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Cover Page

Order ID : Q1488

Project ID : Amtrak Sawtooth Bridges 2025

Client : Portal Partners Tri-Venture

Lab Sample Number	Client Sample Number
Q1488-01	ENV-101-SB01
Q1488-02	ENV-101-SB01
Q1488-03	ENV-101-SB02
Q1488-04	ENV-101-SB02
Q1488-05	ENV-102-SB01
Q1488-06	ENV-102-SB01
Q1488-07	ENV-102-SB02
Q1488-08	ENV-102-SB02
Q1488-09	ENV-104-SB01
Q1488-10	ENV-104-SB01
Q1488-11	ENV-104-SB02
Q1488-12	ENV-104-SB02
Q1488-13	ENV-102-GW01
Q1488-14	ENV-104-GW01
Q1488-15	TB03042025

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: 3/14/2025

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 #: **Q1488**

	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: **KORI AMARNATH** **Date:** **03/14/2025**

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LAB CHRONICLE

OrderID:	Q1488	**OrderDate:**	3/4/2025 3:39:00 PM
Client:	Portal Partners Tri-Venture	**Project:**	Amtrak Sawtooth Bridges 2025
Contact:	Joseph Krupansky	**Location:**	H31,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1488-01	**ENV-101-SB01**	**SOIL**			**03/04/25**			**03/04/25**
			PCB	8082A		03/05/25	03/05/25	
			EPH	NJEPH		03/10/25	03/10/25	
Q1488-03	**ENV-101-SB02**	**SOIL**			**03/04/25**			**03/04/25**
			PCB	8082A		03/05/25	03/05/25	
			EPH	NJEPH		03/10/25	03/10/25	
Q1488-05	**ENV-102-SB01**	**SOIL**			**03/04/25**			**03/04/25**
			PCB	8082A		03/05/25	03/05/25	
			EPH	NJEPH		03/10/25	03/10/25	
			EPH	NJEPH		03/10/25	03/11/25	
Q1488-07	**ENV-102-SB02**	**SOIL**			**03/04/25**			**03/04/25**
			PCB	8082A		03/05/25	03/05/25	
			EPH	NJEPH		03/10/25	03/10/25	
			EPH	NJEPH		03/10/25	03/11/25	
Q1488-09	**ENV-104-SB01**	**SOIL**			**03/04/25**			**03/04/25**
			PCB	8082A		03/05/25	03/05/25	
			EPH	NJEPH		03/10/25	03/10/25	
			EPH	NJEPH		03/10/25	03/11/25	
Q1488-11	**ENV-104-SB02**	**SOIL**			**03/04/25**			**03/04/25**
			PCB	8082A		03/05/25	03/05/25	
			EPH	NJEPH		03/10/25	03/10/25	
			EPH	NJEPH		03/10/25	03/11/25	
Q1488-13	**ENV-102-GW01**	**Water**			**03/04/25**			**03/04/25**
			EPH	NJEPH		03/05/25	03/05/25	
			PCB	8082A		03/06/25	03/06/25	

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LAB CHRONICLE

Q1488-14	**ENV-104-GW01**	**Water**			**03/04/25**		**03/04/25**
			EPH	NJEPH	03/05/25	03/05/25	
			PCB	8082A	03/06/25	03/06/25	

QC SUMMARY

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SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM CASE No.: Q1488 SAS No.: Q1488 SDG No.: Q1488

Run Number: FC030525AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)			TOT OUT
PB166976BL	80			0
PB166976BS	87			0
PB166976BSD	89			0
ENV-102-GW01	70			0
ENV-104-GW01	83			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.: Q1488 SAS No.: Q1488 SDG No.: Q1488

Run Number: FD030525AR

Client SAMPLE NO.	2-Bromonaphthalene (SURR)	2-Flurobiphenyl (SURR)	ortho-Terphenyl (SURR)	TOT OUT
PB166976BL	114	117	99	0
PB166976BS	118	115	104	0
PB166976BSD	120	118	106	0
ENV-102-GW01	116	119	70	0
ENV-104-GW01	108	107	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

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM CASE No.: Q1488 SAS No.: Q1488 SDG No.: Q1488

Run Number: FE031025AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)			TOT OUT
PB167058BL	74			0
PB167058BS	85			0
PB167058BSD	87			0
ENV-101-SB01	102			0
ENV-101-SB01MS	74			0
ENV-101-SB01MSD	77			0
ENV-101-SB02	69			0
ENV-102-SB01	99			0
ENV-102-SB02	73			0
ENV-104-SB01	86			0
ENV-104-SB02	66			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.: Q1488 SAS No.: Q1488 SDG No.: Q1488

Run Number: FF031025AR

Client SAMPLE NO.	2-Bromonaphthalene (SURR)	2-Flurobiphenyl (SURR)	ortho-Terphenyl (SURR)	TOT OUT
PB167058BL	105	111	85	0
PB167058BS	132	135	111	0
PB167058BSD	118	119	99	0
ENV-101-SB01	94	90	69	0
ENV-101-SB01MS	110	108	65	0
ENV-101-SB01MSD	105	104	62	0
ENV-101-SB02	127	119	53	0
ENV-102-SB01	112	110	91	0
ENV-102-SB02	105	102	77	0
ENV-104-SB01	99	102	95	0
ENV-104-SB02	107	107	67	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:** Q1488 **SAS No :** Q1488 **SDG No:** Q1488

Sample No : Q1488-01MS **Datafile:** FE052713.D

Client ID : ENV-101-SB01MS

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C9-C12	11.3	0	6.85	61		(40-140)
Aliphatic C12-C16	7.5	0	6.01	80		(40-140)
Aliphatic C16-C21	11.3	0	9.92	88		(40-140)
Aliphatic C21-C28	15.1	0	13.1	87		(40-140)
Aliphatic C28-C40	22.6	0	22.1	98		(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:** Q1488 **SAS No :** Q1488 **SDG No:** Q1488

Sample No : Q1488-01MSD **Datafile:** FE052714.D

Client ID : ENV-101-SB01MSD

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	RPD |	QC LIMITS	QC Limit Of RPD
Aliphatic C9-C12	11.3	0	6.97	62		1.63 |	(40-140)	25
Aliphatic C12-C16	7.5	0	6.12	81		1.86 |	(40-140)	25
Aliphatic C16-C21	11.3	0	10.1	90		1.8 |	(40-140)	25
Aliphatic C21-C28	15.1	0	13.3	88		1.6 |	(40-140)	25
Aliphatic C28-C40	22.6	0	22.5	100		1.82 |	(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:** Q1488 **SAS No :** Q1488 **SDG No:** Q1488

Sample No : Q1488-01MS **Datafile:** FF015634.D

Client ID : ENV-101-SB01MS

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aromatic C10-C12	7.5	0	5.65	75		(40-140)
Aromatic C12-C16	11.3	0	9.65	86		(40-140)
Aromatic C16-C21	18.8	0	20.2	107		(40-140)
Aromatic C21-C36	30.1	0	28.9	96		(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:** Q1488 **SAS No :** Q1488 **SDG No:** Q1488

Sample No : Q1488-01MSD **Datafile:** FF015635.D

Client ID : ENV-101-SB01MSD

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	RPD |	QC LIMITS	QC Limit Of RPD
Aromatic C10-C12	7.5	0	5.41	72		4.35 |	(40-140)	25
Aromatic C12-C16	11.3	0	9.32	83		3.45 |	(40-140)	25
Aromatic C16-C21	18.8	0	19.4	103		3.81 |	(40-140)	25
Aromatic C21-C36	30.1	0	28.0	93		3.17 |	(40-140)	25

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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:** Q1488 **SAS No :** Q1488 **SDG No:** Q1488

Sample No : PB166976BS **Datafile:** FC068370.D

Client ID : PB166976BS

COMPOUND	SPIKE ADDED ug/l	LCS/LCSD CONCENTRATION ug/l	% REC	Qual	QC LIMITS
Aliphatic C9-C12	300	152	51		(40-140)
Aliphatic C12-C16	200	152	76		(40-140)
Aliphatic C16-C21	300	262	87		(40-140)
Aliphatic C21-C28	400	362	90		(40-140)
Aliphatic C28-C40	600	596	99		(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:** Q1488 **SAS No :** Q1488 **SDG No:** Q1488

Sample No : PB166976BSD **Datafile:** FC068371.D

Client ID : PB166976BSD

COMPOUND	SPIKE ADDED ug/l	LCS/LCSD CONCENTRATION ug/l	% REC	Qual	RPD | QC LIMITS	QC Limit Of RPD
Aliphatic C9-C12	300	152	51		0.0657((40-140)	50
Aliphatic C12-C16	200	152	76		0| (40-140)	50
Aliphatic C16-C21	300	263	88		0.41| (40-140)	50
Aliphatic C21-C28	400	362	90		0| (40-140)	50
Aliphatic C28-C40	600	597	100		0.2| (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:** Q1488 **SAS No :** Q1488 **SDG No:** Q1488

Sample No : PB166976BS **Datafile:** FD049160.D

Client ID : PB166976BS

COMPOUND	SPIKE ADDED ug/l	LCS/LCSD CONCENTRATION ug/l	% REC	Qual	QC LIMITS
Aromatic C10-C12	200	149	74		(40-140)
Aromatic C12-C16	300	274	91		(40-140)
Aromatic C16-C21	500	525	105		(40-140)
Aromatic C21-C36	800	822	102		(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:** Q1488 **SAS No :** Q1488 **SDG No:** Q1488

Sample No : PB166976BSD **Datafile:** FD049161.D

Client ID : PB166976BSD

COMPOUND	SPIKE ADDED ug/l	LCS/LCSD CONCENTRATION ug/l	% REC	Qual	RPD |	QC LIMITS	QC Limit Of RPD
Aromatic C10-C12	200	151	76		1.3|	(40-140)	50
Aromatic C12-C16	300	280	93		2.2|	(40-140)	50
Aromatic C16-C21	500	534	106		1.7|	(40-140)	50
Aromatic C21-C36	800	835	104		2.3|	(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:** Q1488 **SAS No :** Q1488 **SDG No:** Q1488

Sample No : PB167058BS **Datafile:** FE052709.D

Client ID : PB167058BS

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C9-C12	10	5.47	55		(40-140)
Aliphatic C12-C16	6.7	5.36	80		(40-140)
Aliphatic C16-C21	10	9.08	91		(40-140)
Aliphatic C21-C28	13.3	12.1	91		(40-140)
Aliphatic C28-C40	20.0	20.4	102		(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:** Q1488 **SAS No :** Q1488 **SDG No:** Q1488

Sample No : PB167058BSD **Datafile:** FE052710.D

Client ID : PB167058BSD

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD |	QC LIMITS	QC Limit Of RPD
Aliphatic C9-C12	10	5.52	55		0.97|	(40-140)	50
Aliphatic C12-C16	6.7	5.40	81		0.68|	(40-140)	50
Aliphatic C16-C21	10	9.11	91		0.28|	(40-140)	50
Aliphatic C21-C28	13.3	12.2	92		0.83|	(40-140)	50
Aliphatic C28-C40	20.0	20.5	102		0.55|	(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:** Q1488 **SAS No :** Q1488 **SDG No:** Q1488

Sample No : PB167058BS **Datafile:** FF015630.D

Client ID : PB167058BS

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aromatic C10-C12	6.7	5.59	84		(40-140)
Aromatic C12-C16	10	9.97	100		(40-140)
Aromatic C16-C21	16.7	19.4	116		(40-140)
Aromatic C21-C36	26.6	29.9	112		(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:** Q1488 **SAS No :** Q1488 **SDG No:** Q1488

Sample No : PB167058BSD **Datafile:** FF015631.D

Client ID : PB167058BSD

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD |	QC LIMITS	QC Limit Of RPD
Aromatic C10-C12	6.7	5.04	76		10.3|	(40-140)	50
Aromatic C12-C16	10	8.92	89		11.2|	(40-140)	50
Aromatic C16-C21	16.7	17.2	103		11.6|	(40-140)	50
Aromatic C21-C36	26.6	26.7	100		11.1|	(40-140)	50

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4B

METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166976BL

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: Q1488 SAS No.: Q1488 SDG NO.: Q1488

Instrument ID: FID_C Lab Sample ID: PB166976BL

Matrix: (soil/water) Water Date Extracted: 3/5/2025 8:25:00 AM

Level: (low/med) low

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

EPA SAMPLE NO.	LAB SAMPLE ID
PB166976BS	PB166976BS
PB166976BSD	PB166976BSD
ENV-102-GW01	Q1488-13
ENV-104-GW01	Q1488-14

COMMENTS:

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4B

METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167058BL

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: Q1488 SAS No.: Q1488 SDG NO.: Q1488

Instrument ID: FID_C Lab Sample ID: PB167058BL

Matrix: (soil/water) Solid Date Extracted: 3/10/2025 9:20:00 A

Level: (low/med) low

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

EPA SAMPLE NO.	LAB SAMPLE ID
PB167058BS	PB167058BS
PB167058BSD	PB167058BSD
ENV-101-SB01	Q1488-01
ENV-101-SB01MS	Q1488-01MS
ENV-101-SB01MSD	Q1488-01MSD
ENV-101-SB02	Q1488-03
ENV-102-SB01	Q1488-05
ENV-102-SB02	Q1488-07
ENV-104-SB01	Q1488-09
ENV-104-SB02	Q1488-11

COMMENTS:

SAMPLE DATA

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-101-SB01	SDG No.:	Q1488
Lab Sample ID:	Q1488-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	88.5
Sample Wt/Vol:	30.06 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
03/10/25 09:20	03/10/25 21:32	PB167058

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.43	U	1	0.43	1.13	mg/kg	FE052711.D
Aliphatic C12-C16	Aliphatic C12-C16	0.27	U	1	0.27	0.75	mg/kg	FE052711.D
Aliphatic C16-C21	Aliphatic C16-C21	0.34	U	1	0.34	1.13	mg/kg	FE052711.D
Aliphatic C21-C28	Aliphatic C21-C28	0.90	U	1	0.90	1.50	mg/kg	FE052711.D
Aliphatic C28-C40	Aliphatic C28-C40	2.03	U	1	2.03	2.26	mg/kg	FE052711.D
Aromatic C10-C12	Aromatic C10-C12	0.34	U	1	0.34	0.75	mg/kg	FF015632.D
Aromatic C12-C16	Aromatic C12-C16	0.38	U	1	0.38	1.13	mg/kg	FF015632.D
Aromatic C16-C21	Aromatic C16-C21	1.08	U	1	1.08	1.88	mg/kg	FF015632.D
Aromatic C21-C36	Aromatic C21-C36	2.26	U	1	2.26	3.01	mg/kg	FF015632.D
Total AliphaticEPH	Total AliphaticEPH	3.97	U		3.97	6.77	mg/kg	
Total AromaticEPH	Total AromaticEPH	4.06	U		4.06	6.77	mg/kg	
Total EPH	Total EPH	8.03	U		8.03	13.5	mg/kg	

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

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

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-101-SB01	SDG No.:	Q1488
Lab Sample ID:	Q1488-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	88.5
Sample Wt/Vol:	30.06 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE052711.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	0.43	U	0.43	1.13	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	0.27	U	0.27	0.75	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	0.34	U	0.34	1.13	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	0.90	U	0.90	1.50	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	2.03	U	2.03	2.26	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	51.0		40 - 140	102%	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:	Q1488-01	Acq On:	10 Mar 2025 21:32
Client Sample ID:	ENV-101-SB01	Operator:	YP\AJ
Data file:	FE052711.D	Misc:	
Instrument:	FID_E	ALS Vial:	22
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.151	6.796	0	0	300	ug/ml
Aliphatic C12-C16	6.797	10.250	324956	2.136	200	ug/ml
Aliphatic C16-C21	10.251	13.630	0	0	300	ug/ml
Aliphatic C21-C28	13.631	17.305	0	0	400	ug/ml
Aliphatic C28-C40	17.306	22.234	0	0	600	ug/ml
Aliphatic EPH	3.151	22.234	324956	2.136		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.359	13.359	6193125	51		ug/ml
Aliphatic C9-C28	3.151	17.305	324956	2.136	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052711.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 21:32
Operator : YP\AJ
Sample : Q1488-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-101-SB01

Integration File: autoint1.e
Quant Time: Mar 11 05:23:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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...	13.359	6193125	51.003 ug/ml
Spiked Amount 50.000		Recovery = 102.01%	
Target Compounds			

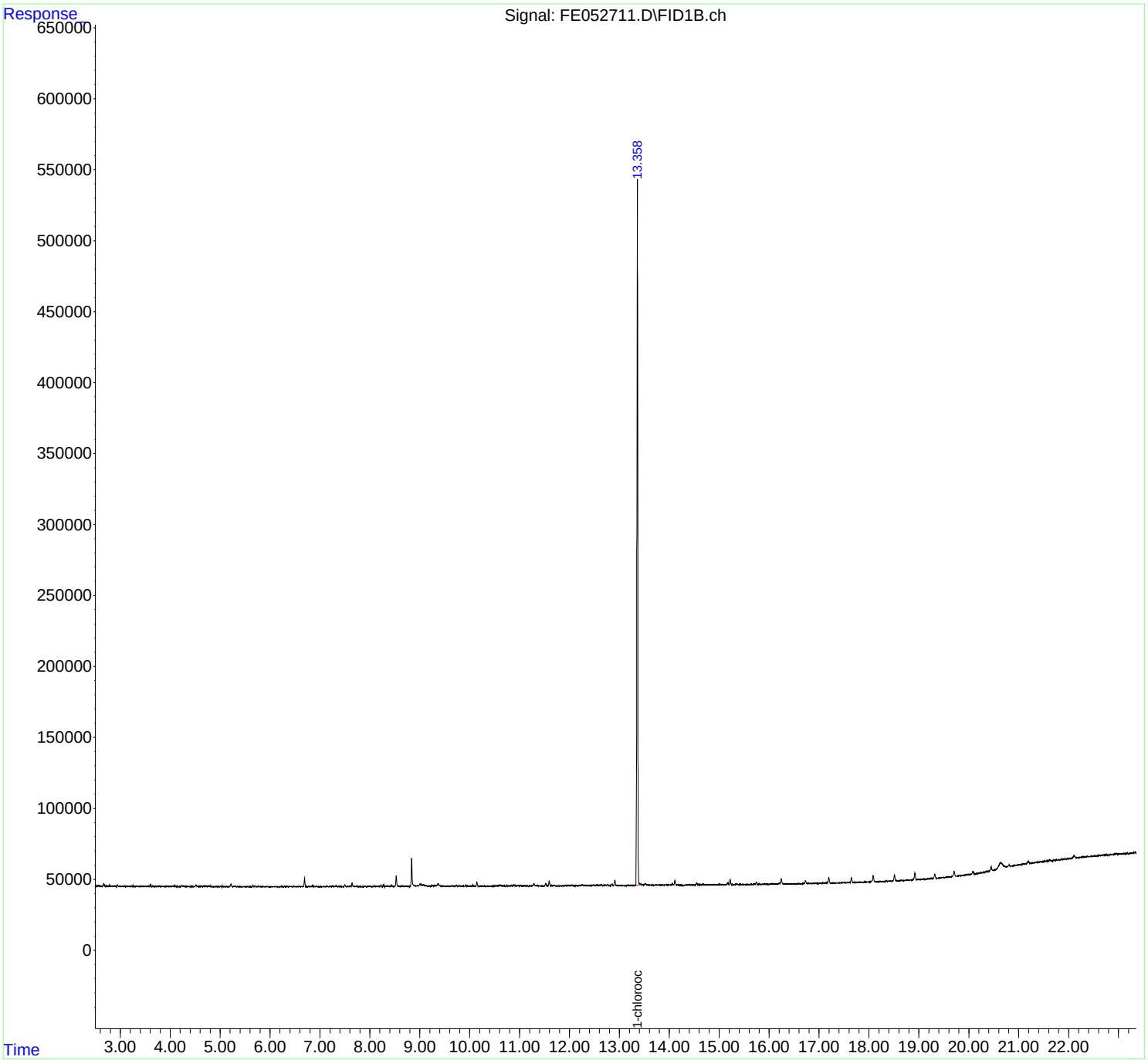
(f)=RT Delta > 1/2 Window (m)=manual int.

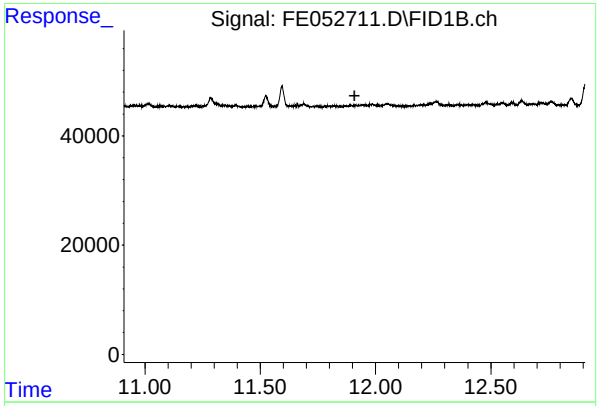
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052711.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 21:32
Operator : YP\AJ
Sample : Q1488-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-101-SB01

Integration File: autoint1.e
Quant Time: Mar 11 05:23:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

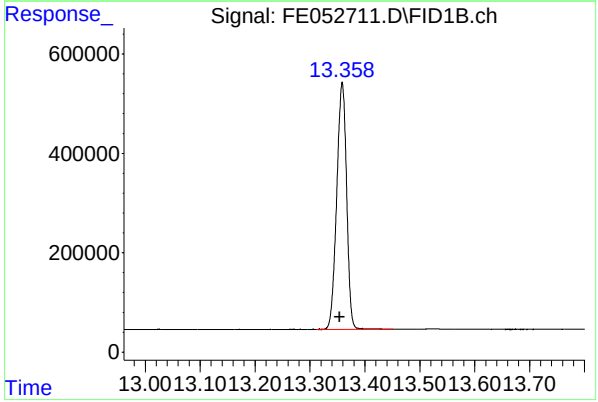




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.909 min
Response: 0
Conc: N.D.

Instrument :
FID_E
ClientSampleId :
ENV-101-SB01



#12 1-chlorooctadecane (SURR)

R.T.: 13.359 min
Delta R.T.: 0.005 min
Response: 6193125
Conc: 51.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052711.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 21:32
Sample : Q1488-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.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	8.530	8.498	8.591	BB	7534	90443	1.46%	1.388%
2	8.838	8.808	8.908	BB	19848	234513	3.79%	3.598%
3	13.359	13.311	13.451	BB	495043	6193125	100.00%	95.015%

Sum of corrected areas: 6518082

Aliphatic EPH 030325.M Tue Mar 11 06:19:47 2025

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-101-SB01	SDG No.:	Q1488
Lab Sample ID:	Q1488-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	88.5
Sample Wt/Vol:	30.06 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FF015632.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.34	U	0.34	0.75	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.38	U	0.38	1.13	mg/kg
Aromatic C16-C21	Aromatic C16-C21	1.08	U	1.08	1.88	mg/kg
Aromatic C21-C36	Aromatic C21-C36	2.26	U	2.26	3.01	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	46.8		40 - 140	94%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	45.0		40 - 140	90%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	34.4		40 - 140	69%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	Q1488-01	Acq On:	10 Mar 2025 18:15
Client Sample ID:	ENV-101-SB01	Operator:	YP\AJ
Data file:	FF015632.D	Misc:	
Instrument:	FID_F	ALS Vial:	74
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.505	6.377	0	0	200	ug/ml
Aromatic C12-C16	6.378	9.069	0	0	300	ug/ml
Aromatic C16-C21	9.070	13.390	1463074	10.997	500	ug/ml
Aromatic C21-C36	13.391	18.845	113223	0.871	800	ug/ml
Aromatic EPH	4.505	18.845	1576297	11.868		ug/ml
2-Bromonaphthalene (SURR)	7.997	7.997	5453196	46.84		ug/ml
2-Flurobiphenyl (SURR)	8.876	8.876	3207625	45.03		ug/ml
ortho-Terphenyl (SURR)	11.935	11.935	5056753	34.38		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015632.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 18:15
Operator : YP\AJ
Sample : Q1488-01
Misc :
ALS Vial : 74 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
ENV-101-SB01

Integration File: autoint1.e
Quant Time: Mar 11 03:23:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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...	7.997	5453196	46.843 ug/ml
Spiked Amount 50.000		Recovery = 93.69%	
6) S 2-Flurobiphenyl (SURR)	8.876	3207625	45.031 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery = 90.06%	
11) S ortho-Terphenyl (SURR)	11.935	5056753	34.375 ug/ml
Spiked Amount 50.000		Recovery = 68.75%	
Target Compounds			

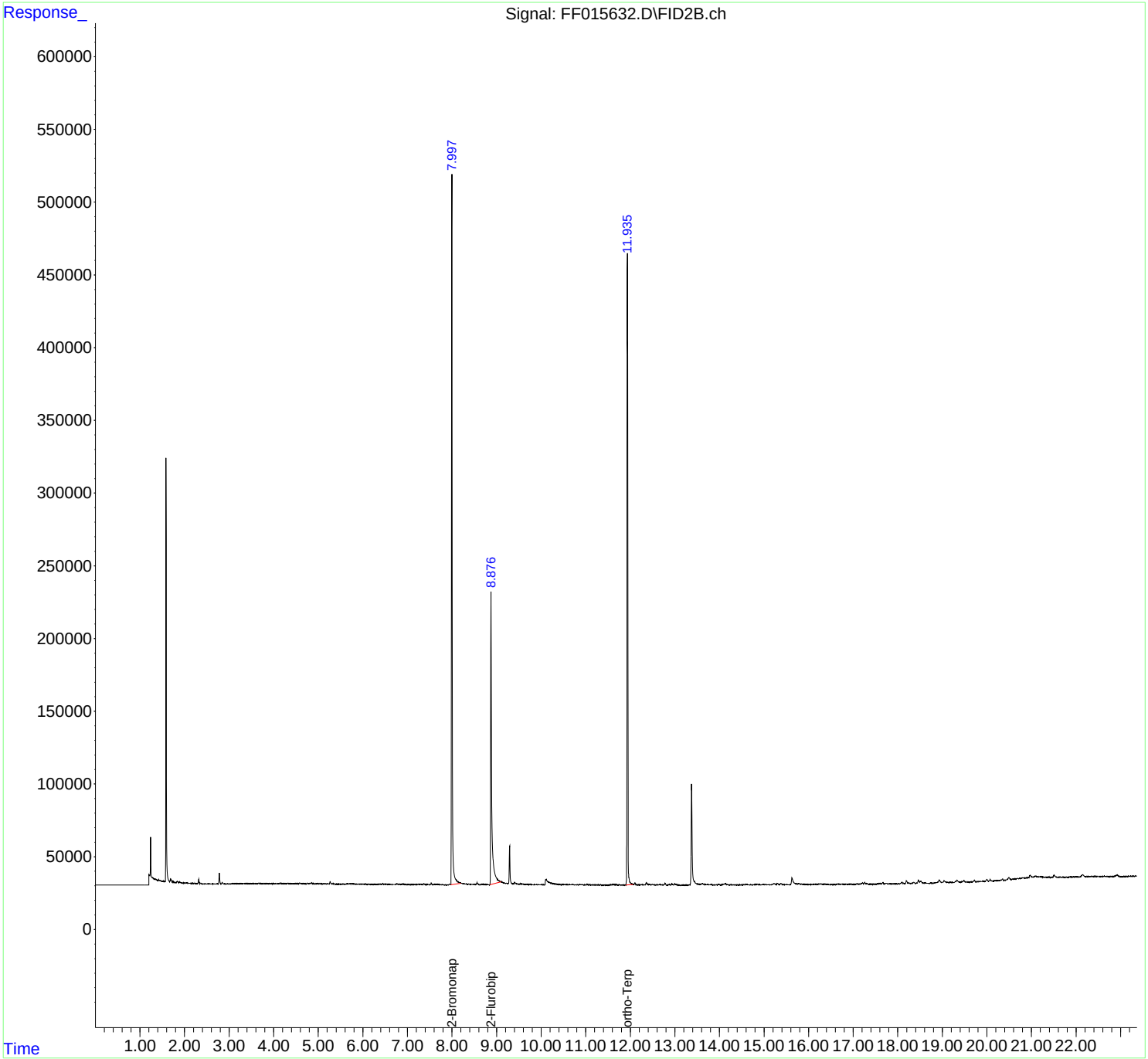
(f)=RT Delta > 1/2 Window (m)=manual int.

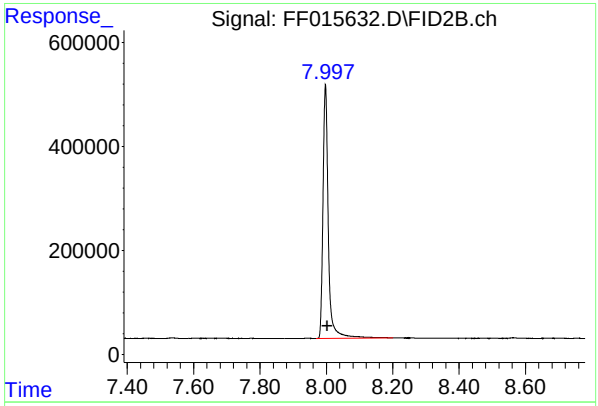
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015632.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 18:15
Operator : YP\AJ
Sample : Q1488-01
Misc :
ALS Vial : 74 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
ENV-101-SB01

Integration File: autoint1.e
Quant Time: Mar 11 03:23:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
Response via : Initial Calibration
Integrator: ChemStation

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

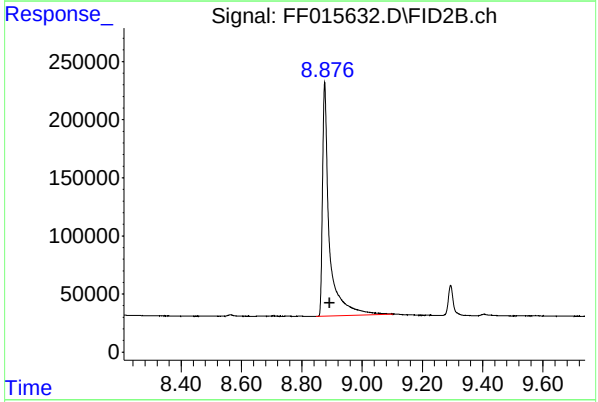




#4 2-Bromonaphthalene (SURR)

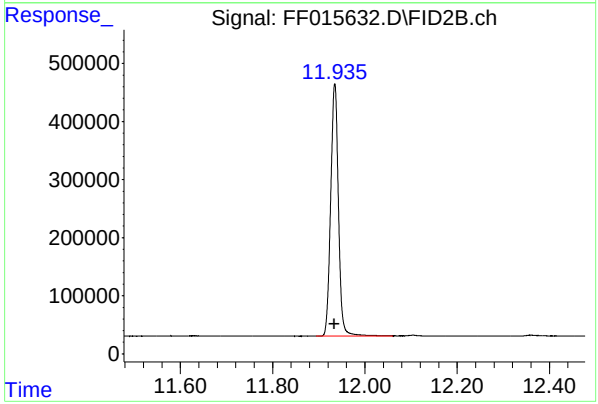
R.T.: 7.997 min
Delta R.T.: -0.006 min
Response: 5453196
Conc: 46.84 ug/ml

Instrument :
FID_F
ClientSampleId :
ENV-101-SB01



#6 2-Flurobiphenyl (SURR)

R.T.: 8.876 min
Delta R.T.: -0.016 min
Response: 3207625
Conc: 45.03 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.935 min
Delta R.T.: 0.001 min
Response: 5056753
Conc: 34.38 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015632.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 18:15
Sample : Q1488-01
Misc :
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	7.997	7.969	8.201	BB	488443	5453196	100.00%	35.656%
2	8.876	8.847	9.102	BB	201088	3207625	58.82%	20.973%
3	9.294	9.236	9.362	BB	26036	295853	5.43%	1.934%
4	10.108	10.079	10.166	BB	3237	78324	1.44%	0.512%
5	11.935	11.894	12.061	BB	434843	5056753	92.73%	33.064%
6	13.372	13.321	13.517	BB	69263	1088897	19.97%	7.120%
7	15.625	15.574	15.716	BB	4442	113223	2.08%	0.740%
			Sum of corrected areas:			15293869		

Aromatic EPH 022625.M Tue Mar 11 04:29:23 2025

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-101-SB02	SDG No.:	Q1488
Lab Sample ID:	Q1488-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.6
Sample Wt/Vol:	30.08 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
03/10/25 09:20	03/10/25 23:32	PB167058

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.42	U	1	0.42	1.10	mg/kg	FE052715.D
Aliphatic C12-C16	Aliphatic C12-C16	0.70	J	1	0.26	0.73	mg/kg	FE052715.D
Aliphatic C16-C21	Aliphatic C16-C21	0.33	U	1	0.33	1.10	mg/kg	FE052715.D
Aliphatic C21-C28	Aliphatic C21-C28	0.88	U	1	0.88	1.47	mg/kg	FE052715.D
Aliphatic C28-C40	Aliphatic C28-C40	1.98	U	1	1.98	2.20	mg/kg	FE052715.D
Aromatic C10-C12	Aromatic C10-C12	0.33	U	1	0.33	0.73	mg/kg	FF015636.D
Aromatic C12-C16	Aromatic C12-C16	0.37	U	1	0.37	1.10	mg/kg	FF015636.D
Aromatic C16-C21	Aromatic C16-C21	1.06	U	1	1.06	1.83	mg/kg	FF015636.D
Aromatic C21-C36	Aromatic C21-C36	2.20	U	1	2.20	2.94	mg/kg	FF015636.D
Total AliphaticEPH	Total AliphaticEPH	3.87	U		3.87	6.60	mg/kg	
Total AromaticEPH	Total AromaticEPH	3.96	U		3.96	6.60	mg/kg	
Total EPH	Total EPH	7.84	U		7.84	13.2	mg/kg	

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

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

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-101-SB02	SDG No.:	Q1488
Lab Sample ID:	Q1488-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.6
Sample Wt/Vol:	30.08 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE052715.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter		Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12		0.42	U	0.42	1.10	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16		0.70	J	0.26	0.73	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21		0.33	U	0.33	1.10	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28		0.88	U	0.88	1.47	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40		1.98	U	1.98	2.20	mg/kg
SURROGATES							
3383-33-2	1-chlorooctadecane (SURR)		34.4		40 - 140	69%	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:	Q1488-03	Acq On:	10 Mar 2025 23:32
Client Sample ID:	ENV-101-SB02	Operator:	YP\AJ
Data file:	FE052715.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	3.151	6.796	433142	2.777	300	ug/ml
Aliphatic C12-C16	6.797	10.250	1456046	9.573	200	ug/ml
Aliphatic C16-C21	10.251	13.630	595343	4.062	300	ug/ml
Aliphatic C21-C28	13.631	17.305	855082	6.003	400	ug/ml
Aliphatic C28-C40	17.306	22.234	2417303	18.946	600	ug/ml
Aliphatic EPH	3.151	22.234	5756916	41.362		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.357	13.357	4181776	34.44		ug/ml
Aliphatic C9-C28	3.151	17.305	3339613	22.415	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052715.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 23:32
Operator : YP\AJ
Sample : Q1488-03
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-101-SB02

Integration File: autoint1.e
Quant Time: Mar 11 05:25:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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...	13.357	4181776	34.439 ug/ml
Spiked Amount 50.000		Recovery = 68.88%	
Target Compounds			

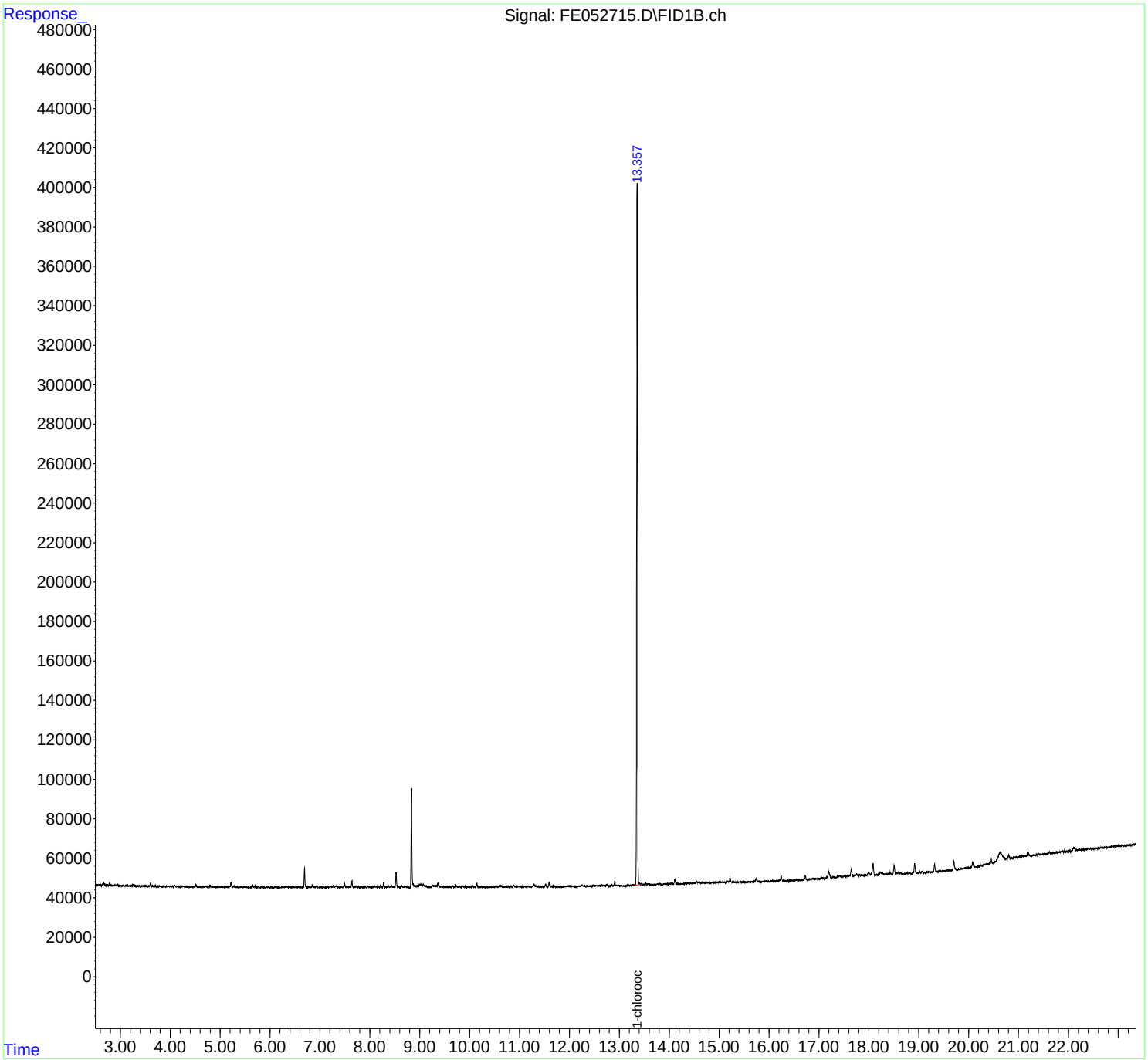
(f)=RT Delta > 1/2 Window (m)=manual int.

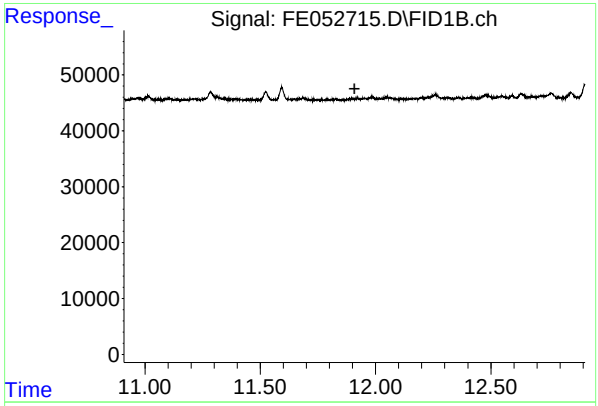
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052715.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 23:32
Operator : YP\AJ
Sample : Q1488-03
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-101-SB02

Integration File: autoint1.e
Quant Time: Mar 11 05:25:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

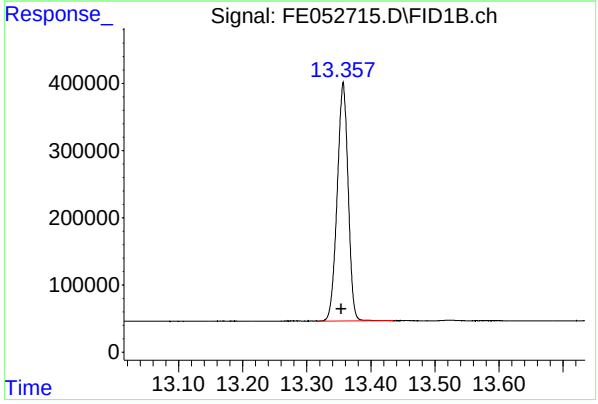




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.909 min
Response: 0
Conc: N.D.

Instrument :
FID_E
ClientSampleId :
ENV-101-SB02



#12 1-chlorooctadecane (SURR)

R.T.: 13.357 min
Delta R.T.: 0.003 min
Response: 4181776
Conc: 34.44 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052715.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 23:32
Sample : Q1488-03
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.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	2.944	2.888	3.002	BV	566	6076	0.14%	0.061%
2	3.015	3.002	3.028	PV	64	616	0.01%	0.006%
3	3.101	3.028	3.114	VV	142	3271	0.08%	0.033%
4	3.140	3.114	3.207	VV	106	3282	0.08%	0.033%
5	3.251	3.207	3.272	VV	482	5886	0.14%	0.059%
6	3.281	3.272	3.291	VV	76	818	0.02%	0.008%
7	3.296	3.291	3.345	VV	134	1915	0.05%	0.019%
8	3.405	3.345	3.431	PV	143	3954	0.09%	0.040%
9	3.450	3.431	3.480	VV	166	2965	0.07%	0.030%
10	3.489	3.480	3.505	VV	137	1461	0.03%	0.015%
11	3.510	3.505	3.558	VV	111	2440	0.06%	0.024%
12	3.606	3.558	3.631	VV	1753	20706	0.49%	0.207%
13	3.639	3.631	3.679	VV	190	3046	0.07%	0.031%
14	3.699	3.679	3.752	VV	192	3883	0.09%	0.039%
15	3.762	3.752	3.811	VV	93	2190	0.05%	0.022%
16	3.819	3.811	3.828	VV	107	726	0.02%	0.007%
17	3.841	3.828	3.881	VV	147	2613	0.06%	0.026%
18	3.887	3.881	3.921	VV	113	1523	0.04%	0.015%
19	3.937	3.921	3.987	VV	149	2797	0.07%	0.028%
20	3.999	3.987	4.023	VV	88	1187	0.03%	0.012%
21	4.049	4.023	4.066	PV	299	3493	0.08%	0.035%
22	4.088	4.066	4.145	VV	710	11092	0.26%	0.111%
23	4.159	4.145	4.214	VV	157	3049	0.07%	0.031%
24	4.254	4.214	4.291	VV	438	8521	0.20%	0.085%
25	4.312	4.291	4.359	VV	101	3068	0.07%	0.031%
26	4.367	4.359	4.377	VV	66	532	0.01%	0.005%
27	4.389	4.377	4.491	PV	68	4856	0.12%	0.049%
28	4.513	4.491	4.603	VV	1013	18268	0.43%	0.183%
29	4.637	4.603	4.672	VV	286	4276	0.10%	0.043%
30	4.701	4.672	4.725	PV	691	8241	0.20%	0.083%
31	4.737	4.725	4.746	VV	191	2206	0.05%	0.022%
32	4.763	4.746	4.780	VV	659	7349	0.17%	0.074%
33	4.797	4.780	4.838	VV	984	11560	0.27%	0.116%
34	4.846	4.838	4.895	VV	96	2437	0.06%	0.024%
35	4.899	4.895	4.908	VV	172	924	0.02%	0.009%
36	4.925	4.908	5.008	VV	249	7448	0.18%	0.075%

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37	5.016	5.008	5.067	VV	132	2797	0.07%	0.028%
38	5.076	5.067	5.109	VV	91	1765	0.04%	0.018%
39	5.129	5.109	5.156	VV	200	3103	0.07%	0.031%
40	5.216	5.156	5.249	VV	2451	36147	0.86%	0.362%
41	5.278	5.249	5.324	VV	522	8693	0.21%	0.087%
42	5.333	5.324	5.359	VV	163	1819	0.04%	0.018%
43	5.429	5.359	5.439	PV	217	4218	0.10%	0.042%
44	5.445	5.439	5.451	VV	141	891	0.02%	0.009%
45	5.459	5.451	5.531	VV	202	4728	0.11%	0.047%
46	5.539	5.531	5.581	VV	125	2049	0.05%	0.021%
47	5.599	5.581	5.607	VV	100	978	0.02%	0.010%
48	5.619	5.607	5.632	VV	139	1431	0.03%	0.014%
49	5.656	5.632	5.678	VV	804	10282	0.24%	0.103%
50	5.699	5.678	5.728	VV	943	11248	0.27%	0.113%
51	5.761	5.728	5.797	PV	239	4179	0.10%	0.042%
52	5.839	5.797	5.895	VV	250	7403	0.18%	0.074%
53	5.970	5.895	5.988	VV	231	5616	0.13%	0.056%
54	6.002	5.988	6.014	PV	97	1122	0.03%	0.011%
55	6.025	6.014	6.107	VV	145	3779	0.09%	0.038%
56	6.136	6.107	6.160	VV	135	1632	0.04%	0.016%
57	6.185	6.160	6.209	VV	95	1862	0.04%	0.019%
58	6.233	6.209	6.271	VV	282	6113	0.15%	0.061%
59	6.290	6.271	6.318	VV	342	4495	0.11%	0.045%
60	6.336	6.318	6.375	VV	598	8266	0.20%	0.083%
61	6.400	6.375	6.440	VV	376	6438	0.15%	0.064%
62	6.472	6.440	6.502	VV	278	6700	0.16%	0.067%
63	6.512	6.502	6.548	VV	177	3789	0.09%	0.038%
64	6.578	6.548	6.594	VV	239	4891	0.12%	0.049%
65	6.613	6.594	6.627	VV	142	2428	0.06%	0.024%
66	6.655	6.627	6.663	VV	173	2813	0.07%	0.028%
67	6.692	6.663	6.758	VV	9767	109645	2.60%	1.098%
68	6.777	6.758	6.800	VV	464	6392	0.15%	0.064%
69	6.815	6.800	6.827	VV	306	3275	0.08%	0.033%
70	6.846	6.827	6.868	VV	953	12365	0.29%	0.124%
71	6.882	6.868	6.903	VV	411	4919	0.12%	0.049%
72	6.921	6.903	6.961	VV	426	5968	0.14%	0.060%
73	6.975	6.961	6.997	VV	156	1568	0.04%	0.016%
74	7.021	6.997	7.054	VV	184	3397	0.08%	0.034%
75	7.071	7.054	7.081	VV	149	1830	0.04%	0.018%
76	7.089	7.081	7.119	VV	143	2047	0.05%	0.021%
77	7.149	7.119	7.181	VV	452	6873	0.16%	0.069%
78	7.203	7.181	7.240	VV	708	14827	0.35%	0.149%
79	7.268	7.240	7.293	VV	599	12851	0.30%	0.129%
80	7.331	7.293	7.355	VV	876	18610	0.44%	0.186%
81	7.372	7.355	7.395	VV	469	5459	0.13%	0.055%
82	7.416	7.395	7.473	VV	476	10376	0.25%	0.104%
83	7.498	7.473	7.531	VV	1800	22662	0.54%	0.227%
84	7.580	7.531	7.598	VV	360	11498	0.27%	0.115%
85	7.607	7.598	7.620	VV	483	5271	0.13%	0.053%
86	7.643	7.620	7.668	VV	3479	41628	0.99%	0.417%
87	7.678	7.668	7.690	VV	310	3472	0.08%	0.035%
88	7.707	7.690	7.720	VV	374	5223	0.12%	0.052%
89	7.735	7.720	7.758	VV	540	7050	0.17%	0.071%

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90	7.767	7.758	7.778	VV	247	2445	0.06%	0.024%
91	7.816	7.778	7.840	VV	360	8011	0.19%	0.080%
92	7.860	7.840	7.878	VV	226	2662	0.06%	0.027%
93	7.908	7.878	7.930	PV	882	10712	0.25%	0.107%
94	7.961	7.930	8.002	VV	596	13161	0.31%	0.132%
95	8.011	8.002	8.042	VV	303	3921	0.09%	0.039%
96	8.077	8.042	8.089	VV	325	5576	0.13%	0.056%
97	8.106	8.089	8.121	VV	464	6267	0.15%	0.063%
98	8.131	8.121	8.158	VV	505	6342	0.15%	0.064%
99	8.175	8.158	8.197	VV	535	7279	0.17%	0.073%
100	8.221	8.197	8.245	VV	1573	19701	0.47%	0.197%
101	8.277	8.245	8.301	VV	2416	28311	0.67%	0.284%
102	8.317	8.301	8.331	VV	267	3291	0.08%	0.033%
103	8.346	8.331	8.363	VV	592	7189	0.17%	0.072%
104	8.377	8.363	8.405	VV	531	7357	0.17%	0.074%
105	8.434	8.405	8.492	VV	1039	21395	0.51%	0.214%
106	8.529	8.492	8.608	VV	7666	99720	2.37%	0.999%
107	8.628	8.608	8.665	VV	633	15157	0.36%	0.152%
108	8.681	8.665	8.701	VV	425	6757	0.16%	0.068%
109	8.724	8.701	8.742	VV	380	5567	0.13%	0.056%
110	8.767	8.742	8.800	VV	409	5966	0.14%	0.060%
111	8.836	8.800	8.931	VV	50202	581081	13.79%	5.820%
112	8.952	8.931	8.971	VV	759	15822	0.38%	0.158%
113	9.020	8.971	9.054	VV	1619	57391	1.36%	0.575%
114	9.071	9.054	9.117	VV	1545	35205	0.84%	0.353%
115	9.134	9.117	9.175	VV	601	13462	0.32%	0.135%
116	9.190	9.175	9.211	VV	490	7306	0.17%	0.073%
117	9.261	9.211	9.281	VV	1072	24320	0.58%	0.244%
118	9.295	9.281	9.310	VV	883	12981	0.31%	0.130%
119	9.320	9.310	9.341	VV	665	11782	0.28%	0.118%
120	9.370	9.341	9.428	VV	1777	47216	1.12%	0.473%
121	9.447	9.428	9.474	VV	642	9435	0.22%	0.094%
122	9.495	9.474	9.527	VV	359	7078	0.17%	0.071%
123	9.551	9.527	9.565	VV	336	5769	0.14%	0.058%
124	9.575	9.565	9.588	VV	351	3948	0.09%	0.040%
125	9.601	9.588	9.613	VV	374	4153	0.10%	0.042%
126	9.618	9.613	9.628	VV	291	2135	0.05%	0.021%
127	9.663	9.628	9.700	VV	572	13875	0.33%	0.139%
128	9.729	9.700	9.766	VV	940	17421	0.41%	0.174%
129	9.782	9.766	9.813	VV	414	7895	0.19%	0.079%
130	9.827	9.813	9.839	VV	281	3813	0.09%	0.038%
131	9.868	9.839	9.899	VV	586	11022	0.26%	0.110%
132	9.921	9.899	9.958	VV	1198	15558	0.37%	0.156%
133	9.972	9.958	9.993	VV	170	2452	0.06%	0.025%
134	10.012	9.993	10.040	VV	288	3824	0.09%	0.038%
135	10.063	10.040	10.117	VV	602	11797	0.28%	0.118%
136	10.144	10.117	10.198	VV	2115	29516	0.70%	0.296%
137	10.238	10.198	10.304	VV	327	11833	0.28%	0.119%
138	10.316	10.304	10.338	VV	159	2100	0.05%	0.021%
139	10.354	10.338	10.381	PV	116	1405	0.03%	0.014%
140	10.425	10.381	10.439	VV	226	3707	0.09%	0.037%
141	10.466	10.439	10.481	VV	282	4733	0.11%	0.047%

142	10.536	10.481	10.559	VV	610	15071	0.36%	0.151%
143	10.588	10.559	10.668	VV	733	32868	0.78%	0.329%
144	10.678	10.668	10.718	VV	352	7551	0.18%	0.076%
145	10.745	10.718	10.765	VV	355	7777	0.18%	0.078%
146	10.774	10.765	10.796	VV	354	5991	0.14%	0.060%
147	10.816	10.796	10.851	VV	598	12350	0.29%	0.124%
148	10.887	10.851	10.919	VV	893	19398	0.46%	0.194%
149	10.944	10.919	10.990	VV	449	14941	0.35%	0.150%
150	11.013	10.990	11.050	VV	795	16023	0.38%	0.160%
151	11.060	11.050	11.071	VV	265	2779	0.07%	0.028%
152	11.106	11.071	11.125	VV	446	9276	0.22%	0.093%
153	11.143	11.125	11.159	VV	257	3927	0.09%	0.039%
154	11.168	11.159	11.189	VV	186	2867	0.07%	0.029%
155	11.218	11.189	11.238	VV	322	7022	0.17%	0.070%
156	11.285	11.238	11.372	VV	1628	43704	1.04%	0.438%
157	11.394	11.372	11.428	VV	294	6215	0.15%	0.062%
158	11.458	11.428	11.473	VV	201	3281	0.08%	0.033%
159	11.524	11.473	11.555	VV	1572	23578	0.56%	0.236%
160	11.593	11.555	11.628	VV	2308	32134	0.76%	0.322%
161	11.686	11.628	11.728	VV	454	12157	0.29%	0.122%
162	11.749	11.728	11.759	VV	127	1417	0.03%	0.014%
163	11.825	11.759	11.865	PV	180	4676	0.11%	0.047%
164	11.902	11.865	11.915	PV	225	4950	0.12%	0.050%
165	11.921	11.915	11.961	VV	286	6696	0.16%	0.067%
166	11.981	11.961	12.022	VV	399	10081	0.24%	0.101%
167	12.051	12.022	12.134	VV	370	11341	0.27%	0.114%
168	12.199	12.134	12.214	VV	314	7988	0.19%	0.080%
169	12.261	12.214	12.298	VV	787	20677	0.49%	0.207%
170	12.309	12.298	12.335	VV	323	4692	0.11%	0.047%
171	12.358	12.335	12.376	VV	239	3992	0.09%	0.040%
172	12.423	12.376	12.442	VV	280	6578	0.16%	0.066%
173	12.480	12.442	12.518	VV	619	16302	0.39%	0.163%
174	12.550	12.518	12.573	VV	526	9973	0.24%	0.100%
175	12.593	12.573	12.611	VV	543	7436	0.18%	0.074%
176	12.632	12.611	12.662	VV	832	14750	0.35%	0.148%
177	12.678	12.662	12.697	VV	341	5366	0.13%	0.054%
178	12.717	12.697	12.731	VV	408	6868	0.16%	0.069%
179	12.762	12.731	12.816	VV	883	18831	0.45%	0.189%
180	12.847	12.816	12.876	VV	1009	14761	0.35%	0.148%
181	12.908	12.876	12.963	VV	2372	35545	0.84%	0.356%
182	12.977	12.963	13.002	VV	284	4526	0.11%	0.045%
183	13.030	13.002	13.103	VV	199	5935	0.14%	0.059%
184	13.169	13.103	13.225	PV	295	9925	0.24%	0.099%
185	13.235	13.225	13.246	VV	155	1510	0.04%	0.015%
186	13.280	13.246	13.300	VV	262	6030	0.14%	0.060%
187	13.357	13.300	13.441	VV	353626	4214158	100.00%	42.208%
188	13.456	13.441	13.485	VV	671	14818	0.35%	0.148%
189	13.523	13.485	13.555	VV	1350	29972	0.71%	0.300%
190	13.580	13.555	13.627	VV	522	18852	0.45%	0.189%
191	13.637	13.627	13.674	VV	349	7160	0.17%	0.072%
192	13.754	13.674	13.768	VV	467	17613	0.42%	0.176%
193	13.794	13.768	13.836	VV	619	18183	0.43%	0.182%
194	13.864	13.836	13.894	VV	340	9222	0.22%	0.092%

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195	13.962	13.894	14.000	VV	512	22036	0.52%	0.221%
196	14.058	14.000	14.081	VV	1074	25837	0.61%	0.259%
197	14.112	14.081	14.151	VV	2534	41871	0.99%	0.419%
198	14.166	14.151	14.195	VV	453	8915	0.21%	0.089%
199	14.203	14.195	14.215	VV	294	2838	0.07%	0.028%
200	14.223	14.215	14.248	VV	208	3909	0.09%	0.039%
201	14.262	14.248	14.271	VV	204	2550	0.06%	0.026%
202	14.334	14.271	14.368	VV	552	19061	0.45%	0.191%
203	14.380	14.368	14.395	VV	378	5143	0.12%	0.052%
204	14.411	14.395	14.455	VV	396	11583	0.27%	0.116%
205	14.473	14.455	14.487	VV	356	5847	0.14%	0.059%
206	14.499	14.487	14.511	VV	359	4585	0.11%	0.046%
207	14.550	14.511	14.596	VV	1484	35964	0.85%	0.360%
208	14.623	14.596	14.635	VV	531	10742	0.25%	0.108%
209	14.676	14.635	14.717	VV	1016	26873	0.64%	0.269%
210	14.738	14.717	14.749	VV	620	9628	0.23%	0.096%
211	14.755	14.749	14.765	VV	540	4796	0.11%	0.048%
212	14.777	14.765	14.852	VV	519	21663	0.51%	0.217%
213	14.885	14.852	14.908	VV	481	13828	0.33%	0.139%
214	14.931	14.908	14.968	VV	588	17559	0.42%	0.176%
215	14.995	14.968	15.018	VV	661	14323	0.34%	0.143%
216	15.030	15.018	15.041	VV	525	6004	0.14%	0.060%
217	15.071	15.041	15.128	VV	536	19761	0.47%	0.198%
218	15.174	15.128	15.193	VV	929	21974	0.52%	0.220%
219	15.218	15.193	15.252	VV	2678	43415	1.03%	0.435%
220	15.268	15.252	15.322	VV	414	11569	0.27%	0.116%
221	15.361	15.322	15.388	VV	300	7297	0.17%	0.073%
222	15.417	15.388	15.441	VV	294	7384	0.18%	0.074%
223	15.455	15.441	15.508	VV	253	7073	0.17%	0.071%
224	15.530	15.508	15.574	VV	260	6332	0.15%	0.063%
225	15.605	15.574	15.614	VV	197	3664	0.09%	0.037%
226	15.658	15.614	15.670	VV	217	6371	0.15%	0.064%
227	15.697	15.670	15.713	VV	249	5313	0.13%	0.053%
228	15.739	15.713	15.818	VV	1612	30924	0.73%	0.310%
229	15.828	15.818	15.853	VV	186	2318	0.06%	0.023%
230	15.916	15.853	15.940	VV	267	7976	0.19%	0.080%
231	15.960	15.940	15.981	VV	241	3778	0.09%	0.038%
232	15.992	15.981	16.015	VV	172	2162	0.05%	0.022%
233	16.058	16.015	16.095	VV	359	9624	0.23%	0.096%
234	16.106	16.095	16.142	VV	221	4874	0.12%	0.049%
235	16.148	16.142	16.174	VV	152	2022	0.05%	0.020%
236	16.203	16.174	16.216	VV	654	8833	0.21%	0.088%
237	16.242	16.216	16.329	VV	3040	51099	1.21%	0.512%
238	16.345	16.329	16.360	VV	119	1502	0.04%	0.015%
239	16.384	16.360	16.393	PV	102	1593	0.04%	0.016%
240	16.450	16.393	16.466	VV	329	8653	0.21%	0.087%
241	16.479	16.466	16.486	VV	125	1276	0.03%	0.013%
242	16.493	16.486	16.510	VV	143	1147	0.03%	0.011%
243	16.551	16.510	16.570	VV	332	8249	0.20%	0.083%
244	16.587	16.570	16.621	VV	188	4242	0.10%	0.042%
245	16.728	16.621	16.758	VV	2260	36007	0.85%	0.361%
246	16.769	16.758	16.788	PV	121	1660	0.04%	0.017%

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247	16.889	16.788	16.915	VV	415	20018	0.48%	0.200%
248	16.996	16.915	17.013	VV	385	16294	0.39%	0.163%
249	17.058	17.013	17.096	VV	543	18684	0.44%	0.187%
250	17.121	17.096	17.133	VV	243	4823	0.11%	0.048%
251	17.194	17.133	17.257	VV	3914	99438	2.36%	0.996%
252	17.322	17.257	17.345	VV	587	26244	0.62%	0.263%
253	17.380	17.345	17.391	VV	986	19383	0.46%	0.194%
254	17.433	17.391	17.465	VV	1115	39202	0.93%	0.393%
255	17.512	17.465	17.548	VV	1038	35874	0.85%	0.359%
256	17.583	17.548	17.604	VV	1135	27747	0.66%	0.278%
257	17.648	17.604	17.700	VV	4143	93782	2.23%	0.939%
258	17.716	17.700	17.731	VV	948	14953	0.35%	0.150%
259	17.762	17.731	17.795	VV	1246	35870	0.85%	0.359%
260	17.820	17.795	17.832	VV	874	16291	0.39%	0.163%
261	17.846	17.832	17.888	VV	812	20611	0.49%	0.206%
262	17.932	17.888	17.954	VV	938	27974	0.66%	0.280%
263	17.986	17.954	18.023	VV	1564	40812	0.97%	0.409%
264	18.085	18.023	18.150	VV	6137	142359	3.38%	1.426%
265	18.231	18.150	18.305	VV	1727	87494	2.08%	0.876%
266	18.328	18.305	18.355	VV	719	15917	0.38%	0.159%
267	18.377	18.355	18.387	VV	638	10776	0.26%	0.108%
268	18.404	18.387	18.415	VV	759	11048	0.26%	0.111%
269	18.431	18.415	18.448	VV	847	13195	0.31%	0.132%
270	18.464	18.448	18.475	VV	549	8426	0.20%	0.084%
271	18.508	18.475	18.537	VV	4866	75628	1.79%	0.757%
272	18.596	18.537	18.625	VV	1086	33273	0.79%	0.333%
273	18.633	18.625	18.649	VV	683	7811	0.19%	0.078%
274	18.659	18.649	18.698	VV	458	7832	0.19%	0.078%
275	18.736	18.698	18.750	VV	288	6079	0.14%	0.061%
276	18.770	18.750	18.798	VV	435	8180	0.19%	0.082%
277	18.810	18.798	18.848	VV	286	5632	0.13%	0.056%
278	18.857	18.848	18.865	PV	141	814	0.02%	0.008%
279	18.919	18.865	18.958	VV	5114	83026	1.97%	0.832%
280	19.020	18.958	19.039	VV	707	12566	0.30%	0.126%
281	19.071	19.039	19.136	VV	708	15291	0.36%	0.153%
282	19.213	19.136	19.240	PV	326	13444	0.32%	0.135%
283	19.318	19.240	19.386	VV	3920	69655	1.65%	0.698%
284	19.423	19.386	19.457	PV	414	9051	0.21%	0.091%
285	19.568	19.457	19.585	VV	346	16432	0.39%	0.165%
286	19.611	19.585	19.640	VV	340	6606	0.16%	0.066%
287	19.705	19.640	19.785	VV	4471	81900	1.94%	0.820%
288	19.833	19.785	19.860	PV	364	8438	0.20%	0.085%
289	19.949	19.860	19.971	VV	395	13800	0.33%	0.138%
290	19.995	19.971	20.041	VV	305	7388	0.18%	0.074%
291	20.082	20.041	20.115	PV	2841	46241	1.10%	0.463%
292	20.135	20.115	20.165	VV	287	6311	0.15%	0.063%
293	20.363	20.165	20.377	PV	555	37934	0.90%	0.380%
294	20.447	20.377	20.481	VV	3584	78456	1.86%	0.786%
295	20.637	20.481	20.763	VV	5131	418342	9.93%	4.190%
296	20.805	20.763	20.845	VV	3020	95818	2.27%	0.960%
297	21.189	20.845	21.248	VV	3003	345681	8.20%	3.462%
298	21.419	21.248	21.445	VV	804	96719	2.30%	0.969%
299	21.516	21.445	21.541	VV	665	36233	0.86%	0.363%

rteres

300	21.622	21.541	21.654	VV	1016	43695	1.04%	0.438%
301	21.852	21.654	21.871	VV	218	41069	0.97%	0.411%

Sum of corrected areas: 9984324

Aliphatic EPH 030325.M Tue Mar 11 06:25:00 2025

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:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-101-SB02	SDG No.:	Q1488
Lab Sample ID:	Q1488-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.6
Sample Wt/Vol:	30.08 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FF015636.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.33	U	0.33	0.73	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.37	U	0.37	1.10	mg/kg
Aromatic C16-C21	Aromatic C16-C21	1.06	U	1.06	1.83	mg/kg
Aromatic C21-C36	Aromatic C21-C36	2.20	U	2.20	2.94	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	63.6		40 - 140	127%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	59.5		40 - 140	119%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	26.5		40 - 140	53%	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:	Q1488-03	Acq On:	10 Mar 2025 20:13
Client Sample ID:	ENV-101-SB02	Operator:	YP\AJ
Data file:	FF015636.D	Misc:	
Instrument:	FID_F	ALS Vial:	78
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.505	6.377	57913	0.451	200	ug/ml
Aromatic C12-C16	6.378	9.069	0	0	300	ug/ml
Aromatic C16-C21	9.070	13.390	1275048	9.584	500	ug/ml
Aromatic C21-C36	13.391	18.845	215391	1.656	800	ug/ml
Aromatic EPH	4.505	18.845	1548352	11.691		ug/ml
ortho-Terphenyl (SURR)	11.933	11.933	3899585	26.51		ug/ml
2-Bromonaphthalene (SURR)	7.998	7.998	7403413	63.6		ug/ml
2-Flurobiphenyl (SURR)	8.875	8.875	4234903	59.45		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015636.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 20:13
Operator : YP\AJ
Sample : Q1488-03
Misc :
ALS Vial : 78 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
ENV-101-SB02

Integration File: autoint1.e
Quant Time: Mar 11 03:25:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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...	7.998	7403413	63.595 ug/ml
Spiked Amount 50.000		Recovery = 127.19%	
6) S 2-Flurobiphenyl (SURR)	8.875	4234903	59.453 ug/ml
Spiked Amount 50.000	Range 0 - 131	Recovery = 118.91%	
11) S ortho-Terphenyl (SURR)	11.933	3899585	26.509 ug/ml
Spiked Amount 50.000		Recovery = 53.02%	
Target Compounds			

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

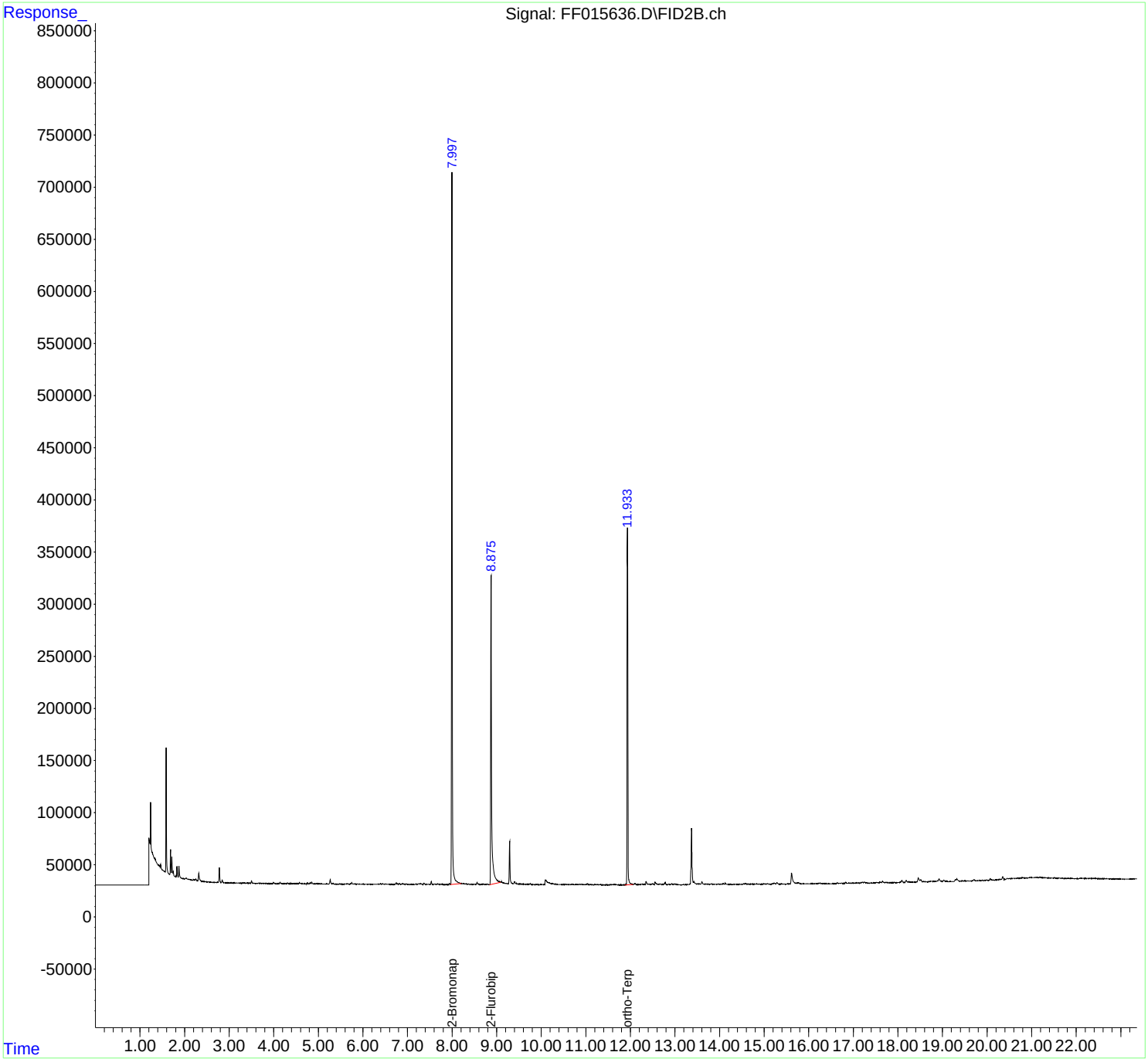
Quantitation Report (QT Reviewed)

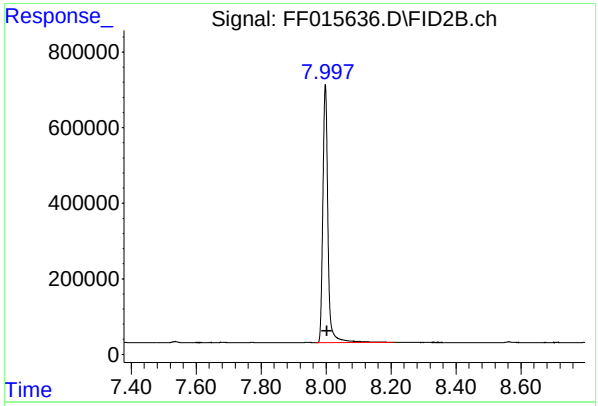
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015636.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 20:13
Operator : YP\AJ
Sample : Q1488-03
Misc :
ALS Vial : 78 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
ENV-101-SB02

Integration File: autoint1.e
Quant Time: Mar 11 03:25:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
Response via : Initial Calibration
Integrator: ChemStation

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

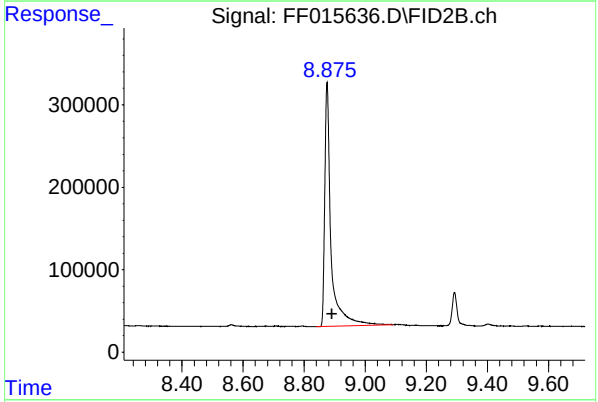




#4 2-Bromonaphthalene (SURR)

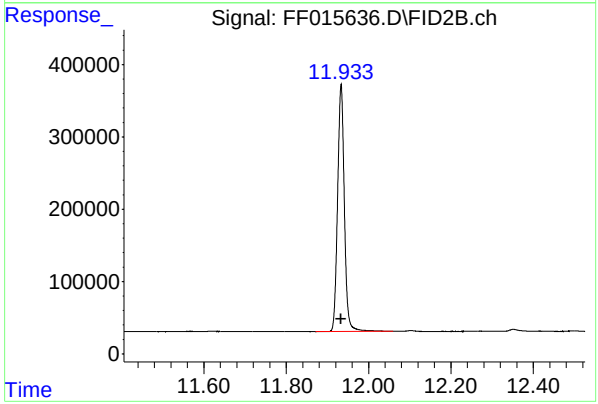
R.T.: 7.998 min
Delta R.T.: -0.005 min
Response: 7403413
Conc: 63.60 ug/ml

Instrument :
FID_F
ClientSampleId :
ENV-101-SB02



#6 2-Flurobiphenyl (SURR)

R.T.: 8.875 min
Delta R.T.: -0.017 min
Response: 4234903
Conc: 59.45 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.933 min
Delta R.T.: 0.000 min
Response: 3899585
Conc: 26.51 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015636.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 20:13
Sample : Q1488-03
Misc :
ALS Vial : 78 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	5.267	5.212	5.307	BV	4111	57913	0.78%	0.339%
2	7.998	7.969	8.206	PB	682361	7403413	100.00%	43.330%
3	8.875	8.839	9.091	BB	295584	4234903	57.20%	24.785%
4	9.292	9.231	9.376	BB	40508	455156	6.15%	2.664%
5	10.097	9.987	10.161	BB	3521	54708	0.74%	0.320%
6	11.933	11.872	12.059	BB	343918	3899585	52.67%	22.823%
7	13.370	13.311	13.472	BB	53387	765184	10.34%	4.478%
8	15.614	15.552	15.711	BB	9935	215391	2.91%	1.261%

Sum of corrected areas: 17086252

Aromatic EPH 022625.M Tue Mar 11 04:32:47 2025

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:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-102-SB01	SDG No.:	Q1488
Lab Sample ID:	Q1488-05	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	85.7
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
03/10/25 09:20	03/11/25 0:03	PB167058

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.44	U	1	0.44	1.17	mg/kg	FE052716.D
Aliphatic C12-C16	Aliphatic C12-C16	0.28	U	1	0.28	0.78	mg/kg	FE052716.D
Aliphatic C16-C21	Aliphatic C16-C21	0.35	U	1	0.35	1.17	mg/kg	FE052716.D
Aliphatic C21-C28	Aliphatic C21-C28	0.93	U	1	0.93	1.55	mg/kg	FE052716.D
Aliphatic C28-C40	Aliphatic C28-C40	2.10	U	1	2.10	2.33	mg/kg	FE052716.D
Aromatic C10-C12	Aromatic C10-C12	0.35	U	1	0.35	0.78	mg/kg	FF015637.D
Aromatic C12-C16	Aromatic C12-C16	0.60	J	1	0.40	1.17	mg/kg	FF015637.D
Aromatic C16-C21	Aromatic C16-C21	3.61		1	1.12	1.94	mg/kg	FF015637.D
Aromatic C21-C36	Aromatic C21-C36	2.75	J	1	2.33	3.11	mg/kg	FF015637.D
Total AliphaticEPH	Total AliphaticEPH	4.11	U		4.11	7.00	mg/kg	
Total AromaticEPH	Total AromaticEPH	6.96	J		4.20	7.00	mg/kg	
Total EPH	Total EPH	8.30	U		8.30	14.0	mg/kg	

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

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

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-102-SB01	SDG No.:	Q1488
Lab Sample ID:	Q1488-05	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	85.7
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
FE052716.D	1	03/10/25	03/11/25	PB167058

CAS Number	Parameter		Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12		0.44	U	0.44	1.17	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16		0.28	U	0.28	0.78	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21		0.35	U	0.35	1.17	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28		0.93	U	0.93	1.55	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40		2.10	U	2.10	2.33	mg/kg
SURROGATES							
3383-33-2	1-chlorooctadecane (SURR)		49.7		40 - 140	99%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)		0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1488-05	Acq On:	11 Mar 2025 00:03
Client Sample ID:	ENV-102-SB01	Operator:	YP\AJ
Data file:	FE052716.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	3.151	6.796	88518	0.568	300	ug/ml
Aliphatic C12-C16	6.797	10.250	253920	1.669	200	ug/ml
Aliphatic C16-C21	10.251	13.630	0	0	300	ug/ml
Aliphatic C21-C28	13.631	17.305	0	0	400	ug/ml
Aliphatic C28-C40	17.306	22.234	123278	0.966	600	ug/ml
Aliphatic EPH	3.151	22.234	465716	3.203		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.357	13.357	6034563	49.7		ug/ml
Aliphatic C9-C28	3.151	17.305	342438	2.237	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052716.D
Signal(s) : FID1B.ch
Acq On : 11 Mar 2025 00:03
Operator : YP\AJ
Sample : Q1488-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-102-SB01

Integration File: autoint1.e
Quant Time: Mar 11 05:25:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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...	13.357	6034563	49.697 ug/ml
Spiked Amount 50.000		Recovery = 99.39%	
Target Compounds			

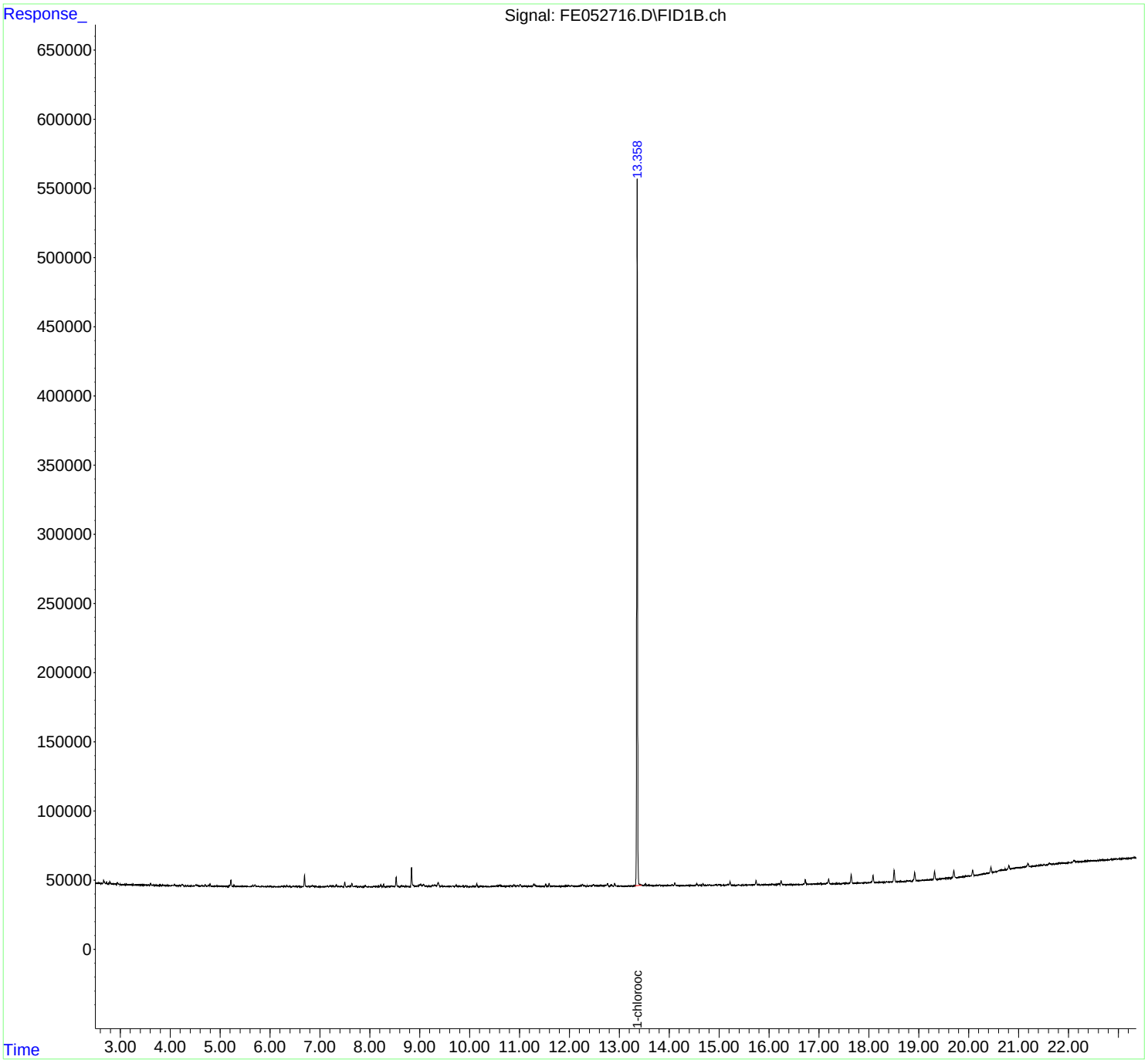
(f)=RT Delta > 1/2 Window (m)=manual int.

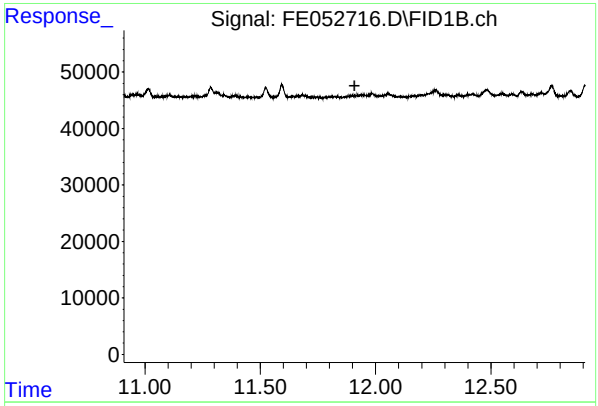
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052716.D
Signal(s) : FID1B.ch
Acq On : 11 Mar 2025 00:03
Operator : YP\AJ
Sample : Q1488-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-102-SB01

Integration File: autoint1.e
Quant Time: Mar 11 05:25:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

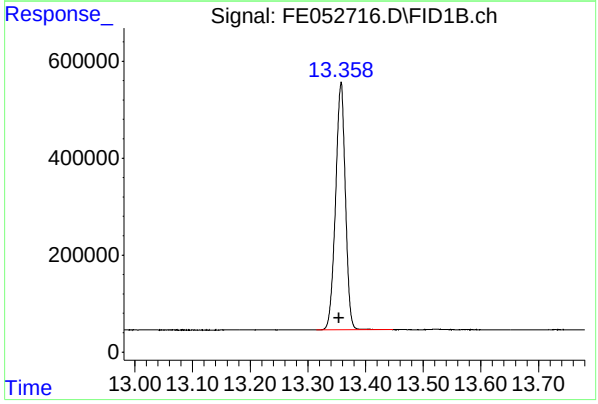




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.909 min
Response: 0
Conc: N.D.

Instrument :
FID_E
ClientSampleId :
ENV-102-SB01



#12 1-chlorooctadecane (SURR)

R.T.: 13.357 min
Delta R.T.: 0.003 min
Response: 6034563
Conc: 49.70 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052716.D
Signal(s) : FID1B.ch
Acq On : 11 Mar 2025 00:03
Sample : Q1488-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.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	6.692	6.664	6.754	BB	8353	88518	1.47%	1.362%
2	8.529	8.501	8.588	BB	6859	81227	1.35%	1.250%
3	8.838	8.798	8.904	BB	13914	172693	2.86%	2.657%
4	13.357	13.314	13.448	BB	510283	6034563	100.00%	92.835%
5	18.508	18.448	18.548	BB	8520	123278	2.04%	1.897%

Sum of corrected areas: 6500278

Aliphatic EPH 030325.M Tue Mar 11 06:25:55 2025

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:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-102-SB01	SDG No.:	Q1488
Lab Sample ID:	Q1488-05	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	85.7
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
FF015637.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.35	U	0.35	0.78	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.60	J	0.40	1.17	mg/kg
Aromatic C16-C21	Aromatic C16-C21	3.61		1.12	1.94	mg/kg
Aromatic C21-C36	Aromatic C21-C36	2.75	J	2.33	3.11	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	56.0		40 - 140	112%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	54.9		40 - 140	110%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	45.4		40 - 140	91%	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:	Q1488-05	Acq On:	10 Mar 2025 20:42
Client Sample ID:	ENV-102-SB01	Operator:	YP\AJ
Data file:	FF015637.D	Misc:	
Instrument:	FID_F	ALS Vial:	79
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.505	6.377	261984	2.041	200	ug/ml
Aromatic C12-C16	6.378	9.069	1046657	7.651	300	ug/ml
Aromatic C16-C21	9.070	13.390	6180335	46.455	500	ug/ml
Aromatic C21-C36	13.391	18.845	4602180	35.386	800	ug/ml
Aromatic EPH	4.505	18.845	12091156	91.533		ug/ml
ortho-Terphenyl (SURR)	11.935	11.935	6672885	45.36		ug/ml
2-Bromonaphthalene (SURR)	7.997	7.997	6512903	55.95		ug/ml
2-Flurobiphenyl (SURR)	8.875	8.875	3908861	54.88		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015637.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 20:42
Operator : YP\AJ
Sample : Q1488-05
Misc :
ALS Vial : 79 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
ENV-102-SB01

Integration File: autoint1.e
Quant Time: Mar 11 03:25:28 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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...	7.997	6512903	55.946 ug/ml
Spiked Amount 50.000		Recovery = 111.89%	
6) S 2-Flurobiphenyl (SURR)	8.875	3908861	54.875 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery = 109.75%	
11) S ortho-Terphenyl (SURR)	11.935	6672885	45.362 ug/ml
Spiked Amount 50.000		Recovery = 90.72%	
Target Compounds			

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

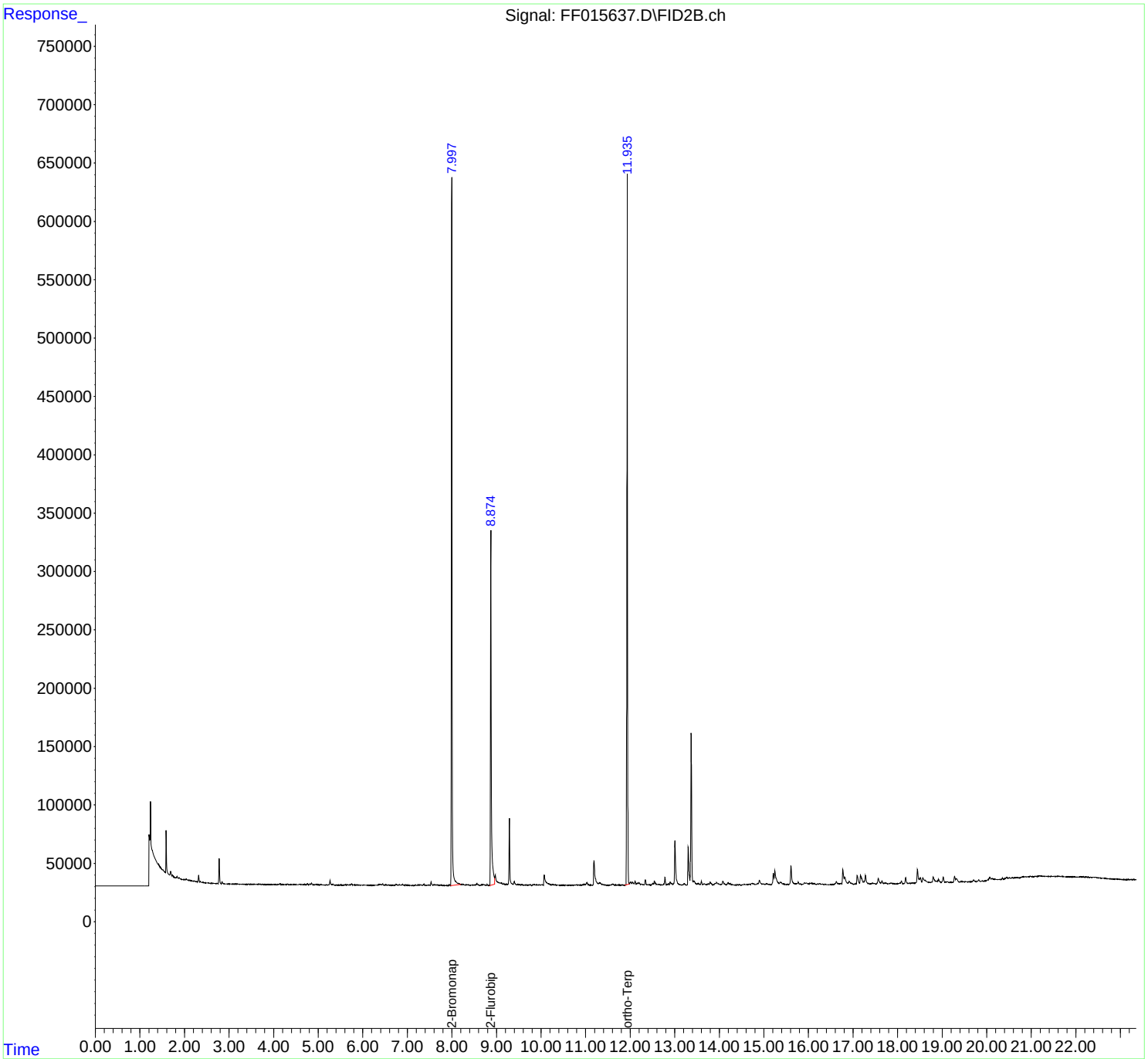
Quantitation Report (QT Reviewed)

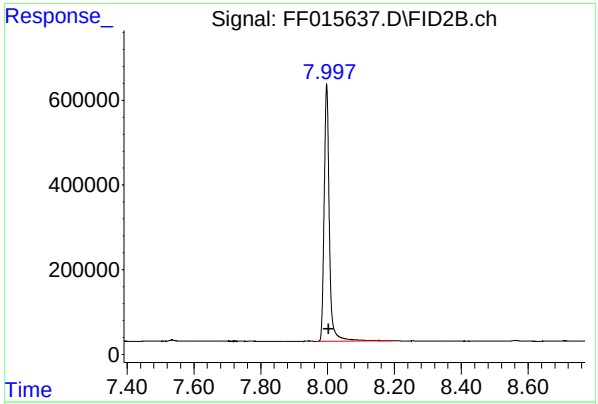
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015637.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 20:42
Operator : YP\AJ
Sample : Q1488-05
Misc :
ALS Vial : 79 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
ENV-102-SB01

Integration File: autoint1.e
Quant Time: Mar 11 03:25:28 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
Response via : Initial Calibration
Integrator: ChemStation

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

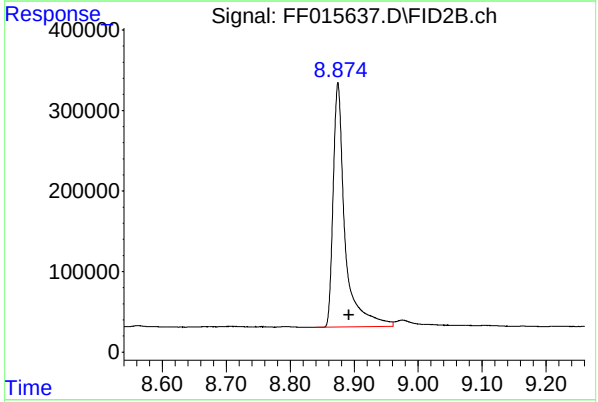




#4 2-Bromonaphthalene (SURR)

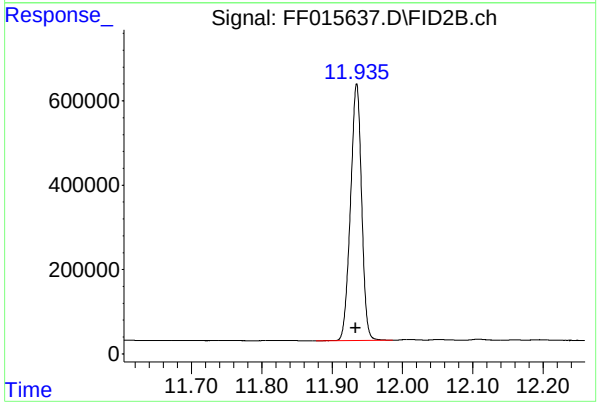
R.T.: 7.997 min
Delta R.T.: -0.006 min
Response: 6512903
Conc: 55.95 ug/ml

Instrument :
FID_F
ClientSampleId :
ENV-102-SB01



#6 2-Flurobiphenyl (SURR)

R.T.: 8.875 min
Delta R.T.: -0.017 min
Response: 3908861
Conc: 54.88 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.935 min
Delta R.T.: 0.001 min
Response: 6672885
Conc: 45.36 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015637.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 20:42
Sample : Q1488-05
Misc :
ALS Vial : 79 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	4.455	4.400	4.480	BV	174	1692	0.03%	0.006%
2	4.537	4.523	4.552	PV	129	1459	0.02%	0.005%
3	4.580	4.552	4.629	PV	578	12709	0.19%	0.043%
4	4.639	4.629	4.668	VV	173	2078	0.03%	0.007%
5	4.695	4.668	4.735	VV	272	4143	0.06%	0.014%
6	4.756	4.735	4.787	VV	1305	17294	0.26%	0.059%
7	4.819	4.787	4.834	VV	930	12494	0.19%	0.043%
8	4.852	4.834	4.904	VV	1666	23604	0.35%	0.081%
9	4.943	4.904	4.961	VV	487	8639	0.13%	0.029%
10	4.979	4.961	5.042	VV	414	10115	0.15%	0.035%
11	5.060	5.042	5.079	VV	420	5060	0.08%	0.017%
12	5.094	5.089	5.119	VV	113	1392	0.02%	0.005%
13	5.123	5.119	5.159	VV	103	1412	0.02%	0.005%
14	5.178	5.159	5.214	VV	332	4905	0.07%	0.017%
15	5.266	5.214	5.311	PV	3993	58713	0.87%	0.200%
16	5.329	5.311	5.359	VV	877	11986	0.18%	0.041%
17	5.379	5.377	5.395	VV	145	1013	0.02%	0.003%
18	5.434	5.418	5.445	VV	109	1278	0.02%	0.004%
19	5.475	5.469	5.500	VV	208	2325	0.03%	0.008%
20	5.508	5.500	5.527	VV	123	1180	0.02%	0.004%
21	5.610	5.564	5.615	VV	343	5438	0.08%	0.019%
22	5.620	5.615	5.624	VV	331	1557	0.02%	0.005%
23	5.628	5.624	5.632	VV	355	1676	0.02%	0.006%
24	5.634	5.632	5.654	VV	364	3874	0.06%	0.013%
25	5.664	5.654	5.670	VV	376	2792	0.04%	0.010%
26	5.672	5.670	5.681	VV	346	1694	0.03%	0.006%
27	5.688	5.681	5.698	VV	285	2493	0.04%	0.009%
28	5.720	5.698	5.731	VV	444	6348	0.09%	0.022%
29	5.749	5.731	5.794	VV	1270	21164	0.31%	0.072%
30	5.806	5.794	5.841	VV	423	6979	0.10%	0.024%
31	5.848	5.841	5.879	VV	218	3394	0.05%	0.012%
32	5.894	5.879	5.902	VV	230	2589	0.04%	0.009%
33	5.907	5.902	5.925	VV	216	1935	0.03%	0.007%
34	5.967	5.947	6.003	VV	169	3165	0.05%	0.011%
35	6.013	6.003	6.030	VV	218	2422	0.04%	0.008%
36	6.033	6.030	6.055	VV	160	1426	0.02%	0.005%

rteres

37	6.060	6.055	6.107	VV	154	3086	0.05%	0.011%
38	6.128	6.121	6.155	PV	105	1329	0.02%	0.005%
39	6.202	6.191	6.223	VV	100	1024	0.02%	0.003%
40	6.238	6.223	6.269	VV	155	1918	0.03%	0.007%
41	6.291	6.280	6.306	VV	232	2624	0.04%	0.009%
42	6.309	6.306	6.318	VV	227	1258	0.02%	0.004%
43	6.386	6.318	6.423	VV	1065	38348	0.57%	0.131%
44	6.446	6.423	6.472	VV	1412	22922	0.34%	0.078%
45	6.477	6.472	6.481	VV	401	1988	0.03%	0.007%
46	6.485	6.481	6.490	VV	452	2194	0.03%	0.007%
47	6.508	6.490	6.559	VV	591	17658	0.26%	0.060%
48	6.572	6.559	6.600	VV	332	5469	0.08%	0.019%
49	6.602	6.600	6.614	VV	240	1476	0.02%	0.005%
50	6.619	6.614	6.636	VV	195	2198	0.03%	0.007%
51	6.641	6.636	6.657	VV	158	1779	0.03%	0.006%
52	6.669	6.664	6.674	VV	220	1124	0.02%	0.004%
53	6.678	6.674	6.697	VV	233	2680	0.04%	0.009%
54	6.699	6.697	6.720	VV	247	2539	0.04%	0.009%
55	6.746	6.720	6.802	VV	1013	24451	0.36%	0.083%
56	6.817	6.802	6.843	VV	788	11320	0.17%	0.039%
57	6.859	6.843	6.871	VV	415	5324	0.08%	0.018%
58	6.890	6.871	6.916	VV	1069	15534	0.23%	0.053%
59	6.923	6.916	6.945	VV	414	4702	0.07%	0.016%
60	6.965	6.945	7.002	VV	580	9934	0.15%	0.034%
61	7.006	7.002	7.039	VV	221	2711	0.04%	0.009%
62	7.046	7.039	7.064	PV	292	1998	0.03%	0.007%
63	7.070	7.064	7.090	VV	188	1981	0.03%	0.007%
64	7.114	7.104	7.123	VV	181	1294	0.02%	0.004%
65	7.142	7.139	7.168	VV	154	1175	0.02%	0.004%
66	7.188	7.168	7.219	VV	698	9149	0.14%	0.031%
67	7.245	7.219	7.269	VV	694	13581	0.20%	0.046%
68	7.291	7.269	7.307	VV	868	14266	0.21%	0.049%
69	7.313	7.307	7.344	VV	579	8796	0.13%	0.030%
70	7.371	7.344	7.436	VV	1326	26153	0.39%	0.089%
71	7.474	7.436	7.509	VV	560	17068	0.25%	0.058%
72	7.535	7.509	7.586	VV	3355	53899	0.80%	0.184%
73	7.608	7.586	7.632	VV	824	18569	0.28%	0.063%
74	7.645	7.632	7.664	VV	719	10919	0.16%	0.037%
75	7.685	7.664	7.713	VV	756	15457	0.23%	0.053%
76	7.719	7.713	7.730	VV	361	3392	0.05%	0.012%
77	7.741	7.730	7.759	VV	559	7428	0.11%	0.025%
78	7.772	7.759	7.804	VV	583	9130	0.14%	0.031%
79	7.822	7.804	7.836	VV	221	3128	0.05%	0.011%
80	7.841	7.836	7.874	VV	199	2753	0.04%	0.009%
81	7.895	7.874	7.909	PV	229	2878	0.04%	0.010%
82	7.944	7.909	7.966	VV	1113	16923	0.25%	0.058%
83	7.997	7.966	8.132	VV	605358	6541163	97.35%	22.318%
84	8.139	8.132	8.197	VV	2110	65763	0.98%	0.224%
85	8.207	8.197	8.237	VV	1252	25812	0.38%	0.088%
86	8.256	8.237	8.284	VV	1168	25724	0.38%	0.088%
87	8.287	8.284	8.298	VV	718	5781	0.09%	0.020%
88	8.314	8.298	8.332	VV	783	13976	0.21%	0.048%
89	8.345	8.332	8.379	VV	796	17929	0.27%	0.061%

rteres

90	8.382	8.379	8.409	VV	544	8149	0.12%	0.028%
91	8.418	8.409	8.424	VV	437	3365	0.05%	0.011%
92	8.450	8.424	8.455	VV	513	8326	0.12%	0.028%
93	8.471	8.455	8.502	VV	593	13857	0.21%	0.047%
94	8.531	8.502	8.542	VV	887	16745	0.25%	0.057%
95	8.562	8.542	8.637	VV	2059	46371	0.69%	0.158%
96	8.676	8.637	8.685	VV	763	16051	0.24%	0.055%
97	8.712	8.685	8.737	VV	1112	26540	0.39%	0.091%
98	8.755	8.737	8.777	VV	669	11842	0.18%	0.040%
99	8.794	8.777	8.824	VV	966	13218	0.20%	0.045%
100	8.875	8.847	8.961	VV	303280	3956139	58.88%	13.498%
101	8.976	8.961	9.090	VV	8950	312920	4.66%	1.068%
102	9.105	9.090	9.150	VV	2272	66924	1.00%	0.228%
103	9.164	9.150	9.199	VV	1464	34119	0.51%	0.116%
104	9.215	9.199	9.253	VV	1177	34531	0.51%	0.118%
105	9.292	9.253	9.379	VV	57682	719364	10.71%	2.454%
106	9.401	9.379	9.455	VV	3725	81145	1.21%	0.277%
107	9.475	9.455	9.517	VV	1143	31476	0.47%	0.107%
108	9.524	9.517	9.552	VV	855	12940	0.19%	0.044%
109	9.575	9.552	9.600	VV	994	19671	0.29%	0.067%
110	9.604	9.600	9.617	VV	528	4405	0.07%	0.015%
111	9.634	9.617	9.664	VV	525	13276	0.20%	0.045%
112	9.669	9.664	9.680	VV	616	4773	0.07%	0.016%
113	9.689	9.680	9.730	VV	603	13498	0.20%	0.046%
114	9.752	9.730	9.798	VV	914	16731	0.25%	0.057%
115	9.820	9.798	9.852	VV	1054	23986	0.36%	0.082%
116	9.857	9.852	9.882	VV	663	10752	0.16%	0.037%
117	9.899	9.882	9.921	VV	639	11849	0.18%	0.040%
118	9.956	9.921	9.985	VV	739	20188	0.30%	0.069%
119	10.006	9.985	10.015	VV	773	10243	0.15%	0.035%
120	10.025	10.015	10.053	VV	878	13404	0.20%	0.046%
121	10.073	10.053	10.161	VV	8984	242848	3.61%	0.829%
122	10.166	10.161	10.231	VV	1795	48039	0.71%	0.164%
123	10.238	10.231	10.248	VV	769	7063	0.11%	0.024%
124	10.261	10.248	10.290	VV	871	18871	0.28%	0.064%
125	10.309	10.290	10.332	VV	747	16959	0.25%	0.058%
126	10.344	10.332	10.367	VV	522	8212	0.12%	0.028%
127	10.400	10.367	10.419	VV	371	9114	0.14%	0.031%
128	10.423	10.419	10.434	VV	314	2225	0.03%	0.008%
129	10.443	10.434	10.460	VV	367	3769	0.06%	0.013%
130	10.487	10.460	10.504	VV	476	7988	0.12%	0.027%
131	10.509	10.504	10.532	VV	215	2539	0.04%	0.009%
132	10.563	10.532	10.583	PV	368	6769	0.10%	0.023%
133	10.598	10.583	10.618	VV	310	4586	0.07%	0.016%
134	10.635	10.618	10.669	VV	417	8334	0.12%	0.028%
135	10.693	10.669	10.712	VV	489	7651	0.11%	0.026%
136	10.729	10.712	10.742	VV	295	4314	0.06%	0.015%
137	10.747	10.742	10.751	VV	274	1548	0.02%	0.005%
138	10.766	10.751	10.776	VV	476	5684	0.08%	0.019%
139	10.807	10.776	10.825	VV	636	13659	0.20%	0.047%
140	10.844	10.825	10.870	VV	573	10564	0.16%	0.036%
141	10.892	10.870	10.900	VV	424	6199	0.09%	0.021%

142	10.906	10.900	10.912	VV	418	2772	0.04%	0.009%
143	10.931	10.912	10.945	VV	620	10165	0.15%	0.035%
144	10.963	10.945	10.986	VV	1252	22742	0.34%	0.078%
145	10.992	10.986	11.001	VV	928	7029	0.10%	0.024%
146	11.032	11.001	11.097	VV	2457	63481	0.94%	0.217%
147	11.111	11.097	11.153	VV	647	12130	0.18%	0.041%
148	11.187	11.153	11.289	VV	21320	473205	7.04%	1.615%
149	11.308	11.289	11.417	VV	2188	100753	1.50%	0.344%
150	11.421	11.417	11.457	VV	593	9719	0.14%	0.033%
151	11.462	11.457	11.482	VV	259	3015	0.04%	0.010%
152	11.488	11.482	11.505	VV	191	1635	0.02%	0.006%
153	11.550	11.516	11.569	VV	483	7835	0.12%	0.027%
154	11.612	11.569	11.662	VV	1163	35867	0.53%	0.122%
155	11.689	11.662	11.697	VV	415	7215	0.11%	0.025%
156	11.703	11.697	11.722	VV	409	5047	0.08%	0.017%
157	11.741	11.722	11.792	VV	526	12600	0.19%	0.043%
158	11.814	11.792	11.839	VV	515	9688	0.14%	0.033%
159	11.843	11.839	11.864	VV	329	2895	0.04%	0.010%
160	11.935	11.864	11.986	VV	610877	6719164	100.00%	22.925%
161	12.008	11.986	12.034	VV	2925	62120	0.92%	0.212%
162	12.050	12.034	12.088	VV	2892	67176	1.00%	0.229%
163	12.108	12.088	12.142	VV	3655	70739	1.05%	0.241%
164	12.160	12.142	12.176	VV	2119	34632	0.52%	0.118%
165	12.194	12.176	12.234	VV	2426	57154	0.85%	0.195%
166	12.239	12.234	12.244	VV	932	5645	0.08%	0.019%
167	12.248	12.244	12.275	VV	964	15463	0.23%	0.053%
168	12.278	12.275	12.306	VV	844	10155	0.15%	0.035%
169	12.341	12.306	12.409	VV	4738	84681	1.26%	0.289%
170	12.415	12.409	12.426	VV	588	4974	0.07%	0.017%
171	12.434	12.426	12.464	VV	554	8786	0.13%	0.030%
172	12.505	12.464	12.528	VV	1494	37128	0.55%	0.127%
173	12.543	12.528	12.596	VV	3783	75789	1.13%	0.259%
174	12.607	12.596	12.625	VV	860	12918	0.19%	0.044%
175	12.639	12.625	12.673	VV	1080	20711	0.31%	0.071%
176	12.679	12.673	12.708	VV	494	8102	0.12%	0.028%
177	12.720	12.708	12.729	VV	378	4149	0.06%	0.014%
178	12.780	12.729	12.828	VV	6861	114327	1.70%	0.390%
179	12.856	12.828	12.876	VV	1617	26212	0.39%	0.089%
180	12.896	12.876	12.915	VV	2892	44390	0.66%	0.151%
181	12.925	12.915	12.949	VV	1790	28150	0.42%	0.096%
182	12.958	12.949	12.969	VV	1226	13422	0.20%	0.046%
183	13.003	12.969	13.109	VV	38294	691528	10.29%	2.359%
184	13.114	13.109	13.162	VV	670	12852	0.19%	0.044%
185	13.214	13.162	13.258	VV	1577	36031	0.54%	0.123%
186	13.301	13.258	13.340	VV	32886	505318	7.52%	1.724%
187	13.368	13.340	13.420	VV	129125	1759780	26.19%	6.004%
188	13.434	13.420	13.505	VV	3550	104177	1.55%	0.355%
189	13.528	13.505	13.568	VV	1636	41438	0.62%	0.141%
190	13.596	13.568	13.634	VV	3391	57147	0.85%	0.195%
191	13.661	13.634	13.699	VV	1323	33795	0.50%	0.115%
192	13.708	13.699	13.715	VV	603	5104	0.08%	0.017%
193	13.753	13.715	13.772	VV	1307	31797	0.47%	0.108%
194	13.799	13.772	13.859	VV	2321	67763	1.01%	0.231%

195	13.866	13.859	13.875	VV	339	2832	0.04%	0.010%
196	13.908	13.875	13.922	VV	1664	33728	0.50%	0.115%
197	13.938	13.922	13.977	VV	2489	54910	0.82%	0.187%
198	13.986	13.977	14.024	VV	1179	21793	0.32%	0.074%
199	14.078	14.024	14.113	VV	3393	84843	1.26%	0.289%
200	14.119	14.113	14.148	VV	1138	15283	0.23%	0.052%
201	14.195	14.148	14.229	VV	2425	56351	0.84%	0.192%
202	14.243	14.229	14.314	VV	1428	36760	0.55%	0.125%
203	14.327	14.314	14.355	VV	258	4270	0.06%	0.015%
204	14.422	14.355	14.439	VV	459	10849	0.16%	0.037%
205	14.462	14.439	14.502	VV	374	7433	0.11%	0.025%
206	14.531	14.502	14.543	PV	454	7015	0.10%	0.024%
207	14.564	14.543	14.585	VV	715	13045	0.19%	0.045%
208	14.608	14.585	14.627	VV	623	12407	0.18%	0.042%
209	14.669	14.627	14.700	VV	785	25738	0.38%	0.088%
210	14.725	14.700	14.731	VV	1437	21065	0.31%	0.072%
211	14.735	14.731	14.753	VV	1460	18200	0.27%	0.062%
212	14.759	14.753	14.822	VV	1321	34911	0.52%	0.119%
213	14.830	14.822	14.835	VV	607	4627	0.07%	0.016%
214	14.855	14.835	14.874	VV	1669	26964	0.40%	0.092%
215	14.899	14.874	14.959	VV	4151	106563	1.59%	0.364%
216	14.962	14.959	14.968	VV	822	4517	0.07%	0.015%
217	14.979	14.968	14.995	VV	896	13162	0.20%	0.045%
218	15.007	14.995	15.025	VV	906	13999	0.21%	0.048%
219	15.049	15.025	15.058	VV	999	17028	0.25%	0.058%
220	15.070	15.058	15.107	VV	1085	26190	0.39%	0.089%
221	15.117	15.107	15.157	VV	722	14652	0.22%	0.050%
222	15.210	15.157	15.227	VV	9864	158629	2.36%	0.541%
223	15.244	15.227	15.344	VV	12251	357592	5.32%	1.220%
224	15.366	15.344	15.385	VV	2544	50066	0.75%	0.171%
225	15.392	15.385	15.415	VV	2033	28098	0.42%	0.096%
226	15.429	15.415	15.497	VV	1072	34220	0.51%	0.117%
227	15.534	15.497	15.562	VV	633	17734	0.26%	0.061%
228	15.608	15.562	15.729	VV	16360	354858	5.28%	1.211%
229	15.770	15.729	15.795	VV	2442	54126	0.81%	0.185%
230	15.815	15.795	15.852	VV	946	21331	0.32%	0.073%
231	15.873	15.852	15.880	VV	633	9101	0.14%	0.031%
232	15.910	15.880	15.930	VV	1948	39408	0.59%	0.134%
233	15.956	15.930	15.990	VV	1694	45736	0.68%	0.156%
234	16.002	15.990	16.012	VV	924	11521	0.17%	0.039%
235	16.035	16.012	16.050	VV	1357	26029	0.39%	0.089%
236	16.065	16.050	16.077	VV	1398	20736	0.31%	0.071%
237	16.081	16.077	16.113	VV	1329	23640	0.35%	0.081%
238	16.133	16.113	16.162	VV	1034	24233	0.36%	0.083%
239	16.179	16.162	16.185	VV	576	7399	0.11%	0.025%
240	16.209	16.185	16.228	VV	804	16388	0.24%	0.056%
241	16.249	16.228	16.283	VV	1224	25512	0.38%	0.087%
242	16.293	16.283	16.302	VV	549	5760	0.09%	0.020%
243	16.316	16.302	16.368	VV	645	16317	0.24%	0.056%
244	16.384	16.368	16.407	VV	364	6212	0.09%	0.021%
245	16.423	16.407	16.444	VV	165	1939	0.03%	0.007%
246	16.511	16.491	16.543	VV	327	4555	0.07%	0.016%

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247	16.564	16.543	16.571	VV	216	2332	0.03%	0.008%
248	16.624	16.571	16.666	VV	2651	67679	1.01%	0.231%
249	16.677	16.666	16.697	VV	919	15476	0.23%	0.053%
250	16.700	16.697	16.712	VV	716	6193	0.09%	0.021%
251	16.732	16.712	16.748	VV	1270	20108	0.30%	0.069%
252	16.770	16.748	16.799	VV	12950	228374	3.40%	0.779%
253	16.814	16.799	16.880	VV	6385	169314	2.52%	0.578%
254	16.914	16.880	17.015	VV	2789	101611	1.51%	0.347%
255	17.035	17.015	17.047	VV	568	7420	0.11%	0.025%
256	17.060	17.047	17.071	VV	706	8107	0.12%	0.028%
257	17.093	17.071	17.147	VV	7821	166928	2.48%	0.570%
258	17.167	17.147	17.229	VV	7941	215723	3.21%	0.736%
259	17.249	17.229	17.257	VV	2812	40726	0.61%	0.139%
260	17.279	17.257	17.381	VV	7706	171803	2.56%	0.586%
261	17.445	17.381	17.465	VV	883	27508	0.41%	0.094%
262	17.483	17.465	17.520	VV	676	13605	0.20%	0.046%
263	17.566	17.520	17.625	VV	5071	127920	1.90%	0.436%
264	17.649	17.625	17.673	VV	2906	48408	0.72%	0.165%
265	17.680	17.673	17.704	VV	827	12672	0.19%	0.043%
266	17.736	17.704	17.777	VV	1103	27494	0.41%	0.094%
267	17.809	17.777	17.824	VV	373	7603	0.11%	0.026%
268	17.849	17.824	17.950	VV	757	33321	0.50%	0.114%
269	17.982	17.959	17.991	VV	148	1639	0.02%	0.006%
270	18.022	17.999	18.035	VV	463	7096	0.11%	0.024%
271	18.059	18.035	18.065	VV	752	9773	0.15%	0.033%
272	18.086	18.065	18.116	VV	2458	37600	0.56%	0.128%
273	18.137	18.116	18.149	PV	141	1591	0.02%	0.005%
274	18.180	18.149	18.230	VV	5422	88022	1.31%	0.300%
275	18.251	18.230	18.269	VV	438	8626	0.13%	0.029%
276	18.274	18.269	18.299	VV	330	4944	0.07%	0.017%
277	18.321	18.299	18.342	VV	442	8048	0.12%	0.027%
278	18.363	18.342	18.387	VV	390	6901	0.10%	0.024%
279	18.446	18.387	18.490	PV	11815	247138	3.68%	0.843%
280	18.510	18.490	18.542	VV	4664	96933	1.44%	0.331%
281	18.565	18.542	18.607	VV	4335	109777	1.63%	0.375%
282	18.614	18.607	18.705	VV	2249	60700	0.90%	0.207%
283	18.713	18.705	18.730	VV	131	1571	0.02%	0.005%

Sum of corrected areas: 29309312

Aromatic EPH 022625.M Tue Mar 11 04:34:35 2025

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:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-102-SB02	SDG No.:	Q1488
Lab Sample ID:	Q1488-07	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	80.1
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
03/10/25 09:20	03/11/25 0:33	PB167058

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.47	U	1	0.47	1.25	mg/kg	FE052717.D
Aliphatic C12-C16	Aliphatic C12-C16	0.30	U	1	0.30	0.83	mg/kg	FE052717.D
Aliphatic C16-C21	Aliphatic C16-C21	0.37	U	1	0.37	1.25	mg/kg	FE052717.D
Aliphatic C21-C28	Aliphatic C21-C28	1.00	U	1	1.00	1.66	mg/kg	FE052717.D
Aliphatic C28-C40	Aliphatic C28-C40	2.24	U	1	2.24	2.49	mg/kg	FE052717.D
Aromatic C10-C12	Aromatic C10-C12	0.37	U	1	0.37	0.83	mg/kg	FF015638.D
Aromatic C12-C16	Aromatic C12-C16	0.42	U	1	0.42	1.25	mg/kg	FF015638.D
Aromatic C16-C21	Aromatic C16-C21	1.20	U	1	1.20	2.08	mg/kg	FF015638.D
Aromatic C21-C36	Aromatic C21-C36	2.49	U	1	2.49	3.32	mg/kg	FF015638.D
Total AliphaticEPH	Total AliphaticEPH	4.38	U		4.38	7.48	mg/kg	
Total AromaticEPH	Total AromaticEPH	4.49	U		4.49	7.48	mg/kg	
Total EPH	Total EPH	8.87	U		8.87	15.0	mg/kg	

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

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

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:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-102-SB02	SDG No.:	Q1488
Lab Sample ID:	Q1488-07	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	80.1
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
FE052717.D	1	03/10/25	03/11/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	0.47	U	0.47	1.25	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	0.30	U	0.30	0.83	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	0.37	U	0.37	1.25	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	1.00	U	1.00	1.66	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	2.24	U	2.24	2.49	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	36.5		40 - 140	73%	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:	Q1488-07	Acq On:	11 Mar 2025 00:33
Client Sample ID:	ENV-102-SB02	Operator:	YP\AJ
Data file:	FE052717.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	3.151	6.796	80375	0.515	300	ug/ml
Aliphatic C12-C16	6.797	10.250	295416	1.942	200	ug/ml
Aliphatic C16-C21	10.251	13.630	0	0	300	ug/ml
Aliphatic C21-C28	13.631	17.305	0	0	400	ug/ml
Aliphatic C28-C40	17.306	22.234	0	0	600	ug/ml
Aliphatic EPH	3.151	22.234	375791	2.458		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.356	13.356	4436611	36.54		ug/ml
Aliphatic C9-C28	3.151	17.305	375791	2.457	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052717.D
Signal(s) : FID1B.ch
Acq On : 11 Mar 2025 00:33
Operator : YP\AJ
Sample : Q1488-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-102-SB02

Integration File: autoint1.e
Quant Time: Mar 11 05:25:51 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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...	13.356	4436611	36.538 ug/ml
Spiked Amount 50.000		Recovery = 73.08%	
Target Compounds			

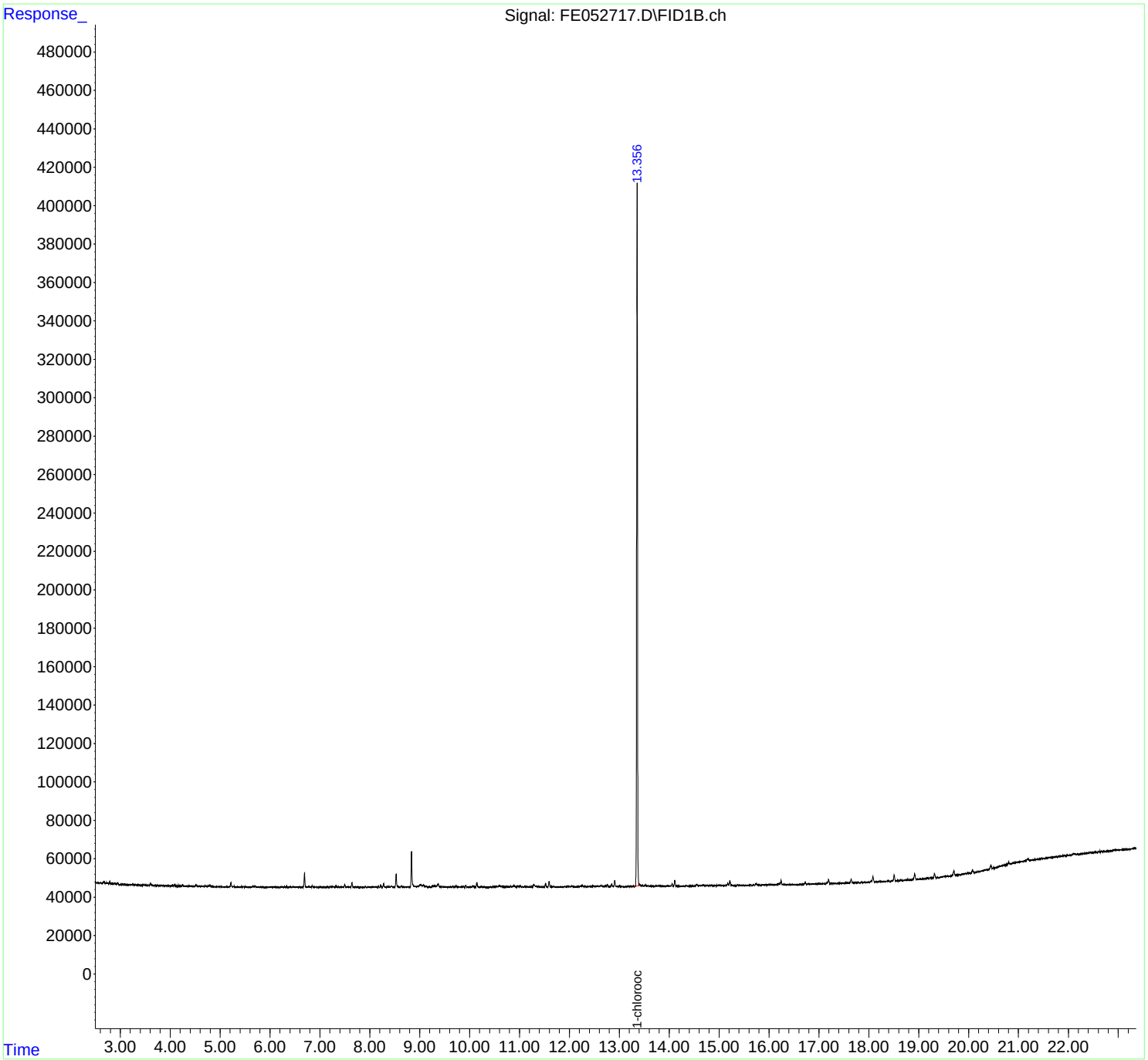
(f)=RT Delta > 1/2 Window (m)=manual int.

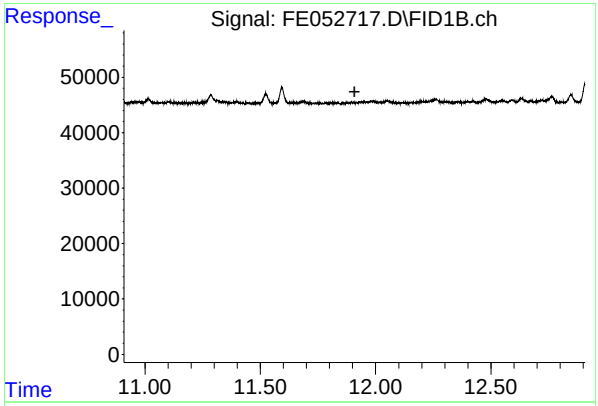
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052717.D
Signal(s) : FID1B.ch
Acq On : 11 Mar 2025 00:33
Operator : YP\AJ
Sample : Q1488-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-102-SB02

Integration File: autoint1.e
Quant Time: Mar 11 05:25:51 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

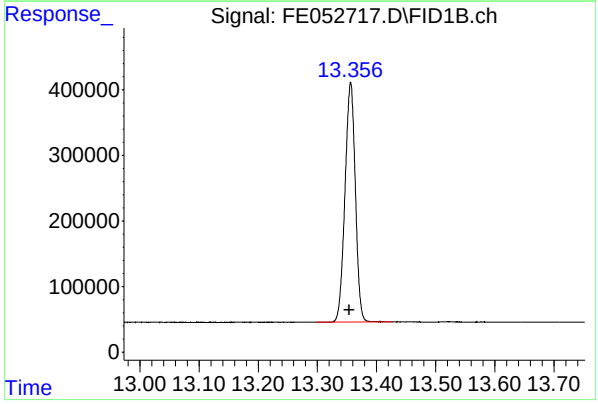




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.909 min
Response: 0
Conc: N.D.

Instrument :
FID_E
ClientSampleId :
ENV-102-SB02



#12 1-chlorooctadecane (SURR)

R.T.: 13.356 min
Delta R.T.: 0.002 min
Response: 4436611
Conc: 36.54 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052717.D
Signal(s) : FID1B.ch
Acq On : 11 Mar 2025 00:33
Sample : Q1488-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.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	6.692	6.665	6.748	BB	7401	80375	1.81%	1.670%
2	8.529	8.501	8.591	BB	6862	81461	1.84%	1.693%
3	8.837	8.748	8.898	BB	18511	213955	4.82%	4.446%
4	13.356	13.298	13.428	BB	362159	4436611	100.00%	92.191%
			Sum of corrected areas:			4812401		

Aliphatic EPH 030325.M Tue Mar 11 06:26:17 2025

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-102-SB02	SDG No.:	Q1488
Lab Sample ID:	Q1488-07	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	80.1
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
FF015638.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.37	U	0.37	0.83	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.42	U	0.42	1.25	mg/kg
Aromatic C16-C21	Aromatic C16-C21	1.20	U	1.20	2.08	mg/kg
Aromatic C21-C36	Aromatic C21-C36	2.49	U	2.49	3.32	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	52.6		40 - 140	105%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	50.8		40 - 140	102%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	38.4		40 - 140	77%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	Q1488-07	Acq On:	10 Mar 2025 21:11
Client Sample ID:	ENV-102-SB02	Operator:	YP\AJ
Data file:	FF015638.D	Misc:	
Instrument:	FID_F	ALS Vial:	80
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.505	6.377	0	0	200	ug/ml
Aromatic C12-C16	6.378	9.069	0	0	300	ug/ml
Aromatic C16-C21	9.070	13.390	1467708	11.032	500	ug/ml
Aromatic C21-C36	13.391	18.845	489315	3.762	800	ug/ml
Aromatic EPH	4.505	18.845	1957023	14.795		ug/ml
ortho-Terphenyl (SURR)	11.934	11.934	5650419	38.41		ug/ml
2-Bromonaphthalene (SURR)	7.998	7.998	6119437	52.57		ug/ml
2-Flurobiphenyl (SURR)	8.876	8.876	3620112	50.82		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015638.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 21:11
Operator : YP\AJ
Sample : Q1488-07
Misc :
ALS Vial : 80 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
ENV-102-SB02

Integration File: autoint1.e
Quant Time: Mar 11 03:25:54 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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...	7.998	6119437	52.566 ug/ml
Spiked Amount 50.000		Recovery = 105.13%	
6) S 2-Flurobiphenyl (SURR)	8.876	3620112	50.822 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery = 101.64%	
11) S ortho-Terphenyl (SURR)	11.934	5650419	38.411 ug/ml
Spiked Amount 50.000		Recovery = 76.82%	
Target Compounds			

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

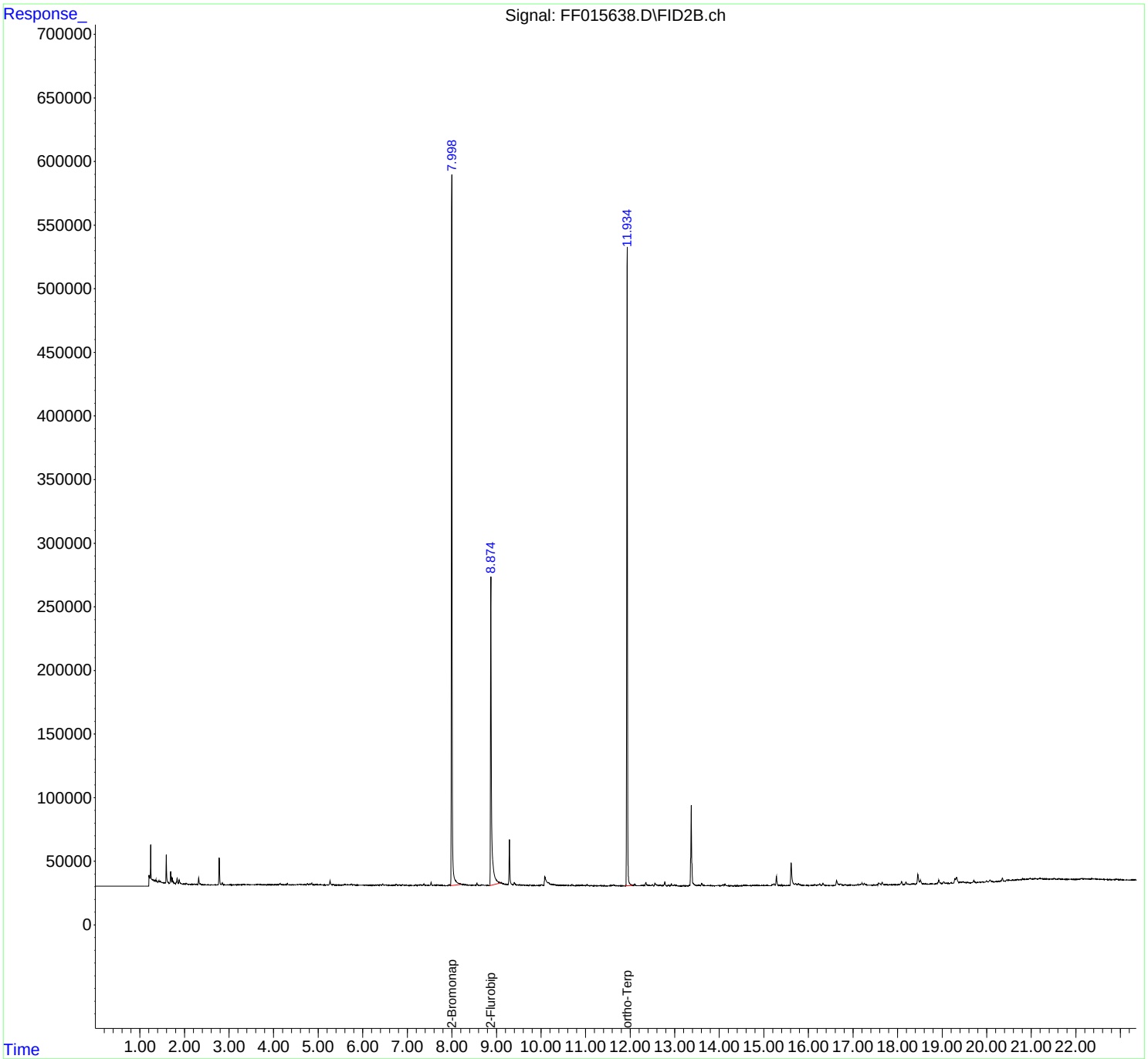
Quantitation Report (QT Reviewed)

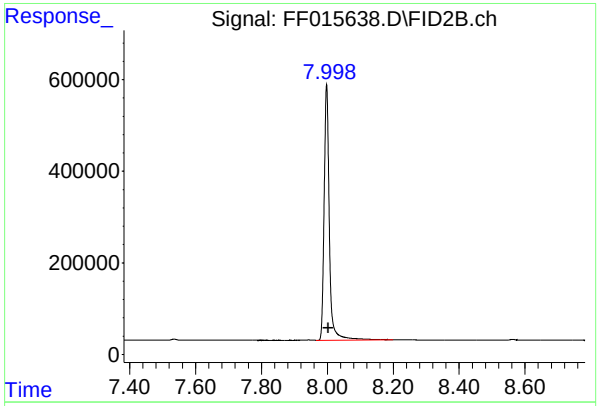
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015638.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 21:11
Operator : YP\AJ
Sample : Q1488-07
Misc :
ALS Vial : 80 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
ENV-102-SB02

Integration File: autoint1.e
Quant Time: Mar 11 03:25:54 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
Response via : Initial Calibration
Integrator: ChemStation

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

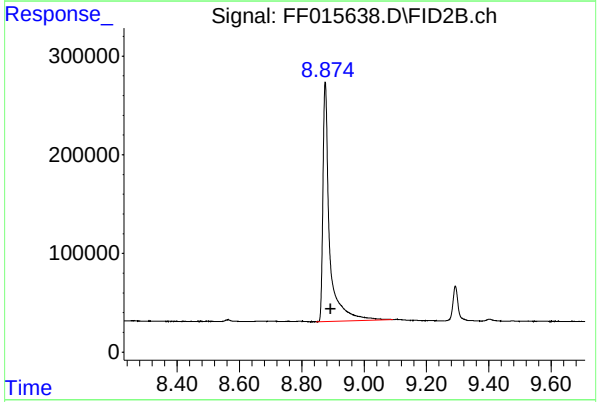




#4 2-Bromonaphthalene (SURR)

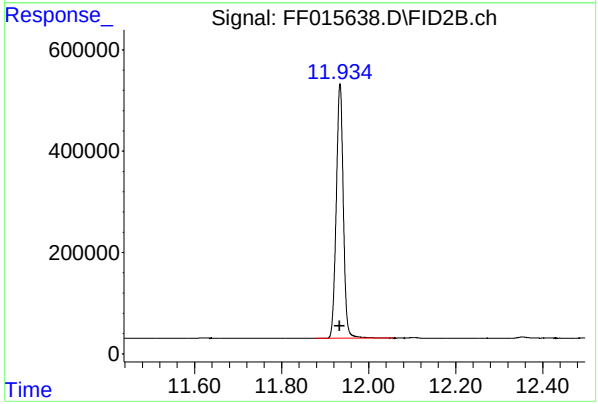
R.T.: 7.998 min
Delta R.T.: -0.005 min
Response: 6119437
Conc: 52.57 ug/ml

Instrument :
FID_F
ClientSampleId :
ENV-102-SB02



#6 2-Flurobiphenyl (SURR)

R.T.: 8.876 min
Delta R.T.: -0.016 min
Response: 3620112
Conc: 50.82 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.934 min
Delta R.T.: 0.000 min
Response: 5650419
Conc: 38.41 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015638.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 21:11
Sample : Q1488-07
Misc :
ALS Vial : 80 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	7.998	7.966	8.199	PB	558258	6119437	100.00%	35.277%
2	8.876	8.846	9.092	BB	242122	3620112	59.16%	20.869%
3	9.293	9.239	9.371	BB	35327	406346	6.64%	2.342%
4	10.086	10.061	10.159	BV	6375	157657	2.58%	0.909%
5	11.934	11.879	12.056	BB	502096	5650419	92.34%	32.573%
6	13.370	13.331	13.474	BB	63023	903705	14.77%	5.210%
7	15.280	15.252	15.341	VBA	7250	111242	1.82%	0.641%
8	15.610	15.572	15.692	BV	17836	312238	5.10%	1.800%
9	16.630	16.599	16.689	BB	3568	65835	1.08%	0.380%
			Sum of corrected areas:			17346990		

Aromatic EPH 022625.M Tue Mar 11 04:34:59 2025

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-104-SB01	SDG No.:	Q1488
Lab Sample ID:	Q1488-09	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	82.6
Sample Wt/Vol:	30.04 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
03/10/25 09:20	03/11/25 1:03	PB167058

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	1.21	mg/kg	FE052718.D
Aliphatic C12-C16	Aliphatic C12-C16	0.29	U	1	0.29	0.81	mg/kg	FE052718.D
Aliphatic C16-C21	Aliphatic C16-C21	0.36	U	1	0.36	1.21	mg/kg	FE052718.D
Aliphatic C21-C28	Aliphatic C21-C28	0.97	U	1	0.97	1.61	mg/kg	FE052718.D
Aliphatic C28-C40	Aliphatic C28-C40	2.18	U	1	2.18	2.42	mg/kg	FE052718.D
Aromatic C10-C12	Aromatic C10-C12	0.36	U	1	0.36	0.81	mg/kg	FF015639.D
Aromatic C12-C16	Aromatic C12-C16	0.76	J	1	0.41	1.21	mg/kg	FF015639.D
Aromatic C16-C21	Aromatic C16-C21	3.84		1	1.16	2.02	mg/kg	FF015639.D
Aromatic C21-C36	Aromatic C21-C36	3.72		1	2.42	3.22	mg/kg	FF015639.D
Total AliphaticEPH	Total AliphaticEPH	4.26	U		4.26	7.26	mg/kg	
Total AromaticEPH	Total AromaticEPH	8.31			4.35	7.26	mg/kg	
Total EPH	Total EPH	8.61	U		8.61	14.5	mg/kg	

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

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

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-104-SB01	SDG No.:	Q1488
Lab Sample ID:	Q1488-09	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	82.6
Sample Wt/Vol:	30.04 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE052718.D	1	03/10/25	03/11/25	PB167058

CAS Number	Parameter		Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12		0.46	U	0.46	1.21	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16		0.29	U	0.29	0.81	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21		0.36	U	0.36	1.21	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28		0.97	U	0.97	1.61	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40		2.18	U	2.18	2.42	mg/kg
SURROGATES							
3383-33-2	1-chlorooctadecane (SURR)		42.9		40 - 140	86%	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:	Q1488-09	Acq On:	11 Mar 2025 01:03
Client Sample ID:	ENV-104-SB01	Operator:	YP\AJ
Data file:	FE052718.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	3.151	6.796	134980	0.866	300	ug/ml
Aliphatic C12-C16	6.797	10.250	116104	0.763	200	ug/ml
Aliphatic C16-C21	10.251	13.630	0	0	300	ug/ml
Aliphatic C21-C28	13.631	17.305	0	0	400	ug/ml
Aliphatic C28-C40	17.306	22.234	0	0	600	ug/ml
Aliphatic EPH	3.151	22.234	251084	1.629		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.358	13.358	5213495	42.94		ug/ml
Aliphatic C9-C28	3.151	17.305	251084	1.629	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052718.D
Signal(s) : FID1B.ch
Acq On : 11 Mar 2025 01:03
Operator : YP\AJ
Sample : Q1488-09
Misc :
ALS Vial : 29 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-104-SB01

Integration File: autoint1.e
Quant Time: Mar 11 05:26:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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...	13.358	5213495	42.936 ug/ml
Spiked Amount 50.000		Recovery = 85.87%	
Target Compounds			

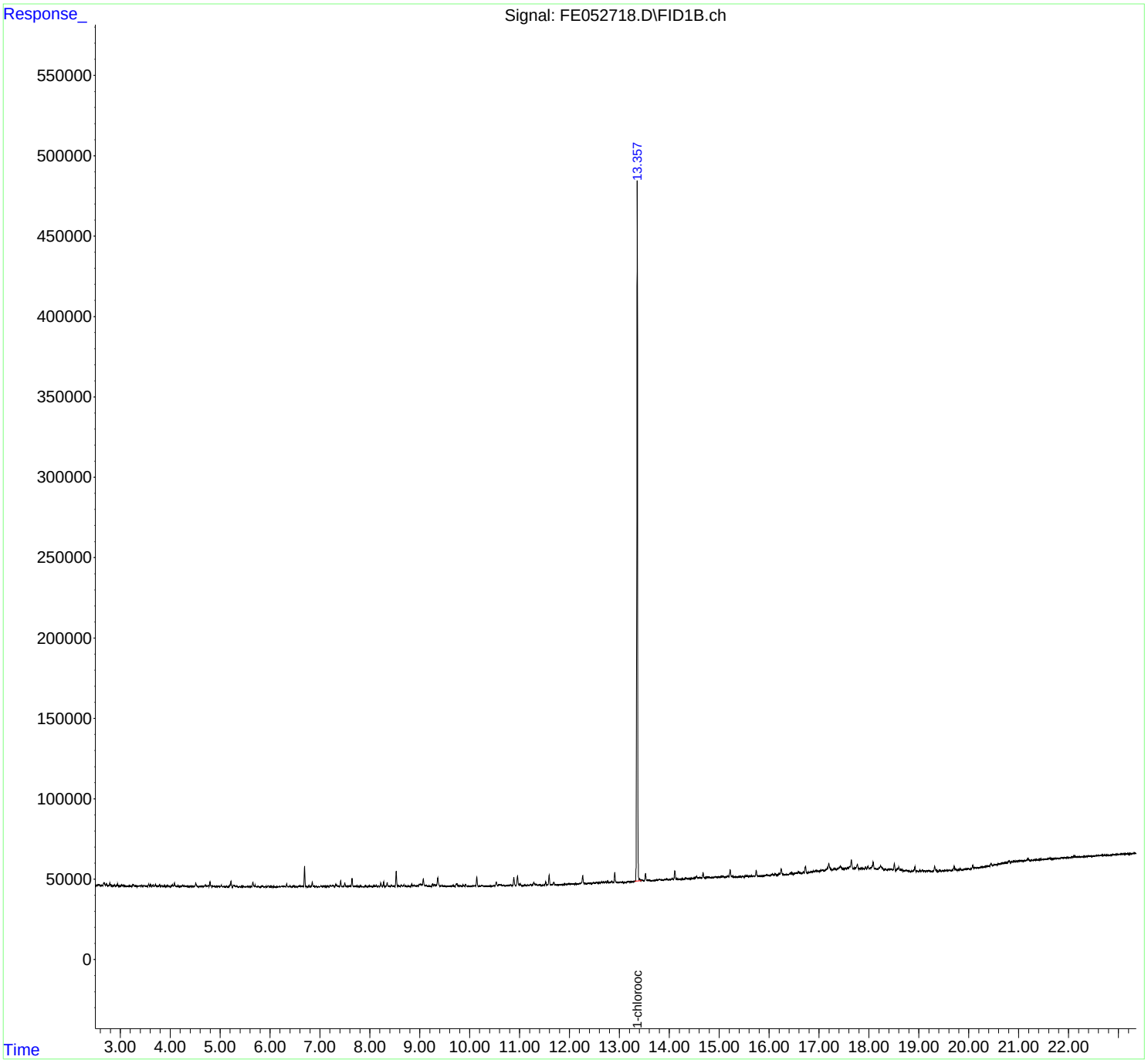
(f)=RT Delta > 1/2 Window (m)=manual int.

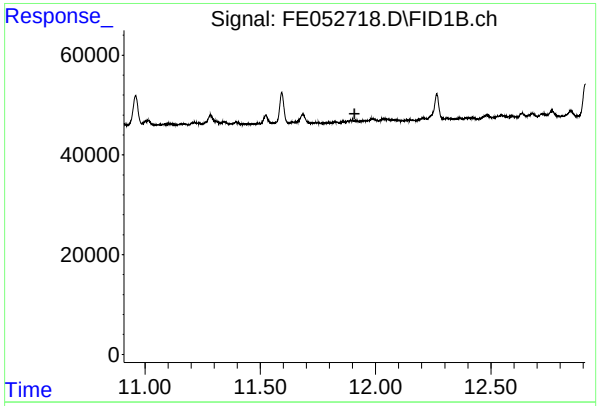
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052718.D
Signal(s) : FID1B.ch
Acq On : 11 Mar 2025 01:03
Operator : YP\AJ
Sample : Q1488-09
Misc :
ALS Vial : 29 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-104-SB01

Integration File: autoint1.e
Quant Time: Mar 11 05:26:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

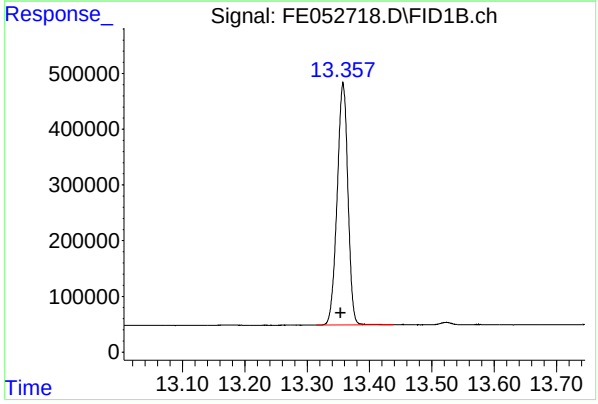




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.909 min
Response: 0
Conc: N.D.

Instrument :
FID_E
ClientSampleId :
ENV-104-SB01



#12 1-chlorooctadecane (SURR)

R.T.: 13.358 min
Delta R.T.: 0.003 min
Response: 5213495
Conc: 42.94 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052718.D
Signal(s) : FID1B.ch
Acq On : 11 Mar 2025 01:03
Sample : Q1488-09
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.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	6.692	6.668	6.751	BB	12747	134980	2.59%	2.470%
2	8.529	8.488	8.598	BB	9447	116104	2.23%	2.125%
3	13.358	13.314	13.438	BB	433975	5213495	100.00%	95.405%

Sum of corrected areas: 5464579

Aliphatic EPH 030325.M Tue Mar 11 06:26:35 2025

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-104-SB01	SDG No.:	Q1488
Lab Sample ID:	Q1488-09	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	82.6
Sample Wt/Vol:	30.04 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FF015639.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.36	U	0.36	0.81	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.76	J	0.41	1.21	mg/kg
Aromatic C16-C21	Aromatic C16-C21	3.84		1.16	2.02	mg/kg
Aromatic C21-C36	Aromatic C21-C36	3.72		2.42	3.22	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	49.3		40 - 140	99%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	51.1		40 - 140	102%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	47.5		40 - 140	95%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	Q1488-09	Acq On:	10 Mar 2025 21:41
Client Sample ID:	ENV-104-SB01	Operator:	YP\AJ
Data file:	FF015639.D	Misc:	
Instrument:	FID_F	ALS Vial:	81
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.505	6.377	575436	4.483	200	ug/ml
Aromatic C12-C16	6.378	9.069	1280754	9.362	300	ug/ml
Aromatic C16-C21	9.070	13.390	6340740	47.661	500	ug/ml
Aromatic C21-C36	13.391	18.845	6003199	46.159	800	ug/ml
Aromatic EPH	4.505	18.845	14200129	107.665		ug/ml
ortho-Terphenyl (SURR)	11.935	11.935	6986134	47.49		ug/ml
2-Bromonaphthalene (SURR)	7.997	7.997	5743878	49.34		ug/ml
2-Flurobiphenyl (SURR)	8.875	8.875	3641411	51.12		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015639.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 21:41
Operator : YP\AJ
Sample : Q1488-09
Misc :
ALS Vial : 81 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
ENV-104-SB01

Integration File: autoint1.e
Quant Time: Mar 11 03:26:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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...	7.997	5743878	49.340 ug/ml
Spiked Amount 50.000		Recovery = 98.68%	
6) S 2-Flurobiphenyl (SURR)	8.875	3641411	51.121 ug/ml
Spiked Amount 50.000	Range 0 - 131	Recovery = 102.24%	
11) S ortho-Terphenyl (SURR)	11.935	6986134	47.491 ug/ml
Spiked Amount 50.000		Recovery = 94.98%	
Target Compounds			

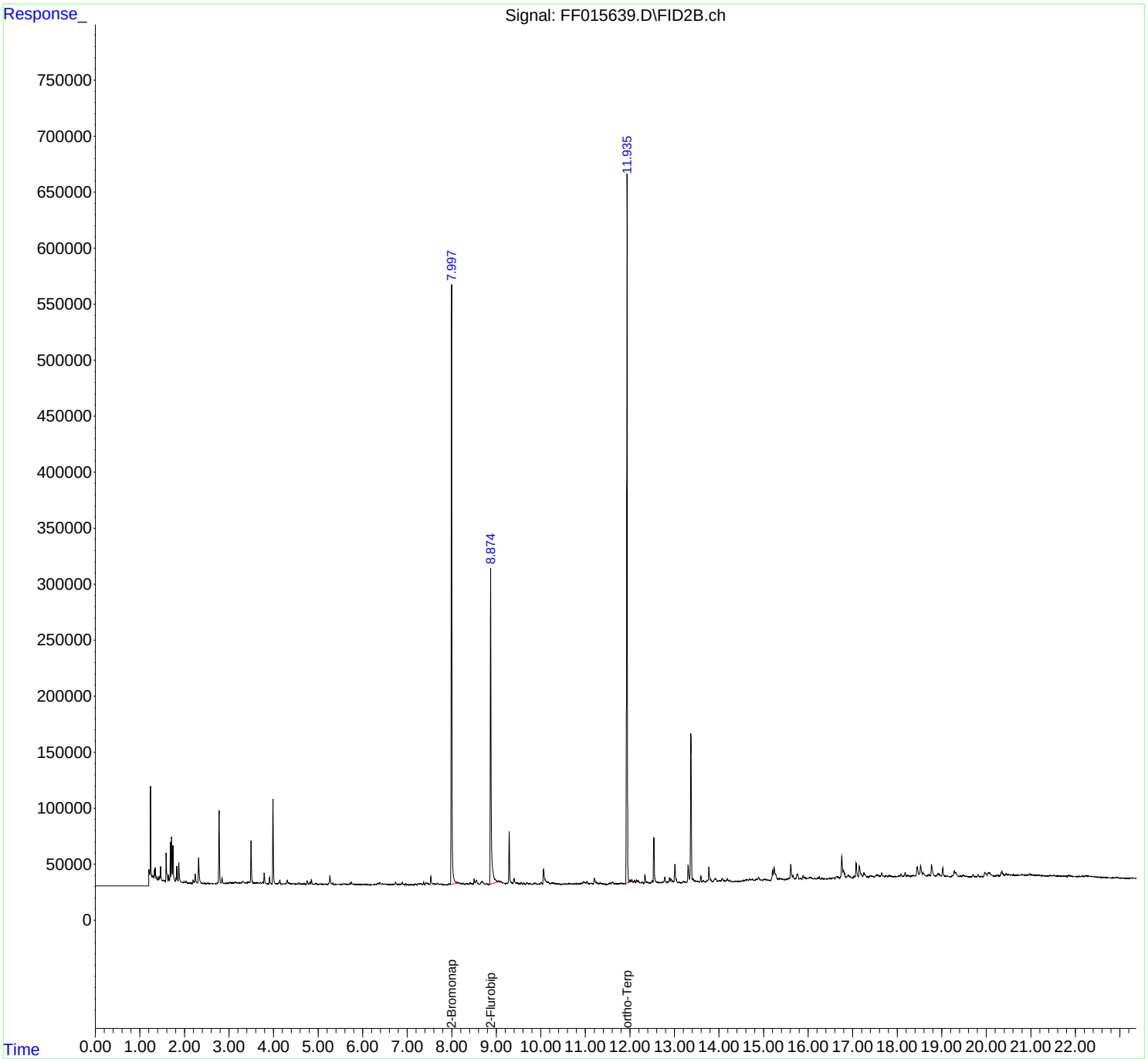
(f)=RT Delta > 1/2 Window (m)=manual int.

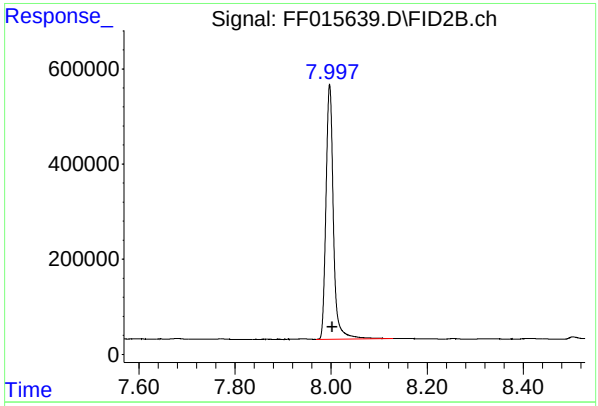
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015639.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 21:41
Operator : YP\AJ
Sample : Q1488-09
Misc :
ALS Vial : 81 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
ENV-104-SB01

Integration File: autoint1.e
Quant Time: Mar 11 03:26:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
Response via : Initial Calibration
Integrator: ChemStation

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

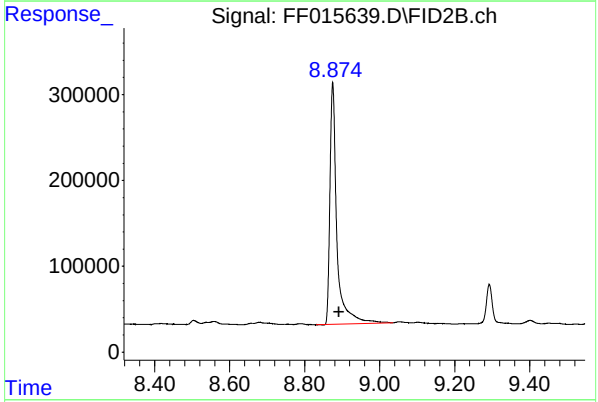




#4 2-Bromonaphthalene (SURR)

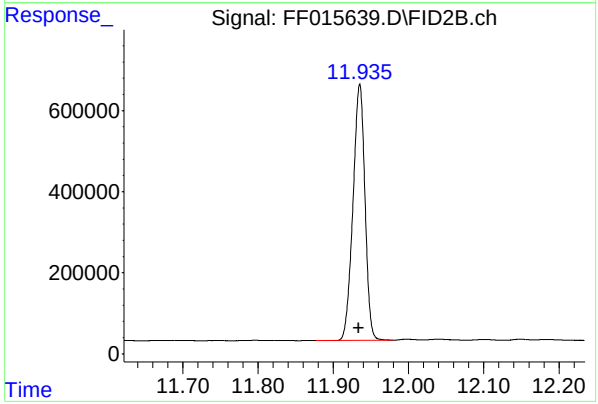
R.T.: 7.997 min
Delta R.T.: -0.006 min
Response: 5743878
Conc: 49.34 ug/ml

Instrument :
FID_F
ClientSampleId :
ENV-104-SB01



#6 2-Flurobiphenyl (SURR)

R.T.: 8.875 min
Delta R.T.: -0.017 min
Response: 3641411
Conc: 51.12 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.935 min
Delta R.T.: 0.002 min
Response: 6986134
Conc: 47.49 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015639.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 21:41
Sample : Q1488-09
Misc :
ALS Vial : 81 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	4.439	4.400	4.480	BV	387	5949	0.08%	0.019%
2	4.489	4.480	4.505	PV	114	1329	0.02%	0.004%
3	4.516	4.505	4.547	VV	232	3317	0.05%	0.011%
4	4.573	4.547	4.607	PV	1575	22604	0.32%	0.073%
5	4.625	4.607	4.674	VV	547	12953	0.18%	0.042%
6	4.693	4.674	4.723	VV	636	8635	0.12%	0.028%
7	4.755	4.723	4.785	PV	3289	44715	0.64%	0.145%
8	4.818	4.785	4.833	VV	2205	28591	0.41%	0.093%
9	4.851	4.833	4.890	VV	4478	55390	0.79%	0.179%
10	4.901	4.890	4.925	VV	239	4397	0.06%	0.014%
11	4.942	4.925	4.969	VV	1298	18549	0.26%	0.060%
12	4.976	4.969	5.005	VV	534	6973	0.10%	0.023%
13	5.010	5.005	5.020	VV	193	1415	0.02%	0.005%
14	5.024	5.020	5.044	VV	219	2494	0.04%	0.008%
15	5.061	5.044	5.074	VV	505	6350	0.09%	0.021%
16	5.081	5.074	5.109	VV	438	6218	0.09%	0.020%
17	5.115	5.109	5.127	VV	188	1439	0.02%	0.005%
18	5.135	5.127	5.149	VV	164	1260	0.02%	0.004%
19	5.180	5.158	5.215	VV	491	8644	0.12%	0.028%
20	5.267	5.215	5.306	VV	7321	117361	1.67%	0.380%
21	5.329	5.306	5.360	VV	1724	24516	0.35%	0.079%
22	5.376	5.360	5.380	VV	214	2086	0.03%	0.007%
23	5.387	5.380	5.420	VV	290	5254	0.07%	0.017%
24	5.433	5.420	5.450	VV	200	2801	0.04%	0.009%
25	5.478	5.450	5.497	VV	435	6793	0.10%	0.022%
26	5.504	5.497	5.517	VV	147	1281	0.02%	0.004%
27	5.576	5.537	5.582	VV	658	12241	0.17%	0.040%
28	5.586	5.582	5.639	VV	635	14710	0.21%	0.048%
29	5.642	5.639	5.654	VV	273	2217	0.03%	0.007%
30	5.665	5.654	5.691	VV	368	5434	0.08%	0.018%
31	5.715	5.691	5.732	VV	1135	17743	0.25%	0.057%
32	5.748	5.732	5.791	VV	2504	36887	0.52%	0.119%
33	5.810	5.791	5.827	VV	688	9680	0.14%	0.031%
34	5.833	5.827	5.857	VV	249	2713	0.04%	0.009%
35	5.878	5.857	5.919	VV	339	9121	0.13%	0.030%
36	5.924	5.919	5.940	VV	224	2012	0.03%	0.007%

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37	5.961	5.949	5.990	VV	173	3493	0.05%	0.011%
38	6.018	5.990	6.052	VV	648	11321	0.16%	0.037%
39	6.077	6.052	6.108	VV	448	8559	0.12%	0.028%
40	6.115	6.108	6.131	VV	224	2481	0.04%	0.008%
41	6.135	6.131	6.147	VV	163	1292	0.02%	0.004%
42	6.202	6.194	6.223	VV	150	1647	0.02%	0.005%
43	6.239	6.223	6.248	VV	213	2113	0.03%	0.007%
44	6.285	6.248	6.315	VV	378	9620	0.14%	0.031%
45	6.340	6.315	6.365	VV	1394	28116	0.40%	0.091%
46	6.383	6.365	6.428	VV	2077	41040	0.58%	0.133%
47	6.446	6.428	6.468	VV	1276	19421	0.28%	0.063%
48	6.475	6.468	6.487	VV	410	4343	0.06%	0.014%
49	6.518	6.487	6.563	VV	1020	26132	0.37%	0.085%
50	6.569	6.563	6.594	VV	359	5236	0.07%	0.017%
51	6.597	6.594	6.619	VV	299	3199	0.05%	0.010%
52	6.638	6.619	6.665	VV	397	7870	0.11%	0.025%
53	6.686	6.673	6.709	VV	375	5192	0.07%	0.017%
54	6.739	6.709	6.800	VV	2612	44422	0.63%	0.144%
55	6.819	6.800	6.842	VV	1015	13249	0.19%	0.043%
56	6.858	6.842	6.871	VV	705	8113	0.12%	0.026%
57	6.889	6.871	6.910	VV	2281	27739	0.39%	0.090%
58	6.922	6.910	6.945	VV	648	7844	0.11%	0.025%
59	6.963	6.945	6.997	VV	1154	13998	0.20%	0.045%
60	7.066	7.052	7.097	VV	261	2893	0.04%	0.009%
61	7.113	7.097	7.144	PV	177	2713	0.04%	0.009%
62	7.188	7.164	7.220	VV	1167	13418	0.19%	0.043%
63	7.243	7.220	7.260	VV	1264	18572	0.26%	0.060%
64	7.268	7.260	7.274	VV	853	6760	0.10%	0.022%
65	7.291	7.274	7.303	VV	1278	17780	0.25%	0.058%
66	7.310	7.303	7.339	VV	1098	14402	0.20%	0.047%
67	7.371	7.339	7.394	VV	2047	30968	0.44%	0.100%
68	7.420	7.394	7.439	VV	1708	29783	0.42%	0.096%
69	7.453	7.439	7.510	VV	1526	38455	0.55%	0.125%
70	7.533	7.510	7.577	VV	7545	113965	1.62%	0.369%
71	7.594	7.577	7.626	VV	1003	24429	0.35%	0.079%
72	7.644	7.626	7.656	VV	868	12495	0.18%	0.040%
73	7.680	7.656	7.710	VV	1798	32249	0.46%	0.104%
74	7.714	7.710	7.719	VV	470	2109	0.03%	0.007%
75	7.740	7.719	7.756	VV	690	11794	0.17%	0.038%
76	7.772	7.756	7.810	VV	1145	14560	0.21%	0.047%
77	7.843	7.821	7.852	VV	184	1496	0.02%	0.005%
78	7.866	7.852	7.871	VV	213	1537	0.02%	0.005%
79	7.874	7.871	7.885	VV	201	1029	0.01%	0.003%
80	7.891	7.885	7.907	VV	142	1574	0.02%	0.005%
81	7.942	7.907	7.969	VV	1406	20375	0.29%	0.066%
82	7.997	7.969	8.128	VV	535771	5832631	82.87%	18.889%
83	8.145	8.128	8.197	VV	2046	66825	0.95%	0.216%
84	8.208	8.197	8.229	VV	1172	18373	0.26%	0.060%
85	8.234	8.229	8.238	VV	691	3355	0.05%	0.011%
86	8.254	8.238	8.295	VV	1701	31174	0.44%	0.101%
87	8.315	8.295	8.339	VV	1235	23488	0.33%	0.076%
88	8.342	8.339	8.366	VV	923	12684	0.18%	0.041%
89	8.376	8.366	8.389	VV	784	8770	0.12%	0.028%

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90	8.418	8.389	8.484	VV	1647	58314	0.83%	0.189%
91	8.504	8.484	8.525	VV	5314	70967	1.01%	0.230%
92	8.559	8.525	8.634	VV	4118	114616	1.63%	0.371%
93	8.657	8.634	8.665	VV	1955	21353	0.30%	0.069%
94	8.679	8.665	8.741	VV	2980	80674	1.15%	0.261%
95	8.755	8.741	8.770	VV	783	10811	0.15%	0.035%
96	8.789	8.770	8.807	VV	1460	21129	0.30%	0.068%
97	8.814	8.807	8.834	VV	413	4666	0.07%	0.015%
98	8.875	8.852	9.035	PV	282297	3799383	53.98%	12.304%
99	9.052	9.035	9.087	VV	3581	92401	1.31%	0.299%
100	9.102	9.087	9.149	VV	3055	84024	1.19%	0.272%
101	9.162	9.149	9.202	VV	1663	43290	0.62%	0.140%
102	9.243	9.202	9.257	VV	1420	39609	0.56%	0.128%
103	9.292	9.257	9.360	VV	47442	588974	8.37%	1.907%
104	9.401	9.360	9.435	VV	5267	116135	1.65%	0.376%
105	9.450	9.435	9.463	VV	1897	28484	0.40%	0.092%
106	9.471	9.463	9.510	VV	1752	32144	0.46%	0.104%
107	9.525	9.510	9.538	VV	966	12219	0.17%	0.040%
108	9.557	9.538	9.591	VV	2094	39411	0.56%	0.128%
109	9.609	9.591	9.658	VV	1487	36941	0.52%	0.120%
110	9.695	9.658	9.735	VV	1994	49970	0.71%	0.162%
111	9.752	9.735	9.791	VV	1272	24401	0.35%	0.079%
112	9.811	9.791	9.826	VV	624	8840	0.13%	0.029%
113	9.839	9.826	9.843	VV	639	5845	0.08%	0.019%
114	9.863	9.843	9.880	VV	1920	28436	0.40%	0.092%
115	9.894	9.880	9.933	VV	1233	21058	0.30%	0.068%
116	9.953	9.933	9.970	VV	476	8558	0.12%	0.028%
117	9.975	9.970	9.977	VV	521	1911	0.03%	0.006%
118	10.005	9.977	10.042	VV	2135	42123	0.60%	0.136%
119	10.061	10.042	10.152	VV	13751	333226	4.73%	1.079%
120	10.169	10.152	10.227	VV	2568	65854	0.94%	0.213%
121	10.252	10.227	10.270	VV	1402	31032	0.44%	0.100%
122	10.289	10.270	10.335	VV	1343	40013	0.57%	0.130%
123	10.352	10.335	10.366	VV	652	10823	0.15%	0.035%
124	10.397	10.366	10.435	VV	765	20564	0.29%	0.067%
125	10.441	10.435	10.461	VV	332	3080	0.04%	0.010%
126	10.489	10.461	10.508	VV	562	8809	0.13%	0.029%
127	10.534	10.508	10.544	VV	763	11548	0.16%	0.037%
128	10.559	10.544	10.579	VV	709	11107	0.16%	0.036%
129	10.599	10.579	10.614	VV	451	7139	0.10%	0.023%
130	10.632	10.614	10.640	VV	866	10334	0.15%	0.033%
131	10.655	10.640	10.677	VV	891	14720	0.21%	0.048%
132	10.694	10.677	10.713	VV	693	9921	0.14%	0.032%
133	10.731	10.713	10.760	VV	759	15684	0.22%	0.051%
134	10.793	10.760	10.822	VV	904	25566	0.36%	0.083%
135	10.844	10.822	10.870	VV	885	18583	0.26%	0.060%
136	10.911	10.870	10.920	VV	1262	24593	0.35%	0.080%
137	10.927	10.920	10.936	VV	1214	10420	0.15%	0.034%
138	10.960	10.936	11.009	VV	2388	71620	1.02%	0.232%
139	11.033	11.009	11.088	VV	2618	66864	0.95%	0.217%
140	11.121	11.088	11.125	VV	1218	19263	0.27%	0.062%
141	11.129	11.125	11.174	VV	1263	22633	0.32%	0.073%

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142	11.200	11.174	11.300	VV	5556	153732	2.18%	0.498%
143	11.328	11.300	11.357	VV	1325	32313	0.46%	0.105%
144	11.362	11.357	11.384	VV	760	9241	0.13%	0.030%
145	11.395	11.384	11.415	VV	586	8690	0.12%	0.028%
146	11.421	11.415	11.479	VV	431	7421	0.11%	0.024%
147	11.493	11.479	11.499	PV	177	1036	0.01%	0.003%
148	11.544	11.499	11.566	VV	1205	25687	0.36%	0.083%
149	11.589	11.566	11.595	VV	1318	18409	0.26%	0.060%
150	11.612	11.595	11.647	VV	2052	34754	0.49%	0.113%
151	11.673	11.647	11.686	VV	720	12106	0.17%	0.039%
152	11.705	11.686	11.726	VV	615	11022	0.16%	0.036%
153	11.743	11.726	11.765	VV	491	9149	0.13%	0.030%
154	11.798	11.765	11.822	VV	1184	24756	0.35%	0.080%
155	11.834	11.822	11.855	VV	727	10402	0.15%	0.034%
156	11.882	11.855	11.888	VV	521	8033	0.11%	0.026%
157	11.891	11.888	11.900	VV	423	2699	0.04%	0.009%
158	11.935	11.900	11.979	VV	634068	7038610	100.00%	22.795%
159	11.998	11.979	12.020	VV	3829	65691	0.93%	0.213%
160	12.038	12.020	12.079	VV	3864	89214	1.27%	0.289%
161	12.102	12.079	12.128	VV	3182	60779	0.86%	0.197%
162	12.148	12.128	12.167	VV	3644	58449	0.83%	0.189%
163	12.184	12.167	12.234	VV	3016	71948	1.02%	0.233%
164	12.279	12.234	12.312	VV	1546	44595	0.63%	0.144%
165	12.338	12.312	12.370	VV	8230	114535	1.63%	0.371%
166	12.384	12.370	12.399	VV	1266	20191	0.29%	0.065%
167	12.408	12.399	12.462	VV	1083	31061	0.44%	0.101%
168	12.497	12.462	12.518	VV	2606	55908	0.79%	0.181%
169	12.537	12.518	12.634	VV	40827	531869	7.56%	1.722%
170	12.647	12.634	12.660	VV	930	13890	0.20%	0.045%
171	12.664	12.660	12.667	VV	1011	4335	0.06%	0.014%
172	12.670	12.667	12.695	VV	1001	15325	0.22%	0.050%
173	12.704	12.695	12.716	VV	815	9267	0.13%	0.030%
174	12.742	12.716	12.756	VV	1466	28560	0.41%	0.092%
175	12.783	12.756	12.810	VV	5711	100827	1.43%	0.327%
176	12.818	12.810	12.837	VV	1408	16972	0.24%	0.055%
177	12.858	12.837	12.872	VV	1809	27072	0.38%	0.088%
178	12.890	12.872	12.908	VV	5202	72160	1.03%	0.234%
179	12.924	12.908	12.946	VV	3951	64371	0.91%	0.208%
180	12.959	12.946	12.977	VV	2411	34688	0.49%	0.112%
181	13.008	12.977	13.092	VV	16769	315256	4.48%	1.021%
182	13.119	13.092	13.151	VV	867	20419	0.29%	0.066%
183	13.183	13.151	13.196	PV	1325	19822	0.28%	0.064%
184	13.210	13.196	13.230	VV	1444	22884	0.33%	0.074%
185	13.248	13.230	13.265	VV	1043	18080	0.26%	0.059%
186	13.305	13.265	13.339	VV	15967	267812	3.80%	0.867%
187	13.368	13.339	13.401	VV	132603	1709541	24.29%	5.536%
188	13.413	13.401	13.503	VV	3983	134394	1.91%	0.435%
189	13.515	13.503	13.520	VV	1369	12783	0.18%	0.041%
190	13.531	13.520	13.559	VV	1459	24621	0.35%	0.080%
191	13.592	13.559	13.625	VV	5964	92280	1.31%	0.299%
192	13.647	13.625	13.680	VV	1792	36529	0.52%	0.118%
193	13.707	13.680	13.712	VV	964	13341	0.19%	0.043%
194	13.770	13.712	13.849	VV	13985	278539	3.96%	0.902%

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195	13.921	13.849	13.963	VV	3601	133959	1.90%	0.434%
196	13.999	13.963	14.015	VV	1643	35951	0.51%	0.116%
197	14.028	14.015	14.044	VV	1477	21446	0.30%	0.069%
198	14.074	14.044	14.103	VV	3456	76258	1.08%	0.247%
199	14.119	14.103	14.138	VV	1865	26420	0.38%	0.086%
200	14.183	14.138	14.215	VV	2943	69025	0.98%	0.224%
201	14.230	14.215	14.280	VV	1520	36722	0.52%	0.119%
202	14.290	14.280	14.322	VV	479	8294	0.12%	0.027%
203	14.357	14.322	14.366	VV	448	7707	0.11%	0.025%
204	14.370	14.366	14.374	VV	367	1692	0.02%	0.005%
205	14.392	14.374	14.428	VV	494	8701	0.12%	0.028%
206	14.452	14.428	14.479	PV	437	6941	0.10%	0.022%
207	14.515	14.479	14.537	VV	859	18611	0.26%	0.060%
208	14.559	14.537	14.576	VV	1138	19794	0.28%	0.064%
209	14.609	14.576	14.627	VV	1680	39296	0.56%	0.127%
210	14.644	14.627	14.665	VV	1765	31170	0.44%	0.101%
211	14.686	14.665	14.725	VV	2394	60037	0.85%	0.194%
212	14.747	14.725	14.774	VV	2023	43419	0.62%	0.141%
213	14.786	14.774	14.796	VV	1016	12303	0.17%	0.040%
214	14.841	14.796	14.866	VV	2410	62044	0.88%	0.201%
215	14.890	14.866	14.959	VV	3555	97959	1.39%	0.317%
216	14.963	14.959	14.980	VV	962	10531	0.15%	0.034%
217	15.002	14.980	15.007	VV	1314	16038	0.23%	0.052%
218	15.030	15.007	15.047	VV	1438	31972	0.45%	0.104%
219	15.054	15.047	15.062	VV	1298	11220	0.16%	0.036%
220	15.066	15.062	15.087	VV	1297	15538	0.22%	0.050%
221	15.097	15.087	15.156	VV	853	20227	0.29%	0.066%
222	15.200	15.156	15.215	VV	9348	143241	2.04%	0.464%
223	15.235	15.215	15.265	VV	12073	250216	3.55%	0.810%
224	15.270	15.265	15.314	VV	5885	97957	1.39%	0.317%
225	15.330	15.314	15.344	VV	1573	25875	0.37%	0.084%
226	15.363	15.344	15.379	VV	1866	34122	0.48%	0.111%
227	15.394	15.379	15.487	VV	1658	67711	0.96%	0.219%
228	15.505	15.487	15.523	VV	1074	17296	0.25%	0.056%
229	15.526	15.523	15.528	VV	869	2770	0.04%	0.009%
230	15.533	15.528	15.539	VV	953	5670	0.08%	0.018%
231	15.566	15.539	15.584	VV	1847	39461	0.56%	0.128%
232	15.609	15.584	15.645	VV	14108	250982	3.57%	0.813%
233	15.659	15.645	15.701	VV	4215	80776	1.15%	0.262%
234	15.711	15.701	15.722	VV	1319	15812	0.22%	0.051%
235	15.748	15.722	15.755	VV	4933	64647	0.92%	0.209%
236	15.765	15.755	15.790	VV	5270	75668	1.08%	0.245%
237	15.797	15.790	15.812	VV	1068	12818	0.18%	0.042%
238	15.831	15.812	15.857	VV	1701	29696	0.42%	0.096%
239	15.883	15.857	15.907	VV	3872	68526	0.97%	0.222%
240	15.923	15.907	15.963	VV	2209	55305	0.79%	0.179%
241	15.982	15.963	16.000	VV	1354	26759	0.38%	0.087%
242	16.041	16.000	16.119	VV	2073	100359	1.43%	0.325%
243	16.146	16.119	16.174	VV	1062	25585	0.36%	0.083%
244	16.179	16.174	16.190	VV	630	5003	0.07%	0.016%
245	16.213	16.190	16.219	VV	1240	16475	0.23%	0.053%
246	16.225	16.219	16.234	VV	1251	10419	0.15%	0.034%

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247	16.249	16.234	16.281	VV	1730	30270	0.43%	0.098%
248	16.313	16.281	16.342	VV	1241	22264	0.32%	0.072%
249	16.346	16.342	16.360	VV	422	3696	0.05%	0.012%
250	16.381	16.360	16.403	VV	556	8744	0.12%	0.028%
251	16.416	16.403	16.424	VV	176	1353	0.02%	0.004%
252	16.438	16.424	16.441	PV	242	1268	0.02%	0.004%
253	16.449	16.441	16.453	VV	322	1952	0.03%	0.006%
254	16.460	16.453	16.465	VV	391	2597	0.04%	0.008%
255	16.483	16.465	16.508	VV	809	12110	0.17%	0.039%
256	16.531	16.508	16.542	VV	668	8824	0.13%	0.029%
257	16.571	16.542	16.604	VV	1321	31550	0.45%	0.102%
258	16.643	16.604	16.703	VV	2093	81358	1.16%	0.263%
259	16.754	16.703	16.782	VV	19990	349155	4.96%	1.131%
260	16.793	16.782	16.857	VV	7104	177208	2.52%	0.574%
261	16.899	16.857	17.001	VV	3263	138140	1.96%	0.447%
262	17.032	17.001	17.054	VV	2508	44074	0.63%	0.143%
263	17.077	17.054	17.128	VV	13663	242869	3.45%	0.787%
264	17.149	17.128	17.227	VV	10755	288960	4.11%	0.936%
265	17.251	17.227	17.320	VV	4848	149483	2.12%	0.484%
266	17.326	17.320	17.352	VV	1221	19083	0.27%	0.062%
267	17.415	17.352	17.490	VV	1828	108874	1.55%	0.353%
268	17.521	17.490	17.532	VV	2024	38963	0.55%	0.126%
269	17.546	17.532	17.570	VV	2286	47617	0.68%	0.154%
270	17.575	17.570	17.600	VV	1828	26274	0.37%	0.085%
271	17.617	17.600	17.627	VV	1325	19503	0.28%	0.063%
272	17.650	17.627	17.677	VV	4093	74531	1.06%	0.241%
273	17.687	17.677	17.717	VV	1551	29147	0.41%	0.094%
274	17.765	17.717	17.795	VV	1548	51084	0.73%	0.165%
275	17.818	17.795	17.855	VV	1862	43179	0.61%	0.140%
276	17.865	17.855	17.887	VV	1017	16256	0.23%	0.053%
277	17.892	17.887	17.897	VV	549	2946	0.04%	0.010%
278	17.904	17.897	17.914	VV	552	4790	0.07%	0.016%
279	17.941	17.914	17.963	VV	581	14168	0.20%	0.046%
280	17.981	17.963	18.002	VV	504	8330	0.12%	0.027%
281	18.026	18.002	18.037	VV	788	12237	0.17%	0.040%
282	18.054	18.037	18.067	VV	1022	16214	0.23%	0.053%
283	18.084	18.067	18.117	VV	2389	39050	0.55%	0.126%
284	18.137	18.117	18.147	VV	714	9725	0.14%	0.031%
285	18.177	18.147	18.204	VV	3780	63240	0.90%	0.205%
286	18.222	18.204	18.228	VV	887	11340	0.16%	0.037%
287	18.251	18.228	18.285	VV	1052	26397	0.38%	0.085%
288	18.318	18.285	18.337	VV	548	12740	0.18%	0.041%
289	18.358	18.337	18.395	VV	1119	23684	0.34%	0.077%
290	18.414	18.395	18.418	VV	750	7162	0.10%	0.023%
291	18.449	18.418	18.488	VV	8295	184050	2.61%	0.596%
292	18.524	18.488	18.565	VV	9608	214119	3.04%	0.693%
293	18.579	18.565	18.625	VV	2979	71825	1.02%	0.233%
294	18.637	18.625	18.652	VV	585	7623	0.11%	0.025%
295	18.655	18.652	18.671	VV	427	2606	0.04%	0.008%
296	18.692	18.671	18.700	PV	965	10774	0.15%	0.035%
297	18.705	18.700	18.711	VV	925	5478	0.08%	0.018%
298	18.722	18.711	18.748	VV	998	14444	0.21%	0.047%
299	18.770	18.748	18.800	PBA	8871	130960	1.86%	0.424%

rteres
Sum of corrected areas: 30878033

Aromatic EPH 022625.M Tue Mar 11 04:35:44 2025

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:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-104-SB02	SDG No.:	Q1488
Lab Sample ID:	Q1488-11	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	81.1
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
03/10/25 09:20	03/11/25 1:34	PB167058

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.47	U	1	0.47	1.23	mg/kg	FE052719.D
Aliphatic C12-C16	Aliphatic C12-C16	0.30	U	1	0.30	0.82	mg/kg	FE052719.D
Aliphatic C16-C21	Aliphatic C16-C21	0.37	U	1	0.37	1.23	mg/kg	FE052719.D
Aliphatic C21-C28	Aliphatic C21-C28	0.98	U	1	0.98	1.64	mg/kg	FE052719.D
Aliphatic C28-C40	Aliphatic C28-C40	2.22	U	1	2.22	2.46	mg/kg	FE052719.D
Aromatic C10-C12	Aromatic C10-C12	0.37	U	1	0.37	0.82	mg/kg	FF015640.D
Aromatic C12-C16	Aromatic C12-C16	0.42	U	1	0.42	1.23	mg/kg	FF015640.D
Aromatic C16-C21	Aromatic C16-C21	1.18	U	1	1.18	2.05	mg/kg	FF015640.D
Aromatic C21-C36	Aromatic C21-C36	2.46	U	1	2.46	3.28	mg/kg	FF015640.D
Total AliphaticEPH	Total AliphaticEPH	4.34	U		4.34	7.38	mg/kg	
Total AromaticEPH	Total AromaticEPH	4.43	U		4.43	7.38	mg/kg	
Total EPH	Total EPH	8.76	U		8.76	14.8	mg/kg	

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

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

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-104-SB02	SDG No.:	Q1488
Lab Sample ID:	Q1488-11	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	81.1
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
FE052719.D	1	03/10/25	03/11/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	0.47	U	0.47	1.23	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	0.30	U	0.30	0.82	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	0.37	U	0.37	1.23	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	0.98	U	0.98	1.64	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	2.22	U	2.22	2.46	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	33.0		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:	Q1488-11	Acq On:	11 Mar 2025 01:34
Client Sample ID:	ENV-104-SB02	Operator:	YP\AJ
Data file:	FE052719.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	3.151	6.796	110142	0.706	300	ug/ml
Aliphatic C12-C16	6.797	10.250	257610	1.694	200	ug/ml
Aliphatic C16-C21	10.251	13.630	0	0	300	ug/ml
Aliphatic C21-C28	13.631	17.305	0	0	400	ug/ml
Aliphatic C28-C40	17.306	22.234	106151	0.832	600	ug/ml
Aliphatic EPH	3.151	22.234	473903	3.232		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.357	13.357	4009135	33.02		ug/ml
Aliphatic C9-C28	3.151	17.305	367752	2.4	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052719.D
Signal(s) : FID1B.ch
Acq On : 11 Mar 2025 01:34
Operator : YP\AJ
Sample : Q1488-11
Misc :
ALS Vial : 30 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-104-SB02

Integration File: autoint1.e
Quant Time: Mar 11 05:26:31 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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...	13.357	4009135	33.017 ug/ml
Spiked Amount 50.000		Recovery = 66.03%	
Target Compounds			

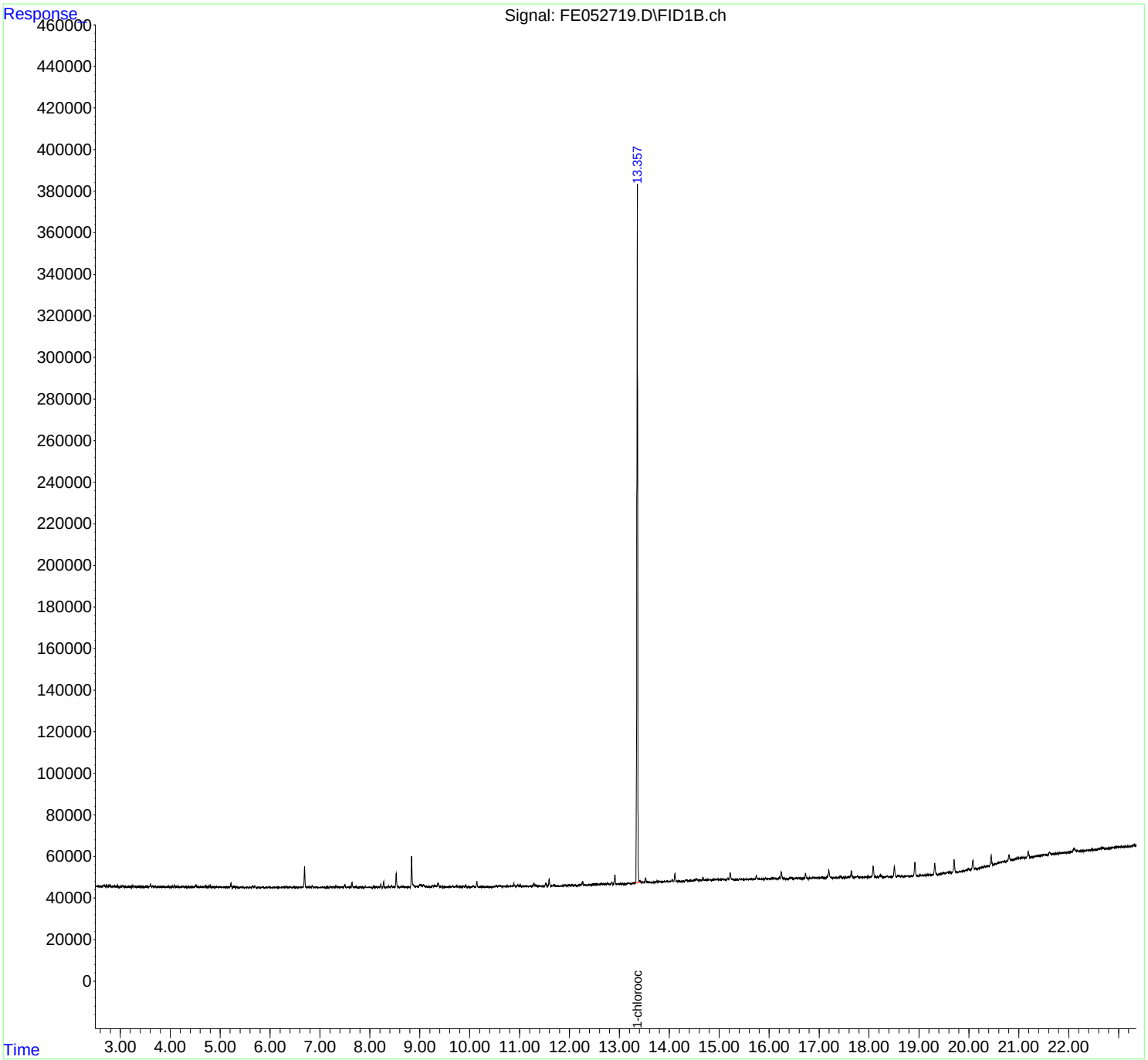
(f)=RT Delta > 1/2 Window (m)=manual int.

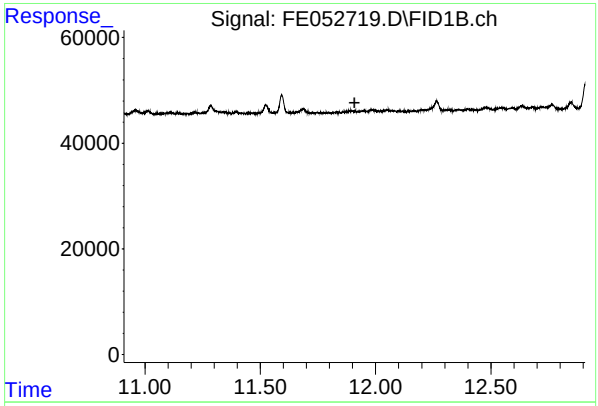
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052719.D
Signal(s) : FID1B.ch
Acq On : 11 Mar 2025 01:34
Operator : YP\AJ
Sample : Q1488-11
Misc :
ALS Vial : 30 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-104-SB02

Integration File: autoint1.e
Quant Time: Mar 11 05:26:31 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

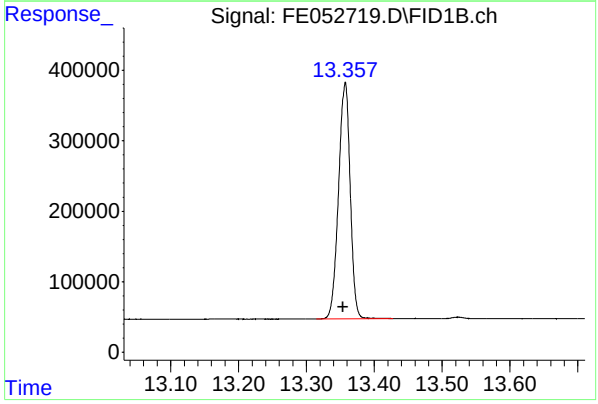




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.909 min
Response: 0
Conc: N.D.

Instrument :
FID_E
ClientSampleId :
ENV-104-SB02



#12 1-chlorooctadecane (SURR)

R.T.: 13.357 min
Delta R.T.: 0.003 min
Response: 4009135
Conc: 33.02 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052719.D
Signal(s) : FID1B.ch
Acq On : 11 Mar 2025 01:34
Sample : Q1488-11
Misc :
ALS Vial : 30 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.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	6.692	6.661	6.748	BB	10107	110142	2.75%	2.457%
2	8.528	8.494	8.591	BB	6735	78988	1.97%	1.762%
3	8.837	8.808	8.901	BB	14843	178622	4.46%	3.984%
4	13.357	13.314	13.428	BB	336818	4009135	100.00%	89.429%
5	18.919	18.871	18.978	BB	6633	106151	2.65%	2.368%

Sum of corrected areas: 4483037

Aliphatic EPH 030325.M Tue Mar 11 06:26:56 2025

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:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-104-SB02	SDG No.:	Q1488
Lab Sample ID:	Q1488-11	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	81.1
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
FF015640.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.37	U	0.37	0.82	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.42	U	0.42	1.23	mg/kg
Aromatic C16-C21	Aromatic C16-C21	1.18	U	1.18	2.05	mg/kg
Aromatic C21-C36	Aromatic C21-C36	2.46	U	2.46	3.28	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	53.5		40 - 140	107%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	53.5		40 - 140	107%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	33.4		40 - 140	67%	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:	Q1488-11	Acq On:	10 Mar 2025 22:10
Client Sample ID:	ENV-104-SB02	Operator:	YP\AJ
Data file:	FF015640.D	Misc:	
Instrument:	FID_F	ALS Vial:	82
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.505	6.377	0	0	200	ug/ml
Aromatic C12-C16	6.378	9.069	0	0	300	ug/ml
Aromatic C16-C21	9.070	13.390	1658092	12.463	500	ug/ml
Aromatic C21-C36	13.391	18.845	265196	2.039	800	ug/ml
Aromatic EPH	4.505	18.845	1923288	14.502		ug/ml
ortho-Terphenyl (SURR)	11.934	11.934	4906237	33.35		ug/ml
2-Bromonaphthalene (SURR)	7.997	7.997	6223400	53.46		ug/ml
2-Flurobiphenyl (SURR)	8.875	8.875	3813525	53.54		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015640.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 22:10
Operator : YP\AJ
Sample : Q1488-11
Misc :
ALS Vial : 82 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
ENV-104-SB02

Integration File: autoint1.e
Quant Time: Mar 11 03:26:40 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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...	7.997	6223400	53.459 ug/ml
Spiked Amount 50.000		Recovery = 106.92%	
6) S 2-Flurobiphenyl (SURR)	8.875	3813525	53.537 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery = 107.07%	
11) S ortho-Terphenyl (SURR)	11.934	4906237	33.352 ug/ml
Spiked Amount 50.000		Recovery = 66.70%	
Target Compounds			

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

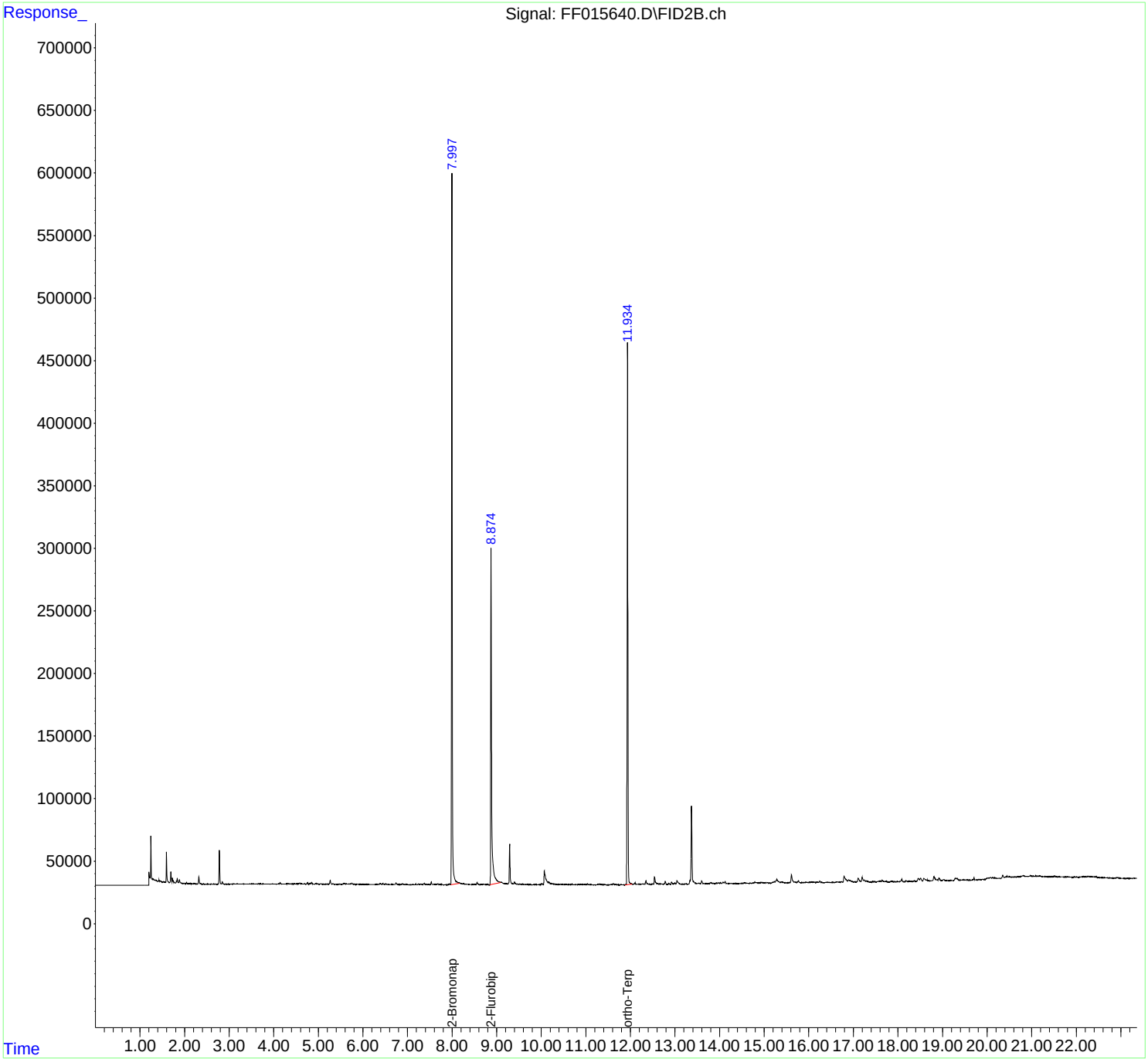
Quantitation Report (QT Reviewed)

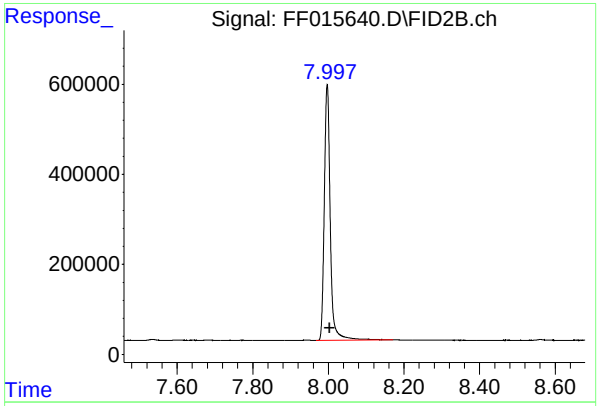
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015640.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 22:10
Operator : YP\AJ
Sample : Q1488-11
Misc :
ALS Vial : 82 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
ENV-104-SB02

Integration File: autoint1.e
Quant Time: Mar 11 03:26:40 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
Response via : Initial Calibration
Integrator: ChemStation

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

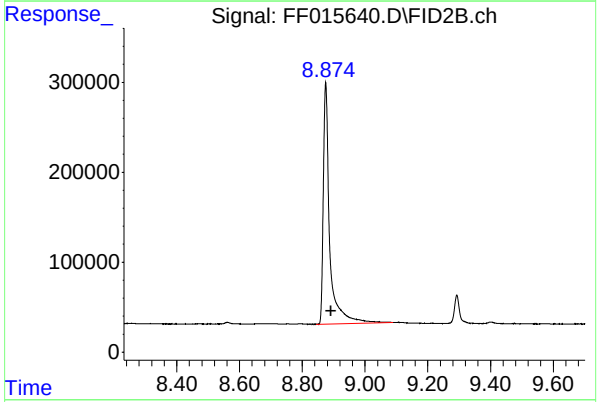




#4 2-Bromonaphthalene (SURR)

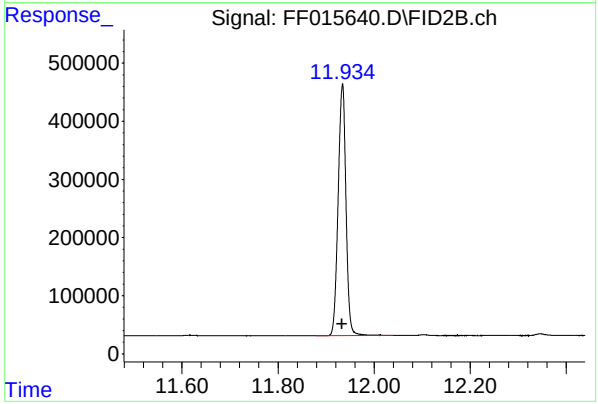
R.T.: 7.997 min
Delta R.T.: -0.006 min
Response: 6223400
Conc: 53.46 ug/ml

Instrument :
FID_F
ClientSampleId :
ENV-104-SB02



#6 2-Flurobiphenyl (SURR)

R.T.: 8.875 min
Delta R.T.: -0.017 min
Response: 3813525
Conc: 53.54 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.934 min
Delta R.T.: 0.000 min
Response: 4906237
Conc: 33.35 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015640.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 22:10
Sample : Q1488-11
Misc :
ALS Vial : 82 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	7.997	7.967	8.171	BB	568857	6223400	100.00%	36.898%
2	8.875	8.844	9.089	BB	267487	3813525	61.28%	22.610%
3	9.293	9.237	9.371	BB	31837	356391	5.73%	2.113%
4	10.070	10.049	10.216	PB	10945	319976	5.14%	1.897%
5	11.934	11.879	12.039	BB	432706	4906237	78.84%	29.089%
6	12.540	12.524	12.602	PB	5826	86393	1.39%	0.512%
7	13.369	13.279	13.477	BB	62231	895332	14.39%	5.308%
8	15.611	15.501	15.694	BB	6261	118318	1.90%	0.701%
9	16.792	16.694	16.867	BV	4099	94911	1.53%	0.563%
10	18.806	18.749	18.850	BBA	2951	51967	0.84%	0.308%

Sum of corrected areas: 16866449

Aromatic EPH 022625.M Tue Mar 11 04:36:13 2025

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:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-102-GW01	SDG No.:	Q1488
Lab Sample ID:	Q1488-13	Matrix:	Water
Analytical Method:	NJEPH	% Solid:	0
Sample Wt/Vol:	810 Units: mL	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :	SW3510		

Prep Date :	Date Analyzed :	Prep Batch ID
03/05/25 08:25	03/05/25 18:27	PB166976

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	8.04	J	1	7.11	37.0	ug/l	FC068373.D
Aliphatic C12-C16	Aliphatic C12-C16	14.0	J	1	4.46	24.7	ug/l	FC068373.D
Aliphatic C16-C21	Aliphatic C16-C21	12.8	J	1	6.35	37.0	ug/l	FC068373.D
Aliphatic C21-C28	Aliphatic C21-C28	11.9	J	1	11.1	49.4	ug/l	FC068373.D
Aliphatic C28-C40	Aliphatic C28-C40	61.2	J	1	21.0	74.1	ug/l	FC068373.D
Aromatic C10-C12	Aromatic C10-C12	9.38	J	1	4.10	24.7	ug/l	FD049163.D
Aromatic C12-C16	Aromatic C12-C16	13.0	J	1	4.56	37.0	ug/l	FD049163.D
Aromatic C16-C21	Aromatic C16-C21	136		1	15.7	61.7	ug/l	FD049163.D
Aromatic C21-C36	Aromatic C21-C36	51.3	J	1	31.1	98.8	ug/l	FD049163.D
Total AliphaticEPH	Total AliphaticEPH	108	J		50.0	222	ug/l	
Total AromaticEPH	Total AromaticEPH	210	J		55.5	222	ug/l	
Total EPH	Total EPH	318	J		105	444	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:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-102-GW01	SDG No.:	Q1488
Lab Sample ID:	Q1488-13	Matrix:	Water
Analytical Method:	NJEPH	% Solid:	0
Sample Wt/Vol:	810 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
FC068373.D	1	03/05/25	03/05/25	PB166976

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	8.04	J	7.11	37.0	ug/l
Aliphatic C12-C16	Aliphatic C12-C16	14.0	J	4.46	24.7	ug/l
Aliphatic C16-C21	Aliphatic C16-C21	12.8	J	6.35	37.0	ug/l
Aliphatic C21-C28	Aliphatic C21-C28	11.9	J	11.1	49.4	ug/l
Aliphatic C28-C40	Aliphatic C28-C40	61.2	J	21.0	74.1	ug/l
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	35.2		40 - 140	70%	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:	Q1488-13	Acq On:	05 Mar 2025 18:27
Client Sample ID:	ENV-102-GW01	Operator:	YP/AJ
Data file:	FC068373.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	3.102	6.366	459255	3.256	300	ug/ml
Aliphatic C12-C16	6.367	9.749	773343	5.659	200	ug/ml
Aliphatic C16-C21	9.750	13.103	681686	5.179	300	ug/ml
Aliphatic C21-C28	13.104	16.755	590149	4.81	400	ug/ml
Aliphatic C28-C40	16.756	21.556	2549539	24.79	600	ug/ml
Aliphatic EPH	3.102	21.556	5053972	43.694		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.834	12.834	3961758	35.22		ug/ml
Aliphatic C9-C28	3.102	16.755	2504433	18.904	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068373.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 18:27
Operator : YP/AJ
Sample : Q1488-13
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
ENV-102-GW01

Integration File: autoint1.e
Quant Time: Mar 05 22:33:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
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...	12.834	3961758	35.224 ug/ml
Spiked Amount 50.000		Recovery = 70.45%	
Target Compounds			

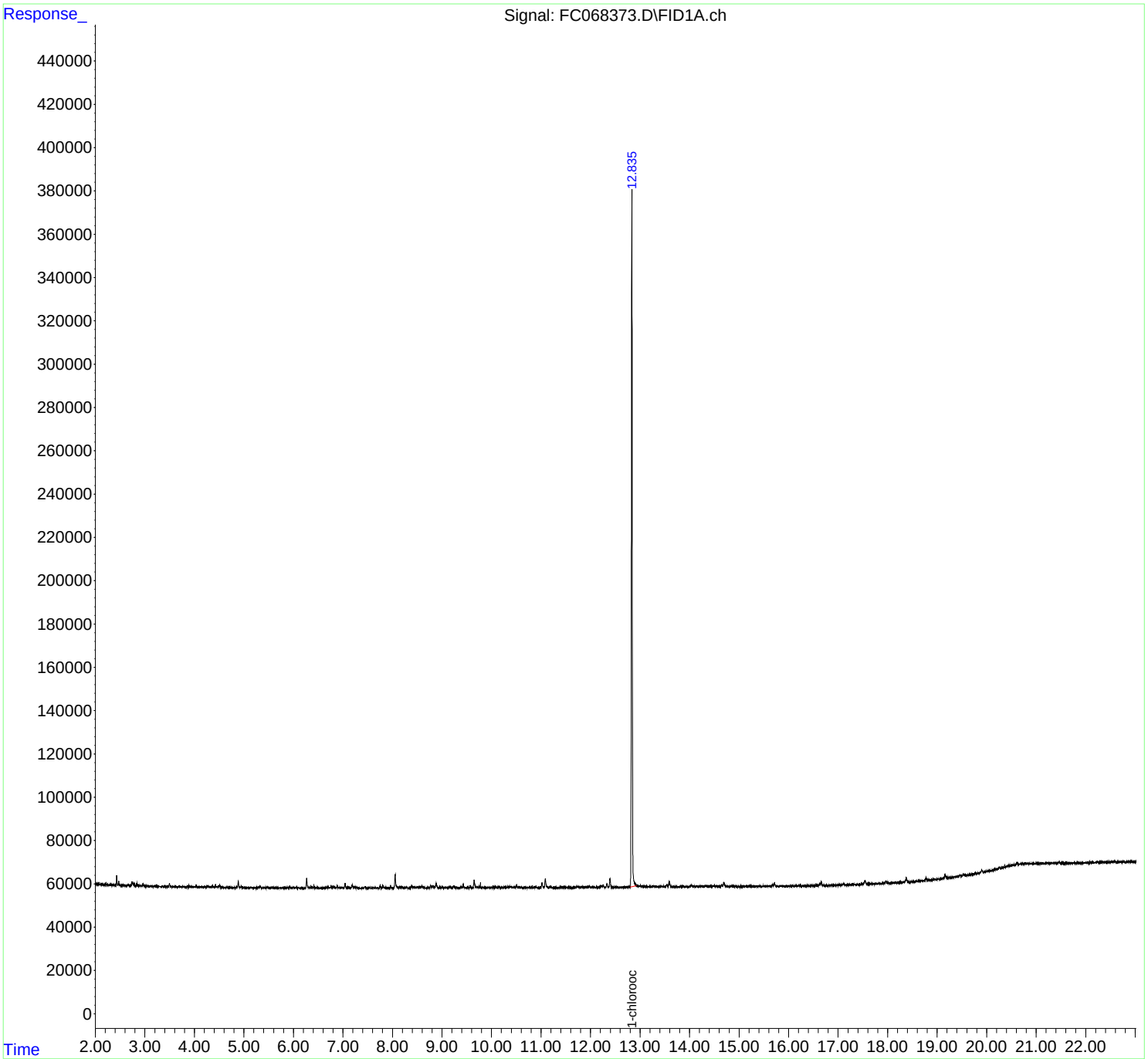
(f)=RT Delta > 1/2 Window (m)=manual int.

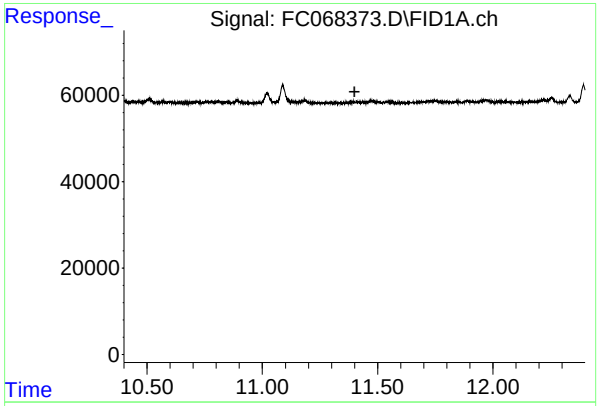
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068373.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 18:27
Operator : YP/AJ
Sample : Q1488-13
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
ENV-102-GW01

Integration File: autoint1.e
Quant Time: Mar 05 22:33:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

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

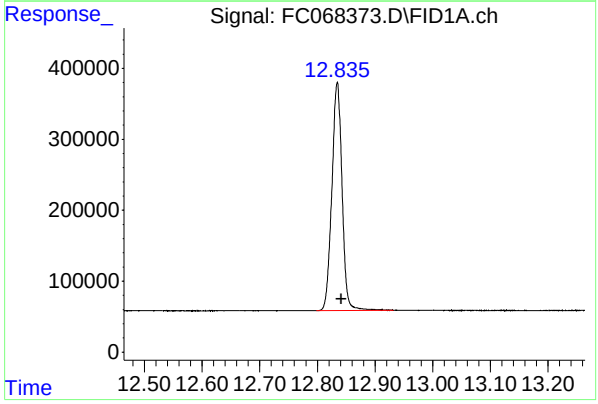




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
ENV-102-GW01



#12 1-chlorooctadecane (SURR)

R.T.: 12.834 min
Delta R.T.: -0.007 min
Response: 3961758
Conc: 35.22 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068373.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 18:27
Sample : Q1488-13
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.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	2.358	2.344	2.407	VV	321	4211	0.10%	0.045%
2	2.430	2.407	2.453	PV	4394	34350	0.85%	0.366%
3	2.471	2.453	2.489	VV	2068	17353	0.43%	0.185%
4	2.497	2.489	2.551	VV	254	4354	0.11%	0.046%
5	2.557	2.551	2.570	VV	128	1198	0.03%	0.013%
6	2.590	2.570	2.628	VV	221	3861	0.10%	0.041%
7	2.654	2.628	2.718	VV	544	10618	0.26%	0.113%
8	2.742	2.718	2.772	VV	1729	26874	0.67%	0.286%
9	2.787	2.772	2.821	VV	1091	14509	0.36%	0.155%
10	2.837	2.821	2.904	VV	1277	19078	0.47%	0.203%
11	2.918	2.904	2.934	VV	217	3019	0.08%	0.032%
12	2.960	2.934	3.018	VV	1181	16235	0.40%	0.173%
13	3.045	3.018	3.079	VV	168	3437	0.09%	0.037%
14	3.085	3.079	3.114	PV	112	1432	0.04%	0.015%
15	3.150	3.114	3.188	VV	122	2728	0.07%	0.029%
16	3.206	3.188	3.249	VV	255	4504	0.11%	0.048%
17	3.260	3.249	3.338	VV	144	4261	0.11%	0.045%
18	3.351	3.338	3.422	VV	77	3630	0.09%	0.039%
19	3.432	3.422	3.451	PV	60	644	0.02%	0.007%
20	3.497	3.451	3.516	PV	1556	17025	0.42%	0.181%
21	3.525	3.516	3.560	VV	288	2896	0.07%	0.031%
22	3.572	3.560	3.598	VV	167	2371	0.06%	0.025%
23	3.621	3.598	3.642	VV	179	2617	0.07%	0.028%
24	3.657	3.642	3.671	VV	102	1311	0.03%	0.014%
25	3.693	3.671	3.748	VV	259	6693	0.17%	0.071%
26	3.773	3.748	3.831	VV	319	6815	0.17%	0.073%
27	3.865	3.831	3.878	PV	407	5136	0.13%	0.055%
28	3.893	3.878	3.932	VV	720	12372	0.31%	0.132%
29	3.958	3.932	3.993	VV	245	4517	0.11%	0.048%
30	4.036	3.993	4.067	VV	793	14945	0.37%	0.159%
31	4.083	4.067	4.093	VV	186	2608	0.06%	0.028%
32	4.103	4.093	4.140	VV	188	4255	0.11%	0.045%
33	4.156	4.140	4.165	VV	185	2355	0.06%	0.025%
34	4.180	4.165	4.209	VV	269	4559	0.11%	0.049%
35	4.265	4.209	4.340	VV	673	26108	0.65%	0.278%
36	4.362	4.340	4.388	VV	597	10867	0.27%	0.116%

rteres

37	4.426	4.388	4.466	VV	1053	20827	0.52%	0.222%
38	4.481	4.466	4.495	VV	725	8919	0.22%	0.095%
39	4.511	4.495	4.609	VV	1273	20246	0.50%	0.216%
40	4.622	4.609	4.774	VV	207	9980	0.25%	0.106%
41	4.785	4.774	4.794	PV	99	827	0.02%	0.009%
42	4.808	4.794	4.844	VV	185	3148	0.08%	0.034%
43	4.887	4.844	4.921	VV	3113	41181	1.02%	0.439%
44	4.945	4.921	4.991	VV	746	12796	0.32%	0.136%
45	4.996	4.991	5.064	VV	157	4198	0.10%	0.045%
46	5.080	5.064	5.094	VV	192	2326	0.06%	0.025%
47	5.107	5.094	5.144	VV	118	3114	0.08%	0.033%
48	5.161	5.144	5.186	VV	250	3795	0.09%	0.040%
49	5.194	5.186	5.208	VV	109	861	0.02%	0.009%
50	5.253	5.208	5.269	PV	145	3620	0.09%	0.039%
51	5.292	5.269	5.311	VV	429	7578	0.19%	0.081%
52	5.329	5.311	5.364	VV	1051	14393	0.36%	0.153%
53	5.384	5.364	5.398	VV	239	3055	0.08%	0.033%
54	5.407	5.398	5.438	VV	181	2358	0.06%	0.025%
55	5.468	5.438	5.498	VV	301	7148	0.18%	0.076%
56	5.502	5.498	5.546	VV	223	4003	0.10%	0.043%
57	5.575	5.546	5.605	VV	235	5216	0.13%	0.056%
58	5.622	5.605	5.644	VV	182	2646	0.07%	0.028%
59	5.656	5.644	5.681	VV	227	3051	0.08%	0.033%
60	5.689	5.681	5.718	VV	98	2261	0.06%	0.024%
61	5.743	5.718	5.764	VV	168	2966	0.07%	0.032%
62	5.793	5.764	5.808	PV	178	3562	0.09%	0.038%
63	5.846	5.808	5.874	VV	357	8955	0.22%	0.095%
64	5.886	5.874	5.899	VV	348	4270	0.11%	0.046%
65	5.928	5.899	5.971	VV	598	12160	0.30%	0.130%
66	5.990	5.971	6.031	VV	461	9461	0.24%	0.101%
67	6.060	6.031	6.082	VV	320	6446	0.16%	0.069%
68	6.103	6.082	6.125	VV	157	2779	0.07%	0.030%
69	6.154	6.125	6.188	PV	131	3524	0.09%	0.038%
70	6.194	6.188	6.223	VV	90	1600	0.04%	0.017%
71	6.268	6.223	6.331	VV	4629	64181	1.59%	0.684%
72	6.348	6.331	6.371	VV	660	8587	0.21%	0.092%
73	6.384	6.371	6.396	VV	362	4374	0.11%	0.047%
74	6.415	6.396	6.434	VV	816	10753	0.27%	0.115%
75	6.447	6.434	6.466	VV	438	5101	0.13%	0.054%
76	6.487	6.466	6.534	VV	521	7126	0.18%	0.076%
77	6.541	6.534	6.564	VV	156	1431	0.04%	0.015%
78	6.578	6.564	6.624	VV	124	3550	0.09%	0.038%
79	6.628	6.624	6.665	VV	173	2879	0.07%	0.031%
80	6.705	6.665	6.733	VV	610	10367	0.26%	0.110%
81	6.759	6.733	6.778	VV	621	10491	0.26%	0.112%
82	6.808	6.778	6.852	VV	710	19225	0.48%	0.205%
83	6.885	6.852	6.912	VV	916	16003	0.40%	0.171%
84	6.922	6.912	6.944	VV	279	3808	0.09%	0.041%
85	6.968	6.944	7.012	VV	330	6547	0.16%	0.070%
86	7.045	7.012	7.077	VV	2263	26648	0.66%	0.284%
87	7.104	7.077	7.141	VV	355	8856	0.22%	0.094%
88	7.154	7.141	7.165	VV	367	4261	0.11%	0.045%
89	7.189	7.165	7.231	VV	1436	24612	0.61%	0.262%

90	7.247	7.231	7.262	VV	409	5543	0.14%	0.059%
91	7.279	7.262	7.334	VV	418	8498	0.21%	0.091%
92	7.355	7.334	7.381	VV	172	1812	0.05%	0.019%
93	7.397	7.381	7.424	VV	114	1782	0.04%	0.019%
94	7.445	7.424	7.498	VV	808	9790	0.24%	0.104%
95	7.540	7.498	7.578	VV	241	6944	0.17%	0.074%
96	7.610	7.578	7.630	VV	324	6466	0.16%	0.069%
97	7.642	7.630	7.650	VV	179	1830	0.05%	0.020%
98	7.660	7.650	7.693	VV	200	3248	0.08%	0.035%
99	7.707	7.693	7.730	VV	269	2866	0.07%	0.031%
100	7.752	7.730	7.787	PV	939	12781	0.32%	0.136%
101	7.807	7.787	7.861	VV	1326	18598	0.46%	0.198%
102	7.873	7.861	7.894	VV	219	1821	0.05%	0.019%
103	7.909	7.894	7.941	VV	191	3137	0.08%	0.033%
104	7.964	7.941	7.983	VV	837	9966	0.25%	0.106%
105	7.994	7.983	8.027	VV	275	5009	0.12%	0.053%
106	8.055	8.027	8.126	VV	6284	90373	2.25%	0.963%
107	8.155	8.126	8.179	VV	564	12384	0.31%	0.132%
108	8.200	8.179	8.222	VV	537	9356	0.23%	0.100%
109	8.245	8.222	8.268	VV	414	7119	0.18%	0.076%
110	8.285	8.268	8.334	VV	466	6459	0.16%	0.069%
111	8.398	8.334	8.457	PV	734	29421	0.73%	0.314%
112	8.466	8.457	8.491	VV	440	7406	0.18%	0.079%
113	8.510	8.491	8.528	VV	494	9655	0.24%	0.103%
114	8.541	8.528	8.573	VV	482	12150	0.30%	0.129%
115	8.593	8.573	8.629	VV	843	18648	0.46%	0.199%
116	8.654	8.629	8.684	VV	408	6540	0.16%	0.070%
117	8.704	8.684	8.728	VV	400	5180	0.13%	0.055%
118	8.773	8.728	8.792	VV	1341	20108	0.50%	0.214%
119	8.810	8.792	8.822	VV	849	11608	0.29%	0.124%
120	8.829	8.822	8.857	VV	612	11176	0.28%	0.119%
121	8.886	8.857	8.940	VV	2124	40644	1.01%	0.433%
122	8.960	8.940	8.983	VV	569	8411	0.21%	0.090%
123	9.009	8.983	9.038	VV	448	7127	0.18%	0.076%
124	9.064	9.038	9.098	VV	297	7539	0.19%	0.080%
125	9.172	9.098	9.210	VV	626	20785	0.52%	0.222%
126	9.238	9.210	9.275	VV	936	17375	0.43%	0.185%
127	9.292	9.275	9.320	VV	440	7381	0.18%	0.079%
128	9.341	9.320	9.351	VV	240	3416	0.08%	0.036%
129	9.380	9.351	9.407	VV	687	11428	0.28%	0.122%
130	9.431	9.407	9.481	VV	1489	23450	0.58%	0.250%
131	9.486	9.481	9.504	VV	278	2961	0.07%	0.032%
132	9.521	9.504	9.547	VV	263	5124	0.13%	0.055%
133	9.573	9.547	9.624	VV	692	15012	0.37%	0.160%
134	9.651	9.624	9.704	VV	3679	59765	1.48%	0.637%
135	9.720	9.704	9.786	VV	533	19219	0.48%	0.205%
136	9.797	9.786	9.807	VV	342	3361	0.08%	0.036%
137	9.820	9.807	9.881	VV	318	6854	0.17%	0.073%
138	9.927	9.881	9.948	VV	287	6569	0.16%	0.070%
139	9.964	9.948	9.991	VV	408	7393	0.18%	0.079%
140	10.036	9.991	10.058	VV	626	15564	0.39%	0.166%
141	10.084	10.058	10.101	VV	439	8859	0.22%	0.094%

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142	10.127	10.101	10.144	VV	454	8531	0.21%	0.091%
143	10.155	10.144	10.194	VV	369	7105	0.18%	0.076%
144	10.249	10.194	10.264	VV	458	11312	0.28%	0.121%
145	10.272	10.264	10.298	VV	382	6289	0.16%	0.067%
146	10.330	10.298	10.351	VV	551	13005	0.32%	0.139%
147	10.391	10.351	10.422	VV	739	20867	0.52%	0.222%
148	10.442	10.422	10.455	VV	450	7428	0.18%	0.079%
149	10.467	10.455	10.482	VV	425	5966	0.15%	0.064%
150	10.510	10.482	10.551	VV	1078	23250	0.58%	0.248%
151	10.570	10.551	10.585	VV	367	6401	0.16%	0.068%
152	10.602	10.585	10.661	VV	384	11005	0.27%	0.117%
153	10.672	10.661	10.690	VV	278	3857	0.10%	0.041%
154	10.718	10.690	10.729	VV	313	6213	0.15%	0.066%
155	10.779	10.729	10.791	VV	397	11456	0.28%	0.122%
156	10.808	10.791	10.828	VV	535	9009	0.22%	0.096%
157	10.843	10.828	10.869	VV	328	6011	0.15%	0.064%
158	10.891	10.869	10.954	VV	717	14107	0.35%	0.150%
159	10.963	10.954	10.969	VV	147	1131	0.03%	0.012%
160	11.020	10.969	11.055	VV	2368	40870	1.02%	0.436%
161	11.088	11.055	11.161	VV	4265	75130	1.87%	0.801%
162	11.184	11.161	11.223	VV	715	13392	0.33%	0.143%
163	11.237	11.223	11.281	VV	183	4079	0.10%	0.043%
164	11.289	11.281	11.347	VV	178	4359	0.11%	0.046%
165	11.409	11.347	11.424	PV	318	9883	0.25%	0.105%
166	11.473	11.424	11.521	VV	569	18063	0.45%	0.192%
167	11.543	11.521	11.627	VV	352	11405	0.28%	0.122%
168	11.751	11.627	11.784	VV	552	28212	0.70%	0.301%
169	11.798	11.784	11.824	VV	327	6073	0.15%	0.065%
170	11.839	11.824	11.864	VV	330	5470	0.14%	0.058%
171	11.885	11.864	11.931	VV	528	12254	0.30%	0.131%
172	11.971	11.931	12.008	VV	668	20010	0.50%	0.213%
173	12.028	12.008	12.039	VV	349	5085	0.13%	0.054%
174	12.061	12.039	12.079	VV	306	6265	0.16%	0.067%
175	12.086	12.079	12.111	VV	226	3361	0.08%	0.036%
176	12.125	12.111	12.138	VV	272	3108	0.08%	0.033%
177	12.160	12.138	12.181	VV	310	7174	0.18%	0.076%
178	12.220	12.181	12.236	VV	701	15688	0.39%	0.167%
179	12.255	12.236	12.302	VV	1285	20167	0.50%	0.215%
180	12.333	12.302	12.364	VV	1691	24438	0.61%	0.260%
181	12.393	12.364	12.421	VV	4151	54257	1.35%	0.578%
182	12.436	12.421	12.473	VV	345	6478	0.16%	0.069%
183	12.486	12.473	12.492	VV	225	1921	0.05%	0.020%
184	12.512	12.492	12.607	VV	274	8565	0.21%	0.091%
185	12.647	12.607	12.674	PV	212	5310	0.13%	0.057%
186	12.681	12.674	12.693	VV	151	1417	0.04%	0.015%
187	12.711	12.693	12.730	VV	185	3100	0.08%	0.033%
188	12.755	12.730	12.796	VV	300	8380	0.21%	0.089%
189	12.834	12.796	12.981	VV	321662	4024839	100.00%	42.894%
190	13.000	12.981	13.054	VV	795	25511	0.63%	0.272%
191	13.071	13.054	13.094	VV	557	10718	0.27%	0.114%
192	13.112	13.094	13.150	VV	472	12639	0.31%	0.135%
193	13.162	13.150	13.174	VV	357	4180	0.10%	0.045%
194	13.209	13.174	13.241	VV	441	14225	0.35%	0.152%

195	13.284	13.241	13.334	VV	550	21043	0.52%	0.224%
196	13.352	13.334	13.367	VV	276	4762	0.12%	0.051%
197	13.437	13.367	13.481	VV	497	22905	0.57%	0.244%
198	13.539	13.481	13.564	VV	1245	27586	0.69%	0.294%
199	13.591	13.564	13.720	VV	2719	60810	1.51%	0.648%
200	13.728	13.720	13.738	VV	250	2089	0.05%	0.022%
201	13.761	13.738	13.776	VV	194	3778	0.09%	0.040%
202	13.786	13.776	13.790	VV	177	1227	0.03%	0.013%
203	13.834	13.790	13.874	VV	336	12684	0.32%	0.135%
204	13.897	13.874	13.914	VV	280	5786	0.14%	0.062%
205	13.924	13.914	13.942	VV	312	3836	0.10%	0.041%
206	13.962	13.942	13.981	VV	273	5228	0.13%	0.056%
207	13.984	13.981	14.004	VV	260	3152	0.08%	0.034%
208	14.032	14.004	14.138	VV	779	33266	0.83%	0.355%
209	14.157	14.138	14.184	VV	416	8839	0.22%	0.094%
210	14.202	14.184	14.237	VV	320	9144	0.23%	0.097%
211	14.295	14.237	14.341	VV	465	22077	0.55%	0.235%
212	14.347	14.341	14.372	VV	354	5518	0.14%	0.059%
213	14.398	14.372	14.422	VV	337	8356	0.21%	0.089%
214	14.459	14.422	14.487	VV	373	11002	0.27%	0.117%
215	14.503	14.487	14.523	VV	387	6141	0.15%	0.065%
216	14.542	14.523	14.604	VV	341	10807	0.27%	0.115%
217	14.649	14.604	14.668	VV	1077	19645	0.49%	0.209%
218	14.692	14.668	14.783	VV	2063	47725	1.19%	0.509%
219	14.815	14.783	14.834	VV	209	4625	0.11%	0.049%
220	14.855	14.834	14.884	VV	332	6235	0.15%	0.066%
221	14.891	14.884	14.899	VV	139	1237	0.03%	0.013%
222	14.924	14.899	14.985	VV	188	6715	0.17%	0.072%
223	14.996	14.985	15.022	VV	136	2232	0.06%	0.024%
224	15.115	15.022	15.172	VV	253	11704	0.29%	0.125%
225	15.220	15.172	15.288	VV	346	11303	0.28%	0.120%
226	15.298	15.288	15.306	VV	125	966	0.02%	0.010%
227	15.336	15.306	15.367	VV	152	4200	0.10%	0.045%
228	15.378	15.367	15.391	VV	153	1840	0.05%	0.020%
229	15.405	15.391	15.428	VV	200	2543	0.06%	0.027%
230	15.446	15.428	15.465	VV	140	1892	0.05%	0.020%
231	15.500	15.465	15.634	VV	284	14723	0.37%	0.157%
232	15.712	15.634	15.818	VV	1493	42259	1.05%	0.450%
233	15.848	15.818	15.868	VV	167	2704	0.07%	0.029%
234	15.895	15.868	15.952	VV	115	3852	0.10%	0.041%
235	16.029	15.952	16.059	PV	125	3767	0.09%	0.040%
236	16.087	16.059	16.140	PV	115	3620	0.09%	0.039%
237	16.198	16.140	16.224	VV	293	8026	0.20%	0.086%
238	16.251	16.224	16.300	VV	230	6267	0.16%	0.067%
239	16.407	16.300	16.454	VV	212	8877	0.22%	0.095%
240	16.552	16.454	16.594	VV	282	10048	0.25%	0.107%
241	16.659	16.594	16.728	VV	1446	39888	0.99%	0.425%
242	16.735	16.728	16.764	VV	170	2176	0.05%	0.023%
243	16.772	16.764	16.798	VV	76	1442	0.04%	0.015%
244	16.836	16.798	16.868	VV	113	2627	0.07%	0.028%
245	16.878	16.868	16.904	VV	80	1041	0.03%	0.011%
246	16.953	16.904	16.998	PV	215	5387	0.13%	0.057%

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247	17.111	16.998	17.181	VV	720	19588	0.49%	0.209%
248	17.208	17.181	17.257	VV	227	5852	0.15%	0.062%
249	17.302	17.257	17.348	VV	205	6723	0.17%	0.072%
250	17.546	17.348	17.594	PV	1823	51277	1.27%	0.546%
251	17.638	17.594	17.654	VV	232	6416	0.16%	0.068%
252	17.707	17.654	17.783	VV	196	8763	0.22%	0.093%
253	17.829	17.783	17.881	PV	226	5921	0.15%	0.063%
254	17.967	17.881	18.038	VV	1151	24116	0.60%	0.257%
255	18.226	18.038	18.264	VV	273	8211	0.20%	0.088%
256	18.377	18.264	18.457	VV	1849	46949	1.17%	0.500%
257	18.774	18.457	18.811	PV	1053	19939	0.50%	0.212%
258	18.951	18.811	18.977	VV	249	6418	0.16%	0.068%
259	19.160	18.977	19.223	PV	1526	40440	1.00%	0.431%
260	19.465	19.223	19.504	VV	576	41753	1.04%	0.445%
261	19.536	19.504	19.584	VV	1113	29071	0.72%	0.310%
262	19.901	19.584	19.931	VV	1861	155389	3.86%	1.656%
263	19.961	19.931	19.998	VV	1212	44773	1.11%	0.477%
264	20.258	19.998	20.285	VV	2268	264129	6.56%	2.815%
265	20.432	20.285	20.461	VV	2777	247275	6.14%	2.635%
266	20.611	20.461	20.666	VV	3452	353097	8.77%	3.763%
267	20.771	20.666	20.898	VV	2954	386304	9.60%	4.117%
268	20.931	20.898	20.980	VV	2536	122426	3.04%	1.305%
269	21.024	20.980	21.058	VV	2366	106642	2.65%	1.137%
270	21.185	21.058	21.228	VV	2017	209074	5.19%	2.228%
271	21.239	21.228	21.261	VV	1874	36850	0.92%	0.393%
272	21.279	21.261	21.346	VV	1818	87303	2.17%	0.930%
273	21.367	21.346	21.408	VV	1539	56427	1.40%	0.601%
274	21.464	21.408	21.594	VV	1729	147916	3.68%	1.576%
275	21.617	21.594	21.632	VV	922	20562	0.51%	0.219%
276	21.650	21.632	21.671	VV	868	19705	0.49%	0.210%
277	21.814	21.671	21.881	VV	637	78180	1.94%	0.833%
278	21.906	21.881	21.921	VV	397	8519	0.21%	0.091%
279	21.989	21.921	22.058	VV	285	16883	0.42%	0.180%

Sum of corrected areas: 9383188

Aliphatic EPH 021125.M Wed Mar 05 23:12:47 2025

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:	03/04/25	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	03/04/25	
Client Sample ID:	ENV-102-GW01		SDG No.:	Q1488	
Lab Sample ID:	Q1488-13		Matrix:	Water	
Analytical Method:	NJEPH		% Solid:	0	
Sample Wt/Vol:	810	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
FD049163.D	1	03/05/25	03/05/25	PB166976

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	9.38	J	4.10	24.7	ug/l
Aromatic C12-C16	Aromatic C12-C16	13.0	J	4.56	37.0	ug/l
Aromatic C16-C21	Aromatic C16-C21	136		15.7	61.7	ug/l
Aromatic C21-C36	Aromatic C21-C36	51.3	J	31.1	98.8	ug/l
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	58.1		40 - 140	116%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	59.3		40 - 140	119%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	34.8		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:	Q1488-13	Acq On:	05 Mar 2025 18:27
Client Sample ID:	ENV-102-GW01	Operator:	YP/AJ
Data file:	FD049163.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	4.075	5.793	603848	3.797	200	ug/ml
Aromatic C12-C16	5.794	8.395	849412	5.278	300	ug/ml
Aromatic C16-C21	8.396	12.660	8447939	55.086	500	ug/ml
Aromatic C21-C36	12.661	18.072	2973611	20.778	800	ug/ml
Aromatic EPH	4.075	18.072	12874810	84.939		ug/ml
ortho-Terphenyl (SURR)	11.235	11.235	5636818	34.84		ug/ml
2-Bromonaphthalene (SURR)	7.351	7.351	8320671	58.14		ug/ml
2-Flurobiphenyl (SURR)	8.202	8.202	5210148	59.27		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049163.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 18:27
Operator : YP/AJ
Sample : Q1488-13
Misc :
ALS Vial : 65 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
ENV-102-GW01

Integration File: autoint1.e
Quant Time: Mar 05 23:30:51 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
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...	7.351	8320671	58.142 ug/ml
Spiked Amount 50.000		Recovery = 116.28%	
6) S 2-Flurobiphenyl (SURR)	8.202	5210148	59.266 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery = 118.53%	
11) S ortho-Terphenyl (SURR)	11.235	5636818	34.844 ug/ml
Spiked Amount 50.000		Recovery = 69.69%	
Target Compounds			

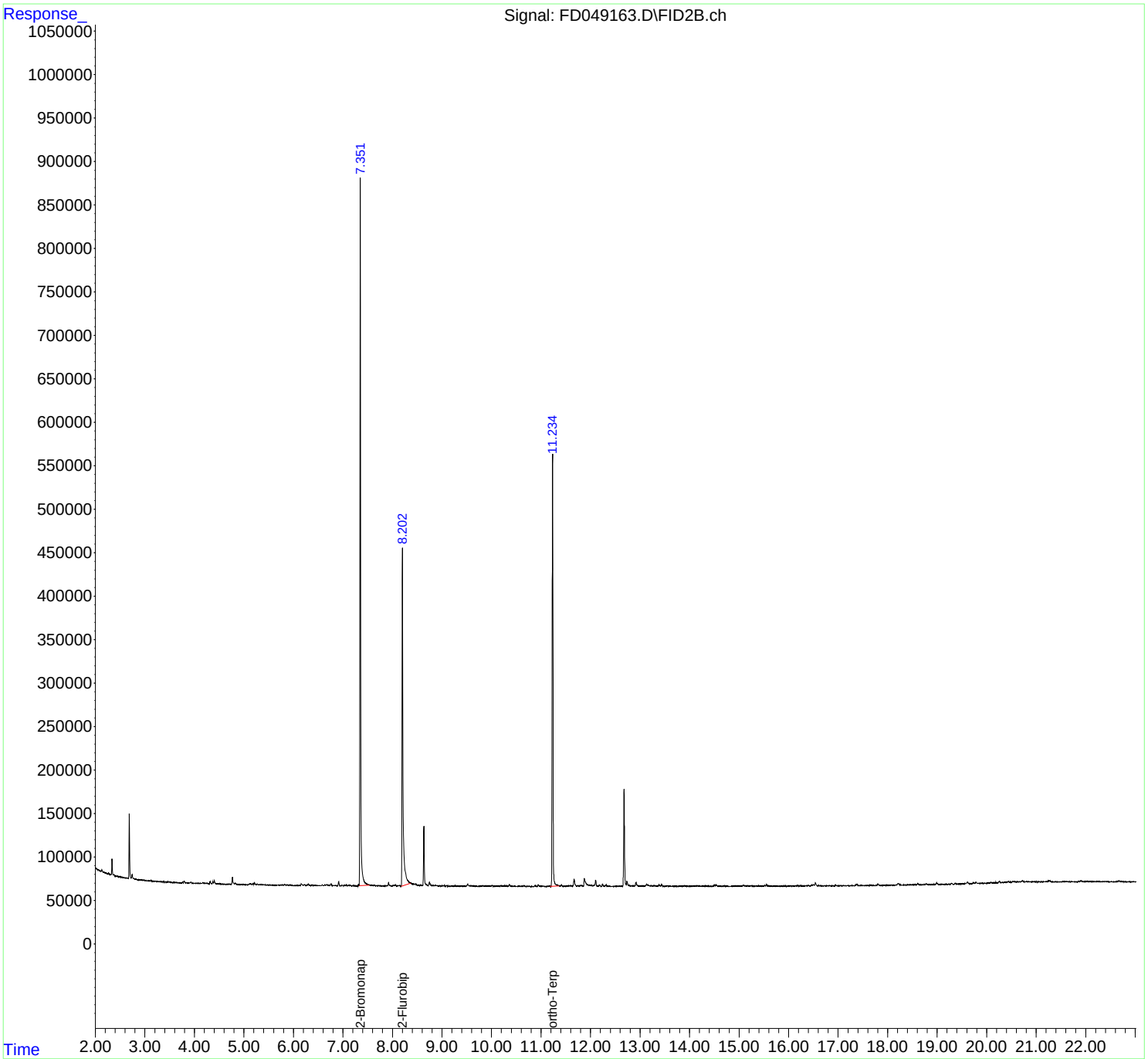
(f)=RT Delta > 1/2 Window (m)=manual int.

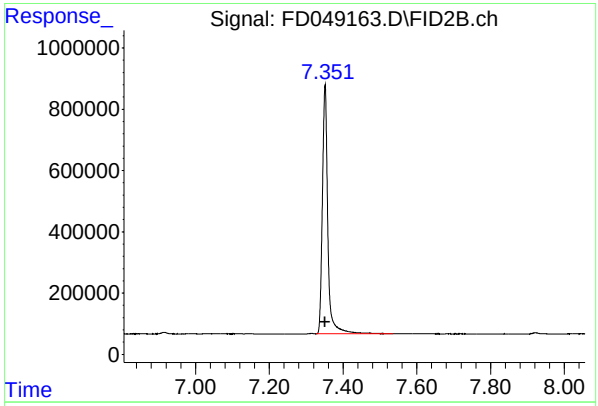
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049163.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 18:27
Operator : YP/AJ
Sample : Q1488-13
Misc :
ALS Vial : 65 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
ENV-102-GW01

Integration File: autoint1.e
Quant Time: Mar 05 23:30:51 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

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

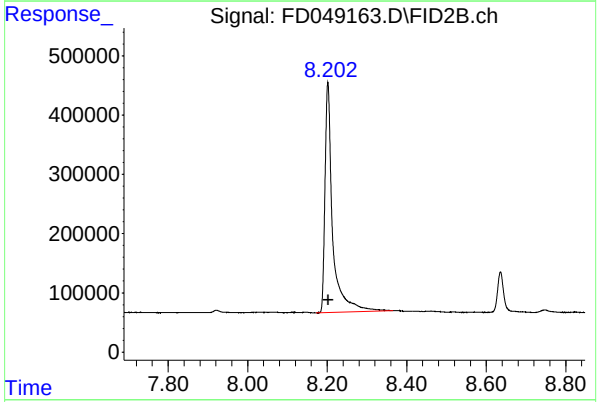




#4 2-Bromonaphthalene (SURR)

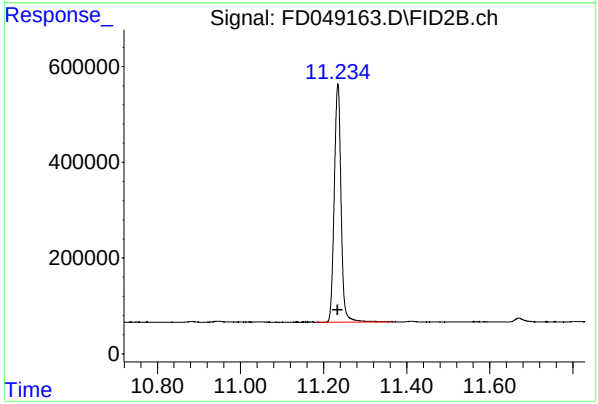
R.T.: 7.351 min
Delta R.T.: 0.000 min
Response: 8320671
Conc: 58.14 ug/ml

Instrument :
FID_D
ClientSampleId :
ENV-102-GW01



#6 2-Flurobiphenyl (SURR)

R.T.: 8.202 min
Delta R.T.: 0.000 min
Response: 5210148
Conc: 59.27 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.235 min
Delta R.T.: 0.001 min
Response: 5636818
Conc: 34.84 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049163.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 18:27
Sample : Q1488-13
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.054	4.042	4.090	BV	200	4165	0.05%	0.016%
2	4.103	4.090	4.120	VV	309	3015	0.04%	0.011%
3	4.127	4.120	4.136	VV	285	2107	0.03%	0.008%
4	4.144	4.136	4.153	VV	246	2035	0.02%	0.008%
5	4.168	4.153	4.206	VV	1455	24366	0.29%	0.091%
6	4.211	4.206	4.218	VV	537	3098	0.04%	0.012%
7	4.228	4.218	4.235	VV	473	3934	0.05%	0.015%
8	4.248	4.235	4.259	VV	629	6789	0.08%	0.025%
9	4.266	4.259	4.295	VV	652	8635	0.10%	0.032%
10	4.319	4.295	4.345	VV	2702	35005	0.42%	0.130%
11	4.348	4.345	4.356	VV	540	3136	0.04%	0.012%
12	4.374	4.356	4.386	VV	2316	25426	0.30%	0.095%
13	4.402	4.386	4.454	VV	4045	58861	0.70%	0.219%
14	4.462	4.454	4.478	VV	427	4482	0.05%	0.017%
15	4.514	4.478	4.567	VV	922	19542	0.23%	0.073%
16	4.584	4.567	4.604	VV	484	6006	0.07%	0.022%
17	4.625	4.620	4.671	PV	153	2160	0.03%	0.008%
18	4.694	4.671	4.721	PV	614	8125	0.10%	0.030%
19	4.731	4.721	4.745	VV	258	2745	0.03%	0.010%
20	4.769	4.745	4.811	VV	8555	114389	1.36%	0.426%
21	4.826	4.811	4.903	VV	1776	34220	0.41%	0.127%
22	4.917	4.903	4.940	VV	286	5553	0.07%	0.021%
23	4.948	4.940	4.962	VV	252	3105	0.04%	0.012%
24	4.968	4.962	5.025	VV	406	8916	0.11%	0.033%
25	5.063	5.025	5.075	PV	340	5124	0.06%	0.019%
26	5.117	5.075	5.173	VV	1152	48159	0.57%	0.179%
27	5.187	5.173	5.199	VV	1456	17000	0.20%	0.063%
28	5.214	5.199	5.259	VV	3029	45535	0.54%	0.170%
29	5.273	5.259	5.292	VV	1065	14517	0.17%	0.054%
30	5.307	5.292	5.312	VV	498	5331	0.06%	0.020%
31	5.347	5.312	5.387	VV	780	21612	0.26%	0.080%
32	5.390	5.387	5.397	VV	369	1803	0.02%	0.007%
33	5.403	5.397	5.417	VV	422	3841	0.05%	0.014%
34	5.426	5.417	5.448	VV	464	6077	0.07%	0.023%
35	5.474	5.448	5.501	VV	505	9708	0.12%	0.036%
36	5.519	5.501	5.526	VV	469	4628	0.05%	0.017%

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37	5.531	5.526	5.562	VV	378	4186	0.05%	0.016%
38	5.577	5.562	5.596	VV	308	3765	0.04%	0.014%
39	5.652	5.645	5.657	VV	276	1414	0.02%	0.005%
40	5.660	5.657	5.717	VV	285	8047	0.10%	0.030%
41	5.727	5.717	5.755	VV	405	6792	0.08%	0.025%
42	5.781	5.755	5.803	VV	568	10659	0.13%	0.040%
43	5.823	5.803	5.852	VV	1252	20791	0.25%	0.077%
44	5.875	5.852	5.896	VV	684	14726	0.17%	0.055%
45	5.900	5.896	5.904	VV	427	1705	0.02%	0.006%
46	5.907	5.904	5.918	VV	327	2503	0.03%	0.009%
47	5.936	5.918	5.955	VV	692	11695	0.14%	0.044%
48	5.960	5.955	5.964	VV	552	2388	0.03%	0.009%
49	5.966	5.964	5.973	VV	400	1413	0.02%	0.005%
50	5.977	5.973	5.988	VV	207	1465	0.02%	0.005%
51	5.999	5.988	6.011	VV	177	1781	0.02%	0.007%
52	6.030	6.011	6.055	VV	282	3304	0.04%	0.012%
53	6.067	6.055	6.094	VV	296	3232	0.04%	0.012%
54	6.116	6.102	6.130	PV	272	2084	0.02%	0.008%
55	6.160	6.130	6.198	VV	2182	40110	0.48%	0.149%
56	6.224	6.198	6.250	VV	1456	23591	0.28%	0.088%
57	6.269	6.250	6.281	VV	913	10119	0.12%	0.038%
58	6.297	6.281	6.324	VV	1846	27943	0.33%	0.104%
59	6.328	6.324	6.351	VV	620	6837	0.08%	0.025%
60	6.371	6.351	6.396	VV	1131	15249	0.18%	0.057%
61	6.400	6.396	6.433	VV	356	4958	0.06%	0.018%
62	6.445	6.433	6.450	VV	342	2063	0.02%	0.008%
63	6.459	6.450	6.476	VV	258	3116	0.04%	0.012%
64	6.496	6.476	6.501	PV	285	2474	0.03%	0.009%
65	6.522	6.501	6.532	VV	287	2798	0.03%	0.010%
66	6.549	6.532	6.562	VV	236	2452	0.03%	0.009%
67	6.582	6.562	6.605	VV	1232	15763	0.19%	0.059%
68	6.610	6.605	6.615	VV	291	1421	0.02%	0.005%
69	6.632	6.615	6.650	VV	1087	15893	0.19%	0.059%
70	6.654	6.650	6.660	VV	852	4844	0.06%	0.018%
71	6.680	6.660	6.697	VV	1714	25875	0.31%	0.096%
72	6.707	6.697	6.735	VV	967	14911	0.18%	0.056%
73	6.760	6.735	6.790	VV	2384	35442	0.42%	0.132%
74	6.793	6.790	6.818	VV	329	4308	0.05%	0.016%
75	6.830	6.818	6.835	VV	377	2631	0.03%	0.010%
76	6.851	6.835	6.876	VV	538	8872	0.11%	0.033%
77	6.914	6.876	6.958	VV	5106	65186	0.77%	0.243%
78	6.962	6.958	6.965	VV	316	1138	0.01%	0.004%
79	6.987	6.965	7.012	VV	938	15032	0.18%	0.056%
80	7.028	7.012	7.054	VV	895	13476	0.16%	0.050%
81	7.066	7.054	7.101	VV	1352	20644	0.25%	0.077%
82	7.117	7.101	7.130	VV	851	10570	0.13%	0.039%
83	7.148	7.130	7.187	VV	1116	15802	0.19%	0.059%
84	7.202	7.187	7.210	VV	336	2483	0.03%	0.009%
85	7.216	7.210	7.223	VV	305	1652	0.02%	0.006%
86	7.227	7.223	7.242	VV	220	1855	0.02%	0.007%
87	7.251	7.242	7.279	PV	259	3046	0.04%	0.011%
88	7.283	7.279	7.298	VV	181	1110	0.01%	0.004%
89	7.314	7.298	7.327	VV	1801	17733	0.21%	0.066%

90	7.351	7.327	7.542	VV	815948	8422324	100.00%	31.357%
91	7.546	7.542	7.569	VV	1180	17218	0.20%	0.064%
92	7.583	7.569	7.613	VV	1079	22443	0.27%	0.084%
93	7.627	7.613	7.653	VV	1444	23061	0.27%	0.086%
94	7.658	7.653	7.670	VV	532	4616	0.05%	0.017%
95	7.683	7.670	7.710	VV	744	13162	0.16%	0.049%
96	7.719	7.710	7.728	VV	695	6183	0.07%	0.023%
97	7.731	7.728	7.740	VV	656	3560	0.04%	0.013%
98	7.747	7.740	7.753	VV	483	2659	0.03%	0.010%
99	7.756	7.753	7.780	VV	386	4472	0.05%	0.017%
100	7.789	7.780	7.795	VV	355	2443	0.03%	0.009%
101	7.804	7.800	7.824	VV	297	3381	0.04%	0.013%
102	7.837	7.824	7.862	VV	592	9287	0.11%	0.035%
103	7.870	7.862	7.890	VV	477	6446	0.08%	0.024%
104	7.894	7.890	7.900	VV	555	2711	0.03%	0.010%
105	7.922	7.900	7.960	VV	4259	59205	0.70%	0.220%
106	7.965	7.960	7.982	VV	548	4971	0.06%	0.019%
107	7.986	7.982	7.991	VV	283	1277	0.02%	0.005%
108	8.018	7.991	8.041	VV	922	20408	0.24%	0.076%
109	8.046	8.041	8.054	VV	792	5829	0.07%	0.022%
110	8.068	8.054	8.098	VV	1082	16462	0.20%	0.061%
111	8.113	8.098	8.132	VV	878	11668	0.14%	0.043%
112	8.146	8.132	8.172	VV	1102	13150	0.16%	0.049%
113	8.202	8.172	8.365	PV	389033	5421321	64.37%	20.184%
114	8.377	8.365	8.410	VV	3940	86316	1.02%	0.321%
115	8.416	8.410	8.442	VV	2662	48253	0.57%	0.180%
116	8.461	8.442	8.503	VV	2942	78760	0.94%	0.293%
117	8.515	8.503	8.540	VV	1527	26806	0.32%	0.100%
118	8.547	8.540	8.551	VV	990	5625	0.07%	0.021%
119	8.568	8.551	8.606	VV	1311	32176	0.38%	0.120%
120	8.636	8.606	8.719	VV	69336	796697	9.46%	2.966%
121	8.748	8.719	8.807	VV	5025	107144	1.27%	0.399%
122	8.822	8.807	8.845	VV	1434	22982	0.27%	0.086%
123	8.870	8.845	8.904	VV	1210	32404	0.38%	0.121%
124	8.907	8.904	8.911	VV	642	2423	0.03%	0.009%
125	8.934	8.911	8.942	VV	755	12633	0.15%	0.047%
126	8.949	8.942	8.997	VV	801	19536	0.23%	0.073%
127	9.003	8.997	9.005	VV	622	2157	0.03%	0.008%
128	9.021	9.005	9.045	VV	972	18180	0.22%	0.068%
129	9.048	9.045	9.074	VV	1024	7709	0.09%	0.029%
130	9.099	9.074	9.134	VV	1130	21409	0.25%	0.080%
131	9.137	9.134	9.142	VV	287	1198	0.01%	0.004%
132	9.147	9.142	9.157	VV	331	2245	0.03%	0.008%
133	9.163	9.157	9.175	VV	345	3175	0.04%	0.012%
134	9.204	9.175	9.228	VV	406	9865	0.12%	0.037%
135	9.249	9.228	9.287	VV	820	14563	0.17%	0.054%
136	9.302	9.287	9.324	VV	570	7347	0.09%	0.027%
137	9.342	9.324	9.356	VV	644	7646	0.09%	0.028%
138	9.375	9.356	9.385	VV	543	6897	0.08%	0.026%
139	9.390	9.385	9.407	VV	508	5077	0.06%	0.019%
140	9.411	9.407	9.428	VV	471	3205	0.04%	0.012%
141	9.449	9.428	9.475	VV	527	6879	0.08%	0.026%

142	9.520	9.475	9.555	VV	2773	55959	0.66%	0.208%
143	9.558	9.555	9.571	VV	849	6880	0.08%	0.026%
144	9.582	9.571	9.639	VV	918	28812	0.34%	0.107%
145	9.650	9.639	9.675	VV	575	10088	0.12%	0.038%
146	9.690	9.675	9.701	VV	418	4437	0.05%	0.017%
147	9.706	9.701	9.739	VV	403	4922	0.06%	0.018%
148	9.787	9.739	9.799	VV	583	12771	0.15%	0.048%
149	9.820	9.799	9.846	VV	890	15650	0.19%	0.058%
150	9.856	9.846	9.872	VV	318	3626	0.04%	0.013%
151	9.890	9.872	9.918	VV	814	14570	0.17%	0.054%
152	9.936	9.918	9.947	VV	750	9544	0.11%	0.036%
153	9.960	9.947	9.982	VV	617	10636	0.13%	0.040%
154	10.012	9.982	10.041	VV	1587	24886	0.30%	0.093%
155	10.101	10.041	10.121	VV	764	19035	0.23%	0.071%
156	10.135	10.121	10.160	VV	596	9099	0.11%	0.034%
157	10.188	10.160	10.206	VV	1204	18724	0.22%	0.070%
158	10.220	10.206	10.235	VV	614	9632	0.11%	0.036%
159	10.260	10.235	10.277	VV	1002	17657	0.21%	0.066%
160	10.295	10.277	10.314	VV	852	11694	0.14%	0.044%
161	10.324	10.314	10.340	VV	699	8026	0.10%	0.030%
162	10.364	10.340	10.392	VV	2271	33577	0.40%	0.125%
163	10.410	10.392	10.423	VV	448	6394	0.08%	0.024%
164	10.428	10.423	10.437	VV	358	2383	0.03%	0.009%
165	10.459	10.437	10.464	VV	514	6361	0.08%	0.024%
166	10.468	10.464	10.480	VV	411	2909	0.03%	0.011%
167	10.489	10.480	10.494	VV	290	1608	0.02%	0.006%
168	10.501	10.494	10.507	VV	260	1707	0.02%	0.006%
169	10.528	10.507	10.533	VV	361	4174	0.05%	0.016%
170	10.546	10.533	10.560	VV	469	5697	0.07%	0.021%
171	10.568	10.560	10.581	VV	400	4144	0.05%	0.015%
172	10.633	10.581	10.643	VV	654	13517	0.16%	0.050%
173	10.663	10.643	10.689	VV	1173	15074	0.18%	0.056%
174	10.707	10.689	10.742	PV	329	7248	0.09%	0.027%
175	10.751	10.742	10.763	VV	371	3615	0.04%	0.013%
176	10.775	10.763	10.803	VV	344	3975	0.05%	0.015%
177	10.819	10.803	10.828	VV	175	1716	0.02%	0.006%
178	10.842	10.828	10.853	PV	274	2566	0.03%	0.010%
179	10.881	10.853	10.917	VV	1505	22188	0.26%	0.083%
180	10.945	10.917	11.008	VV	2326	44802	0.53%	0.167%
181	11.017	11.008	11.026	VV	584	4805	0.06%	0.018%
182	11.048	11.026	11.079	VV	592	12984	0.15%	0.048%
183	11.102	11.079	11.120	VV	289	3987	0.05%	0.015%
184	11.174	11.120	11.202	VV	592	13562	0.16%	0.050%
185	11.234	11.202	11.386	VV	497237	5703920	67.72%	21.236%
186	11.412	11.386	11.448	VV	2088	38160	0.45%	0.142%
187	11.468	11.448	11.480	VV	491	8660	0.10%	0.032%
188	11.498	11.480	11.520	VV	632	11837	0.14%	0.044%
189	11.532	11.520	11.542	VV	731	8231	0.10%	0.031%
190	11.570	11.542	11.585	VV	977	21889	0.26%	0.081%
191	11.590	11.585	11.612	VV	986	13522	0.16%	0.050%
192	11.621	11.612	11.635	VV	788	10372	0.12%	0.039%
193	11.670	11.635	11.722	VV	8729	151965	1.80%	0.566%
194	11.736	11.722	11.747	VV	972	11886	0.14%	0.044%

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195	11.755	11.747	11.779	VV	906	12883	0.15%	0.048%
196	11.813	11.779	11.853	VV	1578	42362	0.50%	0.158%
197	11.877	11.853	12.002	VV	9067	280435	3.33%	1.044%
198	12.009	12.002	12.055	VV	1196	32789	0.39%	0.122%
199	12.103	12.055	12.139	VV	7317	121448	1.44%	0.452%
200	12.181	12.139	12.219	VV	1893	38322	0.45%	0.143%
201	12.243	12.219	12.283	VV	2915	40371	0.48%	0.150%
202	12.314	12.283	12.341	VV	1914	31793	0.38%	0.118%
203	12.363	12.341	12.378	VV	465	7251	0.09%	0.027%
204	12.389	12.378	12.416	VV	346	5309	0.06%	0.020%
205	12.424	12.416	12.475	VV	260	6020	0.07%	0.022%
206	12.494	12.475	12.501	VV	271	3120	0.04%	0.012%
207	12.518	12.501	12.545	VV	408	7433	0.09%	0.028%
208	12.564	12.545	12.587	VV	353	6909	0.08%	0.026%
209	12.613	12.587	12.645	VV	513	12420	0.15%	0.046%
210	12.677	12.645	12.715	VV	112158	1391800	16.53%	5.182%
211	12.735	12.715	12.825	VV	5856	141902	1.68%	0.528%
212	12.853	12.825	12.872	VV	1000	21122	0.25%	0.079%
213	12.919	12.872	12.979	VV	4794	103469	1.23%	0.385%
214	12.985	12.979	13.014	VV	642	12525	0.15%	0.047%
215	13.043	13.014	13.081	VV	894	24481	0.29%	0.091%
216	13.133	13.081	13.218	VV	2386	94917	1.13%	0.353%
217	13.228	13.218	13.256	VV	779	15282	0.18%	0.057%
218	13.288	13.256	13.351	VV	798	37580	0.45%	0.140%
219	13.386	13.351	13.410	VV	1664	35911	0.43%	0.134%
220	13.436	13.410	13.480	VV	2548	41981	0.50%	0.156%
221	13.486	13.480	13.520	VV	493	8195	0.10%	0.031%
222	13.545	13.520	13.606	VV	865	22671	0.27%	0.084%
223	13.613	13.606	13.633	VV	309	3477	0.04%	0.013%
224	13.668	13.633	13.718	VV	337	13808	0.16%	0.051%
225	13.729	13.718	13.757	VV	486	7663	0.09%	0.029%
226	13.772	13.757	13.787	VV	372	4560	0.05%	0.017%
227	13.824	13.787	13.844	VV	340	8116	0.10%	0.030%
228	13.906	13.844	13.939	VV	882	29930	0.36%	0.111%
229	13.945	13.939	13.959	VV	504	5060	0.06%	0.019%
230	13.976	13.959	13.985	VV	469	5969	0.07%	0.022%
231	13.995	13.985	14.026	VV	484	8483	0.10%	0.032%
232	14.035	14.026	14.044	VV	382	3184	0.04%	0.012%
233	14.087	14.044	14.120	VV	671	23082	0.27%	0.086%
234	14.161	14.120	14.179	VV	798	20956	0.25%	0.078%
235	14.199	14.179	14.245	VV	779	19997	0.24%	0.074%
236	14.296	14.245	14.317	VV	679	21395	0.25%	0.080%
237	14.344	14.317	14.364	VV	574	11961	0.14%	0.045%
238	14.381	14.364	14.397	VV	451	6382	0.08%	0.024%
239	14.404	14.397	14.425	VV	431	4581	0.05%	0.017%
240	14.446	14.425	14.473	VV	452	9169	0.11%	0.034%
241	14.498	14.473	14.514	VV	1289	19877	0.24%	0.074%
242	14.538	14.514	14.607	VV	1931	38525	0.46%	0.143%
243	14.629	14.607	14.670	VV	348	8030	0.10%	0.030%
244	14.698	14.670	14.722	VV	973	15849	0.19%	0.059%
245	14.728	14.722	14.759	VV	359	5707	0.07%	0.021%
246	14.770	14.759	14.819	VV	422	5771	0.07%	0.021%

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247	14.838	14.819	14.858	PV	226	3923	0.05%	0.015%
248	14.900	14.858	14.927	VV	566	12921	0.15%	0.048%
249	14.968	14.927	14.984	VV	553	14354	0.17%	0.053%
250	14.989	14.984	14.999	VV	489	4012	0.05%	0.015%
251	15.024	14.999	15.048	VV	550	13290	0.16%	0.049%
252	15.087	15.048	15.137	VV	1360	38570	0.46%	0.144%
253	15.174	15.137	15.204	VV	652	18681	0.22%	0.070%
254	15.244	15.204	15.316	VV	735	28383	0.34%	0.106%
255	15.358	15.316	15.374	VV	534	12306	0.15%	0.046%
256	15.390	15.374	15.426	VV	602	12516	0.15%	0.047%
257	15.435	15.426	15.457	VV	370	4822	0.06%	0.018%
258	15.522	15.457	15.534	VV	1216	18688	0.22%	0.070%
259	15.555	15.534	15.650	VV	1684	41176	0.49%	0.153%
260	15.657	15.650	15.670	VV	279	1435	0.02%	0.005%
261	15.696	15.670	15.713	VV	352	5844	0.07%	0.022%
262	15.740	15.713	15.830	VV	391	12780	0.15%	0.048%
263	15.839	15.830	15.897	VV	392	3325	0.04%	0.012%
264	15.912	15.897	15.927	PV	398	3285	0.04%	0.012%
265	15.931	15.927	15.965	VV	254	2935	0.03%	0.011%
266	15.997	15.965	16.014	VV	313	5663	0.07%	0.021%
267	16.046	16.014	16.080	VV	526	11911	0.14%	0.044%
268	16.096	16.080	16.135	VV	288	7222	0.09%	0.027%
269	16.160	16.135	16.215	VV	461	16334	0.19%	0.061%
270	16.228	16.215	16.249	VV	514	7426	0.09%	0.028%
271	16.257	16.249	16.276	VV	536	5578	0.07%	0.021%
272	16.289	16.276	16.312	VV	320	4406	0.05%	0.016%
273	16.399	16.312	16.447	VV	686	30010	0.36%	0.112%
274	16.467	16.447	16.480	VV	900	13959	0.17%	0.052%
275	16.498	16.480	16.522	VV	1707	29173	0.35%	0.109%
276	16.542	16.522	16.649	VV	3813	72546	0.86%	0.270%
277	16.658	16.649	16.711	VV	406	7656	0.09%	0.029%
278	16.742	16.711	16.755	VV	317	4104	0.05%	0.015%
279	16.794	16.755	16.808	VV	409	7046	0.08%	0.026%
280	16.824	16.808	16.884	VV	521	12277	0.15%	0.046%
281	16.891	16.884	16.900	VV	250	1429	0.02%	0.005%
282	16.911	16.900	16.927	VV	278	3418	0.04%	0.013%
283	16.950	16.927	16.991	VV	1151	20152	0.24%	0.075%
284	16.998	16.991	17.009	VV	297	1998	0.02%	0.007%
285	17.052	17.009	17.084	VV	450	11622	0.14%	0.043%
286	17.109	17.084	17.129	PV	388	6267	0.07%	0.023%
287	17.137	17.129	17.164	VV	368	4787	0.06%	0.018%
288	17.171	17.164	17.185	VV	211	2378	0.03%	0.009%
289	17.202	17.185	17.219	VV	243	4022	0.05%	0.015%
290	17.250	17.219	17.269	VV	304	5305	0.06%	0.020%
291	17.283	17.269	17.314	VV	304	5500	0.07%	0.020%
292	17.318	17.314	17.328	VV	223	1372	0.02%	0.005%
293	17.382	17.328	17.428	VV	2171	47878	0.57%	0.178%
294	17.441	17.428	17.452	VV	308	3241	0.04%	0.012%
295	17.457	17.452	17.483	VV	431	4596	0.05%	0.017%
296	17.492	17.483	17.500	VV	372	2146	0.03%	0.008%
297	17.522	17.500	17.557	VV	365	9441	0.11%	0.035%
298	17.575	17.557	17.615	VV	289	6425	0.08%	0.024%
299	17.666	17.615	17.692	VV	592	16317	0.19%	0.061%

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300	17.704	17.692	17.747	VV	350	4290	0.05%	0.016%
301	17.805	17.747	17.879	PV	1883	41144	0.49%	0.153%
302	17.908	17.879	17.952	VV	408	10168	0.12%	0.038%
303	17.976	17.952	18.006	VV	265	5628	0.07%	0.021%
304	18.069	18.006	18.092	VV	480	12162	0.14%	0.045%
305	18.122	18.092	18.139	VV	283	4305	0.05%	0.016%
306	18.213	18.139	18.278	VV	2298	64396	0.76%	0.240%
307	18.287	18.278	18.296	VV	221	1363	0.02%	0.005%
308	18.323	18.296	18.334	PV	392	4919	0.06%	0.018%
309	18.346	18.334	18.374	VV	404	5842	0.07%	0.022%
310	18.426	18.374	18.448	VV	367	12109	0.14%	0.045%
311	18.473	18.448	18.502	VV	376	8312	0.10%	0.031%
312	18.524	18.502	18.542	VV	321	5380	0.06%	0.020%
313	18.550	18.542	18.570	VV	252	2085	0.02%	0.008%
314	18.608	18.570	18.670	VV	1384	27025	0.32%	0.101%
315	18.677	18.670	18.697	VV	191	1445	0.02%	0.005%

Sum of corrected areas: 26859796

Aromatic EPH 021125.M Wed Mar 05 23:53:55 2025

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:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-104-GW01	SDG No.:	Q1488
Lab Sample ID:	Q1488-14	Matrix:	Water
Analytical Method:	NJEPH	% Solid:	0
Sample Wt/Vol:	970 Units: mL	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :	SW3510		

Prep Date :	Date Analyzed :	Prep Batch ID
03/05/25 08:25	03/05/25 19:04	PB166976

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	6.57	J	1	5.94	30.9	ug/l	FC068374.D
Aliphatic C12-C16	Aliphatic C12-C16	15.6	J	1	3.72	20.6	ug/l	FC068374.D
Aliphatic C16-C21	Aliphatic C16-C21	12.9	J	1	5.30	30.9	ug/l	FC068374.D
Aliphatic C21-C28	Aliphatic C21-C28	18.1	J	1	9.25	41.2	ug/l	FC068374.D
Aliphatic C28-C40	Aliphatic C28-C40	56.4	J	1	17.5	61.9	ug/l	FC068374.D
Aromatic C10-C12	Aromatic C10-C12	7.28	J	1	3.42	20.6	ug/l	FD049164.D
Aromatic C12-C16	Aromatic C12-C16	72.1		1	3.80	30.9	ug/l	FD049164.D
Aromatic C16-C21	Aromatic C16-C21	63.7		1	13.1	51.5	ug/l	FD049164.D
Aromatic C21-C36	Aromatic C21-C36	235		1	26.0	82.5	ug/l	FD049164.D
Total AliphaticEPH	Total AliphaticEPH	110	J		41.7	186	ug/l	
Total AromaticEPH	Total AromaticEPH	378			46.3	186	ug/l	
Total EPH	Total EPH	488			88.0	371	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:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-104-GW01	SDG No.:	Q1488
Lab Sample ID:	Q1488-14	Matrix:	Water
Analytical Method:	NJEPH	% Solid:	0
Sample Wt/Vol:	970 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
FC068374.D	1	03/05/25	03/05/25	PB166976

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	6.57	J	5.94	30.9	ug/l
Aliphatic C12-C16	Aliphatic C12-C16	15.6	J	3.72	20.6	ug/l
Aliphatic C16-C21	Aliphatic C16-C21	12.9	J	5.30	30.9	ug/l
Aliphatic C21-C28	Aliphatic C21-C28	18.1	J	9.25	41.2	ug/l
Aliphatic C28-C40	Aliphatic C28-C40	56.4	J	17.5	61.9	ug/l
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	41.6		40 - 140	83%	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:	Q1488-14	Acq On:	05 Mar 2025 19:04
Client Sample ID:	ENV-104-GW01	Operator:	YP/AJ
Data file:	FC068374.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	3.102	6.366	449284	3.186	300	ug/ml
Aliphatic C12-C16	6.367	9.749	1033866	7.566	200	ug/ml
Aliphatic C16-C21	9.750	13.103	820660	6.235	300	ug/ml
Aliphatic C21-C28	13.104	16.755	1078800	8.793	400	ug/ml
Aliphatic C28-C40	16.756	21.556	2811569	27.338	600	ug/ml
Aliphatic EPH	3.102	21.556	6194179	53.116		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.836	12.836	4675167	41.57		ug/ml
Aliphatic C9-C28	3.102	16.755	3382610	25.78	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068374.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 19:04
Operator : YP/AJ
Sample : Q1488-14
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
ENV-104-GW01

Integration File: autoint1.e
Quant Time: Mar 05 22:34:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
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...	12.836	4675167	41.567 ug/ml
Spiked Amount 50.000		Recovery = 83.13%	
Target Compounds			

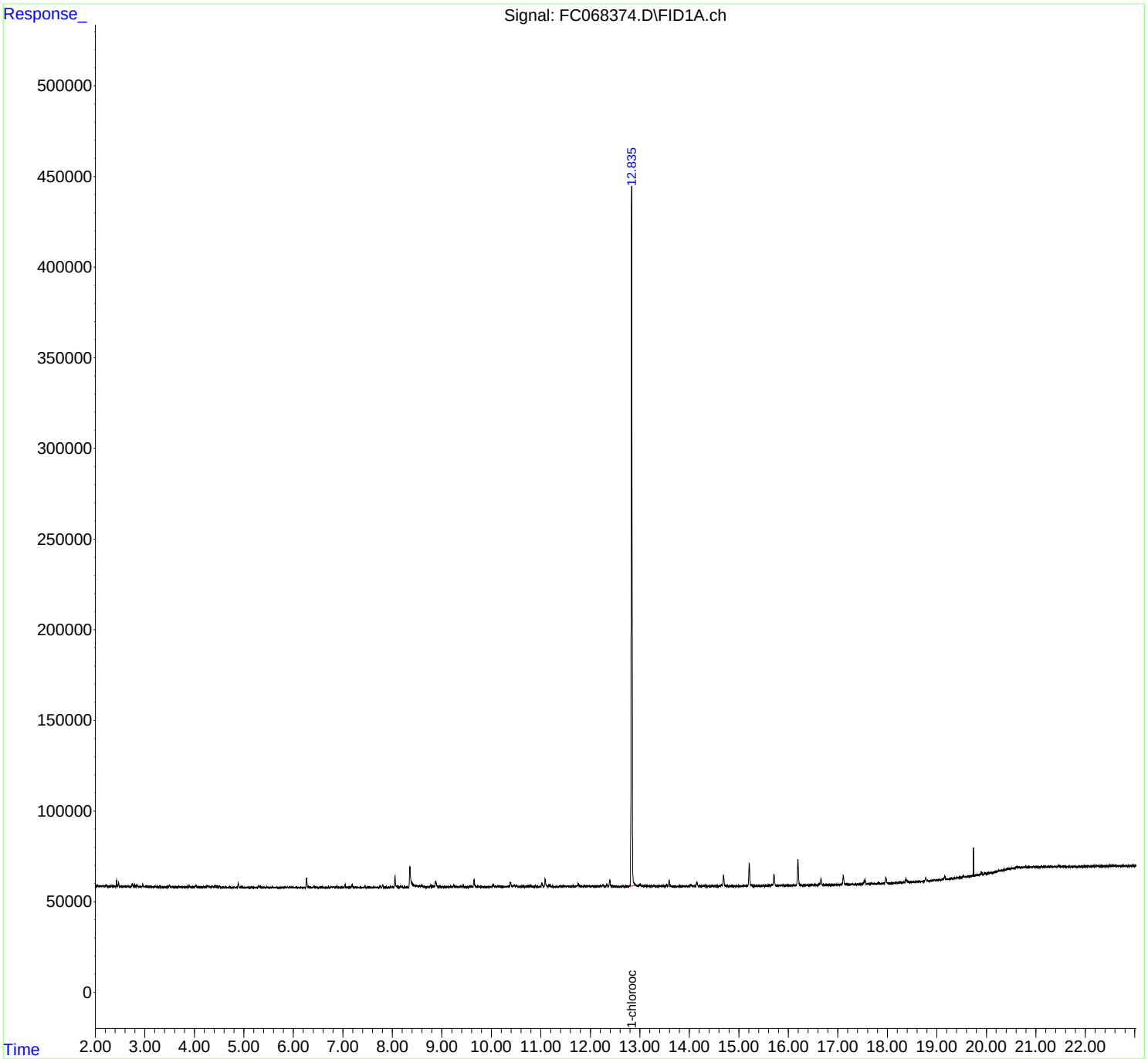
(f)=RT Delta > 1/2 Window (m)=manual int.

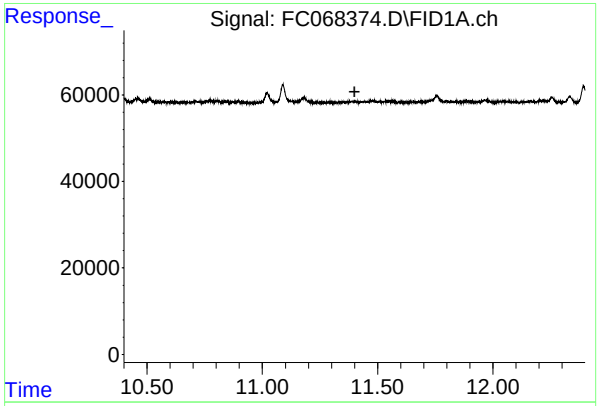
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068374.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 19:04
Operator : YP/AJ
Sample : Q1488-14
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
ENV-104-GW01

Integration File: autoint1.e
Quant Time: Mar 05 22:34:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

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

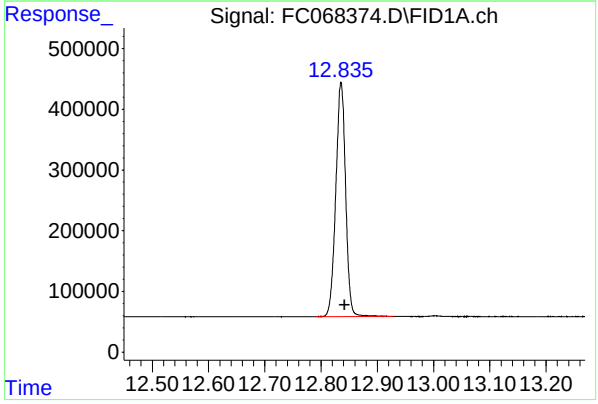




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
ENV-104-GW01



#12 1-chlorooctadecane (SURR)

R.T.: 12.836 min
Delta R.T.: -0.006 min
Response: 4675167
Conc: 41.57 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068374.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 19:04
Sample : Q1488-14
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.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	2.357	2.305	2.402	BV	316	4264	0.09%	0.038%
2	2.430	2.402	2.453	PV	3345	28135	0.59%	0.250%
3	2.471	2.453	2.506	VV	2209	20160	0.43%	0.179%
4	2.527	2.506	2.540	VV	189	1968	0.04%	0.017%
5	2.557	2.540	2.577	VV	141	2270	0.05%	0.020%
6	2.588	2.577	2.606	VV	104	1244	0.03%	0.011%
7	2.655	2.606	2.695	PV	457	6391	0.13%	0.057%
8	2.709	2.695	2.718	VV	111	1107	0.02%	0.010%
9	2.742	2.718	2.769	VV	1335	20138	0.42%	0.179%
10	2.787	2.769	2.821	VV	1134	14477	0.31%	0.129%
11	2.838	2.821	2.876	VV	1083	15102	0.32%	0.134%
12	2.884	2.876	2.895	VV	213	2047	0.04%	0.018%
13	2.916	2.895	2.940	VV	383	6625	0.14%	0.059%
14	2.960	2.940	2.998	VV	1126	15146	0.32%	0.135%
15	3.024	2.998	3.035	VV	202	3763	0.08%	0.033%
16	3.051	3.035	3.138	VV	187	6890	0.15%	0.061%
17	3.153	3.138	3.168	VV	160	2067	0.04%	0.018%
18	3.206	3.168	3.258	VV	409	9201	0.19%	0.082%
19	3.267	3.258	3.365	PV	151	5324	0.11%	0.047%
20	3.372	3.365	3.446	VV	100	3097	0.07%	0.028%
21	3.466	3.446	3.480	VV	237	2494	0.05%	0.022%
22	3.497	3.480	3.514	VV	1506	13198	0.28%	0.117%
23	3.524	3.514	3.553	VV	229	2386	0.05%	0.021%
24	3.577	3.553	3.616	VV	214	3234	0.07%	0.029%
25	3.628	3.616	3.671	VV	92	2191	0.05%	0.019%
26	3.691	3.671	3.751	VV	278	7372	0.16%	0.066%
27	3.774	3.751	3.797	VV	301	4464	0.09%	0.040%
28	3.810	3.797	3.838	VV	104	2310	0.05%	0.021%
29	3.864	3.838	3.881	VV	482	6595	0.14%	0.059%
30	3.893	3.881	3.934	VV	650	11213	0.24%	0.100%
31	3.957	3.934	3.995	VV	256	5959	0.13%	0.053%
32	4.029	3.995	4.061	VV	960	19298	0.41%	0.171%
33	4.074	4.061	4.088	VV	252	4015	0.08%	0.036%
34	4.093	4.088	4.115	VV	263	3472	0.07%	0.031%
35	4.122	4.115	4.152	VV	198	4503	0.10%	0.040%
36	4.163	4.152	4.198	VV	251	6115	0.13%	0.054%

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37	4.215	4.198	4.238	VV	242	4701	0.10%	0.042%
38	4.261	4.238	4.291	VV	832	16846	0.36%	0.150%
39	4.300	4.291	4.340	VV	644	11134	0.23%	0.099%
40	4.364	4.340	4.392	VV	615	11188	0.24%	0.099%
41	4.425	4.392	4.446	VV	866	14429	0.30%	0.128%
42	4.456	4.446	4.467	VV	356	3862	0.08%	0.034%
43	4.481	4.467	4.496	VV	651	7255	0.15%	0.064%
44	4.511	4.496	4.571	VV	1036	13014	0.27%	0.116%
45	4.581	4.571	4.606	VV	168	1931	0.04%	0.017%
46	4.630	4.606	4.668	VV	220	4153	0.09%	0.037%
47	4.707	4.668	4.794	VV	172	5356	0.11%	0.048%
48	4.807	4.794	4.828	VV	234	2182	0.05%	0.019%
49	4.887	4.828	4.923	PV	2514	34593	0.73%	0.307%
50	4.943	4.923	4.958	VV	535	6586	0.14%	0.059%
51	4.973	4.958	5.010	VV	303	5846	0.12%	0.052%
52	5.022	5.010	5.048	VV	169	2846	0.06%	0.025%
53	5.057	5.048	5.069	VV	127	1614	0.03%	0.014%
54	5.082	5.069	5.115	VV	233	3489	0.07%	0.031%
55	5.162	5.115	5.205	PV	168	5057	0.11%	0.045%
56	5.253	5.205	5.273	VV	145	3320	0.07%	0.030%
57	5.291	5.273	5.309	VV	801	9457	0.20%	0.084%
58	5.328	5.309	5.375	VV	931	14611	0.31%	0.130%
59	5.382	5.375	5.412	VV	194	2978	0.06%	0.026%
60	5.421	5.412	5.441	VV	164	1600	0.03%	0.014%
61	5.466	5.441	5.528	VV	252	6353	0.13%	0.056%
62	5.539	5.528	5.548	VV	80	821	0.02%	0.007%
63	5.571	5.548	5.602	VV	323	4466	0.09%	0.040%
64	5.663	5.602	5.682	VV	147	4836	0.10%	0.043%
65	5.691	5.682	5.712	VV	98	1074	0.02%	0.010%
66	5.744	5.712	5.765	PV	237	2710	0.06%	0.024%
67	5.787	5.765	5.819	VV	206	3881	0.08%	0.034%
68	5.848	5.819	5.871	VV	332	6992	0.15%	0.062%
69	5.884	5.871	5.904	VV	317	4667	0.10%	0.041%
70	5.928	5.904	5.969	VV	562	10117	0.21%	0.090%
71	5.990	5.969	6.028	VV	419	7652	0.16%	0.068%
72	6.060	6.028	6.082	VV	220	4296	0.09%	0.038%
73	6.100	6.082	6.144	VV	175	2763	0.06%	0.025%
74	6.167	6.144	6.183	VV	161	2307	0.05%	0.020%
75	6.194	6.183	6.219	VV	98	1563	0.03%	0.014%
76	6.229	6.219	6.240	VV	134	975	0.02%	0.009%
77	6.268	6.240	6.328	VV	5411	70434	1.49%	0.626%
78	6.348	6.328	6.371	VV	508	6821	0.14%	0.061%
79	6.386	6.371	6.397	VV	292	3168	0.07%	0.028%
80	6.415	6.397	6.433	VV	742	8733	0.18%	0.078%
81	6.449	6.433	6.466	VV	272	3766	0.08%	0.033%
82	6.487	6.466	6.521	PV	330	4712	0.10%	0.042%
83	6.532	6.521	6.562	VV	136	1427	0.03%	0.013%
84	6.578	6.562	6.613	VV	178	2080	0.04%	0.018%
85	6.624	6.613	6.648	VV	124	1509	0.03%	0.013%
86	6.660	6.648	6.678	VV	142	1400	0.03%	0.012%
87	6.705	6.678	6.738	VV	515	6341	0.13%	0.056%
88	6.759	6.738	6.793	VV	494	10544	0.22%	0.094%
89	6.809	6.793	6.855	VV	522	10877	0.23%	0.097%

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90	6.883	6.855	6.907	VV	729	12663	0.27%	0.113%
91	6.926	6.907	6.940	VV	240	3270	0.07%	0.029%
92	6.964	6.940	6.979	VV	211	4145	0.09%	0.037%
93	6.988	6.979	7.008	VV	243	2371	0.05%	0.021%
94	7.045	7.008	7.077	VV	1828	21532	0.45%	0.191%
95	7.106	7.077	7.135	VV	272	6551	0.14%	0.058%
96	7.188	7.135	7.231	VV	1995	31602	0.67%	0.281%
97	7.247	7.231	7.268	VV	365	5460	0.12%	0.049%
98	7.277	7.268	7.303	VV	340	4349	0.09%	0.039%
99	7.314	7.303	7.326	VV	146	1590	0.03%	0.014%
100	7.359	7.326	7.379	VV	238	4659	0.10%	0.041%
101	7.446	7.379	7.494	VV	678	12733	0.27%	0.113%
102	7.516	7.494	7.533	VV	262	4003	0.08%	0.036%
103	7.546	7.533	7.573	VV	297	4095	0.09%	0.036%
104	7.610	7.573	7.628	VV	382	6760	0.14%	0.060%
105	7.638	7.628	7.695	VV	266	6603	0.14%	0.059%
106	7.705	7.695	7.728	VV	305	3090	0.07%	0.027%
107	7.751	7.728	7.788	PV	993	12937	0.27%	0.115%
108	7.806	7.788	7.831	VV	1538	17828	0.38%	0.158%
109	7.841	7.831	7.861	VV	265	2760	0.06%	0.025%
110	7.876	7.861	7.927	VV	331	6643	0.14%	0.059%
111	7.963	7.927	7.982	VV	634	8975	0.19%	0.080%
112	7.993	7.982	8.025	VV	224	4962	0.10%	0.044%
113	8.054	8.025	8.128	VV	6258	84158	1.78%	0.748%
114	8.156	8.128	8.185	VV	473	11708	0.25%	0.104%
115	8.200	8.185	8.225	VV	452	7100	0.15%	0.063%
116	8.242	8.225	8.268	VV	310	4869	0.10%	0.043%
117	8.287	8.268	8.320	VV	380	4899	0.10%	0.044%
118	8.355	8.320	8.525	VV	11407	278544	5.88%	2.475%
119	8.540	8.525	8.571	VV	802	18981	0.40%	0.169%
120	8.589	8.571	8.626	VV	1287	26101	0.55%	0.232%
121	8.648	8.626	8.683	VV	560	11629	0.25%	0.103%
122	8.704	8.683	8.748	VV	392	10110	0.21%	0.090%
123	8.772	8.748	8.792	VV	1249	17759	0.37%	0.158%
124	8.809	8.792	8.837	VV	899	16157	0.34%	0.144%
125	8.877	8.837	8.941	VV	3327	72446	1.53%	0.644%
126	8.958	8.941	8.991	VV	611	11362	0.24%	0.101%
127	9.007	8.991	9.034	VV	511	8423	0.18%	0.075%
128	9.063	9.034	9.081	VV	369	7313	0.15%	0.065%
129	9.088	9.081	9.145	VV	307	9969	0.21%	0.089%
130	9.173	9.145	9.218	VV	496	12690	0.27%	0.113%
131	9.241	9.218	9.274	VV	1048	19299	0.41%	0.171%
132	9.292	9.274	9.316	VV	535	8729	0.18%	0.078%
133	9.332	9.316	9.358	VV	390	7396	0.16%	0.066%
134	9.380	9.358	9.410	VV	758	14256	0.30%	0.127%
135	9.430	9.410	9.475	VV	1266	18695	0.39%	0.166%
136	9.492	9.475	9.508	VV	237	3180	0.07%	0.028%
137	9.523	9.508	9.536	VV	258	3048	0.06%	0.027%
138	9.572	9.536	9.594	VV	550	9846	0.21%	0.087%
139	9.613	9.594	9.626	VV	330	5424	0.11%	0.048%
140	9.652	9.626	9.699	VV	4315	63860	1.35%	0.567%
141	9.719	9.699	9.807	VV	483	21777	0.46%	0.194%

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142	9.825	9.807	9.846	VV	267	4522	0.10%	0.040%
143	9.865	9.846	9.878	VV	221	3200	0.07%	0.028%
144	9.882	9.878	9.889	VV	202	1067	0.02%	0.009%
145	9.926	9.889	9.942	VV	269	5555	0.12%	0.049%
146	9.970	9.942	9.980	VV	363	6138	0.13%	0.055%
147	10.038	9.980	10.068	VV	1166	30275	0.64%	0.269%
148	10.078	10.068	10.101	VV	503	8220	0.17%	0.073%
149	10.130	10.101	10.165	VV	542	14285	0.30%	0.127%
150	10.179	10.165	10.227	VV	478	10906	0.23%	0.097%
151	10.248	10.227	10.265	VV	402	6401	0.14%	0.057%
152	10.279	10.265	10.299	VV	369	6072	0.13%	0.054%
153	10.328	10.299	10.351	VV	513	11720	0.25%	0.104%
154	10.388	10.351	10.424	VV	2648	48995	1.03%	0.435%
155	10.458	10.424	10.485	VV	1191	27825	0.59%	0.247%
156	10.511	10.485	10.542	VV	1046	20738	0.44%	0.184%
157	10.557	10.542	10.587	VV	377	8730	0.18%	0.078%
158	10.601	10.587	10.658	VV	381	12135	0.26%	0.108%
159	10.709	10.658	10.740	VV	538	16714	0.35%	0.149%
160	10.773	10.740	10.792	VV	623	15244	0.32%	0.135%
161	10.806	10.792	10.825	VV	623	8955	0.19%	0.080%
162	10.838	10.825	10.862	VV	493	7927	0.17%	0.070%
163	10.893	10.862	10.975	VV	490	16576	0.35%	0.147%
164	11.021	10.975	11.056	VV	2413	41674	0.88%	0.370%
165	11.089	11.056	11.148	VV	4350	73033	1.54%	0.649%
166	11.180	11.148	11.224	VV	1267	28451	0.60%	0.253%
167	11.241	11.224	11.261	VV	226	4402	0.09%	0.039%
168	11.291	11.261	11.345	VV	209	8709	0.18%	0.077%
169	11.379	11.345	11.428	VV	441	15232	0.32%	0.135%
170	11.441	11.428	11.461	VV	413	6876	0.15%	0.061%
171	11.477	11.461	11.528	VV	559	15899	0.34%	0.141%
172	11.542	11.528	11.599	VV	470	14216	0.30%	0.126%
173	11.604	11.599	11.614	VV	200	1664	0.04%	0.015%
174	11.690	11.614	11.701	VV	353	12448	0.26%	0.111%
175	11.756	11.701	11.867	VV	1800	54345	1.15%	0.483%
176	11.884	11.867	11.931	VV	465	11937	0.25%	0.106%
177	11.968	11.931	12.010	VV	641	18059	0.38%	0.160%
178	12.032	12.010	12.115	VV	382	15690	0.33%	0.139%
179	12.165	12.115	12.186	VV	418	12468	0.26%	0.111%
180	12.208	12.186	12.237	VV	538	12854	0.27%	0.114%
181	12.255	12.237	12.300	VV	1279	19544	0.41%	0.174%
182	12.333	12.300	12.361	VV	1498	22625	0.48%	0.201%
183	12.393	12.361	12.495	VV	3785	61387	1.30%	0.545%
184	12.516	12.495	12.559	VV	333	7222	0.15%	0.064%
185	12.585	12.559	12.626	PV	112	3361	0.07%	0.030%
186	12.653	12.626	12.729	VV	276	10763	0.23%	0.096%
187	12.836	12.729	12.976	VV	386937	4739691	100.00%	42.117%
188	13.003	12.976	13.042	VV	1571	32165	0.68%	0.286%
189	13.051	13.042	13.061	VV	494	4894	0.10%	0.043%
190	13.067	13.061	13.156	VV	481	18542	0.39%	0.165%
191	13.210	13.156	13.240	VV	334	13158	0.28%	0.117%
192	13.284	13.240	13.325	VV	453	16069	0.34%	0.143%
193	13.332	13.325	13.339	VV	180	1530	0.03%	0.014%
194	13.353	13.339	13.369	VV	298	3407	0.07%	0.030%

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195	13.389	13.369	13.416	VV	276	6301	0.13%	0.056%
196	13.453	13.416	13.481	VV	348	10945	0.23%	0.097%
197	13.493	13.481	13.510	VV	264	3725	0.08%	0.033%
198	13.538	13.510	13.562	VV	1210	18847	0.40%	0.167%
199	13.591	13.562	13.655	VV	3073	50462	1.06%	0.448%
200	13.665	13.655	13.695	VV	170	3038	0.06%	0.027%
201	13.716	13.695	13.772	VV	146	3784	0.08%	0.034%
202	13.819	13.772	13.911	PV	329	13297	0.28%	0.118%
203	13.947	13.911	13.991	VV	187	5183	0.11%	0.046%
204	14.028	13.991	14.115	VV	1020	26712	0.56%	0.237%
205	14.151	14.115	14.195	VV	2574	42146	0.89%	0.375%
206	14.211	14.195	14.231	VV	200	3763	0.08%	0.033%
207	14.242	14.231	14.255	VV	178	2290	0.05%	0.020%
208	14.290	14.255	14.325	VV	301	9561	0.20%	0.085%
209	14.334	14.325	14.380	VV	217	4863	0.10%	0.043%
210	14.394	14.380	14.421	VV	218	3716	0.08%	0.033%
211	14.465	14.421	14.480	VV	281	6522	0.14%	0.058%
212	14.496	14.480	14.525	VV	264	4126	0.09%	0.037%
213	14.544	14.525	14.581	VV	204	4240	0.09%	0.038%
214	14.585	14.581	14.596	VV	143	675	0.01%	0.006%
215	14.646	14.596	14.663	VV	1043	16248	0.34%	0.144%
216	14.690	14.663	14.818	VV	5897	98659	2.08%	0.877%
217	14.825	14.818	14.834	VV	68	560	0.01%	0.005%
218	14.866	14.834	14.882	VV	252	4743	0.10%	0.042%
219	14.890	14.882	14.960	VV	138	4851	0.10%	0.043%
220	14.994	14.960	15.020	PV	186	3312	0.07%	0.029%
221	15.029	15.020	15.036	VV	112	796	0.02%	0.007%
222	15.041	15.036	15.064	VV	111	1228	0.03%	0.011%
223	15.116	15.064	15.145	PV	297	8294	0.17%	0.074%
224	15.209	15.145	15.303	VV	12589	188776	3.98%	1.677%
225	15.362	15.303	15.371	VV	168	4919	0.10%	0.044%
226	15.387	15.371	15.433	VV	180	5095	0.11%	0.045%
227	15.446	15.433	15.459	VV	146	1870	0.04%	0.017%
228	15.509	15.459	15.531	VV	257	7177	0.15%	0.064%
229	15.552	15.531	15.568	VV	203	3737	0.08%	0.033%
230	15.571	15.568	15.578	VV	203	1074	0.02%	0.010%
231	15.585	15.578	15.592	VV	156	1287	0.03%	0.011%
232	15.601	15.592	15.618	VV	186	2201	0.05%	0.020%
233	15.671	15.618	15.683	VV	864	14976	0.32%	0.133%
234	15.709	15.683	15.801	VV	6318	101183	2.13%	0.899%
235	15.806	15.801	15.831	VV	179	1995	0.04%	0.018%
236	15.856	15.831	15.874	VV	215	3778	0.08%	0.034%
237	15.897	15.874	15.969	VV	182	6547	0.14%	0.058%
238	16.128	15.969	16.141	PV	257	9496	0.20%	0.084%
239	16.192	16.141	16.298	VV	14330	231044	4.87%	2.053%
240	16.317	16.298	16.334	VV	208	3495	0.07%	0.031%
241	16.377	16.334	16.412	VV	213	7108	0.15%	0.063%
242	16.429	16.412	16.451	VV	153	2788	0.06%	0.025%
243	16.461	16.451	16.523	VV	183	4190	0.09%	0.037%
244	16.552	16.523	16.588	VV	285	6802	0.14%	0.060%
245	16.626	16.588	16.634	VV	773	12916	0.27%	0.115%
246	16.659	16.634	16.751	VV	3327	59295	1.25%	0.527%

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247	16.758	16.751	16.785	VV	181	2653	0.06%	0.024%
248	16.791	16.785	16.811	VV	71	1240	0.03%	0.011%
249	16.819	16.811	16.852	VV	134	1869	0.04%	0.017%
250	16.890	16.852	16.911	VV	102	2432	0.05%	0.022%
251	16.952	16.911	16.985	VV	190	4226	0.09%	0.038%
252	16.996	16.985	17.012	PV	156	1242	0.03%	0.011%
253	17.019	17.012	17.027	VV	91	681	0.01%	0.006%
254	17.110	17.027	17.180	PV	5141	85871	1.81%	0.763%
255	17.206	17.180	17.268	VV	275	7274	0.15%	0.065%
256	17.302	17.268	17.381	VV	211	7842	0.17%	0.070%
257	17.391	17.381	17.431	VV	157	2750	0.06%	0.024%
258	17.546	17.431	17.588	VV	2646	56404	1.19%	0.501%
259	17.601	17.588	17.645	VV	228	5542	0.12%	0.049%
260	17.651	17.645	17.661	VV	107	1187	0.03%	0.011%
261	17.698	17.661	17.785	VV	212	8329	0.18%	0.074%
262	17.826	17.785	17.908	PV	333	8580	0.18%	0.076%
263	17.969	17.908	18.061	PV	3499	65533	1.38%	0.582%
264	18.072	18.061	18.077	VV	124	724	0.02%	0.006%
265	18.085	18.077	18.136	VV	128	2974	0.06%	0.026%
266	18.179	18.136	18.201	VV	152	3529	0.07%	0.031%
267	18.249	18.201	18.261	PV	244	6661	0.14%	0.059%
268	18.267	18.261	18.291	VV	169	2331	0.05%	0.021%
269	18.301	18.291	18.309	VV	97	932	0.02%	0.008%
270	18.378	18.309	18.455	VV	2040	48291	1.02%	0.429%
271	18.538	18.455	18.547	PV	129	3534	0.07%	0.031%
272	18.558	18.547	18.571	VV	91	1018	0.02%	0.009%
273	18.575	18.571	18.605	VV	117	1035	0.02%	0.009%
274	18.775	18.605	18.851	PV	1686	34158	0.72%	0.304%
275	18.953	18.851	18.970	PV	300	9123	0.19%	0.081%
276	19.161	18.970	19.228	VV	1552	43711	0.92%	0.388%
277	19.238	19.228	19.244	VV	109	862	0.02%	0.008%
278	19.396	19.244	19.409	VV	420	19986	0.42%	0.178%
279	19.465	19.409	19.497	VV	546	21426	0.45%	0.190%
280	19.536	19.497	19.565	VV	1156	27154	0.57%	0.241%
281	19.741	19.565	19.753	VV	5507	73138	1.54%	0.650%
282	19.794	19.753	19.809	VV	1026	30330	0.64%	0.270%
283	19.899	19.809	19.941	VV	1921	91051	1.92%	0.809%
284	19.962	19.941	19.998	VV	1349	41816	0.88%	0.372%
285	20.254	19.998	20.287	VV	2447	276629	5.84%	2.458%
286	20.431	20.287	20.458	VV	2898	250724	5.29%	2.228%
287	20.612	20.458	20.658	VV	3449	348380	7.35%	3.096%
288	20.796	20.658	20.898	VV	2948	407306	8.59%	3.619%
289	20.941	20.898	20.985	VV	2624	133269	2.81%	1.184%
290	21.015	20.985	21.051	VV	2534	95704	2.02%	0.850%
291	21.314	21.051	21.421	VV	1919	436573	9.21%	3.879%
292	21.467	21.421	21.513	VV	1757	87530	1.85%	0.778%
293	21.534	21.513	21.576	VV	1375	48015	1.01%	0.427%
294	21.594	21.576	21.623	VV	1075	28975	0.61%	0.257%
295	21.799	21.623	21.843	VV	655	101011	2.13%	0.898%
296	21.906	21.843	21.956	VV	384	25561	0.54%	0.227%
297	21.979	21.956	22.083	VV	317	14519	0.31%	0.129%

Sum of corrected areas: 11253663

Aliphatic EPH 021125.M Wed Mar 05 23:13:17 2025

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:	03/04/25	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	03/04/25	
Client Sample ID:	ENV-104-GW01		SDG No.:	Q1488	
Lab Sample ID:	Q1488-14		Matrix:	Water	
Analytical Method:	NJEPH		% Solid:	0	
Sample Wt/Vol:	970	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
FD049164.D	1	03/05/25	03/05/25	PB166976

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	7.28	J	3.42	20.6	ug/l
Aromatic C12-C16	Aromatic C12-C16	72.1		3.80	30.9	ug/l
Aromatic C16-C21	Aromatic C16-C21	63.7		13.1	51.5	ug/l
Aromatic C21-C36	Aromatic C21-C36	235		26.0	82.5	ug/l
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	53.9		40 - 140	108%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	53.5		40 - 140	107%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	45.4		40 - 140	91%	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:	Q1488-14	Acq On:	05 Mar 2025 19:04
Client Sample ID:	ENV-104-GW01	Operator:	YP/AJ
Data file:	FD049164.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	4.075	5.793	561258	3.529	200	ug/ml
Aromatic C12-C16	5.794	8.395	5625234	34.953	300	ug/ml
Aromatic C16-C21	8.396	12.660	4741557	30.918	500	ug/ml
Aromatic C21-C36	12.661	18.072	16337879	114.159	800	ug/ml
Aromatic EPH	4.075	18.072	27265928	183.56		ug/ml
ortho-Terphenyl (SURR)	11.235	11.235	7345608	45.41		ug/ml
2-Bromonaphthalene (SURR)	7.351	7.351	7709000	53.87		ug/ml
2-Flurobiphenyl (SURR)	8.201	8.201	4707811	53.55		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049164.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 19:04
Operator : YP/AJ
Sample : Q1488-14
Misc :
ALS Vial : 66 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
ENV-104-GW01

Integration File: autoint1.e
Quant Time: Mar 05 23:31:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
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...	7.351	7709000	53.868 ug/ml
Spiked Amount 50.000		Recovery = 107.74%	
6) S 2-Flurobiphenyl (SURR)	8.201	4707811	53.551 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery = 107.10%	
11) S ortho-Terphenyl (SURR)	11.235	7345608	45.407 ug/ml
Spiked Amount 50.000		Recovery = 90.81%	
Target Compounds			

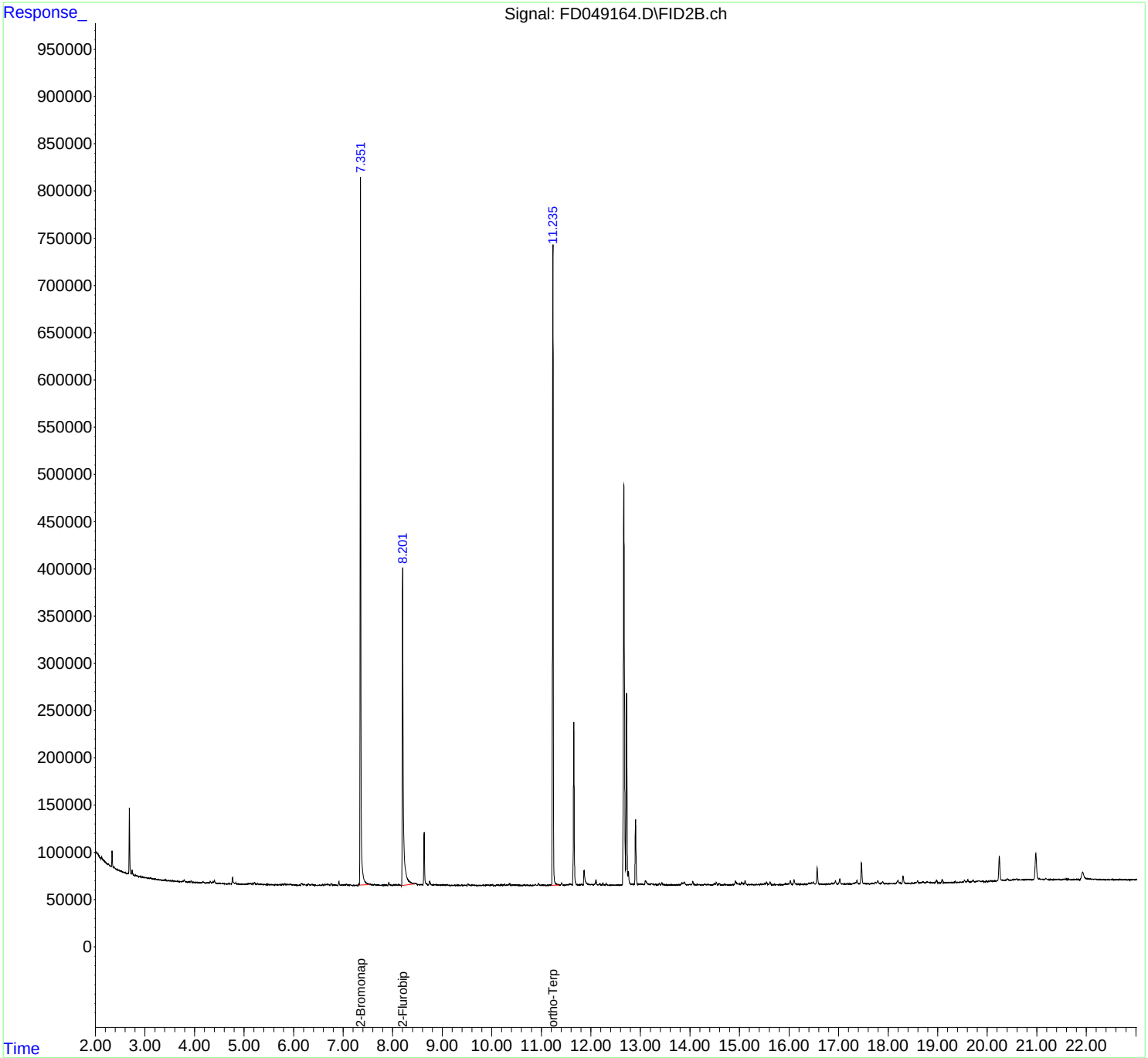
(f)=RT Delta > 1/2 Window (m)=manual int.

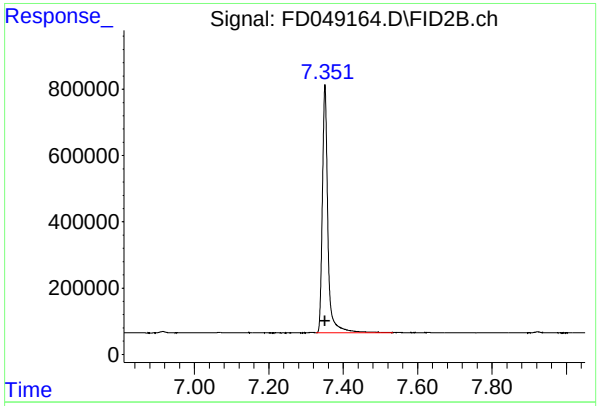
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049164.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 19:04
Operator : YP/AJ
Sample : Q1488-14
Misc :
ALS Vial : 66 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
ENV-104-GW01

Integration File: autoint1.e
Quant Time: Mar 05 23:31:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

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

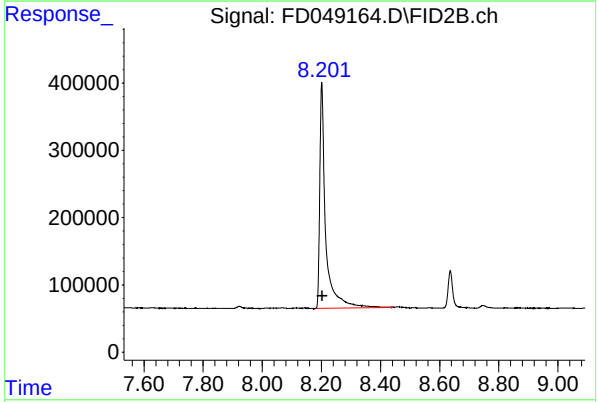




#4 2-Bromonaphthalene (SURR)

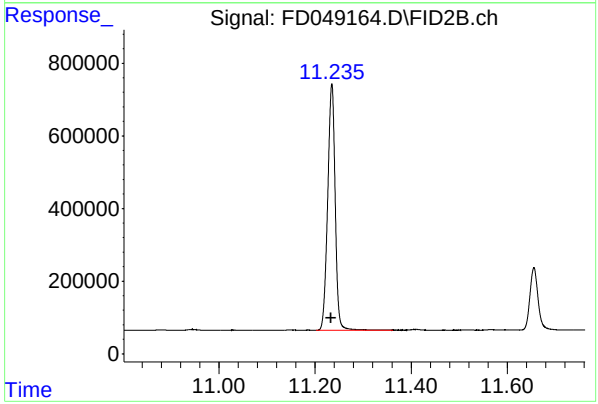
R.T.: 7.351 min
Delta R.T.: 0.000 min
Response: 7709000
Conc: 53.87 ug/ml

Instrument :
FID_D
ClientSampleId :
ENV-104-GW01



#6 2-Flurobiphenyl (SURR)

R.T.: 8.201 min
Delta R.T.: 0.000 min
Response: 4707811
Conc: 53.55 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.235 min
Delta R.T.: 0.002 min
Response: 7345608
Conc: 45.41 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049164.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 19:04
Sample : Q1488-14
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.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	4.056	4.042	4.069	BV	202	1442	0.02%	0.003%
2	4.085	4.069	4.102	PV	255	1133	0.01%	0.003%
3	4.129	4.122	4.147	VV	170	1700	0.02%	0.004%
4	4.169	4.147	4.209	VV	1215	21632	0.28%	0.049%
5	4.221	4.209	4.227	VV	229	1722	0.02%	0.004%
6	4.231	4.227	4.237	VV	238	1074	0.01%	0.002%
7	4.264	4.237	4.285	VV	598	12146	0.16%	0.028%
8	4.291	4.285	4.300	VV	435	2413	0.03%	0.006%
9	4.318	4.300	4.359	VV	2181	31029	0.40%	0.071%
10	4.373	4.359	4.387	VV	2094	22522	0.29%	0.051%
11	4.402	4.387	4.462	VV	3510	48888	0.63%	0.112%
12	4.469	4.462	4.480	VV	280	2378	0.03%	0.005%
13	4.497	4.480	4.501	VV	619	4990	0.06%	0.011%
14	4.512	4.501	4.543	VV	725	11141	0.14%	0.025%
15	4.554	4.543	4.565	PV	176	1486	0.02%	0.003%
16	4.582	4.565	4.645	VV	536	10325	0.13%	0.024%
17	4.648	4.645	4.675	PV	189	2002	0.03%	0.005%
18	4.689	4.675	4.702	VV	476	5068	0.07%	0.012%
19	4.708	4.702	4.745	VV	387	7256	0.09%	0.017%
20	4.768	4.745	4.815	VV	7184	102939	1.32%	0.235%
21	4.828	4.815	4.854	VV	1590	21364	0.27%	0.049%
22	4.857	4.854	4.874	VV	472	4227	0.05%	0.010%
23	4.879	4.874	4.915	VV	474	7558	0.10%	0.017%
24	4.921	4.915	4.939	VV	347	3981	0.05%	0.009%
25	4.949	4.939	4.979	VV	334	6951	0.09%	0.016%
26	4.983	4.979	4.996	VV	249	1370	0.02%	0.003%
27	5.013	4.996	5.022	PV	408	2929	0.04%	0.007%
28	5.041	5.022	5.049	VV	466	5632	0.07%	0.013%
29	5.052	5.049	5.062	VV	430	2893	0.04%	0.007%
30	5.065	5.062	5.072	VV	452	2054	0.03%	0.005%
31	5.100	5.072	5.107	VV	1008	16942	0.22%	0.039%
32	5.112	5.107	5.131	VV	1057	13025	0.17%	0.030%
33	5.137	5.131	5.166	VV	983	16100	0.21%	0.037%
34	5.183	5.166	5.200	VV	1602	22500	0.29%	0.051%
35	5.213	5.200	5.239	VV	2349	31705	0.41%	0.072%
36	5.242	5.239	5.255	VV	531	4513	0.06%	0.010%

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37	5.269	5.255	5.306	VV	1031	17707	0.23%	0.040%
38	5.311	5.306	5.325	VV	378	3543	0.05%	0.008%
39	5.345	5.325	5.359	VV	604	9828	0.13%	0.022%
40	5.366	5.359	5.371	VV	505	3303	0.04%	0.008%
41	5.377	5.371	5.398	VV	538	5627	0.07%	0.013%
42	5.403	5.398	5.427	VV	311	4402	0.06%	0.010%
43	5.432	5.427	5.444	VV	317	2093	0.03%	0.005%
44	5.466	5.444	5.474	VV	555	5070	0.07%	0.012%
45	5.483	5.474	5.508	VV	301	5058	0.06%	0.012%
46	5.512	5.508	5.548	VV	390	6196	0.08%	0.014%
47	5.553	5.548	5.578	VV	254	2309	0.03%	0.005%
48	5.589	5.578	5.597	VV	168	1219	0.02%	0.003%
49	5.609	5.597	5.614	VV	172	1334	0.02%	0.003%
50	5.630	5.620	5.656	VV	296	4184	0.05%	0.010%
51	5.664	5.656	5.675	VV	298	2638	0.03%	0.006%
52	5.693	5.675	5.709	VV	398	5541	0.07%	0.013%
53	5.743	5.709	5.749	VV	536	9023	0.12%	0.021%
54	5.778	5.749	5.803	VV	744	16595	0.21%	0.038%
55	5.819	5.803	5.863	VV	1267	26844	0.34%	0.061%
56	5.870	5.863	5.899	VV	844	11890	0.15%	0.027%
57	5.902	5.899	5.909	VV	538	2739	0.04%	0.006%
58	5.942	5.909	5.985	VV	887	26482	0.34%	0.060%
59	5.989	5.985	6.008	VV	445	4532	0.06%	0.010%
60	6.022	6.008	6.053	VV	387	5279	0.07%	0.012%
61	6.060	6.053	6.066	VV	290	1034	0.01%	0.002%
62	6.086	6.073	6.094	PV	272	2005	0.03%	0.005%
63	6.108	6.094	6.122	VV	195	1871	0.02%	0.004%
64	6.129	6.122	6.137	VV	310	1683	0.02%	0.004%
65	6.159	6.137	6.205	VV	2141	41672	0.54%	0.095%
66	6.223	6.205	6.254	VV	1395	20961	0.27%	0.048%
67	6.267	6.254	6.282	VV	699	9480	0.12%	0.022%
68	6.299	6.282	6.324	VV	1904	30692	0.39%	0.070%
69	6.329	6.324	6.353	VV	729	9102	0.12%	0.021%
70	6.371	6.353	6.420	VV	1098	21521	0.28%	0.049%
71	6.425	6.420	6.434	VV	231	1598	0.02%	0.004%
72	6.447	6.434	6.466	PV	378	4573	0.06%	0.010%
73	6.472	6.466	6.490	VV	227	2643	0.03%	0.006%
74	6.511	6.490	6.517	VV	522	5484	0.07%	0.013%
75	6.522	6.517	6.534	VV	480	3378	0.04%	0.008%
76	6.541	6.534	6.565	VV	325	3878	0.05%	0.009%
77	6.583	6.565	6.609	VV	1084	15655	0.20%	0.036%
78	6.633	6.609	6.644	VV	1076	14234	0.18%	0.032%
79	6.651	6.644	6.660	VV	985	9377	0.12%	0.021%
80	6.681	6.660	6.702	VV	1644	29615	0.38%	0.068%
81	6.709	6.702	6.734	VV	1012	13777	0.18%	0.031%
82	6.758	6.734	6.803	VV	2234	38850	0.50%	0.089%
83	6.809	6.803	6.813	VV	507	2369	0.03%	0.005%
84	6.820	6.813	6.830	VV	441	3622	0.05%	0.008%
85	6.850	6.830	6.873	VV	603	9905	0.13%	0.023%
86	6.915	6.894	6.942	VV	4366	49590	0.64%	0.113%
87	6.945	6.942	6.954	VV	342	1757	0.02%	0.004%
88	6.964	6.954	6.968	VV	344	2323	0.03%	0.005%
89	6.988	6.968	7.016	VV	923	16074	0.21%	0.037%

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90	7.028	7.016	7.037	VV	814	7764	0.10%	0.018%
91	7.040	7.037	7.051	VV	668	5187	0.07%	0.012%
92	7.065	7.051	7.101	VV	1266	23931	0.31%	0.055%
93	7.118	7.101	7.132	VV	791	10368	0.13%	0.024%
94	7.148	7.132	7.167	VV	1099	13126	0.17%	0.030%
95	7.170	7.167	7.176	VV	346	1446	0.02%	0.003%
96	7.182	7.176	7.189	VV	281	1692	0.02%	0.004%
97	7.198	7.189	7.217	VV	337	2593	0.03%	0.006%
98	7.221	7.217	7.235	VV	424	2061	0.03%	0.005%
99	7.239	7.235	7.245	VV	218	1008	0.01%	0.002%
100	7.250	7.245	7.257	VV	284	1368	0.02%	0.003%
101	7.266	7.257	7.295	VV	371	4610	0.06%	0.011%
102	7.315	7.295	7.327	VV	1647	16805	0.22%	0.038%
103	7.351	7.327	7.511	VV	746687	7783871	100.00%	17.765%
104	7.515	7.511	7.533	VV	1507	17775	0.23%	0.041%
105	7.541	7.533	7.569	VV	1285	23838	0.31%	0.054%
106	7.571	7.569	7.576	VV	889	4119	0.05%	0.009%
107	7.586	7.576	7.607	VV	985	16754	0.22%	0.038%
108	7.629	7.607	7.665	VV	1295	29831	0.38%	0.068%
109	7.684	7.665	7.759	VV	784	30570	0.39%	0.070%
110	7.776	7.759	7.809	VV	529	10844	0.14%	0.025%
111	7.814	7.809	7.825	VV	499	3625	0.05%	0.008%
112	7.839	7.825	7.861	VV	470	8893	0.11%	0.020%
113	7.879	7.861	7.902	VV	378	8201	0.11%	0.019%
114	7.923	7.902	7.961	VV	3382	48773	0.63%	0.111%
115	7.967	7.961	7.990	VV	565	5879	0.08%	0.013%
116	8.016	7.990	8.027	VV	716	10408	0.13%	0.024%
117	8.035	8.027	8.050	VV	774	10149	0.13%	0.023%
118	8.069	8.050	8.095	VV	1127	19162	0.25%	0.044%
119	8.117	8.095	8.134	VV	914	14782	0.19%	0.034%
120	8.147	8.134	8.180	VV	947	13387	0.17%	0.031%
121	8.202	8.180	8.404	VV	334695	4809796	61.79%	10.977%
122	8.410	8.404	8.442	VV	2317	49820	0.64%	0.114%
123	8.459	8.442	8.505	VV	2619	70783	0.91%	0.162%
124	8.513	8.505	8.537	VV	1266	19560	0.25%	0.045%
125	8.564	8.537	8.607	VV	1258	37992	0.49%	0.087%
126	8.636	8.607	8.722	VV	56509	658265	8.46%	1.502%
127	8.747	8.722	8.806	VV	4669	94990	1.22%	0.217%
128	8.823	8.806	8.845	VV	1183	22359	0.29%	0.051%
129	8.870	8.845	8.902	VV	1211	29536	0.38%	0.067%
130	8.924	8.902	8.942	VV	854	15355	0.20%	0.035%
131	8.949	8.942	8.992	VV	822	16571	0.21%	0.038%
132	9.017	8.992	9.074	VV	999	31865	0.41%	0.073%
133	9.095	9.074	9.158	VV	1245	22761	0.29%	0.052%
134	9.193	9.158	9.230	VV	433	12473	0.16%	0.028%
135	9.252	9.230	9.285	VV	616	11236	0.14%	0.026%
136	9.307	9.285	9.365	VV	783	12834	0.16%	0.029%
137	9.385	9.365	9.426	PV	466	12136	0.16%	0.028%
138	9.449	9.426	9.495	VV	581	13781	0.18%	0.031%
139	9.521	9.495	9.572	VV	1838	30773	0.40%	0.070%
140	9.588	9.572	9.639	VV	718	19760	0.25%	0.045%
141	9.647	9.639	9.674	VV	541	5867	0.08%	0.013%

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142	9.687	9.674	9.727	VV	377	5498	0.07%	0.013%
143	9.783	9.727	9.804	VV	459	12423	0.16%	0.028%
144	9.822	9.804	9.849	VV	634	10412	0.13%	0.024%
145	9.908	9.849	9.925	VV	782	19027	0.24%	0.043%
146	9.933	9.925	9.959	VV	420	7984	0.10%	0.018%
147	9.976	9.959	9.989	VV	504	7397	0.10%	0.017%
148	10.013	9.989	10.037	VV	1118	19098	0.25%	0.044%
149	10.047	10.037	10.060	VV	399	4316	0.06%	0.010%
150	10.103	10.060	10.132	VV	829	20135	0.26%	0.046%
151	10.138	10.132	10.159	VV	492	6080	0.08%	0.014%
152	10.187	10.159	10.208	VV	1037	19432	0.25%	0.044%
153	10.222	10.208	10.239	VV	539	9416	0.12%	0.021%
154	10.256	10.239	10.280	VV	1350	21065	0.27%	0.048%
155	10.293	10.280	10.312	VV	746	11046	0.14%	0.025%
156	10.363	10.312	10.389	VV	2239	52804	0.68%	0.121%
157	10.406	10.389	10.422	VV	640	10777	0.14%	0.025%
158	10.433	10.422	10.444	VV	641	7714	0.10%	0.018%
159	10.455	10.444	10.485	VV	787	13114	0.17%	0.030%
160	10.528	10.485	10.559	VV	648	20003	0.26%	0.046%
161	10.565	10.559	10.585	VV	472	5295	0.07%	0.012%
162	10.603	10.585	10.616	VV	479	6165	0.08%	0.014%
163	10.634	10.616	10.646	VV	671	8514	0.11%	0.019%
164	10.663	10.646	10.684	VV	989	13711	0.18%	0.031%
165	10.712	10.684	10.739	VV	507	11651	0.15%	0.027%
166	10.763	10.739	10.784	VV	376	7769	0.10%	0.018%
167	10.798	10.784	10.818	VV	309	5731	0.07%	0.013%
168	10.847	10.818	10.862	VV	515	9487	0.12%	0.022%
169	10.880	10.862	10.915	VV	1406	23205	0.30%	0.053%
170	10.944	10.915	10.980	VV	2483	43001	0.55%	0.098%
171	10.988	10.980	11.012	VV	628	10227	0.13%	0.023%
172	11.030	11.012	11.054	VV	751	14650	0.19%	0.033%
173	11.062	11.054	11.078	VV	538	6072	0.08%	0.014%
174	11.091	11.078	11.120	VV	580	8794	0.11%	0.020%
175	11.148	11.120	11.170	VV	892	17594	0.23%	0.040%
176	11.185	11.170	11.201	VV	790	11027	0.14%	0.025%
177	11.235	11.201	11.385	VV	681535	7405929	95.14%	16.902%
178	11.410	11.385	11.449	VV	2570	47914	0.62%	0.109%
179	11.469	11.449	11.478	VV	721	10991	0.14%	0.025%
180	11.514	11.478	11.545	VV	1402	35425	0.46%	0.081%
181	11.565	11.545	11.583	VV	1850	30773	0.40%	0.070%
182	11.595	11.583	11.625	VV	1635	31508	0.40%	0.072%
183	11.656	11.625	11.725	VV	173007	2068559	26.57%	4.721%
184	11.737	11.725	11.777	VV	1131	30912	0.40%	0.071%
185	11.812	11.777	11.841	VV	1545	41318	0.53%	0.094%
186	11.865	11.841	11.981	VV	16127	356745	4.58%	0.814%
187	11.989	11.981	12.010	VV	1205	20679	0.27%	0.047%
188	12.022	12.010	12.054	VV	1250	29364	0.38%	0.067%
189	12.102	12.054	12.147	VV	6178	121076	1.56%	0.276%
190	12.181	12.147	12.209	VV	2224	45171	0.58%	0.103%
191	12.243	12.209	12.283	VV	3173	56826	0.73%	0.130%
192	12.309	12.283	12.344	VV	2163	42521	0.55%	0.097%
193	12.356	12.344	12.399	VV	755	20479	0.26%	0.047%
194	12.402	12.399	12.461	VV	618	19121	0.25%	0.044%

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195	12.492	12.461	12.502	VV	676	14113	0.18%	0.032%
196	12.512	12.502	12.542	VV	785	15789	0.20%	0.036%
197	12.553	12.542	12.561	VV	657	6712	0.09%	0.015%
198	12.571	12.561	12.584	VV	652	7479	0.10%	0.017%
199	12.612	12.584	12.628	VV	878	18731	0.24%	0.043%
200	12.666	12.628	12.700	VV	424226	6464541	83.05%	14.754%
201	12.721	12.700	12.745	VV	203391	2436791	31.31%	5.561%
202	12.756	12.745	12.815	VV	15195	251568	3.23%	0.574%
203	12.831	12.815	12.874	VV	1644	48812	0.63%	0.111%
204	12.902	12.874	12.952	VV	70138	917323	11.78%	2.094%
205	12.974	12.952	13.007	VV	1967	56288	0.72%	0.128%
206	13.027	13.007	13.080	VV	1920	63841	0.82%	0.146%
207	13.100	13.080	13.196	VV	5116	175436	2.25%	0.400%
208	13.222	13.196	13.292	VV	2159	89975	1.16%	0.205%
209	13.302	13.292	13.320	VV	1374	20862	0.27%	0.048%
210	13.332	13.320	13.360	VV	1192	26674	0.34%	0.061%
211	13.381	13.360	13.412	VV	2572	47900	0.62%	0.109%
212	13.433	13.412	13.457	VV	3279	51271	0.66%	0.117%
213	13.474	13.457	13.510	VV	1447	33913	0.44%	0.077%
214	13.527	13.510	13.537	VV	1035	14544	0.19%	0.033%
215	13.541	13.537	13.565	VV	984	13723	0.18%	0.031%
216	13.589	13.565	13.600	VV	883	17289	0.22%	0.039%
217	13.609	13.600	13.635	VV	936	16267	0.21%	0.037%
218	13.687	13.635	13.697	VV	940	31156	0.40%	0.071%
219	13.726	13.697	13.746	VV	1120	26259	0.34%	0.060%
220	13.804	13.746	13.813	VV	1199	40204	0.52%	0.092%
221	13.843	13.813	13.860	VV	2844	62618	0.80%	0.143%
222	13.886	13.860	13.974	VV	3598	124895	1.60%	0.285%
223	13.995	13.974	14.017	VV	1549	30547	0.39%	0.070%
224	14.057	14.017	14.100	VV	4413	99118	1.27%	0.226%
225	14.111	14.100	14.121	VV	1171	14427	0.19%	0.033%
226	14.133	14.121	14.144	VV	1164	15261	0.20%	0.035%
227	14.157	14.144	14.178	VV	1396	22716	0.29%	0.052%
228	14.192	14.178	14.227	VV	1262	27952	0.36%	0.064%
229	14.247	14.227	14.262	VV	1074	19325	0.25%	0.044%
230	14.297	14.262	14.327	VV	1627	47167	0.61%	0.108%
231	14.335	14.327	14.344	VV	1191	11403	0.15%	0.026%
232	14.371	14.344	14.459	VV	1679	76943	0.99%	0.176%
233	14.487	14.459	14.509	VV	2417	48027	0.62%	0.110%
234	14.531	14.509	14.566	VV	3689	69786	0.90%	0.159%
235	14.590	14.566	14.667	VV	2648	77742	1.00%	0.177%
236	14.698	14.667	14.722	VV	1477	38031	0.49%	0.087%
237	14.734	14.722	14.749	VV	1142	15941	0.20%	0.036%
238	14.756	14.749	14.783	VV	1016	18298	0.24%	0.042%
239	14.795	14.783	14.805	VV	876	10333	0.13%	0.024%
240	14.852	14.805	14.875	VV	1017	39584	0.51%	0.090%
241	14.917	14.875	15.000	VV	5099	185661	2.39%	0.424%
242	15.010	15.000	15.025	VV	1842	25443	0.33%	0.058%
243	15.046	15.025	15.090	VV	3777	93478	1.20%	0.213%
244	15.112	15.090	15.164	VV	5350	110643	1.42%	0.253%
245	15.194	15.164	15.220	VV	1523	42974	0.55%	0.098%
246	15.242	15.220	15.280	VV	1460	45554	0.59%	0.104%

rteres

247	15.290	15.280	15.317	VV	1113	22921	0.29%	0.052%
248	15.338	15.317	15.349	VV	1212	21910	0.28%	0.050%
249	15.364	15.349	15.384	VV	1265	25757	0.33%	0.059%
250	15.394	15.384	15.410	VV	1344	20374	0.26%	0.046%
251	15.443	15.410	15.475	VV	1545	51547	0.66%	0.118%
252	15.509	15.475	15.525	VV	2503	55036	0.71%	0.126%
253	15.545	15.525	15.573	VV	4025	72719	0.93%	0.166%
254	15.584	15.573	15.591	VV	1495	15715	0.20%	0.036%
255	15.615	15.591	15.671	VV	4128	98300	1.26%	0.224%
256	15.688	15.671	15.724	VV	1327	37270	0.48%	0.085%
257	15.739	15.724	15.771	VV	1303	34062	0.44%	0.078%
258	15.807	15.771	15.847	VV	1427	51909	0.67%	0.118%
259	15.930	15.847	15.970	VV	2087	111618	1.43%	0.255%
260	16.024	15.970	16.064	VV	5090	142895	1.84%	0.326%
261	16.099	16.064	16.215	VV	6571	212163	2.73%	0.484%
262	16.238	16.215	16.285	VV	1603	60177	0.77%	0.137%
263	16.309	16.285	16.324	VV	1594	34172	0.44%	0.078%
264	16.350	16.324	16.364	VV	1591	35549	0.46%	0.081%
265	16.402	16.364	16.435	VV	2890	97524	1.25%	0.223%
266	16.454	16.435	16.467	VV	3167	54335	0.70%	0.124%
267	16.487	16.467	16.513	VV	4127	83748	1.08%	0.191%
268	16.566	16.513	16.700	VV	19081	441689	5.67%	1.008%
269	16.711	16.700	16.746	VV	1607	41908	0.54%	0.096%
270	16.760	16.746	16.779	VV	1599	31010	0.40%	0.071%
271	16.797	16.779	16.828	VV	1808	51078	0.66%	0.117%
272	16.864	16.828	16.893	VV	2545	86003	1.10%	0.196%
273	16.936	16.893	16.974	VV	5365	143636	1.85%	0.328%
274	17.023	16.974	17.064	VV	7351	179806	2.31%	0.410%
275	17.077	17.064	17.108	VV	1988	49290	0.63%	0.112%
276	17.117	17.108	17.158	VV	1868	53918	0.69%	0.123%
277	17.191	17.158	17.204	VV	1964	50009	0.64%	0.114%
278	17.224	17.204	17.235	VV	1927	34708	0.45%	0.079%
279	17.252	17.235	17.269	VV	1945	36955	0.47%	0.084%
280	17.309	17.269	17.322	VV	2844	75495	0.97%	0.172%
281	17.370	17.322	17.399	VV	5234	159000	2.04%	0.363%
282	17.410	17.399	17.421	VV	2127	27413	0.35%	0.063%
283	17.460	17.421	17.500	VV	24127	415050	5.33%	0.947%
284	17.521	17.500	17.558	VV	2660	83674	1.07%	0.191%
285	17.578	17.558	17.599	VV	2456	54188	0.70%	0.124%
286	17.604	17.599	17.616	VV	2114	21118	0.27%	0.048%
287	17.668	17.616	17.703	VV	2640	116717	1.50%	0.266%
288	17.739	17.703	17.767	VV	4032	116392	1.50%	0.266%
289	17.791	17.767	17.837	VV	5287	148126	1.90%	0.338%
290	17.890	17.837	17.925	VV	4445	159318	2.05%	0.364%
291	17.934	17.925	17.964	VV	2368	53015	0.68%	0.121%
292	17.968	17.964	17.980	VV	2409	22428	0.29%	0.051%
293	17.987	17.980	18.000	VV	2292	26920	0.35%	0.061%
294	18.010	18.000	18.024	VV	2357	31301	0.40%	0.071%
295	18.041	18.024	18.073	VV	2412	69509	0.89%	0.159%
296	18.084	18.073	18.098	VV	2337	33973	0.44%	0.078%
297	18.111	18.098	18.140	VV	2416	58513	0.75%	0.134%
298	18.197	18.140	18.227	VV	5883	192231	2.47%	0.439%
299	18.233	18.227	18.264	VV	3164	62869	0.81%	0.143%

rteres

300	18.301	18.264	18.349	VV	10406	244660	3.14%	0.558%
301	18.356	18.349	18.377	VV	2824	45311	0.58%	0.103%
302	18.415	18.377	18.429	VV	2692	81044	1.04%	0.185%
303	18.444	18.429	18.470	VV	2790	67292	0.86%	0.154%
304	18.539	18.470	18.550	VV	3161	137737	1.77%	0.314%
305	18.595	18.550	18.647	VV	5078	214477	2.76%	0.489%
306	18.708	18.647	18.750	VBA	4181	220743	2.84%	0.504%

Sum of corrected areas: 43816009

Aromatic EPH 021125.M Wed Mar 05 23:54:16 2025

CALIBRATION SUMMARY

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

Inital Calibration Report for SequenceID : FC021125AL

AreaCount

Parameter Range	FC068252.D	FC068253.D	FC068254.D	FC068255.D	FC068256.D	
Aliphatic C9-C12	39331006.000	20240186.000	8511519.000	4474674.000	2221877.000	
Aliphatic C12-C16	25563872.000	13091029.000	5472087.000	2866719.000	1444048.000	
Aliphatic C16-C21	36707935.000	18751121.000	7907675.000	4144581.000	2112599.000	
Aliphatic C21-C28	45593595.000	23234194.000	9834944.000	5144532.000	2635031.000	
Aliphatic C28-C40	56736862.000	29009865.000	12324513.000	6514067.000	3350978.000	
Aliphatic EPH	203933270.000	104326395.000	44050738.000	23144573.000	11764533.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aliphatic C9-C12	141035.5019998	5.636				
Aliphatic C12-C16	136654.515	5.375				
Aliphatic C16-C21	131630.8946664	6.092				
Aliphatic C21-C28	122691.3215	6.255				
Aliphatic C28-C40	102846.462333	7.171				
Aliphatic EPH	122175.1266664	6.234				

Concentration

Parameter Range	FC068252.D	FC068253.D	FC068254.D	FC068255.D	FC068256.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	FC068252.D	FC068253.D	FC068254.D	FC068255.D	FC068256.D	
Aliphatic C9-C12	131103.353333	134934.573333	141858.650000	149155.800000	148125.133333	
Aliphatic C12-C16	127819.360000	130910.290000	136802.175000	143335.950000	144404.800000	
Aliphatic C16-C21	122359.783333	125007.473333	131794.583333	138152.700000	140839.933333	

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

Inital Calibration Report for SequenceID : FC021125AL

Aliphatic C21-C28	113983.987500	116170.970000	122936.800000	128613.300000	131751.550000	
Aliphatic C28-C40	94561.436666	96699.550000	102704.275000	108567.783333	111699.266666	
Aliphatic EPH	113296.261111	115918.216666	122363.161111	128580.961111	130717.033333	

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068252.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 16:24
Operator : YP/AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Feb 11 02:30:02 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
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)	11.410	14212174	92.574 ug/ml
Spiked Amount	50.000		Recovery =	185.15%
12)	S 1-chlorooctadecane (S...	12.849	10559687	93.495 ug/ml
Spiked Amount	50.000		Recovery =	186.99%
	Target Compounds			
1)	T n-Nonane (C9)	3.211	13034849	92.005 ug/ml
2)	T n-Decane (C10)	4.270	13187244	92.433 ug/ml
3)	T A~Naphthalene (C11.7)	5.838	14533716	93.918 ug/ml
4)	T n-Dodecane (C12)	6.280	13108913	92.818 ug/ml
5)	T A~2-methylnaphthalene...	6.891	13929436	94.987 ug/ml
6)	T n-Tetradecane (C14)	8.068	12728359	93.377 ug/ml
7)	T n-Hexadecane (C16)	9.664	12835513	93.490 ug/ml
8)	T n-Octadecane (C18)	11.104	12748213	93.034 ug/ml
10)	T n-Eicosane (C20)	12.408	12107311	92.743 ug/ml
11)	T n-Heneicosane (C21)	13.019	11852411	92.734 ug/ml
13)	T n-Docosane (C22)	13.604	11728617	92.902 ug/ml
14)	T n-Tetracosane (C24)	14.704	11568914	92.905 ug/ml
15)	T n-Hexacosane (C26)	15.723	11302843	92.721 ug/ml
16)	T n-Octacosane (C28)	16.671	10993221	92.322 ug/ml
17)	T n-Tricontane (C30)	17.556	11027160	91.890 ug/ml
18)	T n-Dotriacontane (C32)	18.388	10599289	91.711 ug/ml
19)	T n-Tetratriacontane (C34)	19.170	9898762	91.900 ug/ml
20)	T n-Hexatriacontane (C36)	19.908	8865949	92.289 ug/ml
21)	T n-Octatriacontane (C38)	20.619	8293679	91.939 ug/ml
22)	T n-Tetracontane (C40)	21.474	8052023	92.913 ug/ml

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

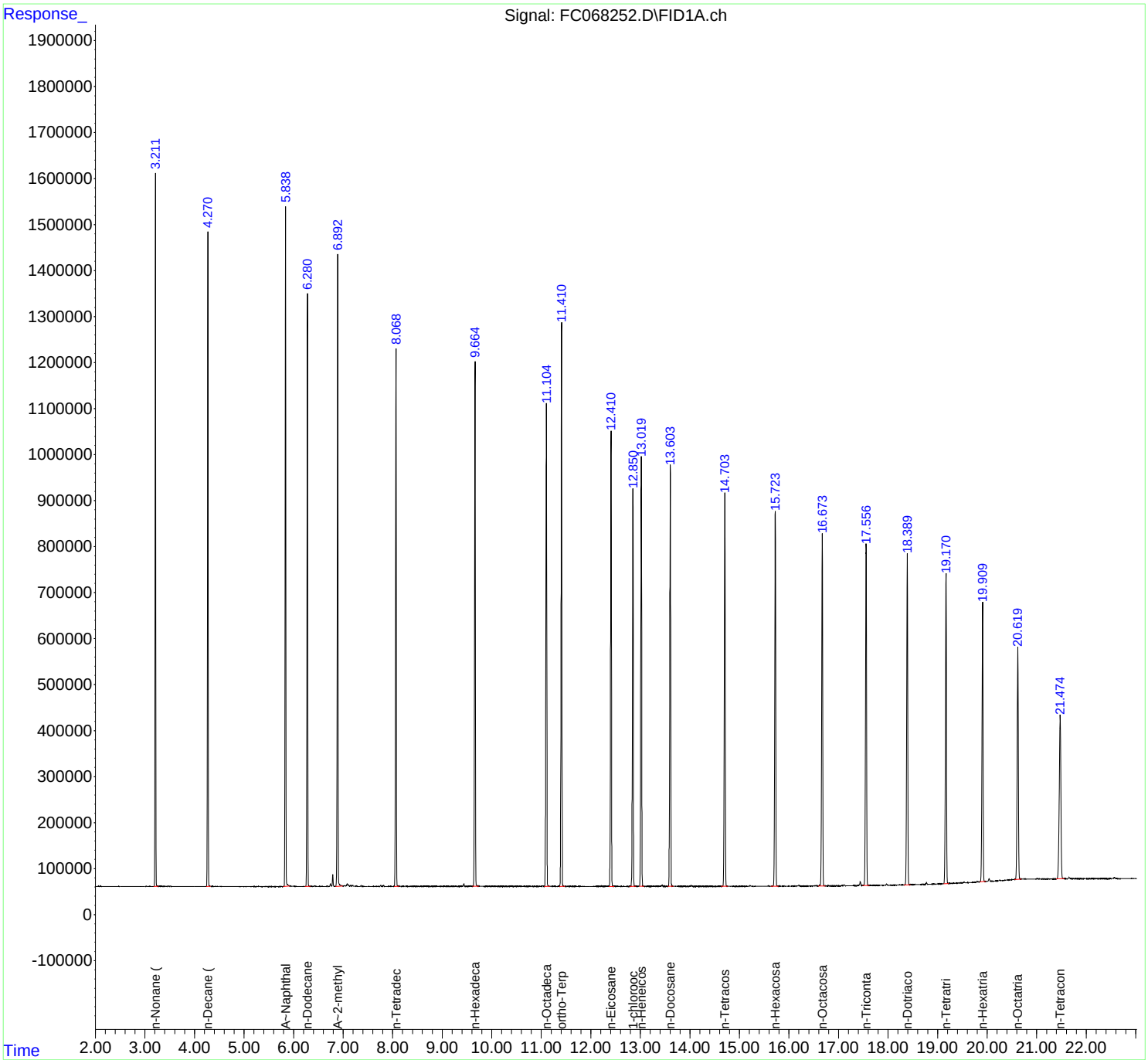
Quantitation Report (QT Reviewed)

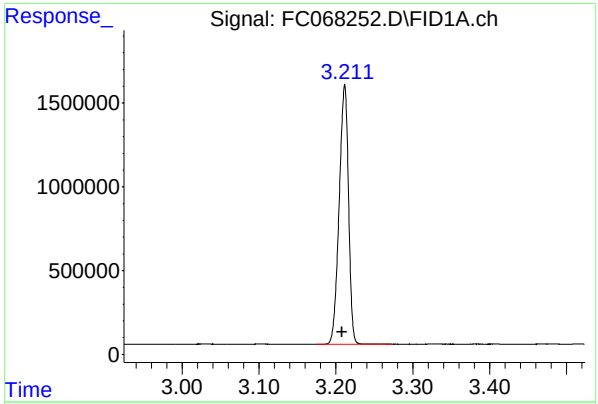
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068252.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 16:24
Operator : YP/AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Feb 11 02:30:02 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

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

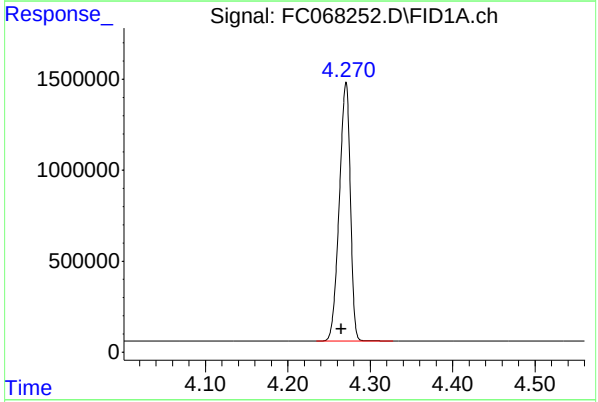




#1 n-Nonane (C9)

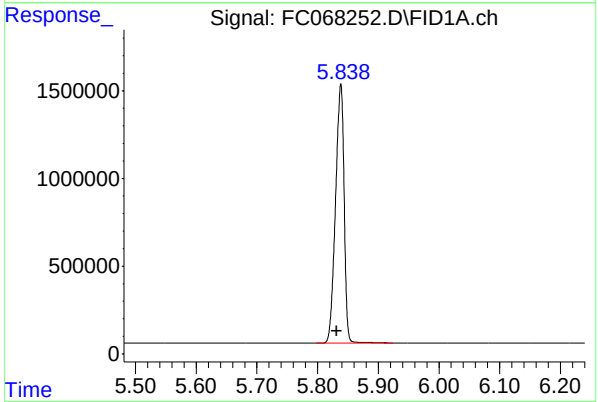
R.T.: 3.211 min
Delta R.T.: 0.003 min
Response: 13034849
Conc: 92.01 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



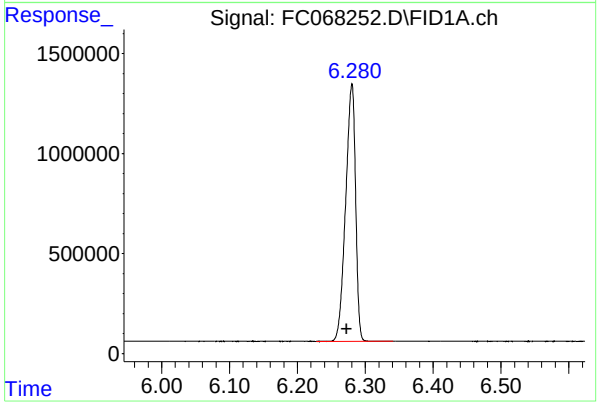
#2 n-Decane (C10)

R.T.: 4.270 min
Delta R.T.: 0.005 min
Response: 13187244
Conc: 92.43 ug/ml



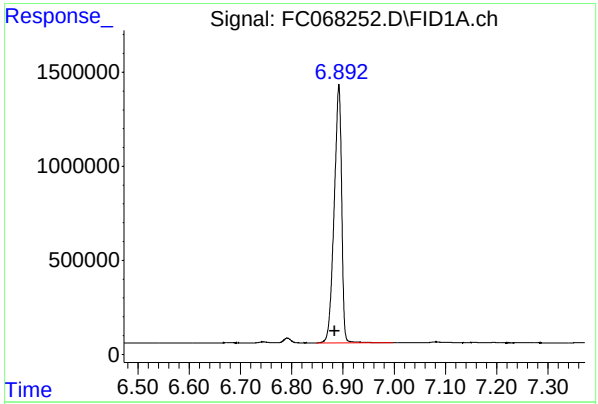
#3 A~Naphthalene (C11.7)

R.T.: 5.838 min
Delta R.T.: 0.006 min
Response: 14533716
Conc: 93.92 ug/ml



#4 n-Dodecane (C12)

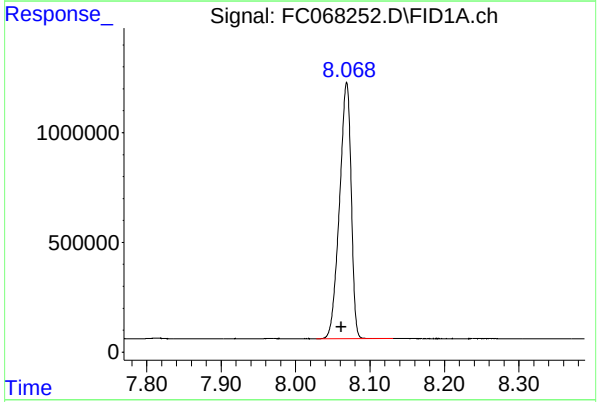
R.T.: 6.280 min
Delta R.T.: 0.007 min
Response: 13108913
Conc: 92.82 ug/ml



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

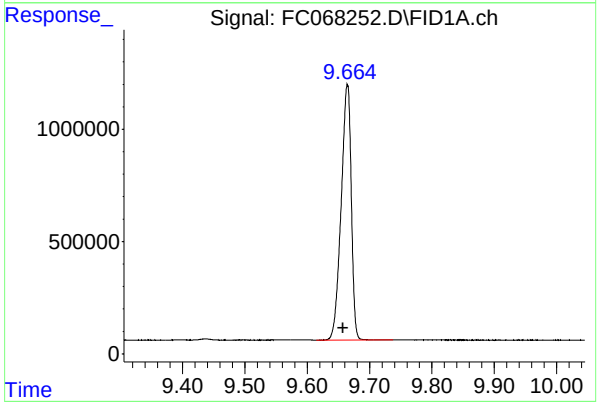
R.T.: 6.891 min
Delta R.T.: 0.007 min
Response: 13929436
Conc: 94.99 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



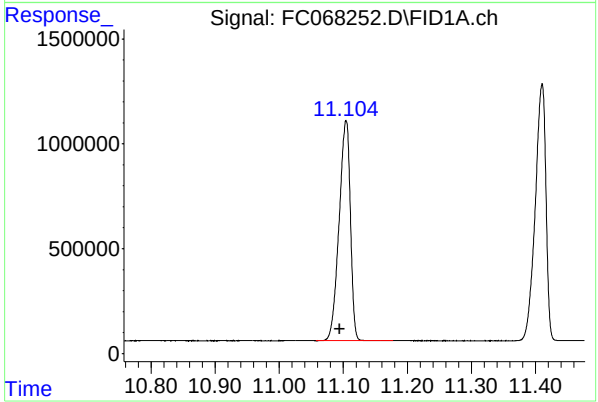
#6 n-Tetradecane (C14)

R.T.: 8.068 min
Delta R.T.: 0.007 min
Response: 12728359
Conc: 93.38 ug/ml



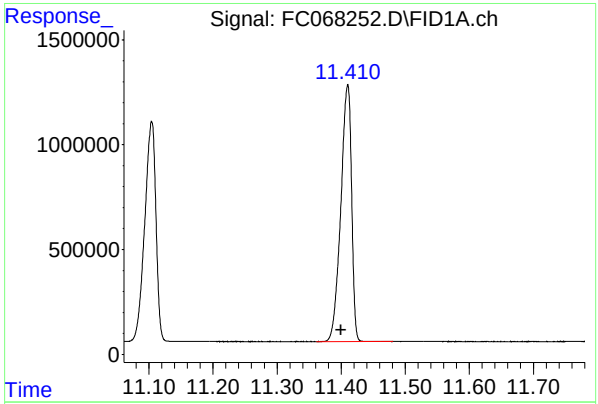
#7 n-Hexadecane (C16)

R.T.: 9.664 min
Delta R.T.: 0.007 min
Response: 12835513
Conc: 93.49 ug/ml



#8 n-Octadecane (C18)

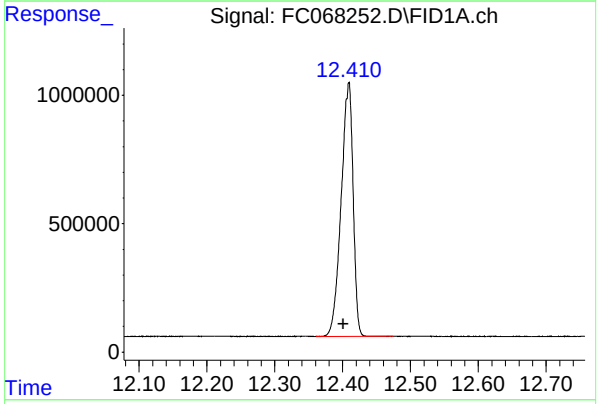
R.T.: 11.104 min
Delta R.T.: 0.009 min
Response: 12748213
Conc: 93.03 ug/ml



#9 ortho-Terphenyl (SURR)

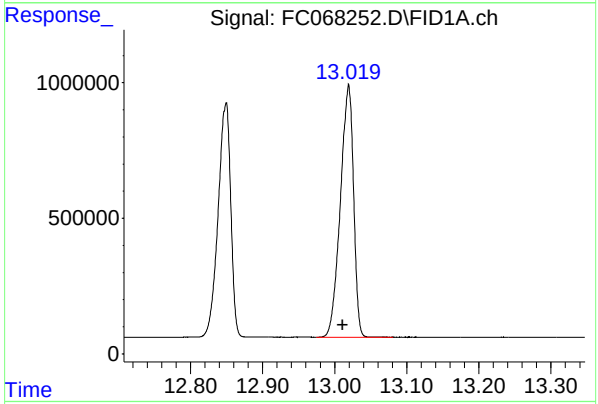
R.T.: 11.410 min
Delta R.T.: 0.010 min
Response: 14212174
Conc: 92.57 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



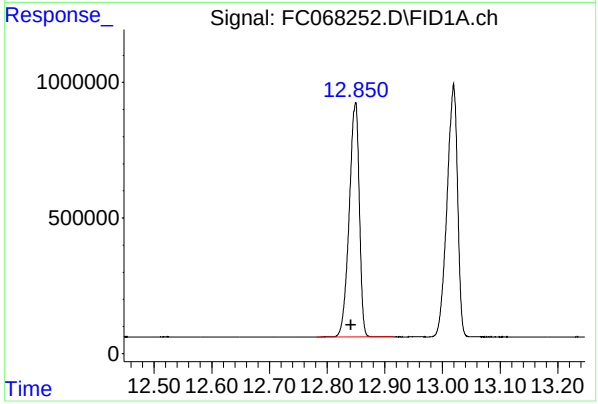
#10 n-Eicosane (C20)

R.T.: 12.408 min
Delta R.T.: 0.007 min
Response: 12107311
Conc: 92.74 ug/ml



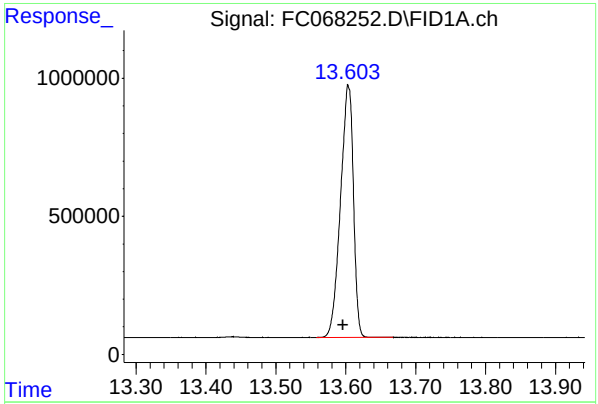
#11 n-Heneicosane (C21)

R.T.: 13.019 min
Delta R.T.: 0.008 min
Response: 11852411
Conc: 92.73 ug/ml



#12 1-chlorooctadecane (SURR)

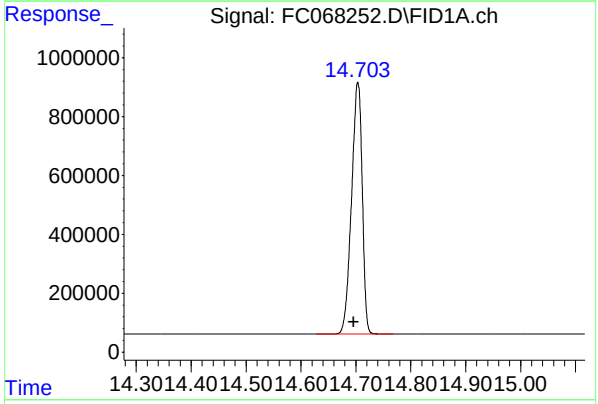
R.T.: 12.849 min
Delta R.T.: 0.007 min
Response: 10559687
Conc: 93.50 ug/ml



#13 n-Docosane (C22)

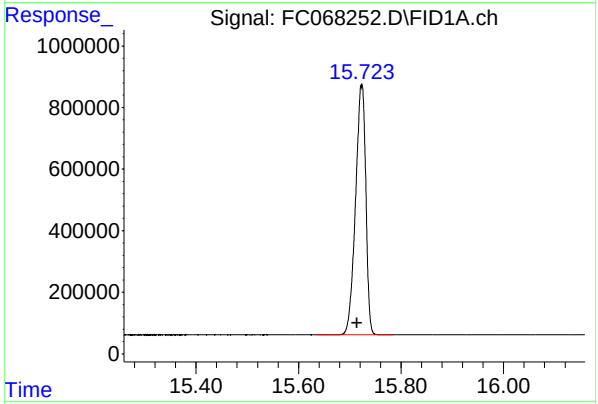
R.T.: 13.604 min
Delta R.T.: 0.008 min
Response: 11728617
Conc: 92.90 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



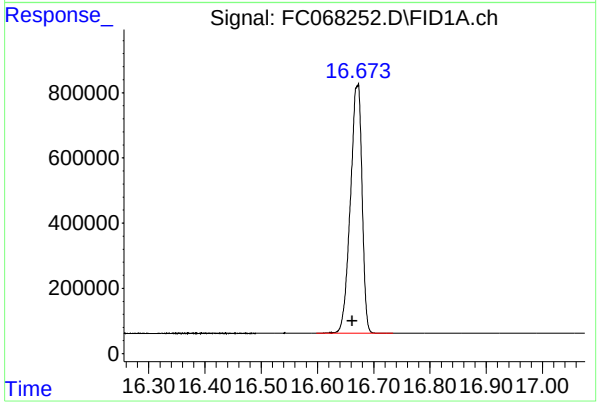
#14 n-Tetracosane (C24)

R.T.: 14.704 min
Delta R.T.: 0.008 min
Response: 11568914
Conc: 92.91 ug/ml



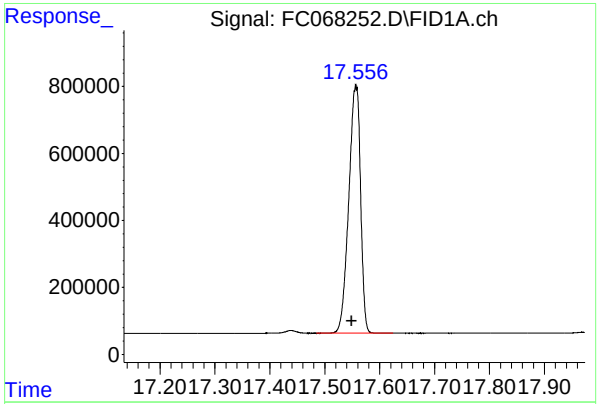
#15 n-Hexacosane (C26)

R.T.: 15.723 min
Delta R.T.: 0.009 min
Response: 11302843
Conc: 92.72 ug/ml



#16 n-Octacosane (C28)

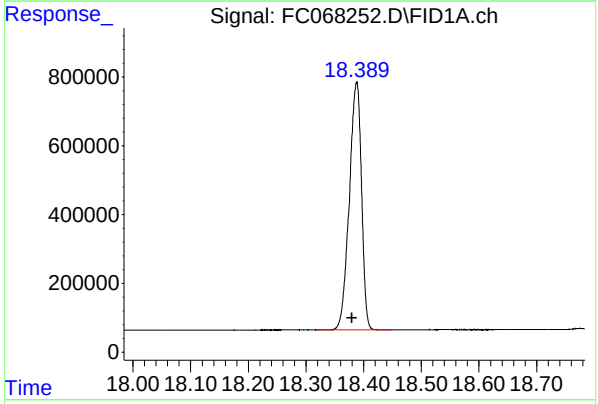
R.T.: 16.671 min
Delta R.T.: 0.009 min
Response: 10993221
Conc: 92.32 ug/ml



#17 n-Tricontane (C30)

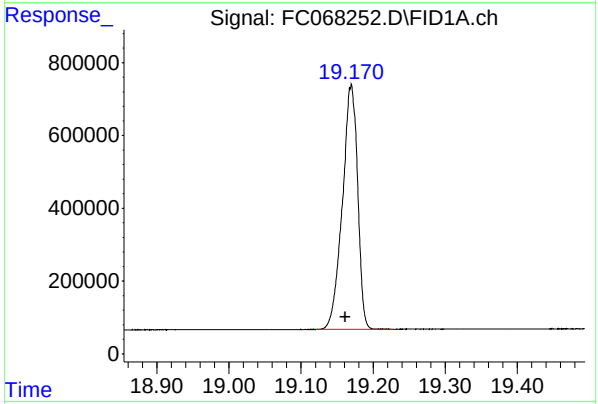
R.T.: 17.556 min
Delta R.T.: 0.007 min
Response: 11027160
Conc: 91.89 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



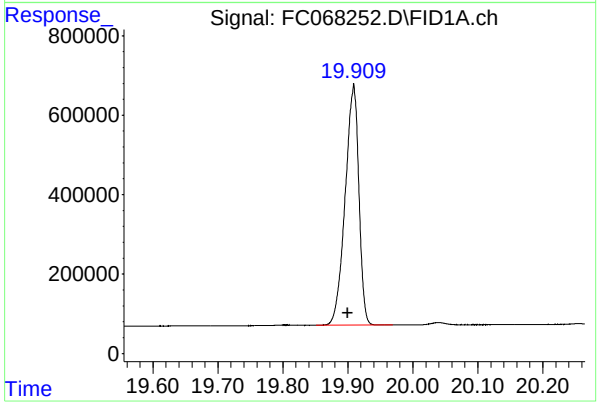
#18 n-Dotriacontane (C32)

R.T.: 18.388 min
Delta R.T.: 0.008 min
Response: 10599289
Conc: 91.71 ug/ml



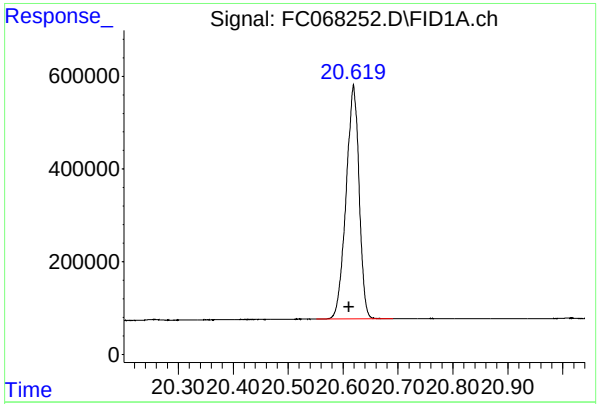
#19 n-Tetratriacontane (C34)

R.T.: 19.170 min
Delta R.T.: 0.008 min
Response: 9898762
Conc: 91.90 ug/ml



#20 n-Hexatriacontane (C36)

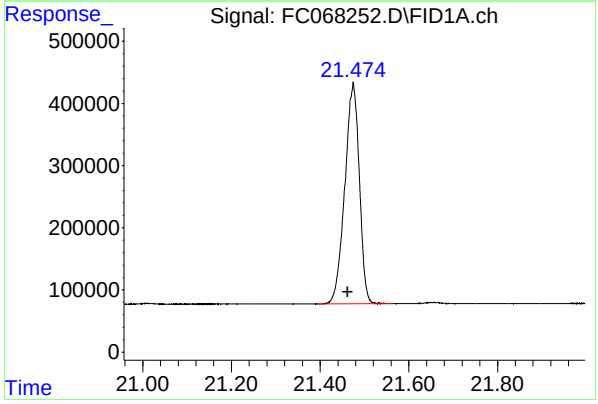
R.T.: 19.908 min
Delta R.T.: 0.008 min
Response: 8865949
Conc: 92.29 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.619 min
Delta R.T.: 0.008 min
Response: 8293679
Conc: 91.94 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



#22 n-Tetracontane (C40)

R.T.: 21.474 min
Delta R.T.: 0.012 min
Response: 8052023
Conc: 92.91 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068252.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 16:24
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.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	3.211	3.174	3.274	BB	1536067	13034849	89.69%	5.069%
2	4.270	4.234	4.328	BB	1438029	13187244	90.74%	5.128%
3	5.838	5.798	5.924	BB	1468511	14533716	100.00%	5.651%
4	6.280	6.228	6.341	BB	1303761	13108913	90.20%	5.097%
5	6.891	6.848	6.998	BB	1352654	13929436	95.84%	5.416%
6	8.068	8.028	8.131	BB	1162652	12728359	87.58%	4.949%
7	9.664	9.614	9.738	BB	1144286	12835513	88.32%	4.991%
8	11.104	11.058	11.178	BB	1054227	12748213	87.71%	4.957%
9	11.410	11.361	11.481	BB	1241101	14212174	97.79%	5.526%
10	12.408	12.361	12.474	BB	966080	12107311	83.30%	4.708%
11	12.849	12.781	12.914	BB	856617	10559687	72.66%	4.106%
12	13.019	12.974	13.081	BB	912197	11852411	81.55%	4.609%
13	13.604	13.558	13.668	BB	916235	11728617	80.70%	4.561%
14	14.704	14.628	14.768	BB	856005	11568914	79.60%	4.499%
15	15.723	15.634	15.784	BB	820737	11302843	77.77%	4.395%
16	16.671	16.598	16.734	BB	759899	10993221	75.64%	4.275%
17	17.556	17.484	17.624	BB	738963	11027160	75.87%	4.288%
18	18.388	18.318	18.451	BB	719758	10599289	72.93%	4.122%
19	19.170	19.121	19.228	BB	668913	9898762	68.11%	3.849%
20	19.908	19.851	19.969	BBA	593167	8865949	61.00%	3.448%
21	20.619	20.551	20.691	BB	499026	8293679	57.07%	3.225%
22	21.474	21.391	21.564	BB	353119	8052023	55.40%	3.131%
			Sum of corrected areas:			257168283		

Aliphatic EPH 021125.M Tue Feb 11 02:39:04 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068253.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 17:01
Operator : YP/AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Feb 11 02:30:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
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)	11.404	7265657	47.326 ug/ml
Spiked Amount	50.000		Recovery =	94.65%
12) S	1-chlorooctadecane (S...	12.845	5379642	47.631 ug/ml
Spiked Amount	50.000		Recovery =	95.26%
	Target Compounds			
1) T	n-Nonane (C9)	3.209	6719412	47.428 ug/ml
2) T	n-Decane (C10)	4.267	6784596	47.555 ug/ml
3) T	A~Naphthalene (C11.7)	5.834	7434634	48.043 ug/ml
4) T	n-Dodecane (C12)	6.276	6736178	47.696 ug/ml
5) T	A~2-methylnaphthalene...	6.887	7096295	48.391 ug/ml
6) T	n-Tetradecane (C14)	8.065	6521596	47.844 ug/ml
7) T	n-Hexadecane (C16)	9.660	6569433	47.850 ug/ml
8) T	n-Octadecane (C18)	11.099	6516282	47.555 ug/ml
10) T	n-Eicosane (C20)	12.404	6182901	47.362 ug/ml
11) T	n-Heneicosane (C21)	13.014	6051938	47.351 ug/ml
13) T	n-Docosane (C22)	13.599	5978682	47.357 ug/ml
14) T	n-Tetracosane (C24)	14.700	5893630	47.329 ug/ml
15) T	n-Hexacosane (C26)	15.718	5756725	47.224 ug/ml
16) T	n-Octacosane (C28)	16.665	5605157	47.073 ug/ml
17) T	n-Tricontane (C30)	17.551	5630196	46.917 ug/ml
18) T	n-Dotriacontane (C32)	18.383	5417986	46.879 ug/ml
19) T	n-Tetratriacontane (C34)	19.165	5059593	46.973 ug/ml
20) T	n-Hexatriacontane (C36)	19.902	4533198	47.188 ug/ml
21) T	n-Octatriacontane (C38)	20.614	4246406	47.073 ug/ml
22) T	n-Tetracontane (C40)	21.465	4122486	47.570 ug/ml

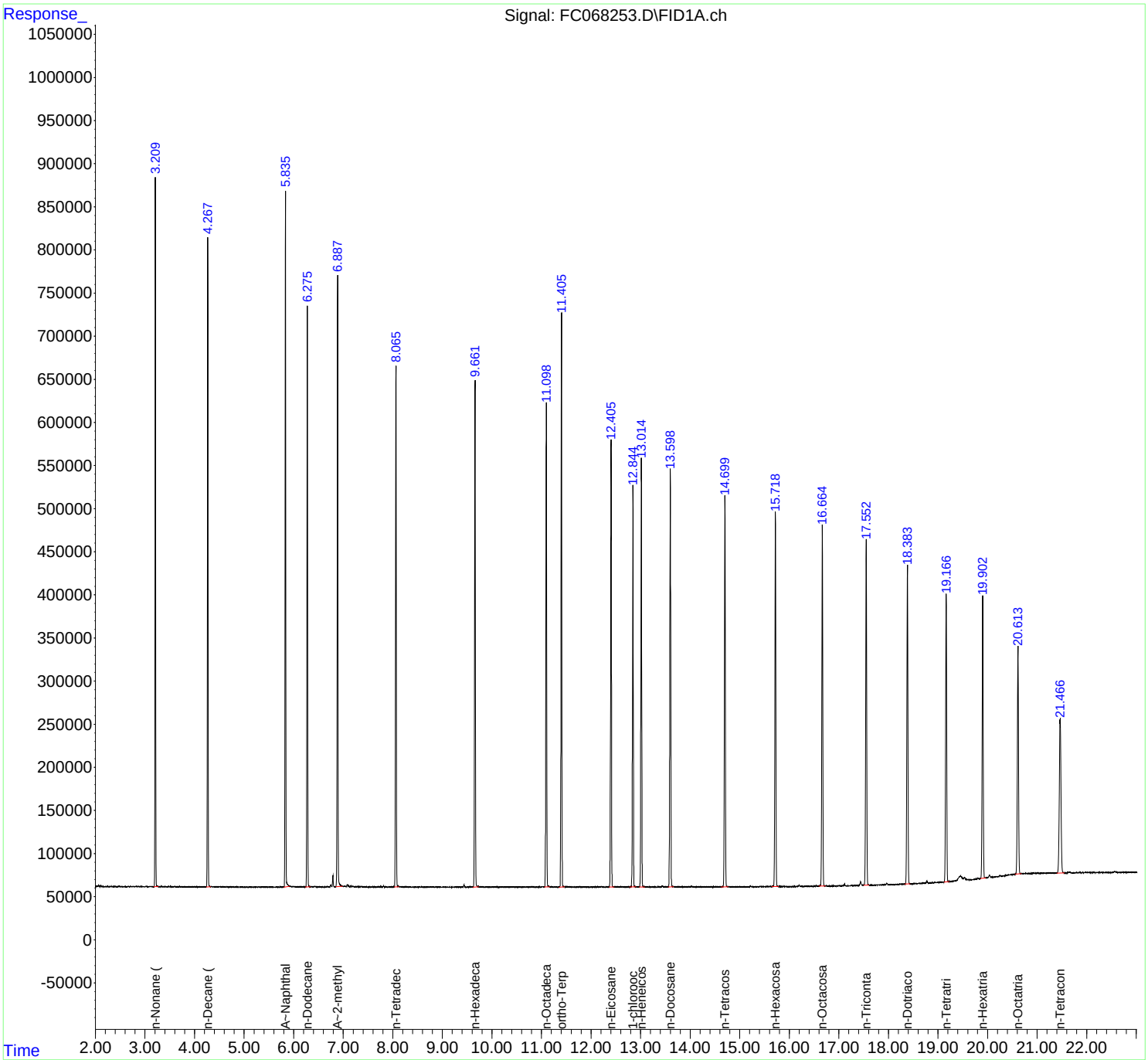
(f)=RT Delta > 1/2 Window (m)=manual int.

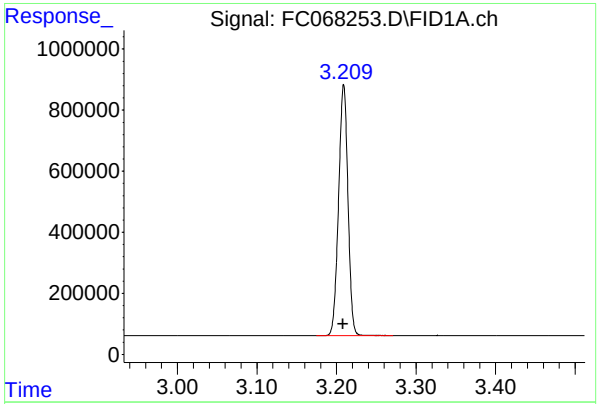
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068253.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 17:01
Operator : YP/AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Feb 11 02:30:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

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

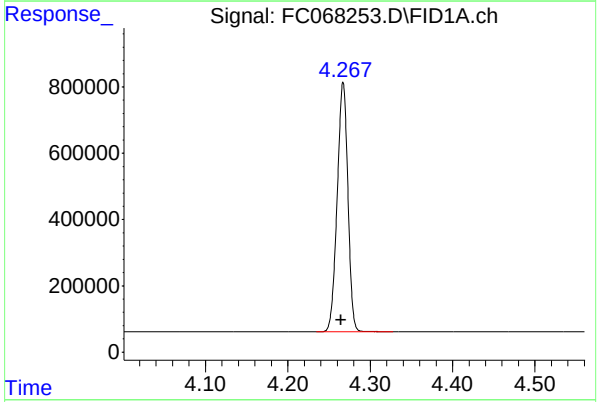




#1 n-Nonane (C9)

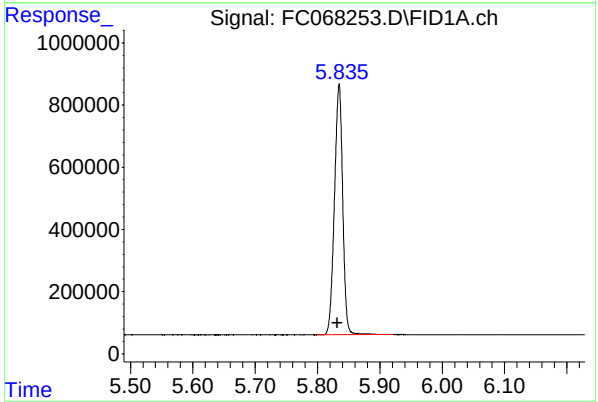
R.T.: 3.209 min
Delta R.T.: 0.000 min
Response: 6719412
Conc: 47.43 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



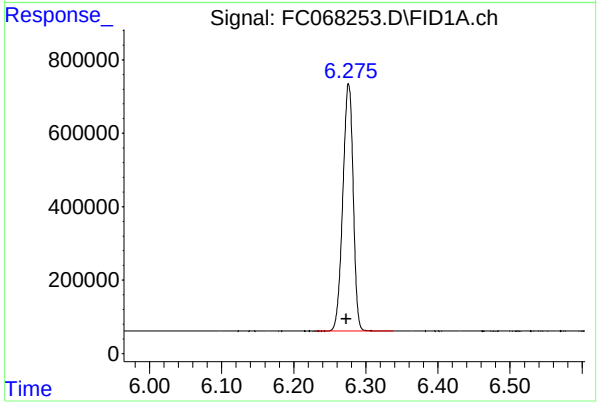
#2 n-Decane (C10)

R.T.: 4.267 min
Delta R.T.: 0.002 min
Response: 6784596
Conc: 47.56 ug/ml



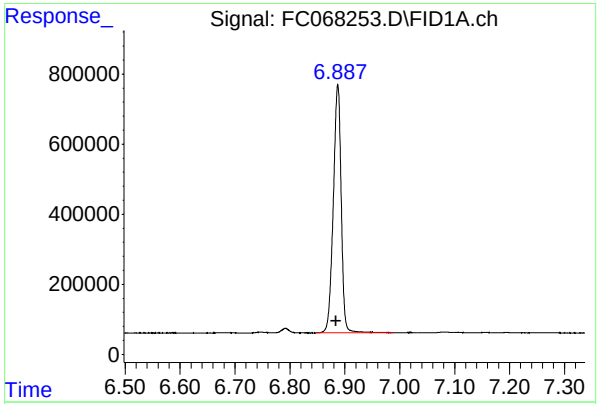
#3 A~Naphthalene (C11.7)

R.T.: 5.834 min
Delta R.T.: 0.003 min
Response: 7434634
Conc: 48.04 ug/ml



#4 n-Dodecane (C12)

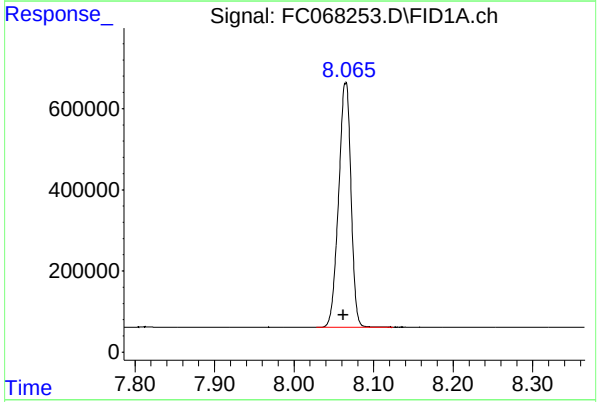
R.T.: 6.276 min
Delta R.T.: 0.003 min
Response: 6736178
Conc: 47.70 ug/ml



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

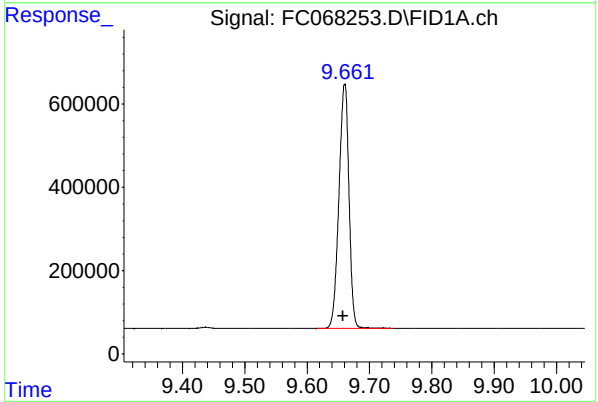
R.T.: 6.887 min
Delta R.T.: 0.003 min
Response: 7096295
Conc: 48.39 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



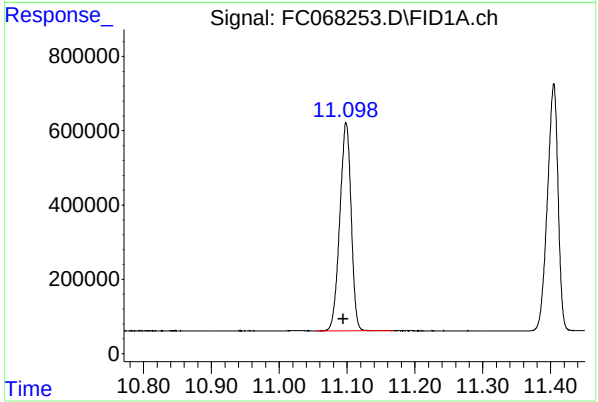
#6 n-Tetradecane (C14)

R.T.: 8.065 min
Delta R.T.: 0.003 min
Response: 6521596
Conc: 47.84 ug/ml



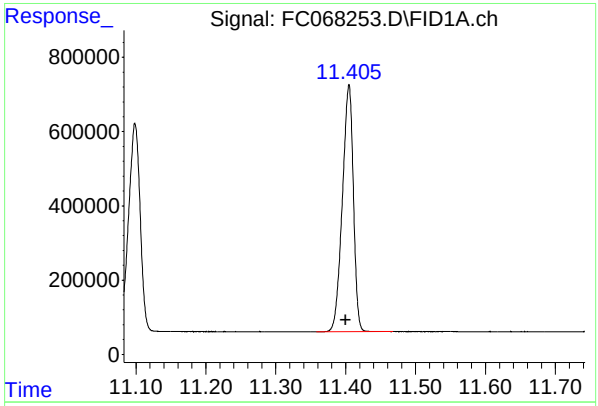
#7 n-Hexadecane (C16)

R.T.: 9.660 min
Delta R.T.: 0.003 min
Response: 6569433
Conc: 47.85 ug/ml



#8 n-Octadecane (C18)

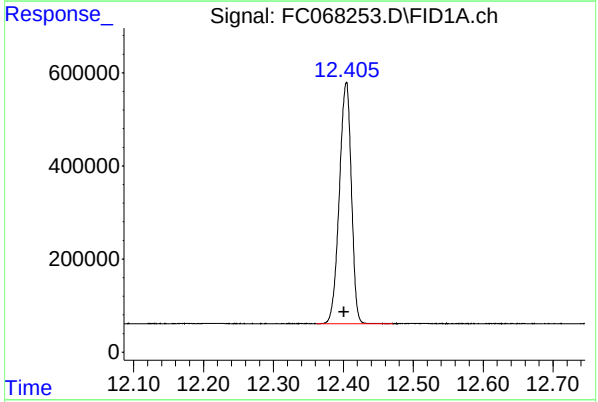
R.T.: 11.099 min
Delta R.T.: 0.004 min
Response: 6516282
Conc: 47.55 ug/ml



#9 ortho-Terphenyl (SURR)

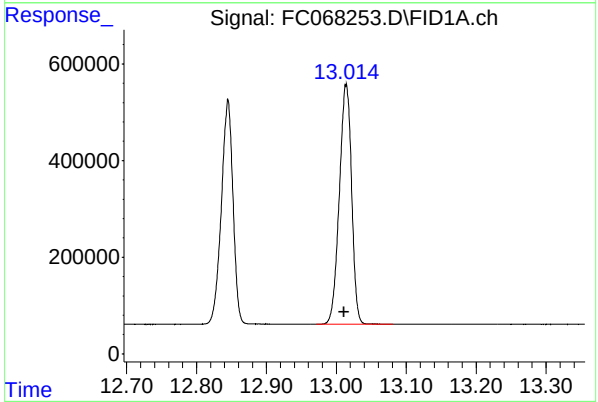
R.T.: 11.404 min
Delta R.T.: 0.005 min
Response: 7265657
Conc: 47.33 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



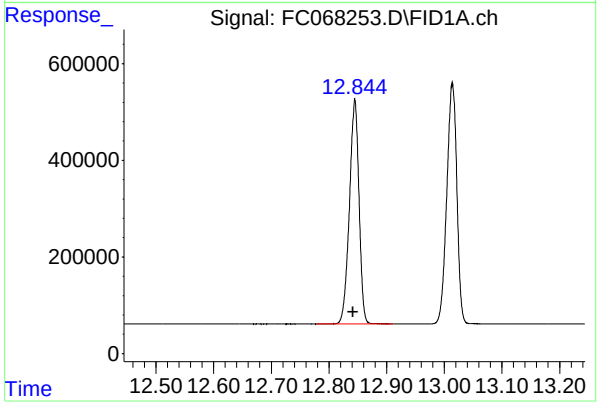
#10 n-Eicosane (C20)

R.T.: 12.404 min
Delta R.T.: 0.003 min
Response: 6182901
Conc: 47.36 ug/ml



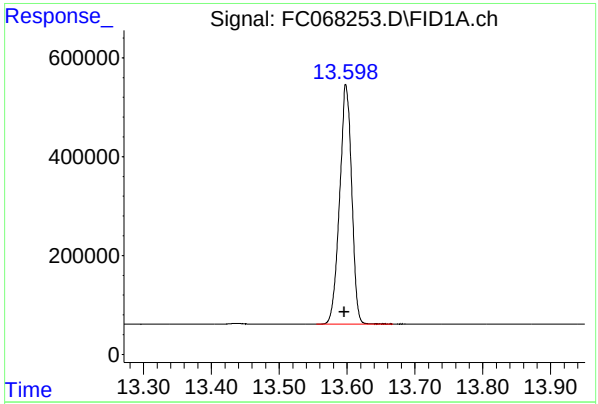
#11 n-Heneicosane (C21)

R.T.: 13.014 min
Delta R.T.: 0.003 min
Response: 6051938
Conc: 47.35 ug/ml



#12 1-chlorooctadecane (SURR)

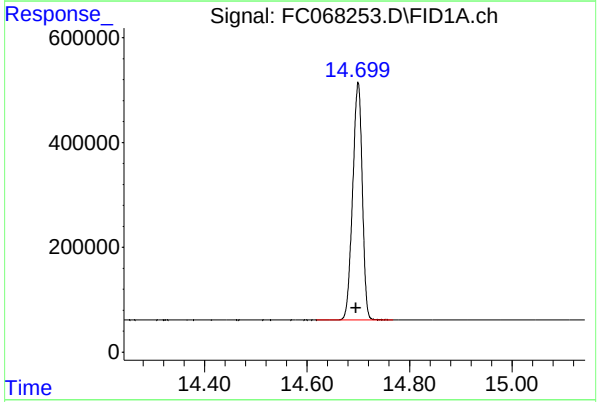
R.T.: 12.845 min
Delta R.T.: 0.003 min
Response: 5379642
Conc: 47.63 ug/ml



#13 n-Docosane (C22)

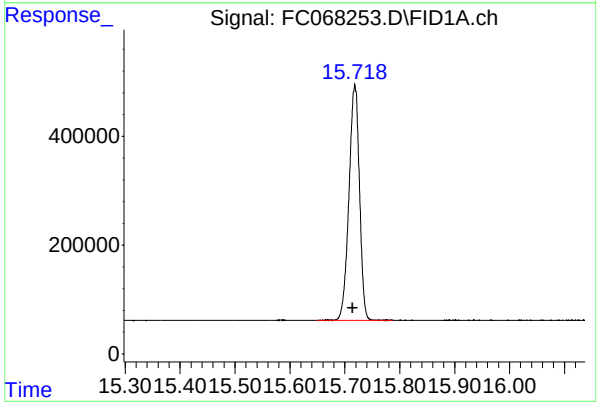
R.T.: 13.599 min
Delta R.T.: 0.003 min
Response: 5978682
Conc: 47.36 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



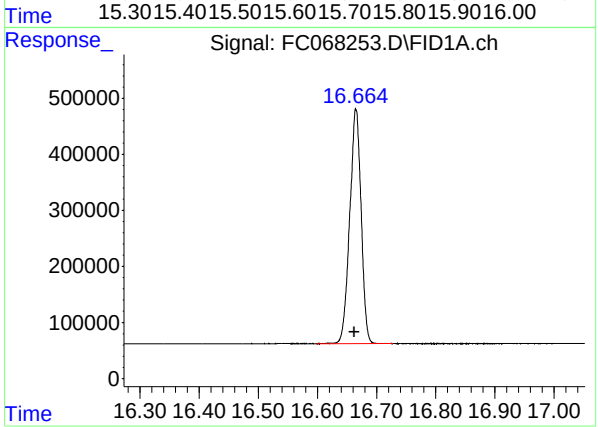
#14 n-Tetracosane (C24)

R.T.: 14.700 min
Delta R.T.: 0.004 min
Response: 5893630
Conc: 47.33 ug/ml



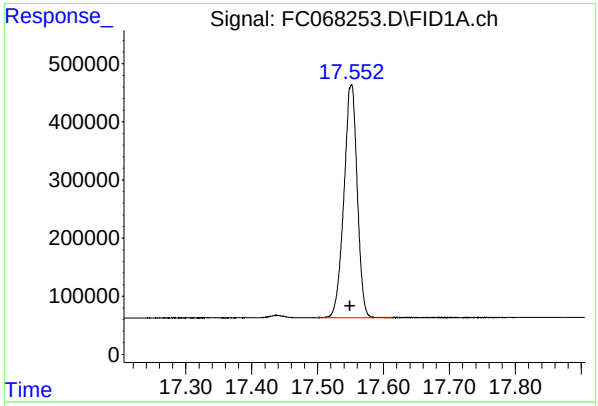
#15 n-Hexacosane (C26)

R.T.: 15.718 min
Delta R.T.: 0.004 min
Response: 5756725
Conc: 47.22 ug/ml



#16 n-Octacosane (C28)

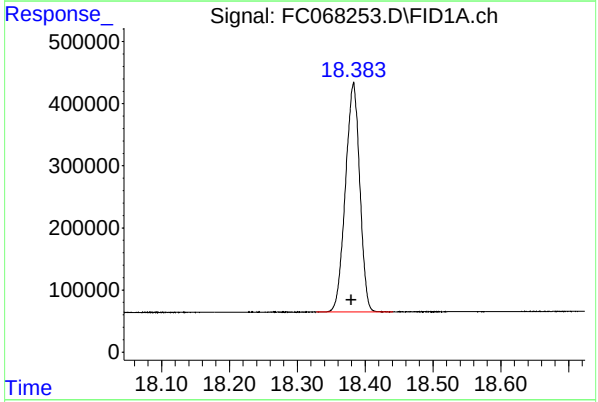
R.T.: 16.665 min
Delta R.T.: 0.003 min
Response: 5605157
Conc: 47.07 ug/ml



#17 n-Tricontane (C30)

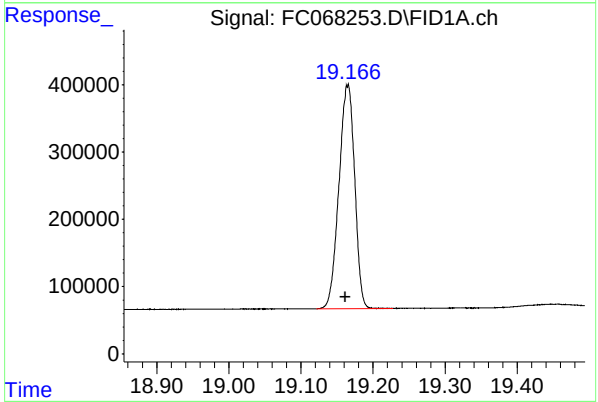
R.T.: 17.551 min
Delta R.T.: 0.002 min
Response: 5630196
Conc: 46.92 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



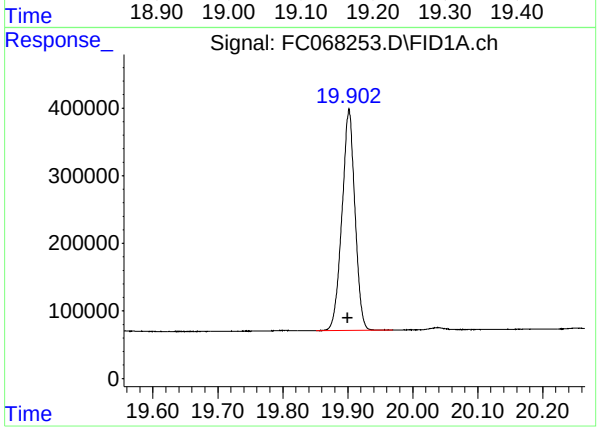
#18 n-Dotriacontane (C32)

R.T.: 18.383 min
Delta R.T.: 0.003 min
Response: 5417986
Conc: 46.88 ug/ml



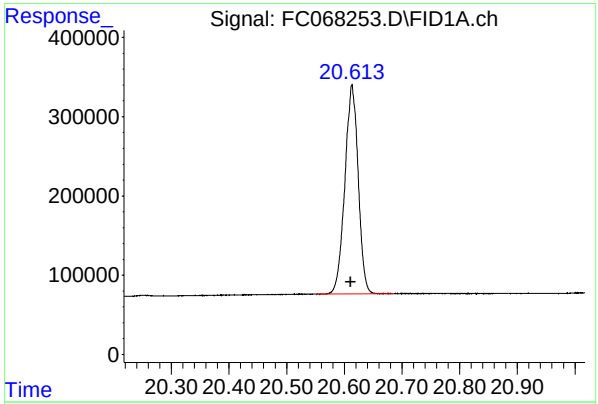
#19 n-Tetratriacontane (C34)

R.T.: 19.165 min
Delta R.T.: 0.004 min
Response: 5059593
Conc: 46.97 ug/ml



#20 n-Hexatriacontane (C36)

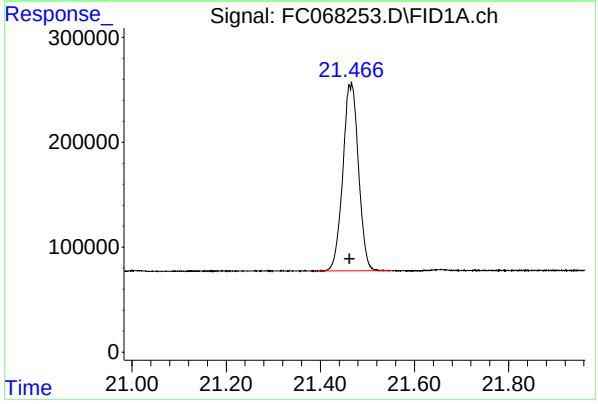
R.T.: 19.902 min
Delta R.T.: 0.002 min
Response: 4533198
Conc: 47.19 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.614 min
Delta R.T.: 0.003 min
Response: 4246406
Conc: 47.07 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



#22 n-Tetracontane (C40)

R.T.: 21.465 min
Delta R.T.: 0.002 min
Response: 4122486
Conc: 47.57 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068253.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 17:01
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.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	3.209	3.174	3.271	BB	811218	6719412	90.38%	5.110%
2	4.267	4.234	4.328	BB	755911	6784596	91.26%	5.159%
3	5.834	5.798	5.921	BB	804975	7434634	100.00%	5.654%
4	6.276	6.231	6.338	BB	678512	6736178	90.61%	5.122%
5	6.887	6.848	6.988	BB	711876	7096295	95.45%	5.396%
6	8.065	8.028	8.124	BB	605991	6521596	87.72%	4.959%
7	9.660	9.614	9.738	BB	593828	6569433	88.36%	4.996%
8	11.099	11.054	11.168	BB	559745	6516282	87.65%	4.955%
9	11.404	11.358	11.468	BB	664804	7265657	97.73%	5.525%
10	12.404	12.361	12.471	BB	520586	6182901	83.16%	4.702%
11	12.845	12.778	12.911	BB	460356	5379642	72.36%	4.091%
12	13.014	12.971	13.081	BB	497432	6051938	81.40%	4.602%
13	13.599	13.554	13.668	BB	486709	5978682	80.42%	4.546%
14	14.700	14.618	14.768	BB	455435	5893630	79.27%	4.482%
15	15.718	15.648	15.788	BB	431622	5756725	77.43%	4.378%
16	16.665	16.598	16.728	BB	419236	5605157	75.39%	4.262%
17	17.551	17.498	17.614	BB	400816	5630196	75.73%	4.281%
18	18.383	18.328	18.441	BB	366233	5417986	72.87%	4.120%
19	19.165	19.121	19.228	BB	333071	5059593	68.05%	3.848%
20	19.902	19.851	19.969	BBA	324588	4533198	60.97%	3.447%
21	20.614	20.551	20.684	BB	260933	4246406	57.12%	3.229%
22	21.465	21.391	21.554	BB	175049	4122486	55.45%	3.135%

Sum of corrected areas: 131502620

Aliphatic EPH 021125.M Tue Feb 11 02:39:29 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068254.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 17:38
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Feb 11 02:30:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
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)	11.400	3070458	20.000 ug/ml
Spiked Amount	50.000		Recovery =	40.00%
12)	S 1-chlorooctadecane (S...	12.842	2258872	20.000 ug/ml
Spiked Amount	50.000		Recovery =	40.00%
	Target Compounds			
1)	T n-Nonane (C9)	3.208	2833506	20.000 ug/ml
2)	T n-Decane (C10)	4.265	2853357	20.000 ug/ml
3)	T A~Naphthalene (C11.7)	5.831	3094970	20.000 ug/ml
4)	T n-Dodecane (C12)	6.273	2824656	20.000 ug/ml
5)	T A~2-methylnaphthalene...	6.884	2932900	20.000 ug/ml
6)	T n-Tetradecane (C14)	8.062	2726217	20.000 ug/ml
7)	T n-Hexadecane (C16)	9.657	2745870	20.000 ug/ml
8)	T n-Octadecane (C18)	11.095	2740539	20.000 ug/ml
10)	T n-Eicosane (C20)	12.401	2610929	20.000 ug/ml
11)	T n-Heneicosane (C21)	13.011	2556207	20.000 ug/ml
13)	T n-Docosane (C22)	13.596	2524938	20.000 ug/ml
14)	T n-Tetracosane (C24)	14.696	2490472	20.000 ug/ml
15)	T n-Hexacosane (C26)	15.714	2438036	20.000 ug/ml
16)	T n-Octacosane (C28)	16.662	2381498	20.000 ug/ml
17)	T n-Tricontane (C30)	17.549	2400071	20.000 ug/ml
18)	T n-Dotriacontane (C32)	18.380	2311459	20.000 ug/ml
19)	T n-Tetratriacontane (C34)	19.161	2154239	20.000 ug/ml
20)	T n-Hexatriacontane (C36)	19.900	1921336	20.000 ug/ml
21)	T n-Octatriacontane (C38)	20.611	1804172	20.000 ug/ml
22)	T n-Tetracontane (C40)	21.463	1733236	20.000 ug/ml

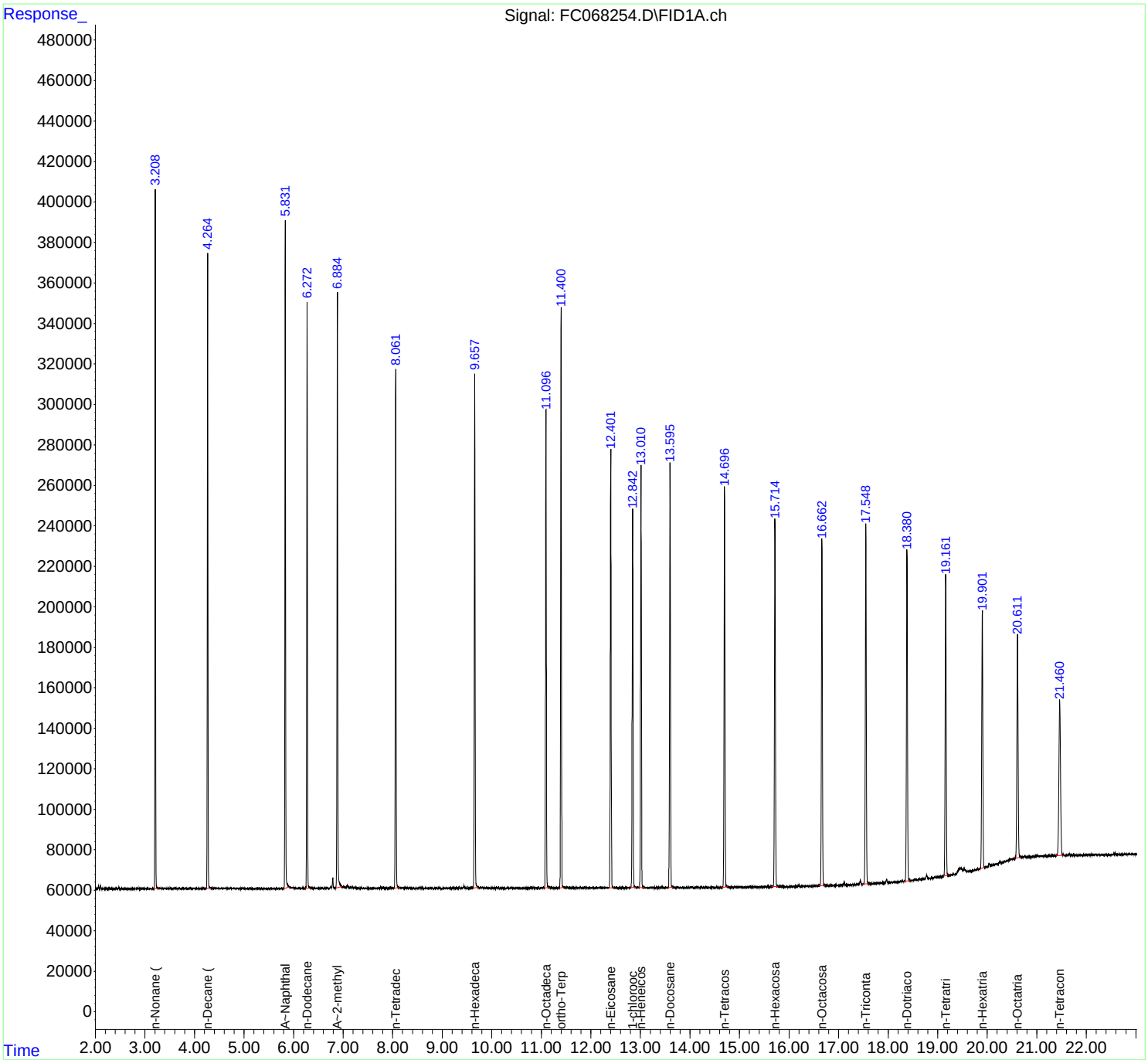
(f)=RT Delta > 1/2 Window (m)=manual int.

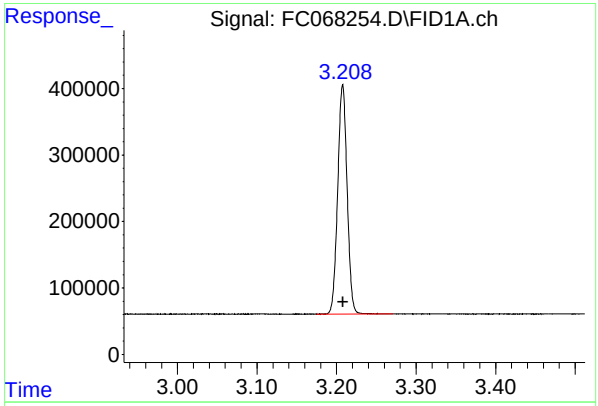
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068254.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 17:38
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Feb 11 02:30:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

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

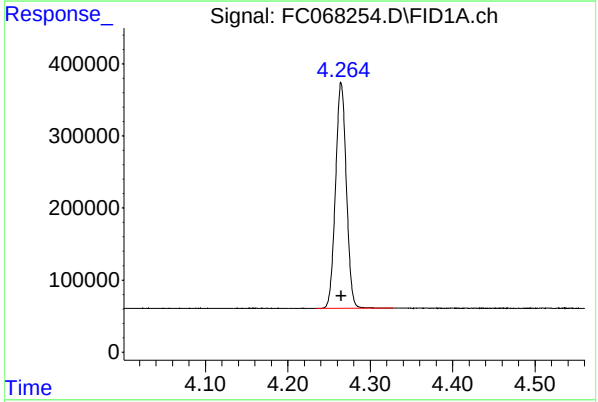




#1 n-Nonane (C9)

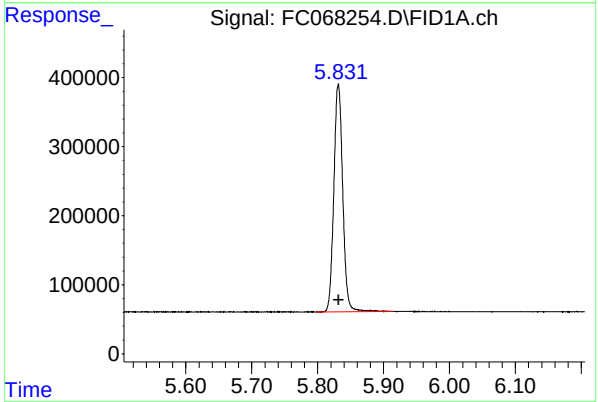
R.T.: 3.208 min
Delta R.T.: 0.000 min
Response: 2833506
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



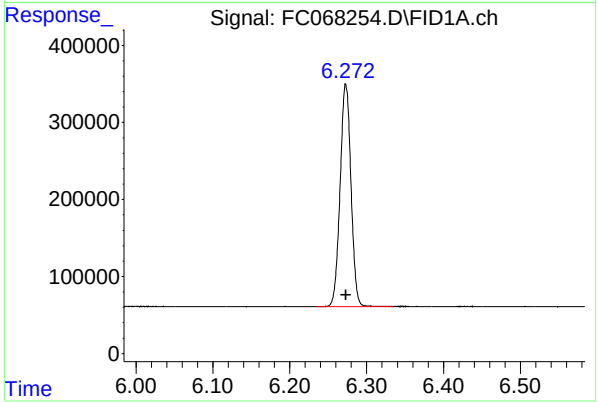
#2 n-Decane (C10)

R.T.: 4.265 min
Delta R.T.: 0.000 min
Response: 2853357
Conc: 20.00 ug/ml



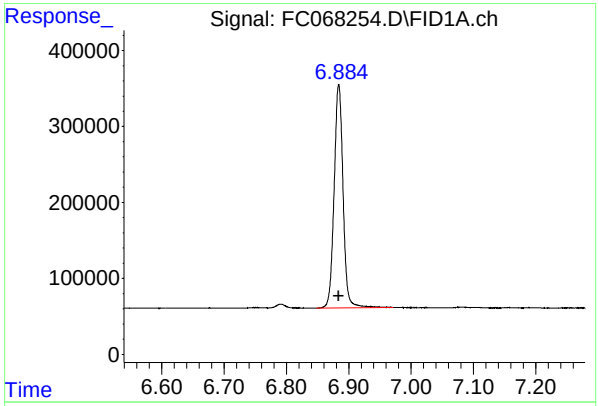
#3 A~Naphthalene (C11.7)

R.T.: 5.831 min
Delta R.T.: 0.000 min
Response: 3094970
Conc: 20.00 ug/ml



#4 n-Dodecane (C12)

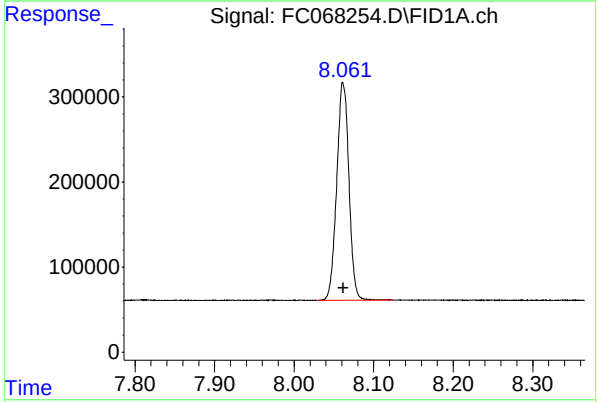
R.T.: 6.273 min
Delta R.T.: 0.000 min
Response: 2824656
Conc: 20.00 ug/ml



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

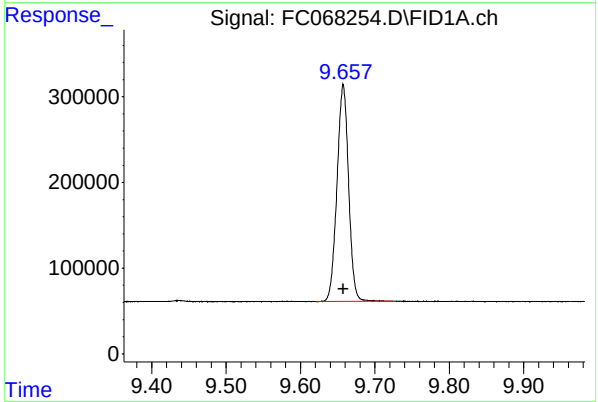
R.T.: 6.884 min
Delta R.T.: 0.000 min
Response: 2932900
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



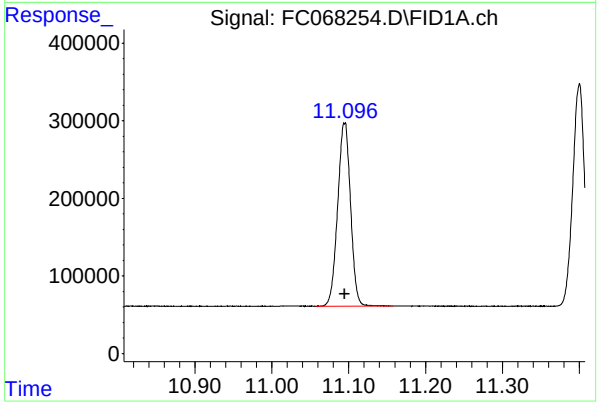
#6 n-Tetradecane (C14)

R.T.: 8.062 min
Delta R.T.: 0.000 min
Response: 2726217
Conc: 20.00 ug/ml



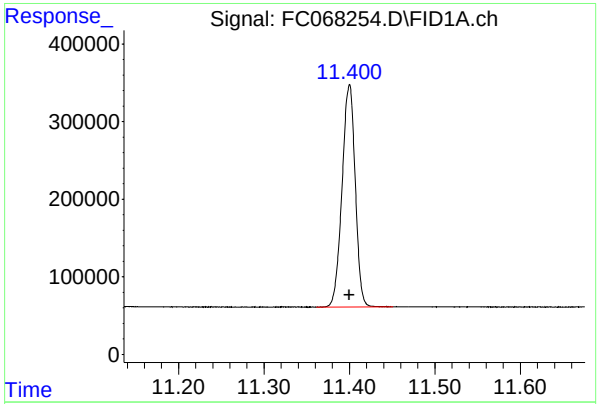
#7 n-Hexadecane (C16)

R.T.: 9.657 min
Delta R.T.: 0.000 min
Response: 2745870
Conc: 20.00 ug/ml



#8 n-Octadecane (C18)

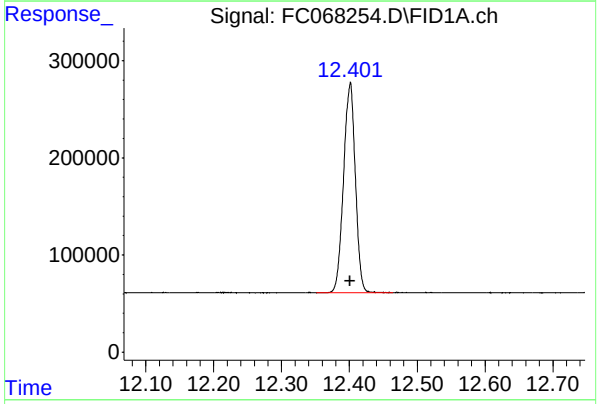
R.T.: 11.095 min
Delta R.T.: 0.000 min
Response: 2740539
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURR)

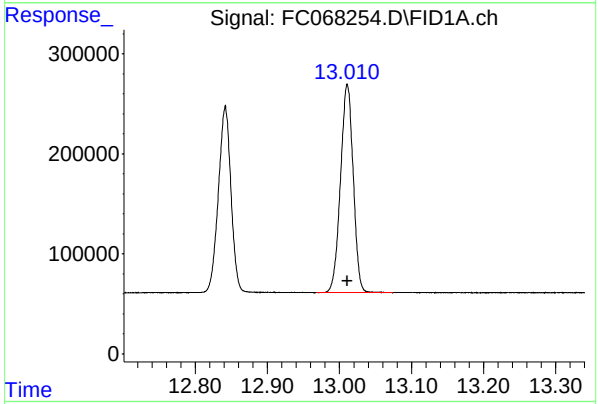
R.T.: 11.400 min
Delta R.T.: 0.000 min
Response: 3070458
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



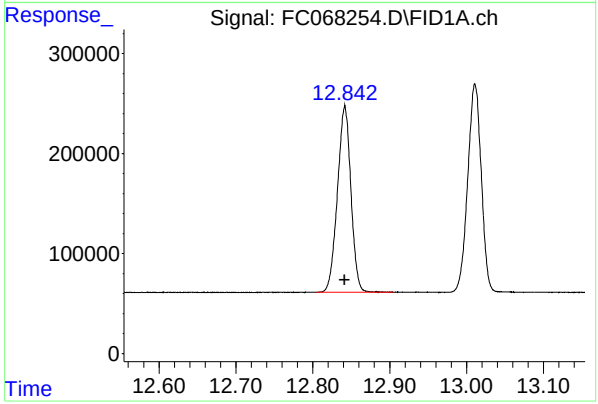
#10 n-Eicosane (C20)

R.T.: 12.401 min
Delta R.T.: 0.000 min
Response: 2610929
Conc: 20.00 ug/ml



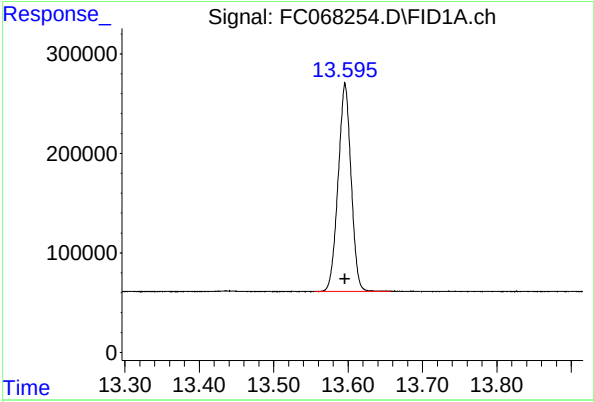
#11 n-Heneicosane (C21)

R.T.: 13.011 min
Delta R.T.: 0.000 min
Response: 2556207
Conc: 20.00 ug/ml



#12 1-chlorooctadecane (SURR)

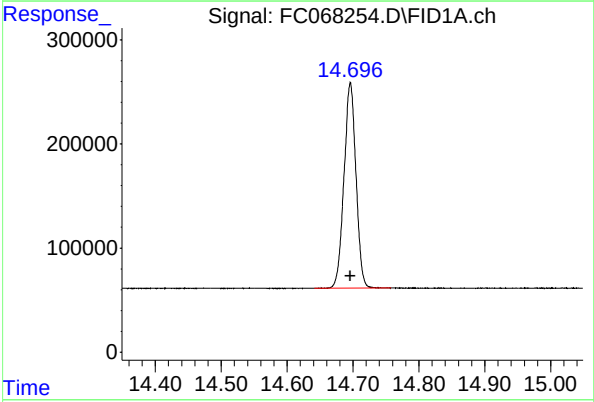
R.T.: 12.842 min
Delta R.T.: 0.000 min
Response: 2258872
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

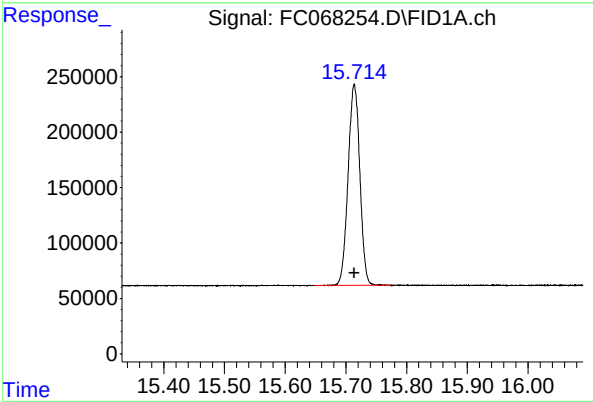
R.T.: 13.596 min
Delta R.T.: 0.000 min
Response: 2524938
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



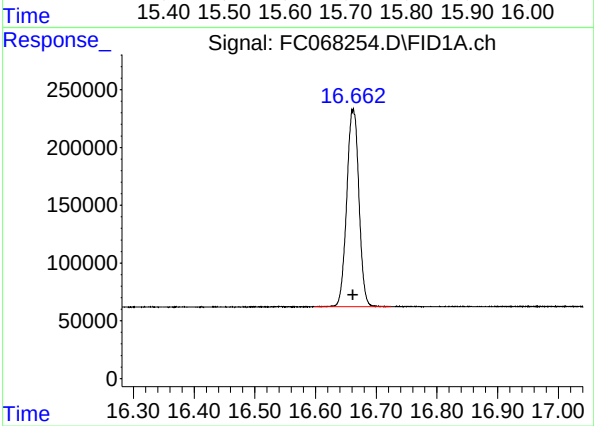
#14 n-Tetracosane (C24)

R.T.: 14.696 min
Delta R.T.: 0.000 min
Response: 2490472
Conc: 20.00 ug/ml



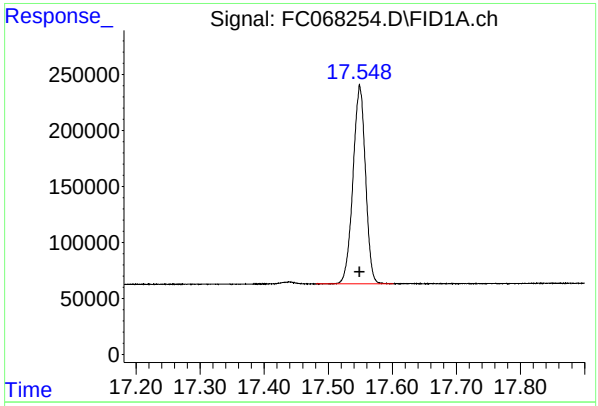
#15 n-Hexacosane (C26)

R.T.: 15.714 min
Delta R.T.: 0.000 min
Response: 2438036
Conc: 20.00 ug/ml



#16 n-Octacosane (C28)

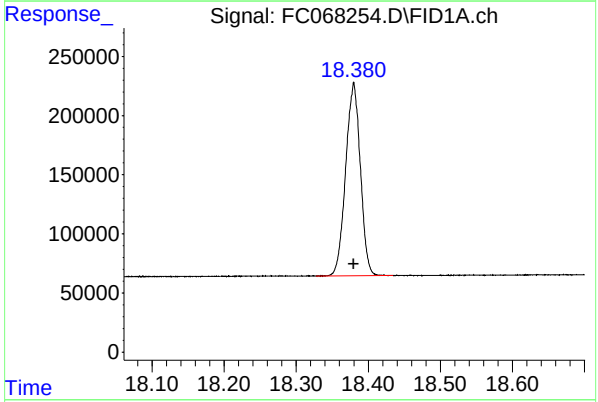
R.T.: 16.662 min
Delta R.T.: 0.000 min
Response: 2381498
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

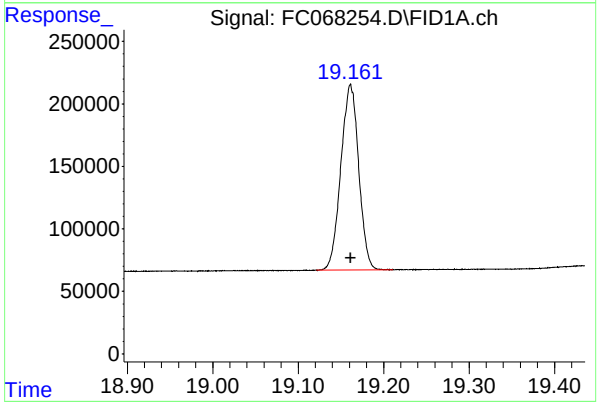
R.T.: 17.549 min
Delta R.T.: 0.000 min
Response: 2400071
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



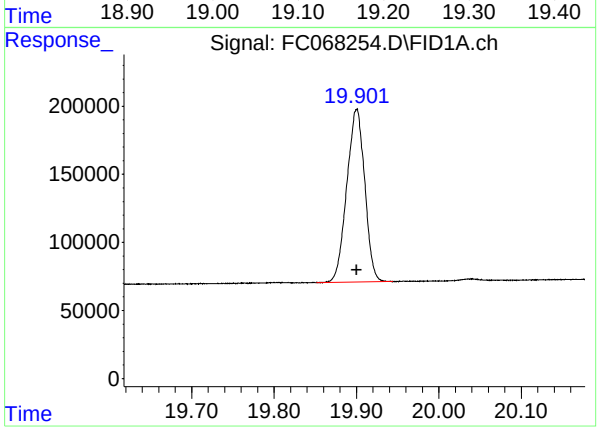
#18 n-Dotriacontane (C32)

R.T.: 18.380 min
Delta R.T.: 0.000 min
Response: 2311459
Conc: 20.00 ug/ml



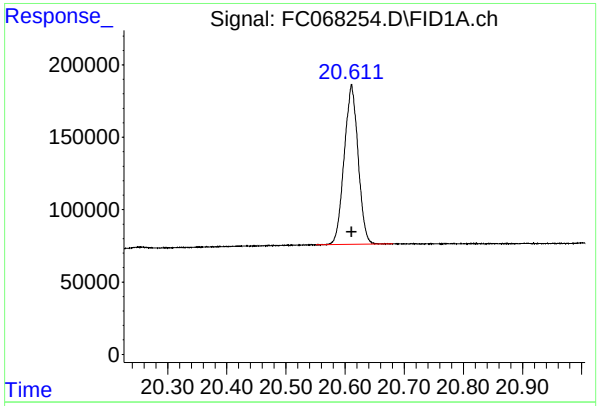
#19 n-Tetratriacontane (C34)

R.T.: 19.161 min
Delta R.T.: 0.000 min
Response: 2154239
Conc: 20.00 ug/ml



#20 n-Hexatriacontane (C36)

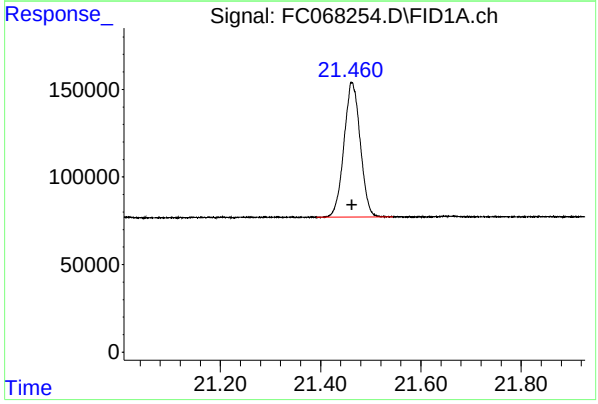
R.T.: 19.900 min
Delta R.T.: 0.000 min
Response: 1921336
Conc: 20.00 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.611 min
Delta R.T.: 0.000 min
Response: 1804172
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



#22 n-Tetracontane (C40)

R.T.: 21.463 min
Delta R.T.: 0.000 min
Response: 1733236
Conc: 20.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068254.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 17:38
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.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	3.208	3.174	3.271	BB	344103	2833506	91.55%	5.114%
2	4.265	4.234	4.328	BB	312569	2853357	92.19%	5.150%
3	5.831	5.798	5.914	BB	329933	3094970	100.00%	5.586%
4	6.273	6.234	6.334	BB	287834	2824656	91.27%	5.098%
5	6.884	6.848	6.971	BB	294443	2932900	94.76%	5.293%
6	8.062	8.028	8.124	BB	257216	2726217	88.09%	4.920%
7	9.657	9.621	9.724	BB	252359	2745870	88.72%	4.956%
8	11.095	11.058	11.158	BB	236897	2740539	88.55%	4.946%
9	11.400	11.361	11.451	BB	288971	3070458	99.21%	5.542%
10	12.401	12.351	12.464	BB	215019	2610929	84.36%	4.712%
11	12.842	12.804	12.904	BB	185197	2258872	72.99%	4.077%
12	13.011	12.968	13.074	BB	208305	2556207	82.59%	4.613%
13	13.596	13.554	13.658	BB	206427	2524938	81.58%	4.557%
14	14.696	14.641	14.758	BB	197006	2490472	80.47%	4.495%
15	15.714	15.648	15.774	BB	180907	2438036	78.77%	4.400%
16	16.662	16.598	16.724	BB	171177	2381498	76.95%	4.298%
17	17.549	17.481	17.601	BB	174807	2400071	77.55%	4.332%
18	18.380	18.328	18.434	BB	162329	2311459	74.68%	4.172%
19	19.161	19.121	19.211	BB	148420	2154239	69.60%	3.888%
20	19.900	19.851	19.944	BB	127484	1921336	62.08%	3.468%
21	20.611	20.551	20.681	BB	109957	1804172	58.29%	3.256%
22	21.463	21.391	21.544	BB	77234	1733236	56.00%	3.128%
			Sum of corrected areas:			55407934		

Aliphatic EPH 021125.M Tue Feb 11 02:39:47 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068255.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 18:14
Operator : YP/AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
Quant Time: Feb 11 02:30:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
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)	11.398	1614436	10.516 ug/ml
Spiked Amount	50.000		Recovery =	21.03%
12) S	1-chlorooctadecane (S...	12.840	1174811	10.402 ug/ml
Spiked Amount	50.000		Recovery =	20.80%
	Target Compounds			
1) T	n-Nonane (C9)	3.208	1490390	10.520 ug/ml
2) T	n-Decane (C10)	4.265	1497516	10.497 ug/ml
3) T	A~Naphthalene (C11.7)	5.832	1604467	10.368 ug/ml
4) T	n-Dodecane (C12)	6.273	1486768	10.527 ug/ml
5) T	A~2-methylnaphthalene...	6.884	1503396	10.252 ug/ml
6) T	n-Tetradecane (C14)	8.061	1434684	10.525 ug/ml
7) T	n-Hexadecane (C16)	9.656	1432035	10.430 ug/ml
8) T	n-Octadecane (C18)	11.093	1433269	10.460 ug/ml
10) T	n-Eicosane (C20)	12.400	1367303	10.474 ug/ml
11) T	n-Heneicosane (C21)	13.010	1344009	10.516 ug/ml
13) T	n-Docosane (C22)	13.595	1321567	10.468 ug/ml
14) T	n-Tetracosane (C24)	14.695	1302068	10.456 ug/ml
15) T	n-Hexacosane (C26)	15.714	1273525	10.447 ug/ml
16) T	n-Octacosane (C28)	16.661	1247372	10.476 ug/ml
17) T	n-Tricontane (C30)	17.547	1280217	10.668 ug/ml
18) T	n-Dotriacontane (C32)	18.378	1224121	10.592 ug/ml
19) T	n-Tetratriacontane (C34)	19.160	1138846	10.573 ug/ml
20) T	n-Hexatriacontane (C36)	19.898	1016654	10.583 ug/ml
21) T	n-Octatriacontane (C38)	20.611	943380	10.458 ug/ml
22) T	n-Tetracontane (C40)	21.461	910849	10.510 ug/ml

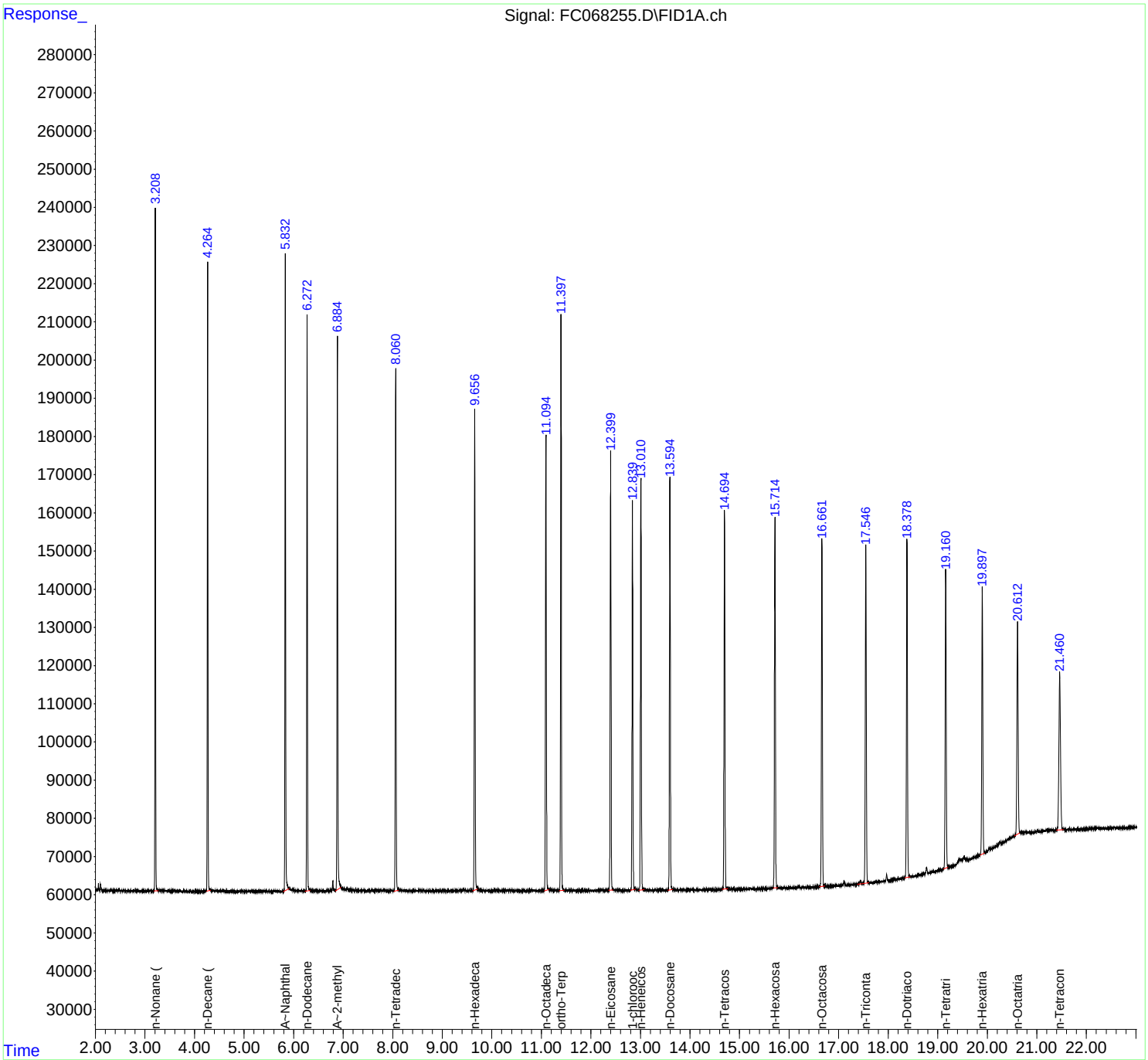
(f)=RT Delta > 1/2 Window (m)=manual int.

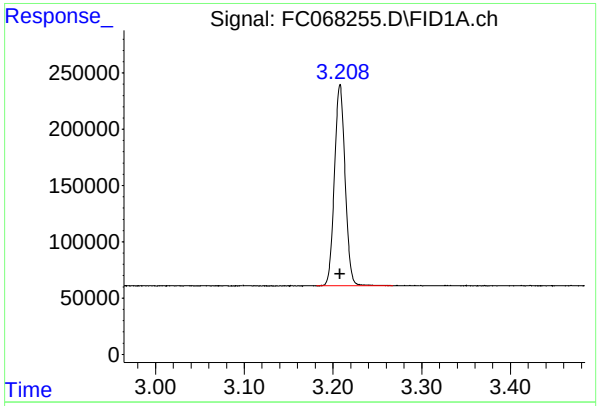
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068255.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 18:14
Operator : YP/AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
Quant Time: Feb 11 02:30:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

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

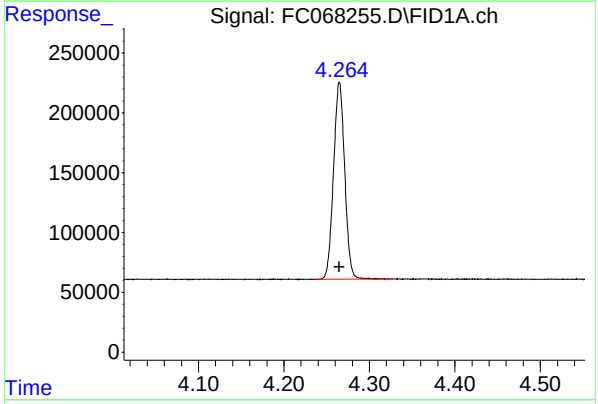




#1 n-Nonane (C9)

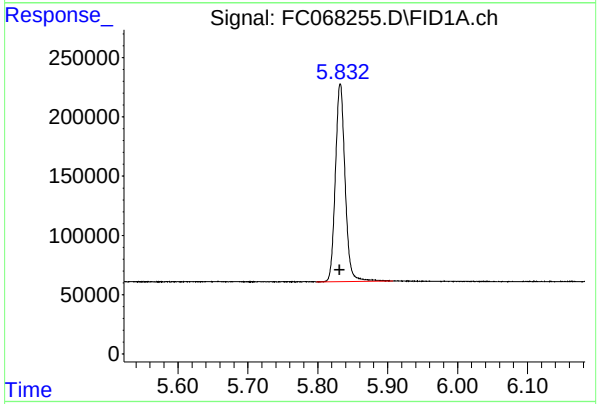
R.T.: 3.208 min
Delta R.T.: 0.000 min
Response: 1490390
Conc: 10.52 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



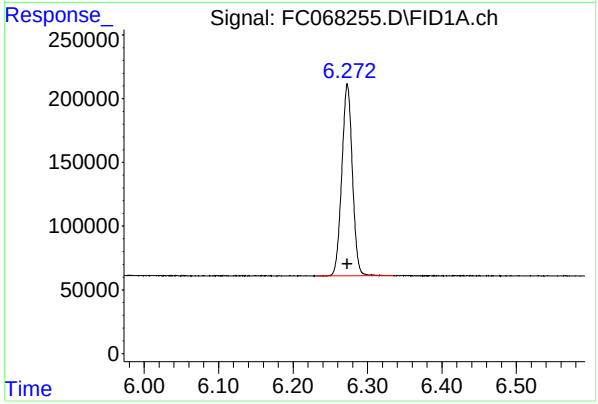
#2 n-Decane (C10)

R.T.: 4.265 min
Delta R.T.: 0.000 min
Response: 1497516
Conc: 10.50 ug/ml



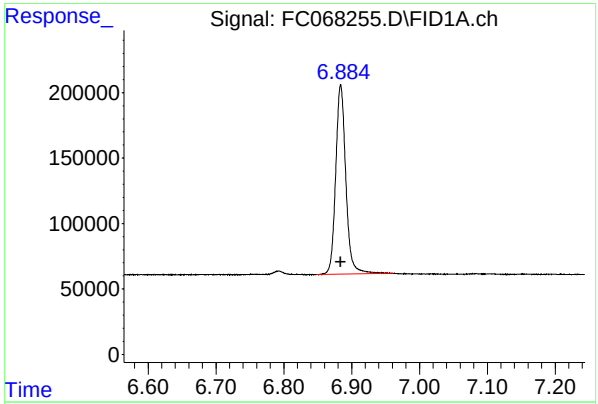
#3 A~Naphthalene (C11.7)

R.T.: 5.832 min
Delta R.T.: 0.000 min
Response: 1604467
Conc: 10.37 ug/ml



#4 n-Dodecane (C12)

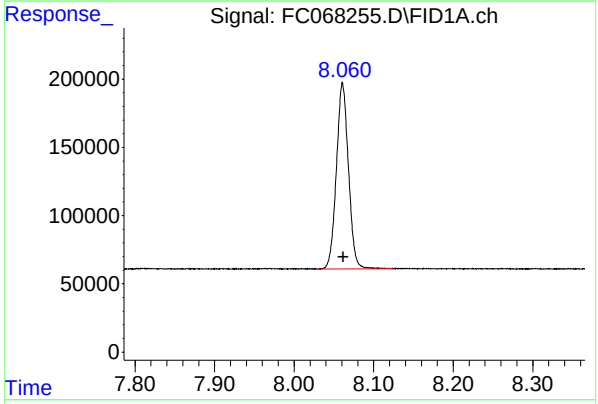
R.T.: 6.273 min
Delta R.T.: 0.000 min
Response: 1486768
Conc: 10.53 ug/ml



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

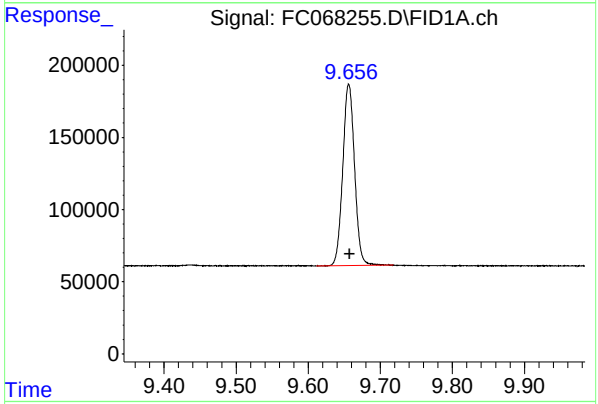
R.T.: 6.884 min
Delta R.T.: 0.000 min
Response: 1503396
Conc: 10.25 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



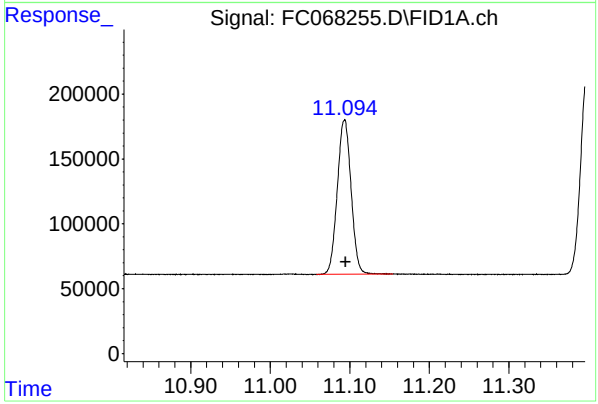
#6 n-Tetradecane (C14)

R.T.: 8.061 min
Delta R.T.: 0.000 min
Response: 1434684
Conc: 10.53 ug/ml



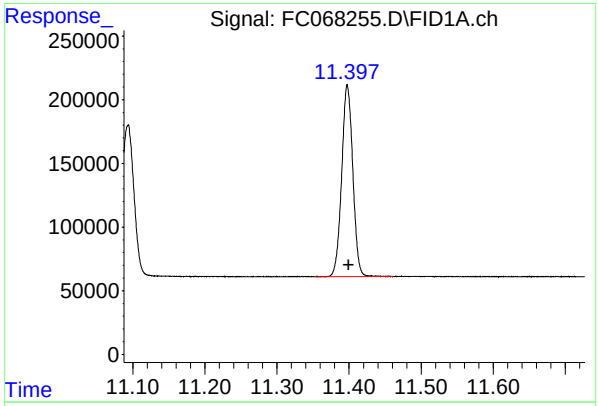
#7 n-Hexadecane (C16)

R.T.: 9.656 min
Delta R.T.: 0.000 min
Response: 1432035
Conc: 10.43 ug/ml



#8 n-Octadecane (C18)

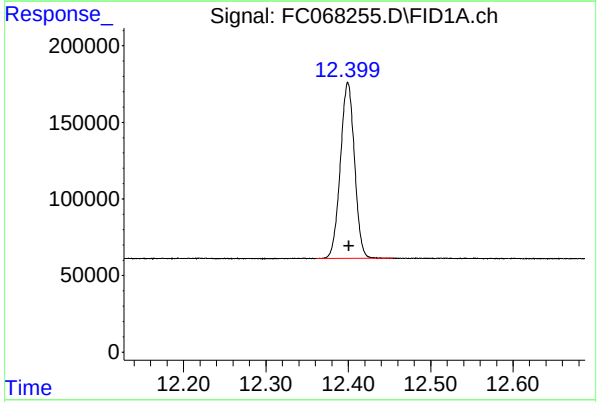
R.T.: 11.093 min
Delta R.T.: -0.001 min
Response: 1433269
Conc: 10.46 ug/ml



#9 ortho-Terphenyl (SURR)

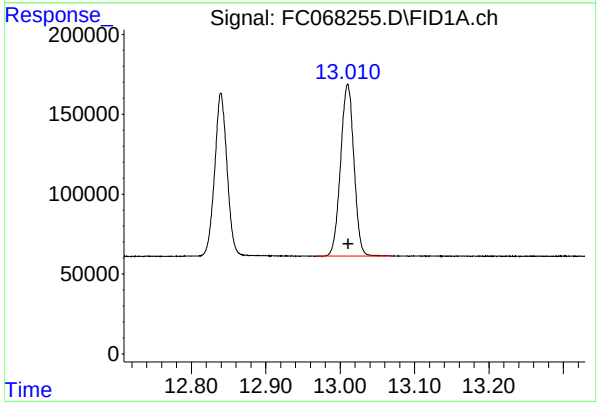
R.T.: 11.398 min
Delta R.T.: -0.002 min
Response: 1614436
Conc: 10.52 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



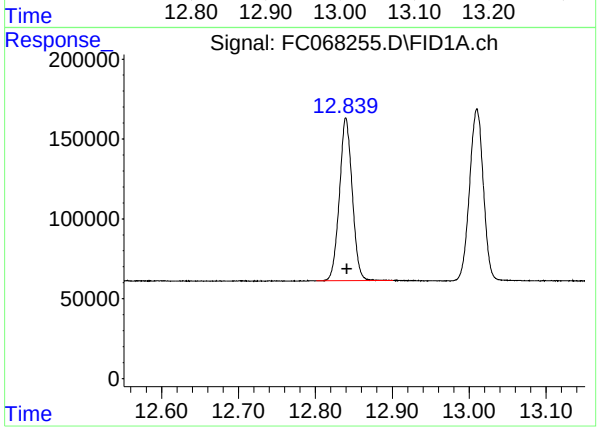
#10 n-Eicosane (C20)

R.T.: 12.400 min
Delta R.T.: -0.001 min
Response: 1367303
Conc: 10.47 ug/ml



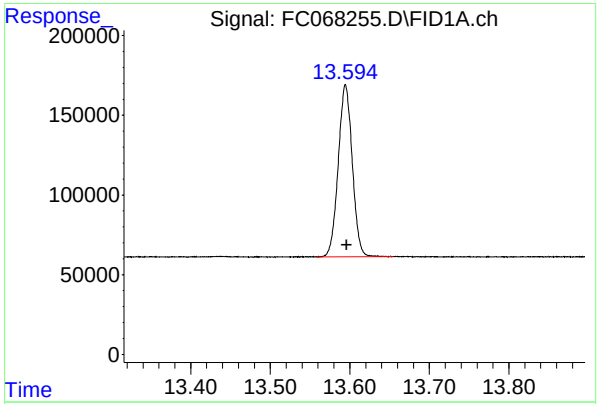
#11 n-Heneicosane (C21)

R.T.: 13.010 min
Delta R.T.: 0.000 min
Response: 1344009
Conc: 10.52 ug/ml



#12 1-chlorooctadecane (SURR)

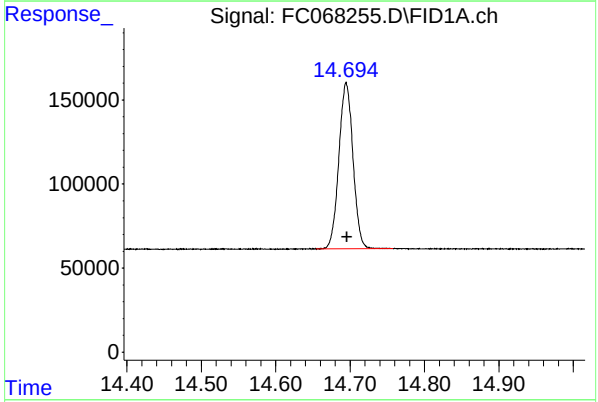
R.T.: 12.840 min
Delta R.T.: -0.002 min
Response: 1174811
Conc: 10.40 ug/ml



#13 n-Docosane (C22)

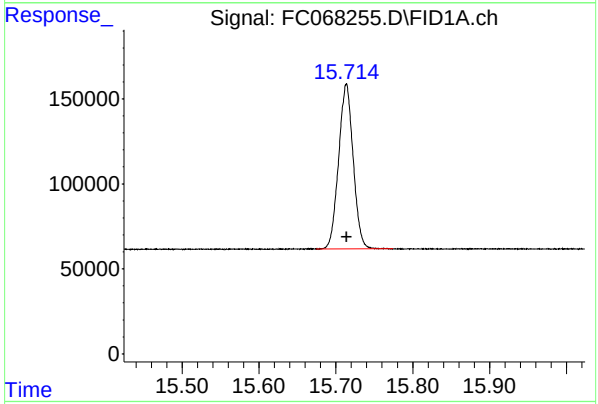
R.T.: 13.595 min
Delta R.T.: -0.001 min
Response: 1321567
Conc: 10.47 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



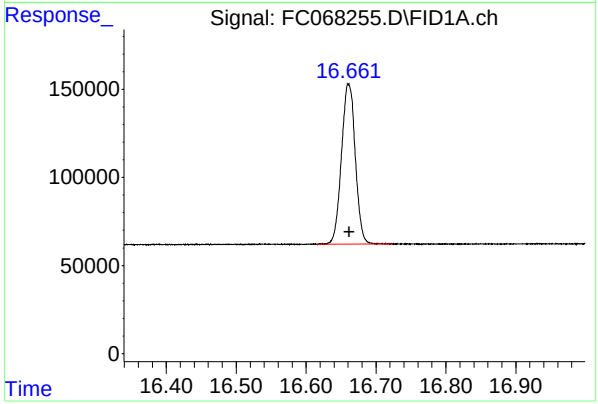
#14 n-Tetracosane (C24)

R.T.: 14.695 min
Delta R.T.: -0.001 min
Response: 1302068
Conc: 10.46 ug/ml



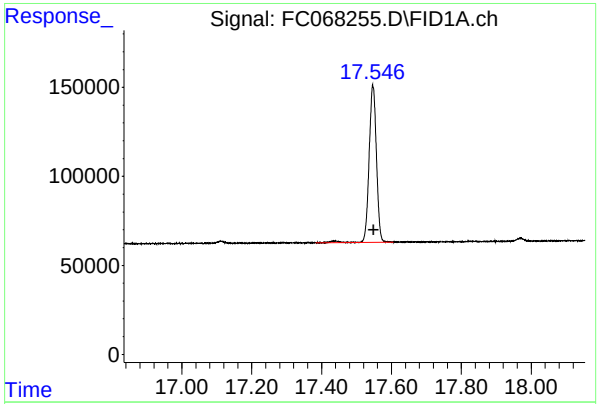
#15 n-Hexacosane (C26)

R.T.: 15.714 min
Delta R.T.: 0.000 min
Response: 1273525
Conc: 10.45 ug/ml



#16 n-Octacosane (C28)

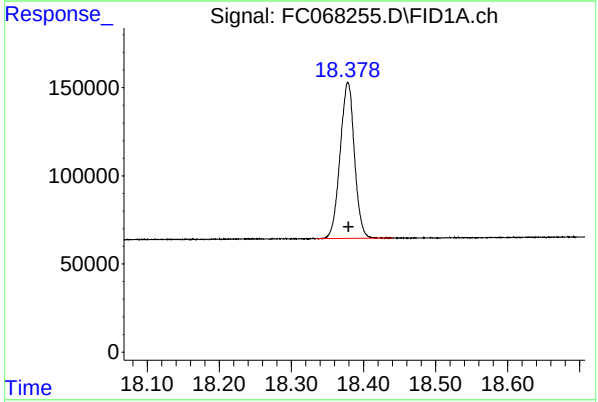
R.T.: 16.661 min
Delta R.T.: -0.001 min
Response: 1247372
Conc: 10.48 ug/ml



#17 n-Tricontane (C30)

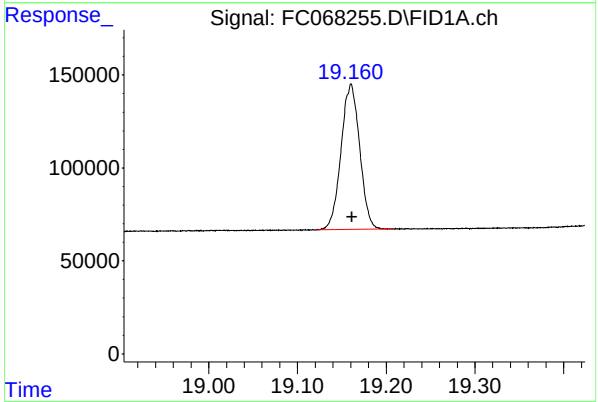
R.T.: 17.547 min
Delta R.T.: -0.002 min
Response: 1280217
Conc: 10.67 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



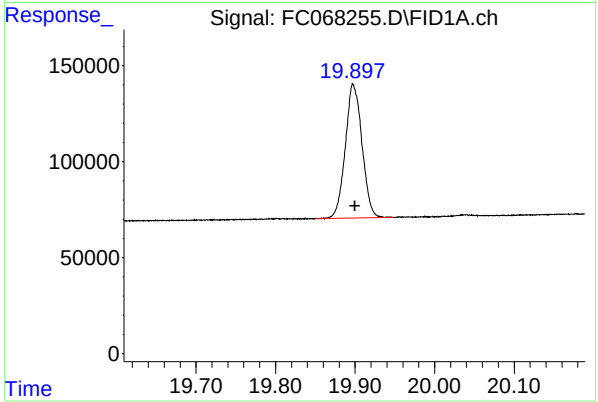
#18 n-Dotriacontane (C32)

R.T.: 18.378 min
Delta R.T.: -0.001 min
Response: 1224121
Conc: 10.59 ug/ml



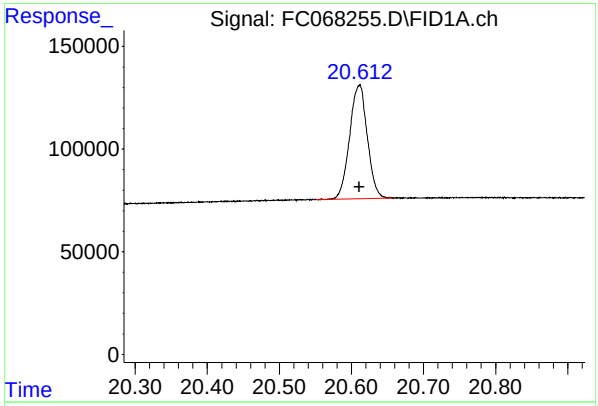
#19 n-Tetratriacontane (C34)

R.T.: 19.160 min
Delta R.T.: -0.001 min
Response: 1138846
Conc: 10.57 ug/ml



#20 n-Hexatriacontane (C36)

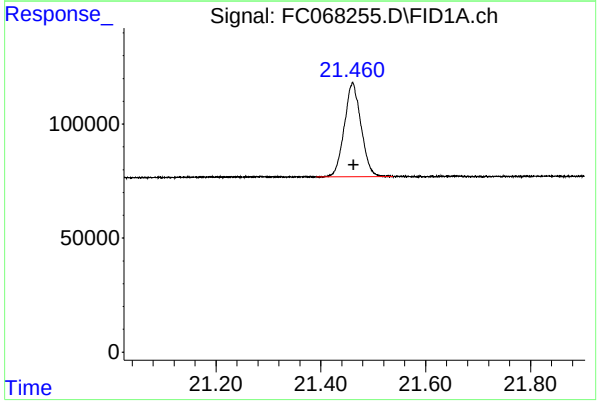
R.T.: 19.898 min
Delta R.T.: -0.002 min
Response: 1016654
Conc: 10.58 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.611 min
Delta R.T.: 0.000 mi
Response: 943380
Conc: 10.46 ug/m

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



#22 n-Tetracontane (C40)

R.T.: 21.461 min
Delta R.T.: -0.002 min
Response: 910849
Conc: 10.51 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068255.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 18:14
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.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	3.208	3.181	3.268	BB	177887	1490390	92.32%	5.132%
2	4.265	4.238	4.328	BB	163966	1497516	92.76%	5.156%
3	5.832	5.798	5.908	BB	166500	1604467	99.38%	5.525%
4	6.273	6.231	6.334	BB	149363	1486768	92.09%	5.119%
5	6.884	6.848	6.961	BB	144374	1503396	93.12%	5.177%
6	8.061	8.028	8.124	BB	135629	1434684	88.87%	4.940%
7	9.656	9.611	9.718	BB	125467	1432035	88.70%	4.931%
8	11.093	11.058	11.154	BB	119437	1433269	88.78%	4.935%
9	11.398	11.354	11.461	BB	150022	1614436	100.00%	5.559%
10	12.400	12.361	12.454	BB	114828	1367303	84.69%	4.708%
11	12.840	12.801	12.901	BB	100668	1174811	72.77%	4.045%
12	13.010	12.968	13.071	BB	107522	1344009	83.25%	4.628%
13	13.595	13.558	13.654	BB	107806	1321567	81.86%	4.551%
14	14.695	14.654	14.758	BB	98638	1302068	80.65%	4.483%
15	15.714	15.674	15.774	BB	97396	1273525	78.88%	4.385%
16	16.661	16.614	16.724	BB	90943	1247372	77.26%	4.295%
17	17.547	17.384	17.604	BB	87801	1280217	79.30%	4.408%
18	18.378	18.334	18.441	BB	88680	1224121	75.82%	4.215%
19	19.160	19.121	19.208	BB	78237	1138846	70.54%	3.921%
20	19.898	19.851	19.948	BB	69453	1016654	62.97%	3.501%
21	20.611	20.551	20.658	BB	55376	943380	58.43%	3.248%
22	21.461	21.391	21.538	BB	41390	910849	56.42%	3.136%
			Sum of corrected areas:			29041681		

Aliphatic EPH 021125.M Tue Feb 11 02:40:05 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068256.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 18:50
Operator : YP/AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
Quant Time: Feb 11 02:30:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
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)	11.397	824094	5.368 ug/ml
Spiked Amount	50.000		Recovery =	10.74%
12) S	1-chlorooctadecane (S...	12.840	593786	5.257 ug/ml
Spiked Amount	50.000		Recovery =	10.51%
	Target Compounds			
1) T	n-Nonane (C9)	3.208	739660	5.221 ug/ml
2) T	n-Decane (C10)	4.265	741867	5.200 ug/ml
3) T	A~Naphthalene (C11.7)	5.833	779725	5.039 ug/ml
4) T	n-Dodecane (C12)	6.273	740350	5.242 ug/ml
5) T	A~2-methylnaphthalene...	6.884	729676	4.976 ug/ml
6) T	n-Tetradecane (C14)	8.060	721115	5.290 ug/ml
7) T	n-Hexadecane (C16)	9.655	722933	5.266 ug/ml
8) T	n-Octadecane (C18)	11.093	728153	5.314 ug/ml
10) T	n-Eicosane (C20)	12.398	697130	5.340 ug/ml
11) T	n-Heneicosane (C21)	13.009	687316	5.378 ug/ml
13) T	n-Docosane (C22)	13.594	674382	5.342 ug/ml
14) T	n-Tetracosane (C24)	14.694	667971	5.364 ug/ml
15) T	n-Hexacosane (C26)	15.713	652733	5.355 ug/ml
16) T	n-Octacosane (C28)	16.660	639945	5.374 ug/ml
17) T	n-Tricontane (C30)	17.547	654656	5.455 ug/ml
18) T	n-Dotriacontane (C32)	18.378	639981	5.537 ug/ml
19) T	n-Tetratriacontane (C34)	19.160	592586	5.502 ug/ml
20) T	n-Hexatriacontane (C36)	19.899	518944	5.402 ug/ml
21) T	n-Octatriacontane (C38)	20.609	485383	5.381 ug/ml
22) T	n-Tetracontane (C40)	21.462	459428	5.301 ug/ml

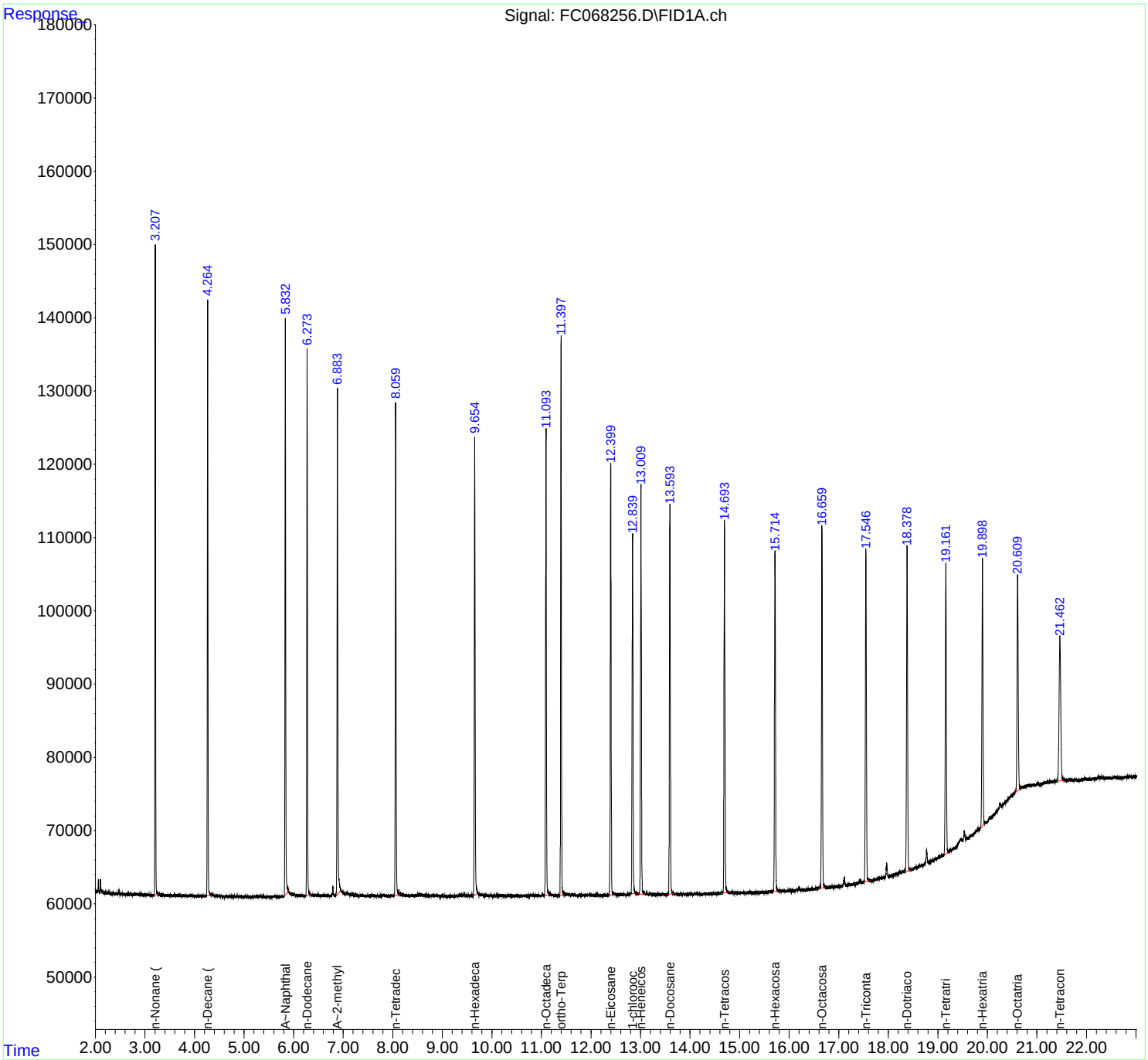
(f)=RT Delta > 1/2 Window (m)=manual int.

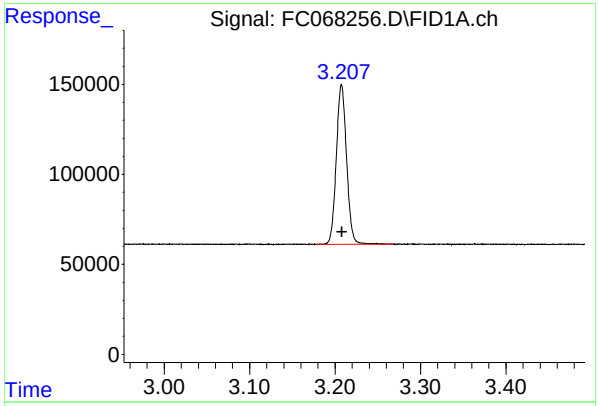
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068256.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 18:50
Operator : YP/AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
Quant Time: Feb 11 02:30:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

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

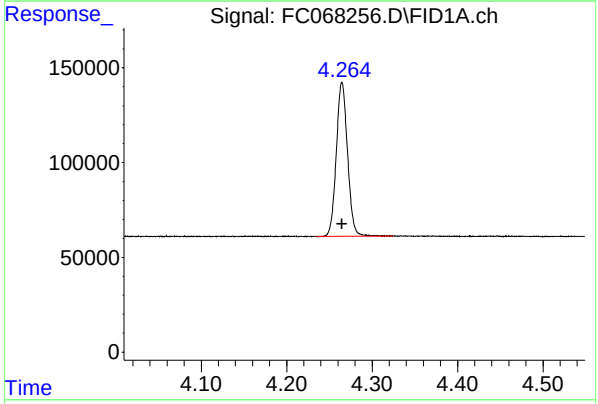




#1 n-Nonane (C9)

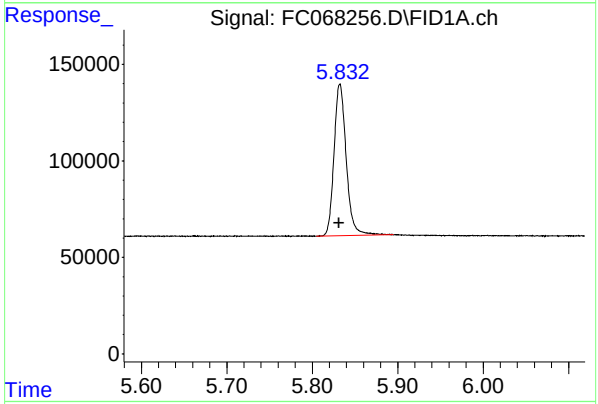
R.T.: 3.208 min
Delta R.T.: 0.000 min
Response: 739660
Conc: 5.22 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



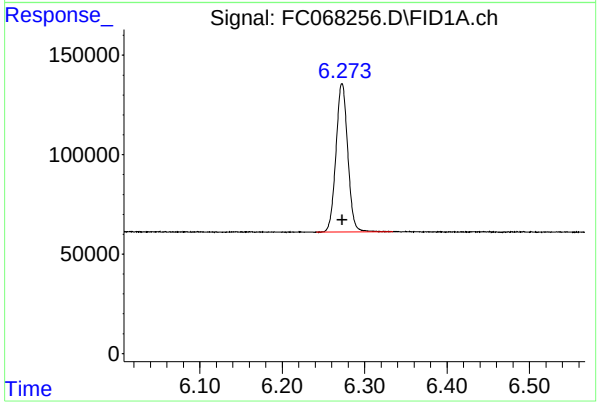
#2 n-Decane (C10)

R.T.: 4.265 min
Delta R.T.: 0.000 min
Response: 741867
Conc: 5.20 ug/ml



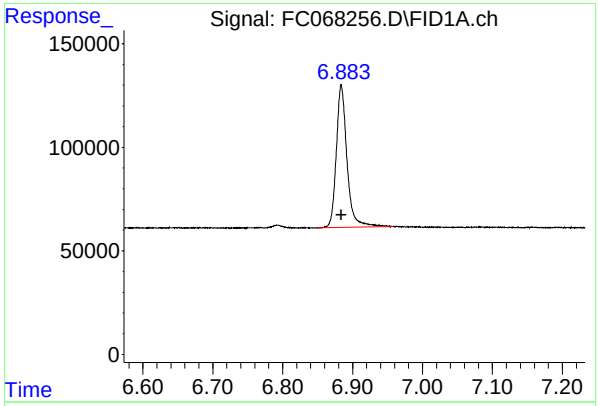
#3 A~Naphthalene (C11.7)

R.T.: 5.833 min
Delta R.T.: 0.001 min
Response: 779725
Conc: 5.04 ug/ml



#4 n-Dodecane (C12)

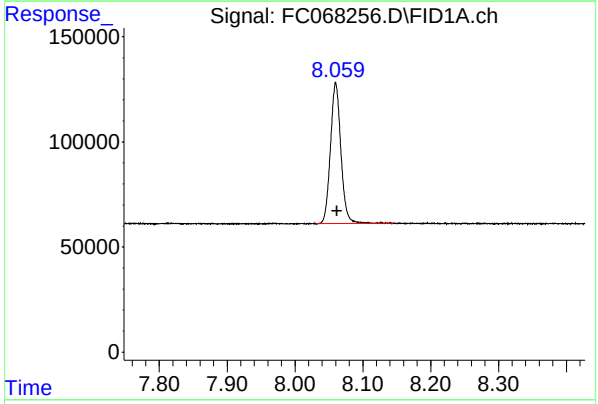
R.T.: 6.273 min
Delta R.T.: 0.000 min
Response: 740350
Conc: 5.24 ug/ml



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

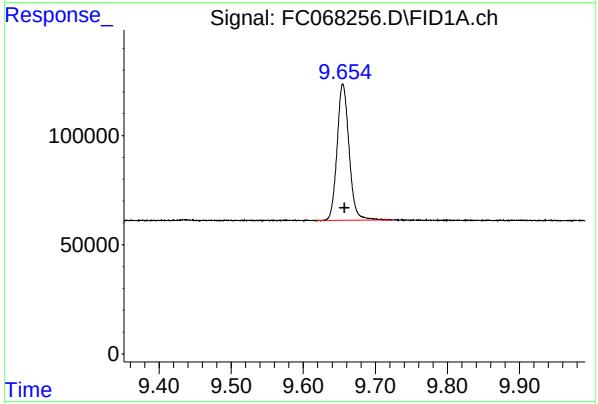
R.T.: 6.884 min
Delta R.T.: 0.000 min
Response: 729676
Conc: 4.98 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



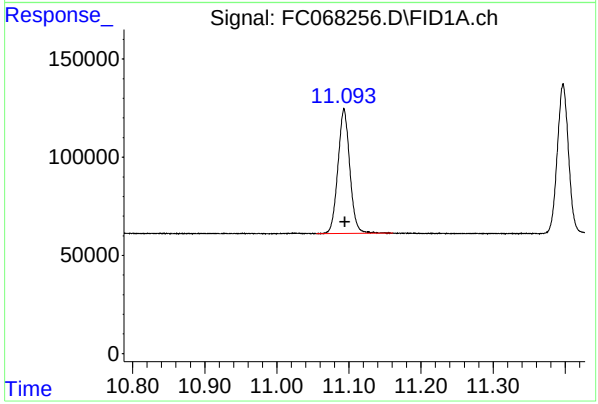
#6 n-Tetradecane (C14)

R.T.: 8.060 min
Delta R.T.: -0.002 min
Response: 721115
Conc: 5.29 ug/ml



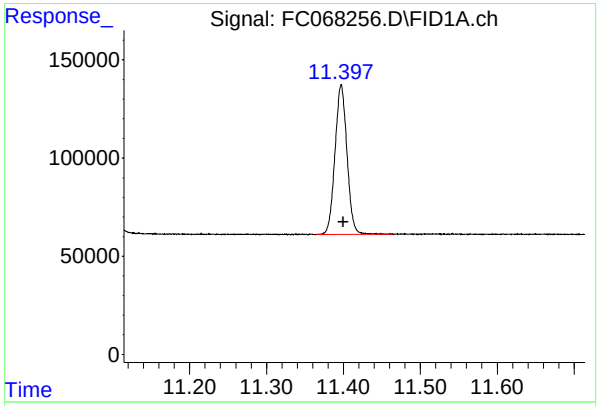
#7 n-Hexadecane (C16)

R.T.: 9.655 min
Delta R.T.: -0.002 min
Response: 722933
Conc: 5.27 ug/ml



#8 n-Octadecane (C18)

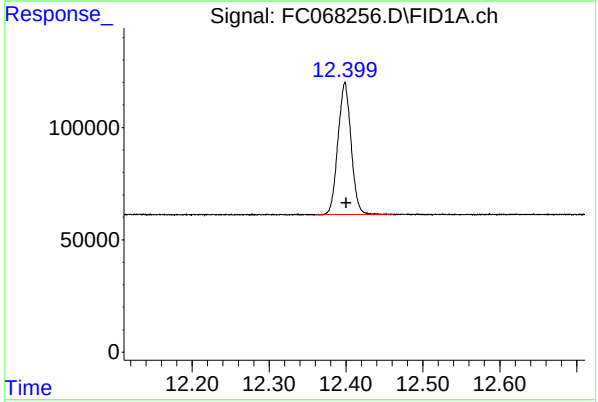
R.T.: 11.093 min
Delta R.T.: -0.001 min
Response: 728153
Conc: 5.31 ug/ml



#9 ortho-Terphenyl (SURR)

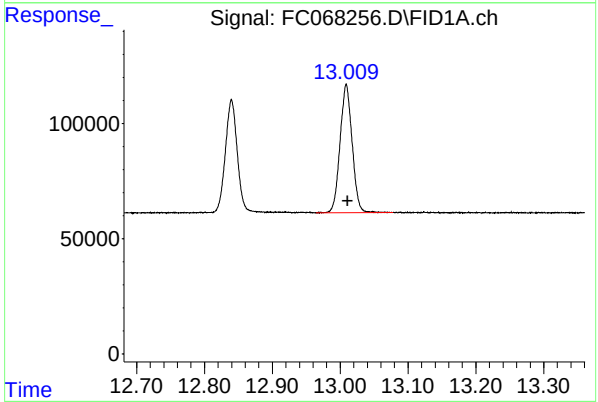
R.T.: 11.397 min
Delta R.T.: -0.003 min
Response: 824094
Conc: 5.37 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



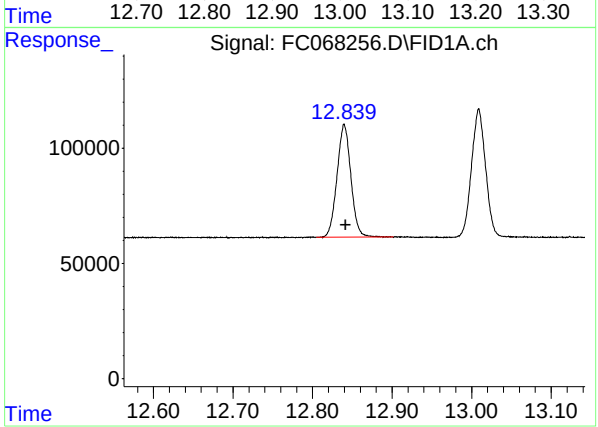
#10 n-Eicosane (C20)

R.T.: 12.398 min
Delta R.T.: -0.002 min
Response: 697130
Conc: 5.34 ug/ml



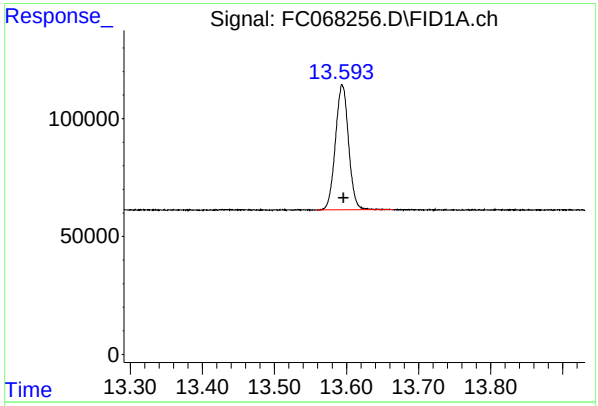
#11 n-Heneicosane (C21)

R.T.: 13.009 min
Delta R.T.: -0.002 min
Response: 687316
Conc: 5.38 ug/ml



#12 1-chlorooctadecane (SURR)

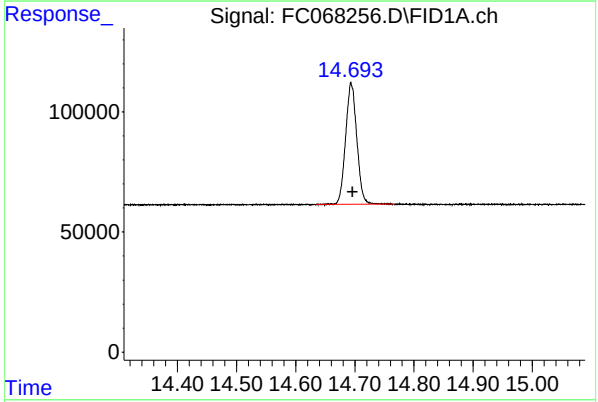
R.T.: 12.840 min
Delta R.T.: -0.002 min
Response: 593786
Conc: 5.26 ug/ml



#13 n-Docosane (C22)

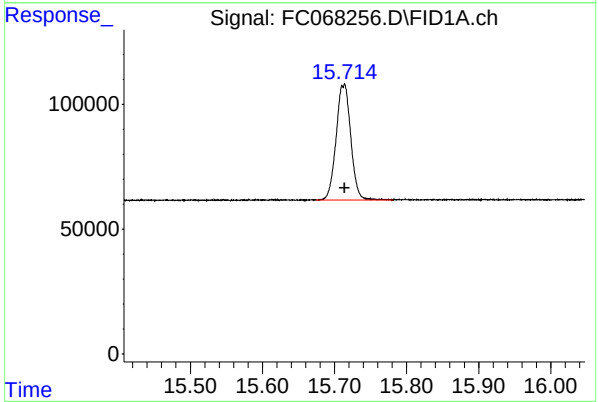
R.T.: 13.594 min
Delta R.T.: -0.002 min
Response: 674382
Conc: 5.34 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



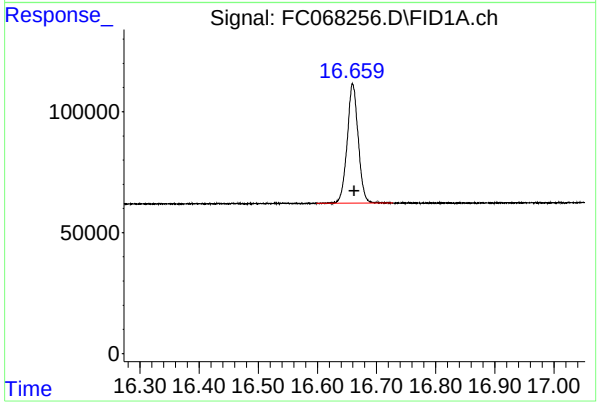
#14 n-Tetracosane (C24)

R.T.: 14.694 min
Delta R.T.: -0.002 min
Response: 667971
Conc: 5.36 ug/ml



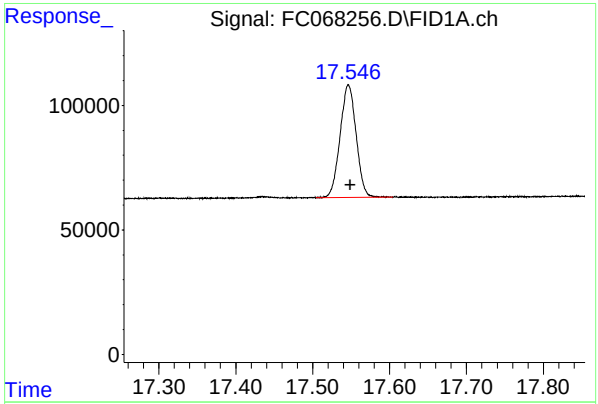
#15 n-Hexacosane (C26)

R.T.: 15.713 min
Delta R.T.: -0.001 min
Response: 652733
Conc: 5.35 ug/ml



#16 n-Octacosane (C28)

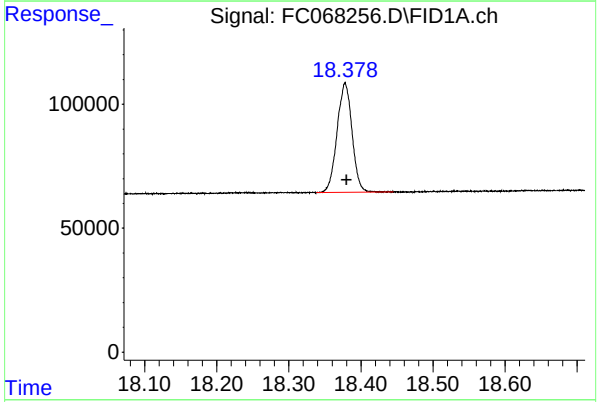
R.T.: 16.660 min
Delta R.T.: -0.002 min
Response: 639945
Conc: 5.37 ug/ml



#17 n-Tricontane (C30)

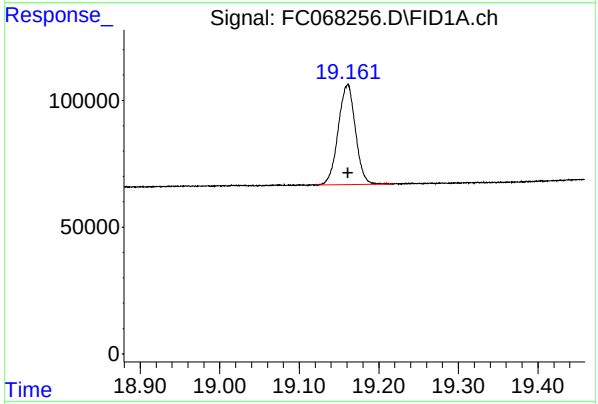
R.T.: 17.547 min
Delta R.T.: -0.002 min
Response: 654656
Conc: 5.46 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



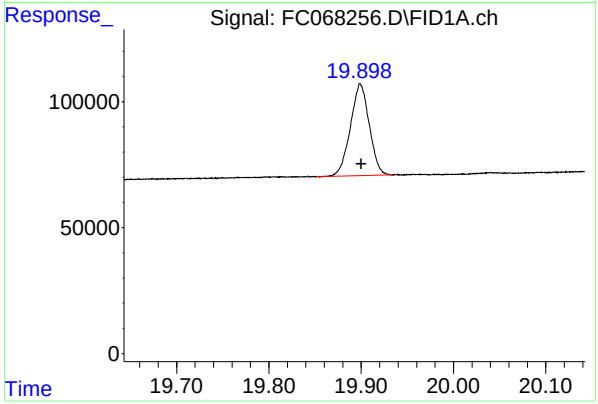
#18 n-Dotriacontane (C32)

R.T.: 18.378 min
Delta R.T.: -0.002 min
Response: 639981
Conc: 5.54 ug/ml



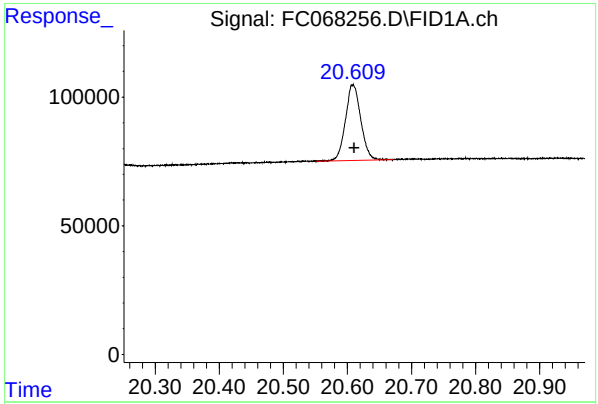
#19 n-Tetratriacontane (C34)

R.T.: 19.160 min
Delta R.T.: 0.000 min
Response: 592586
Conc: 5.50 ug/ml



#20 n-Hexatriacontane (C36)

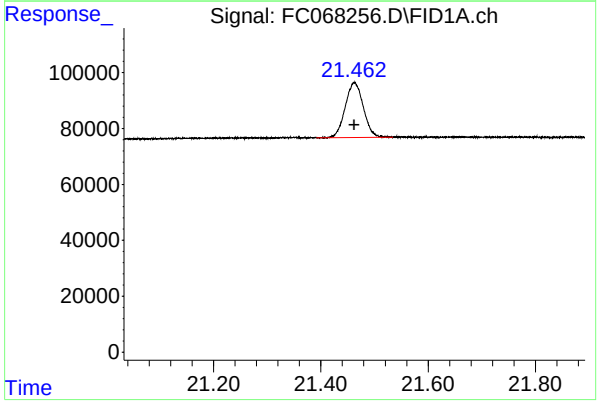
R.T.: 19.899 min
Delta R.T.: 0.000 min
Response: 518944
Conc: 5.40 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.609 min
Delta R.T.: -0.002 min
Response: 485383
Conc: 5.38 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



#22 n-Tetracontane (C40)

R.T.: 21.462 min
Delta R.T.: 0.000 min
Response: 459428
Conc: 5.30 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068256.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 18:50
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.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	3.208	3.178	3.268	BB	88225	739660	89.75%	5.035%
2	4.265	4.234	4.324	BB	81016	741867	90.02%	5.050%
3	5.833	5.804	5.894	BB	78603	779725	94.62%	5.307%
4	6.273	6.241	6.334	BB	74589	740350	89.84%	5.039%
5	6.884	6.848	6.958	BB	68142	729676	88.54%	4.967%
6	8.060	8.031	8.144	BB	66668	721115	87.50%	4.908%
7	9.655	9.618	9.724	BB	62427	722933	87.72%	4.921%
8	11.093	11.054	11.161	BB	62811	728153	88.36%	4.956%
9	11.397	11.364	11.464	BB	75900	824094	100.00%	5.609%
10	12.398	12.361	12.461	BB	58302	697130	84.59%	4.745%
11	12.840	12.804	12.901	BB	48610	593786	72.05%	4.042%
12	13.009	12.964	13.078	BB	55281	687316	83.40%	4.678%
13	13.594	13.558	13.664	BB	53078	674382	81.83%	4.590%
14	14.694	14.634	14.764	BB	50164	667971	81.06%	4.547%
15	15.713	15.674	15.781	BB	46241	652733	79.21%	4.443%
16	16.660	16.598	16.728	BB	48962	639945	77.65%	4.356%
17	17.547	17.504	17.604	BB	44994	654656	79.44%	4.456%
18	18.378	18.338	18.444	BB	44176	639981	77.66%	4.356%
19	19.160	19.121	19.218	BB	39586	592586	71.91%	4.033%
20	19.899	19.851	19.934	BB	36345	518944	62.97%	3.532%
21	20.609	20.551	20.671	BB	29349	485383	58.90%	3.304%
22	21.462	21.391	21.534	BB	19678	459428	55.75%	3.127%
			Sum of corrected areas:			14691811		

Aliphatic EPH 021125.M Tue Feb 11 02:40:20 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068257.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 19:26
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Feb 11 02:33:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
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)	11.399	3006153	19.591 ug/ml
Spiked Amount	50.000		Recovery =	39.18%
12) S	1-chlorooctadecane (S...	12.841	2210712	19.655 ug/ml
Spiked Amount	50.000		Recovery =	39.31%
	Target Compounds			
1) T	n-Nonane (C9)	3.207	2763389	19.644 ug/ml
2) T	n-Decane (C10)	4.265	2787474	19.676 ug/ml
3) T	A~Naphthalene (C11.7)	5.832	3022645	19.751 ug/ml
4) T	n-Dodecane (C12)	6.274	2762475	19.626 ug/ml
5) T	A~2-methylnaphthalene...	6.884	2871264	19.825 ug/ml
6) T	n-Tetradecane (C14)	8.061	2665240	19.548 ug/ml
7) T	n-Hexadecane (C16)	9.657	2676698	19.543 ug/ml
8) T	n-Octadecane (C18)	11.095	2671678	19.536 ug/ml
10) T	n-Eicosane (C20)	12.401	2547036	19.549 ug/ml
11) T	n-Heneicosane (C21)	13.011	2500910	19.562 ug/ml
13) T	n-Docosane (C22)	13.595	2472408	19.618 ug/ml
14) T	n-Tetracosane (C24)	14.696	2447601	19.679 ug/ml
15) T	n-Hexacosane (C26)	15.714	2396918	19.713 ug/ml
16) T	n-Octacosane (C28)	16.662	2352553	19.808 ug/ml
17) T	n-Tricontane (C30)	17.548	2368324	19.676 ug/ml
18) T	n-Dotriacontane (C32)	18.379	2282342	19.664 ug/ml
19) T	n-Tetratriacontane (C34)	19.160	2121381	19.632 ug/ml
20) T	n-Hexatriacontane (C36)	19.898	1897153	19.727 ug/ml
21) T	n-Octatriacontane (C38)	20.609	1768616	19.674 ug/ml
22) T	n-Tetracontane (C40)	21.462	1709466	19.758 ug/ml

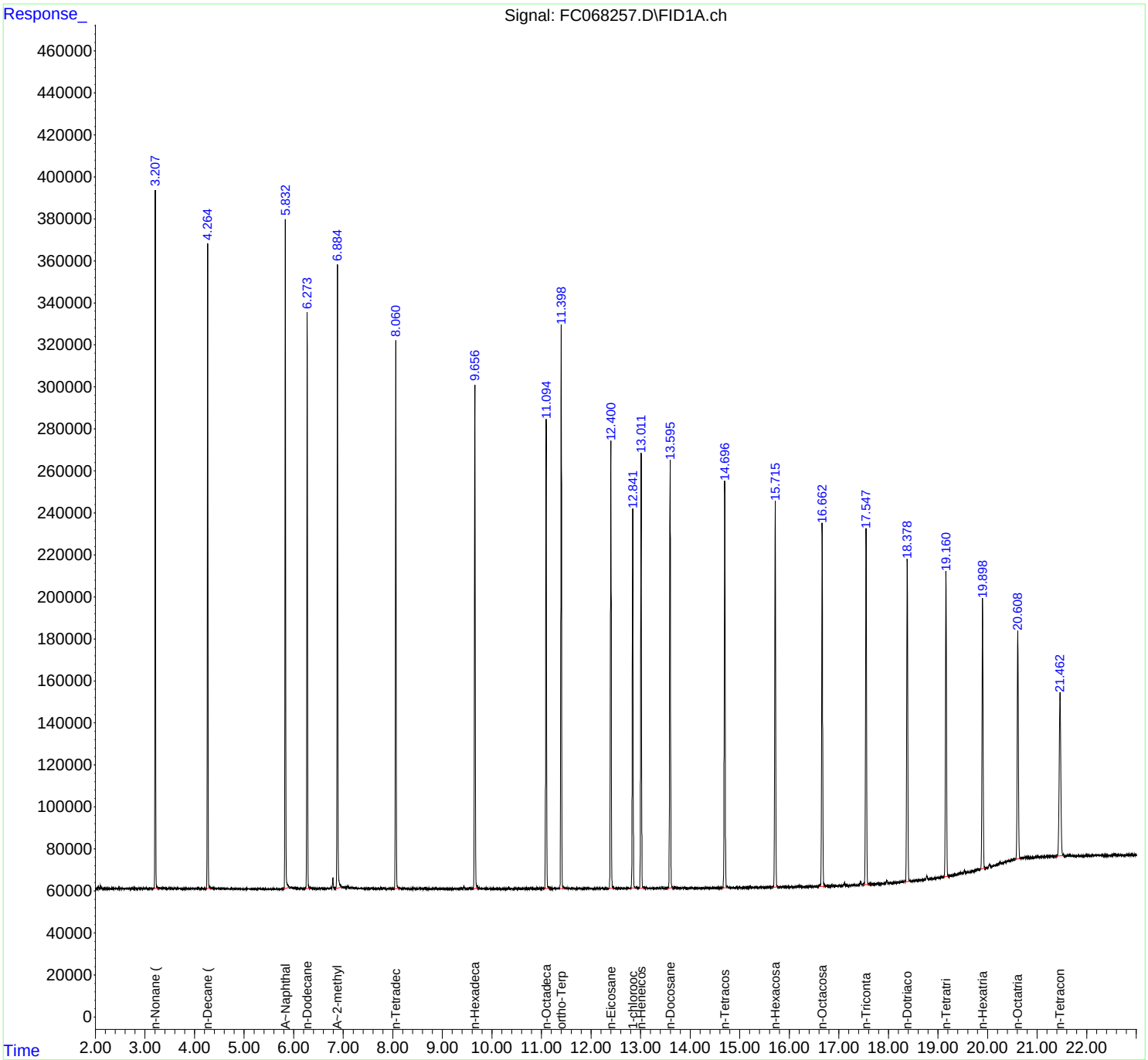
(f)=RT Delta > 1/2 Window (m)=manual int.

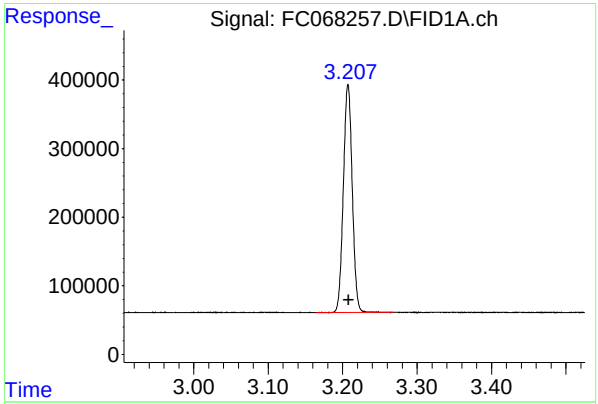
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068257.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 19:26
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Feb 11 02:33:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

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

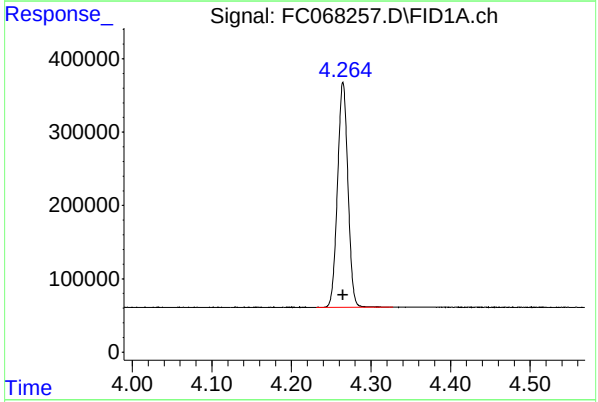




#1 n-Nonane (C9)

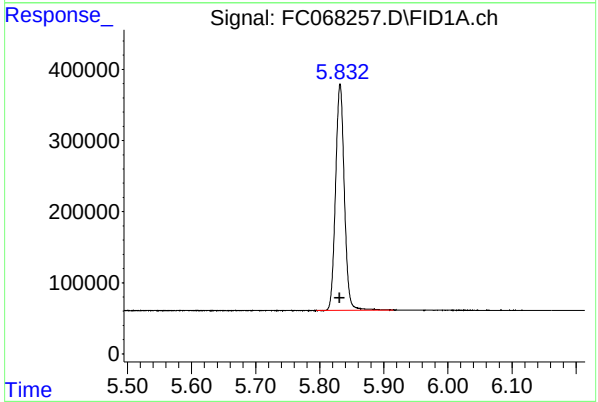
R.T.: 3.207 min
Delta R.T.: 0.000 min
Response: 2763389
Conc: 19.64 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



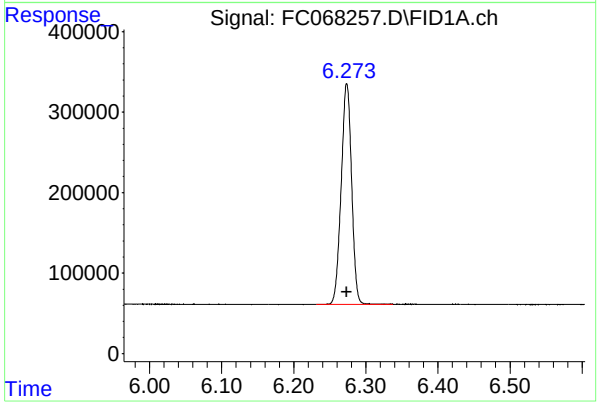
#2 n-Decane (C10)

R.T.: 4.265 min
Delta R.T.: 0.000 min
Response: 2787474
Conc: 19.68 ug/ml



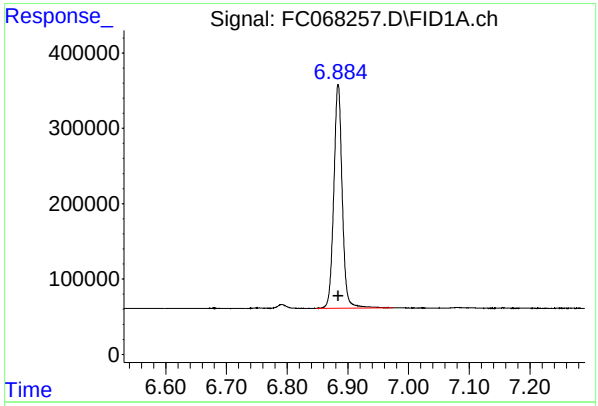
#3 A~Naphthalene (C11.7)

R.T.: 5.832 min
Delta R.T.: 0.000 min
Response: 3022645
Conc: 19.75 ug/ml



#4 n-Dodecane (C12)

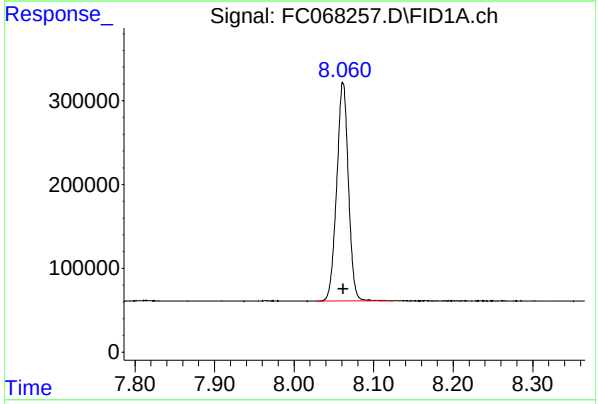
R.T.: 6.274 min
Delta R.T.: 0.000 min
Response: 2762475
Conc: 19.63 ug/ml



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

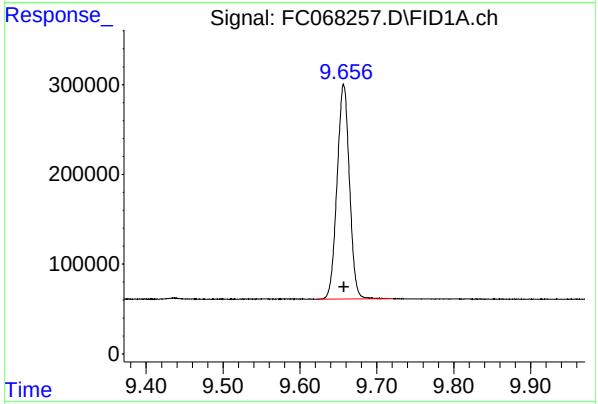
R.T.: 6.884 min
Delta R.T.: 0.000 min
Response: 2871264
Conc: 19.83 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



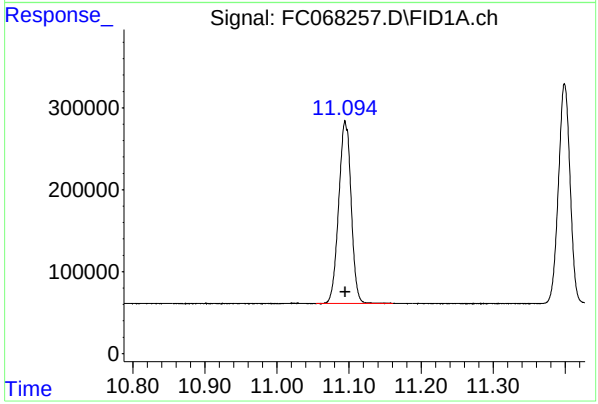
#6 n-Tetradecane (C14)

R.T.: 8.061 min
Delta R.T.: 0.000 min
Response: 2665240
Conc: 19.55 ug/ml



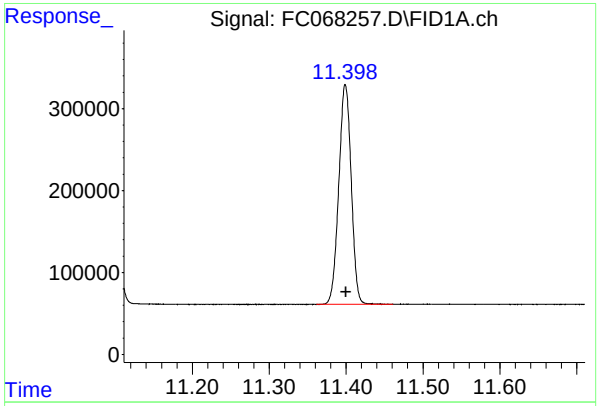
#7 n-Hexadecane (C16)

R.T.: 9.657 min
Delta R.T.: 0.000 min
Response: 2676698
Conc: 19.54 ug/ml



#8 n-Octadecane (C18)

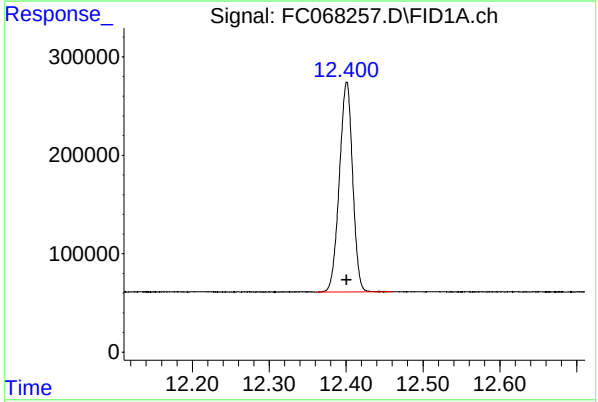
R.T.: 11.095 min
Delta R.T.: 0.000 min
Response: 2671678
Conc: 19.54 ug/ml



#9 ortho-Terphenyl (SURR)

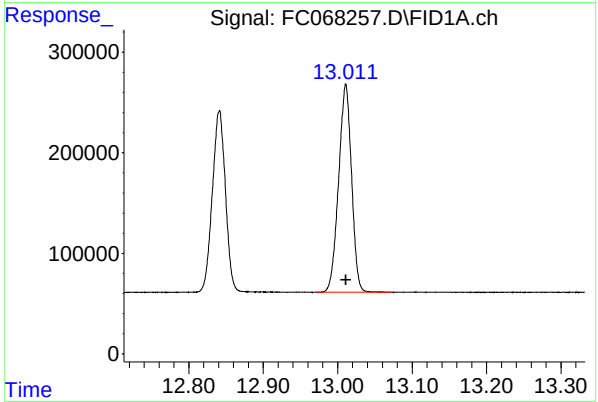
R.T.: 11.399 min
Delta R.T.: 0.000 min
Response: 3006153
Conc: 19.59 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



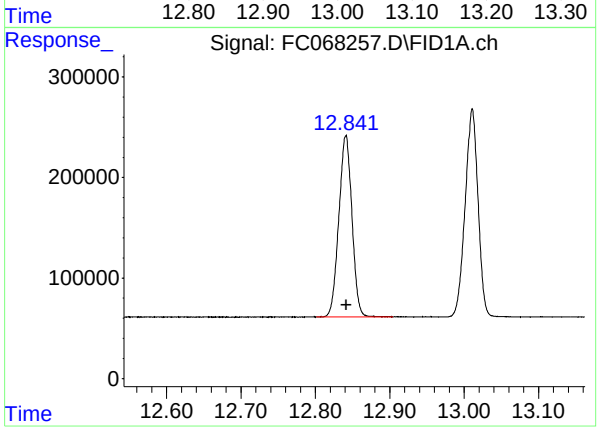
#10 n-Eicosane (C20)

R.T.: 12.401 min
Delta R.T.: 0.000 min
Response: 2547036
Conc: 19.55 ug/ml



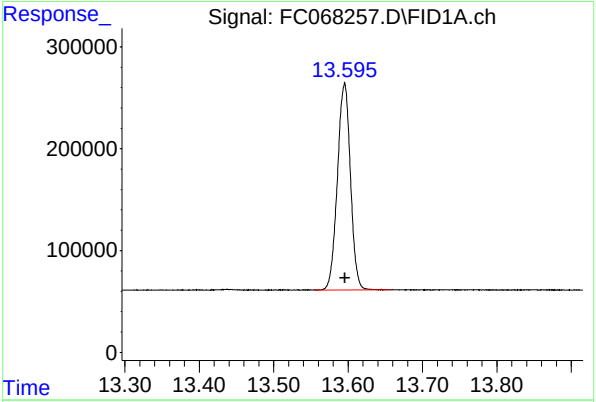
#11 n-Heneicosane (C21)

R.T.: 13.011 min
Delta R.T.: 0.000 min
Response: 2500910
Conc: 19.56 ug/ml



#12 1-chlorooctadecane (SURR)

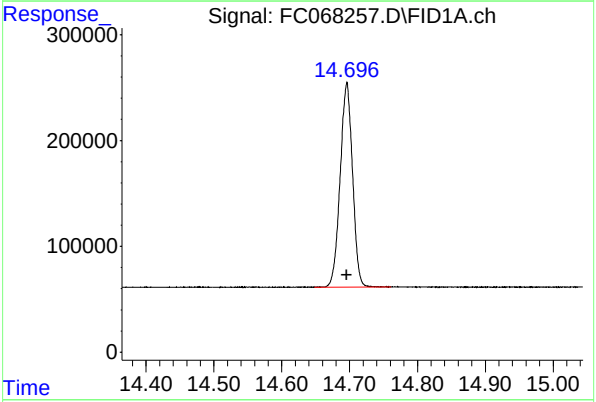
R.T.: 12.841 min
Delta R.T.: 0.000 min
Response: 2210712
Conc: 19.66 ug/ml



#13 n-Docosane (C22)

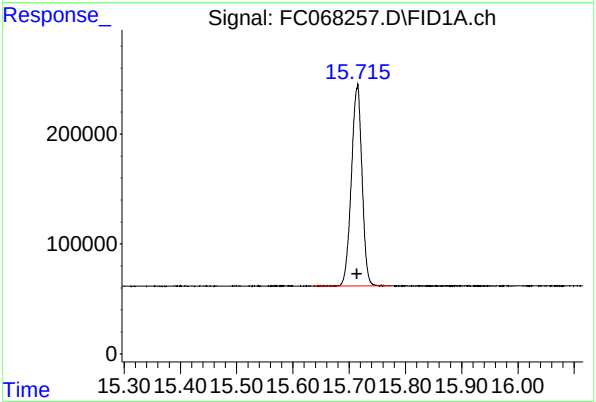
R.T.: 13.595 min
Delta R.T.: 0.000 min
Response: 2472408
Conc: 19.62 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



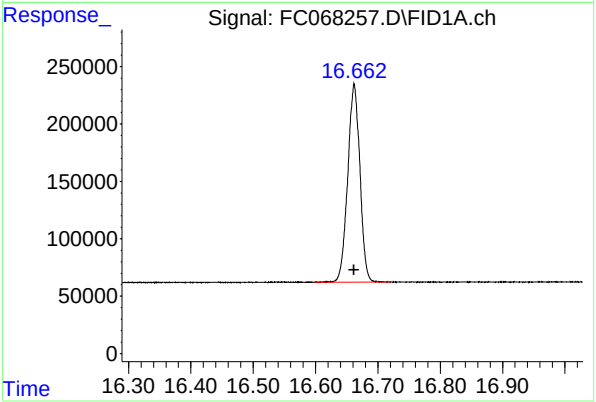
#14 n-Tetracosane (C24)

R.T.: 14.696 min
Delta R.T.: 0.000 min
Response: 2447601
Conc: 19.68 ug/ml



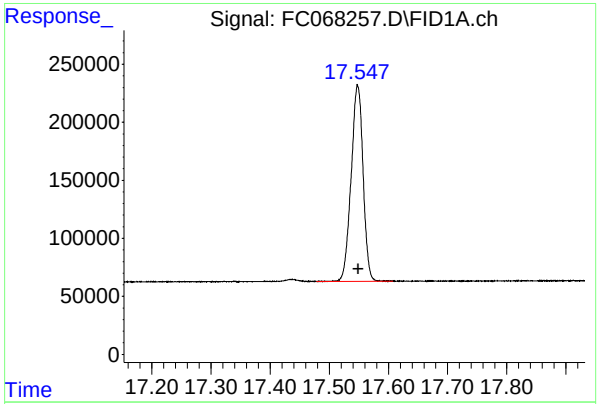
#15 n-Hexacosane (C26)

R.T.: 15.714 min
Delta R.T.: 0.000 min
Response: 2396918
Conc: 19.71 ug/ml



#16 n-Octacosane (C28)

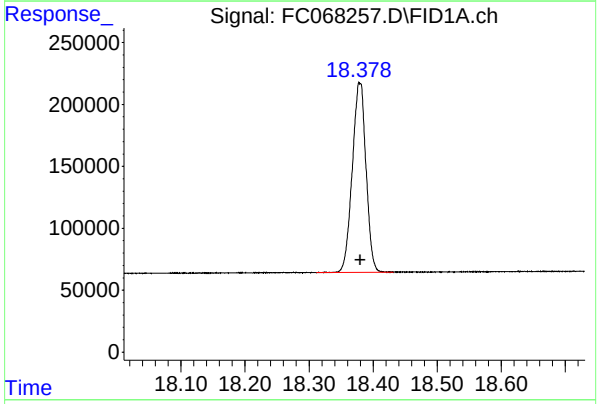
R.T.: 16.662 min
Delta R.T.: 0.000 min
Response: 2352553
Conc: 19.81 ug/ml



#17 n-Tricontane (C30)

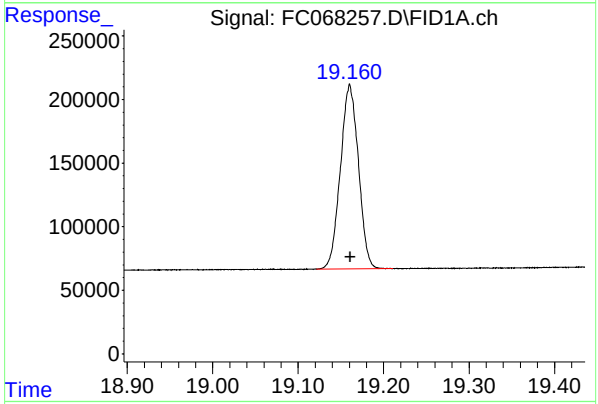
R.T.: 17.548 min
Delta R.T.: -0.001 min
Response: 2368324
Conc: 19.68 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



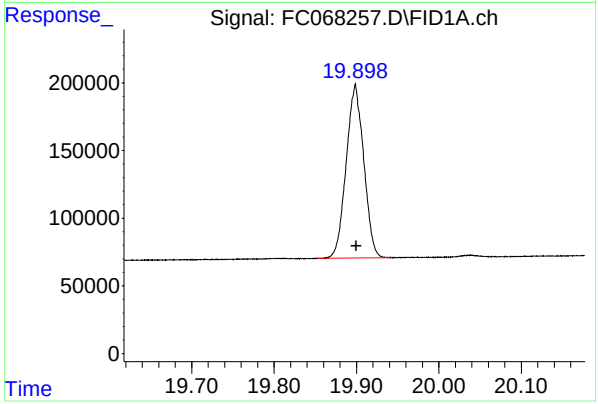
#18 n-Dotriacontane (C32)

R.T.: 18.379 min
Delta R.T.: 0.000 min
Response: 2282342
Conc: 19.66 ug/ml



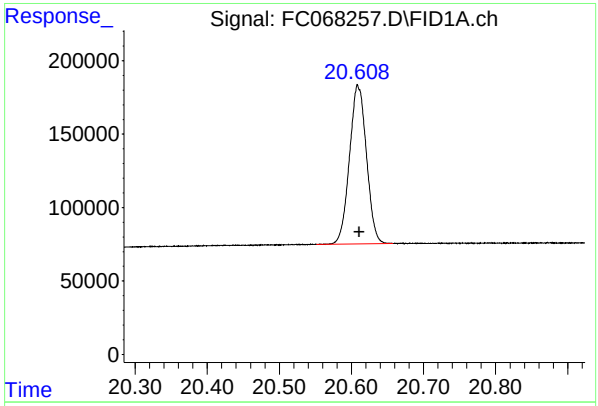
#19 n-Tetratriacontane (C34)

R.T.: 19.160 min
Delta R.T.: 0.000 min
Response: 2121381
Conc: 19.63 ug/ml



#20 n-Hexatriacontane (C36)

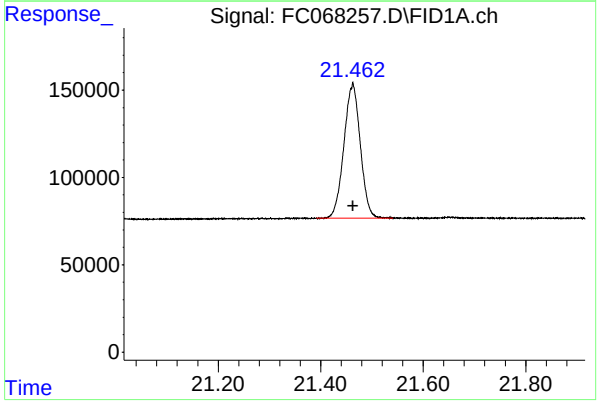
R.T.: 19.898 min
Delta R.T.: -0.002 min
Response: 1897153
Conc: 19.73 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.609 min
Delta R.T.: -0.002 mi
Response: 1768616
Conc: 19.67 ug/m

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



#22 n-Tetracontane (C40)

R.T.: 21.462 min
Delta R.T.: 0.000 min
Response: 1709466
Conc: 19.76 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068257.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 19:26
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.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	3.207	3.164	3.268	BB	332094	2763389	91.42%	5.089%
2	4.265	4.231	4.328	BB	306680	2787474	92.22%	5.133%
3	5.832	5.794	5.914	BB	316234	3022645	100.00%	5.566%
4	6.274	6.231	6.338	BB	274740	2762475	91.39%	5.087%
5	6.884	6.848	6.974	BB	297539	2871264	94.99%	5.288%
6	8.061	8.028	8.124	BB	260997	2665240	88.18%	4.908%
7	9.657	9.621	9.721	BB	239943	2676698	88.55%	4.929%
8	11.095	11.054	11.161	BB	222508	2671678	88.39%	4.920%
9	11.399	11.361	11.461	BB	268482	3006153	99.45%	5.536%
10	12.401	12.361	12.461	BB	214041	2547036	84.27%	4.690%
11	12.841	12.801	12.904	BB	180766	2210712	73.14%	4.071%
12	13.011	12.971	13.074	BB	207142	2500910	82.74%	4.606%
13	13.595	13.554	13.658	BB	201306	2472408	81.80%	4.553%
14	14.696	14.648	14.761	BB	189927	2447601	80.98%	4.507%
15	15.714	15.638	15.774	BB	182011	2396918	79.30%	4.414%
16	16.662	16.598	16.721	BB	171008	2352553	77.83%	4.332%
17	17.548	17.478	17.608	BB	168872	2368324	78.35%	4.361%
18	18.379	18.311	18.431	BB	154550	2282342	75.51%	4.203%
19	19.160	19.121	19.211	BB	143746	2121381	70.18%	3.907%
20	19.898	19.851	19.944	BB	125666	1897153	62.76%	3.494%
21	20.609	20.551	20.658	BB	106434	1768616	58.51%	3.257%
22	21.462	21.391	21.541	BB	75880	1709466	56.56%	3.148%
			Sum of corrected areas:			54302432		

Aliphatic EPH 021125.M Tue Feb 11 02:40:39 2025

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

Inital Calibration Report for SequenceID : FD021125AR

AreaCount

Parameter Range	FD049072.D	FD049073.D	FD049074.D	FD049075.D	FD049076.D	
Aromatic C10-C12	30133782.000	15194817.000	6263156.000	3318077.000	1700032.000	
Aromatic C12-C16	44977690.000	22823722.000	9507721.000	5041964.000	2641021.000	
Aromatic C16-C21	58435647.000	29734390.000	12145436.000	6295751.000	3256475.000	
Aromatic C21-C36	121981098.000	62220992.000	25499877.000	13225172.000	6892110.000	
Aromatic EPH	255528217.000	129973921.000	53416190.000	27880964.000	14489638.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aromatic C10-C12	159020.606	5.389				
Aromatic C12-C16	160935.8659994	6.836				
Aromatic C16-C21	153359.3085	4.411				
Aromatic C21-C36	143114.7526664	4.923				
Aromatic EPH	150128.8232216	5.194				

Concentration

Parameter Range	FD049072.D	FD049073.D	FD049074.D	FD049075.D	FD049076.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	FD049072.D	FD049073.D	FD049074.D	FD049075.D	FD049076.D	
Aromatic C10-C12	150668.910000	151948.170000	156578.900000	165903.850000	170003.200000	
Aromatic C12-C16	149925.633333	152158.146666	158462.016666	168065.466666	176068.066666	
Aromatic C16-C21	146089.117500	148671.950000	151817.950000	157393.775000	162823.750000	
Aromatic C21-C36	135534.553333	138268.871111	141665.983333	146946.355555	153158.000000	
Aromatic EPH	141960.120555	144415.467777	148378.305555	154894.244444	160995.977777	

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049072.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 13:22
Operator : YP/AJ
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1

Integration File: autoint1.e
Quant Time: Feb 10 15:30:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:28:06 2025
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...	7.356	13521753	97.612 ug/ml
Spiked Amount	50.000		Recovery =	195.22%
6) S	2-Flurobiphenyl (SURR)	8.206	9031094	100.727 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	201.45%#
11) S	ortho-Terphenyl (SURR)	11.242	14903579	96.771 ug/ml
Spiked Amount	50.000		Recovery =	193.54%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.179	14869075	97.560 ug/ml
2) T	Naphthalene (C11.7)	5.697	15264707	98.585 ug/ml
3) T	2-Methylnaphthalene (...	6.744	14901306	97.974 ug/ml
5) T	Acenaphthylene (C15.06)	8.010	15174302	97.403 ug/ml
7) T	Acenaphthene (C15.5)	8.306	14902082	96.330 ug/ml
8) T	Flouorene (C16.55)	9.085	14990417	97.888 ug/ml
9) T	Phenanthrene (C19.36)	10.472	14561159	98.628 ug/ml
10) T	Anthracene (C19.43)	10.548	14369869	97.698 ug/ml
12) T	Fluoranthene (C21.85)	12.278	14577451	97.401 ug/ml
13) T	Pyrene (C20.8)	12.571	14514202	98.100 ug/ml
14) T	Benzo[a]anthracene (C...	14.441	13838427	101.145 ug/ml
15) T	Chrysene (C27.41)	14.487	14067276	95.042 ug/ml
16) T	benzo[b]fluoranthene ...	15.992	13742882	98.944 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.030	13818927	96.450 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.370	13061093	98.611 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.738	12478937	107.613 ug/ml
20) T	Dibenz[a,h]anthracene...	17.776	13100134	91.486 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.995	13295971	96.863 ug/ml

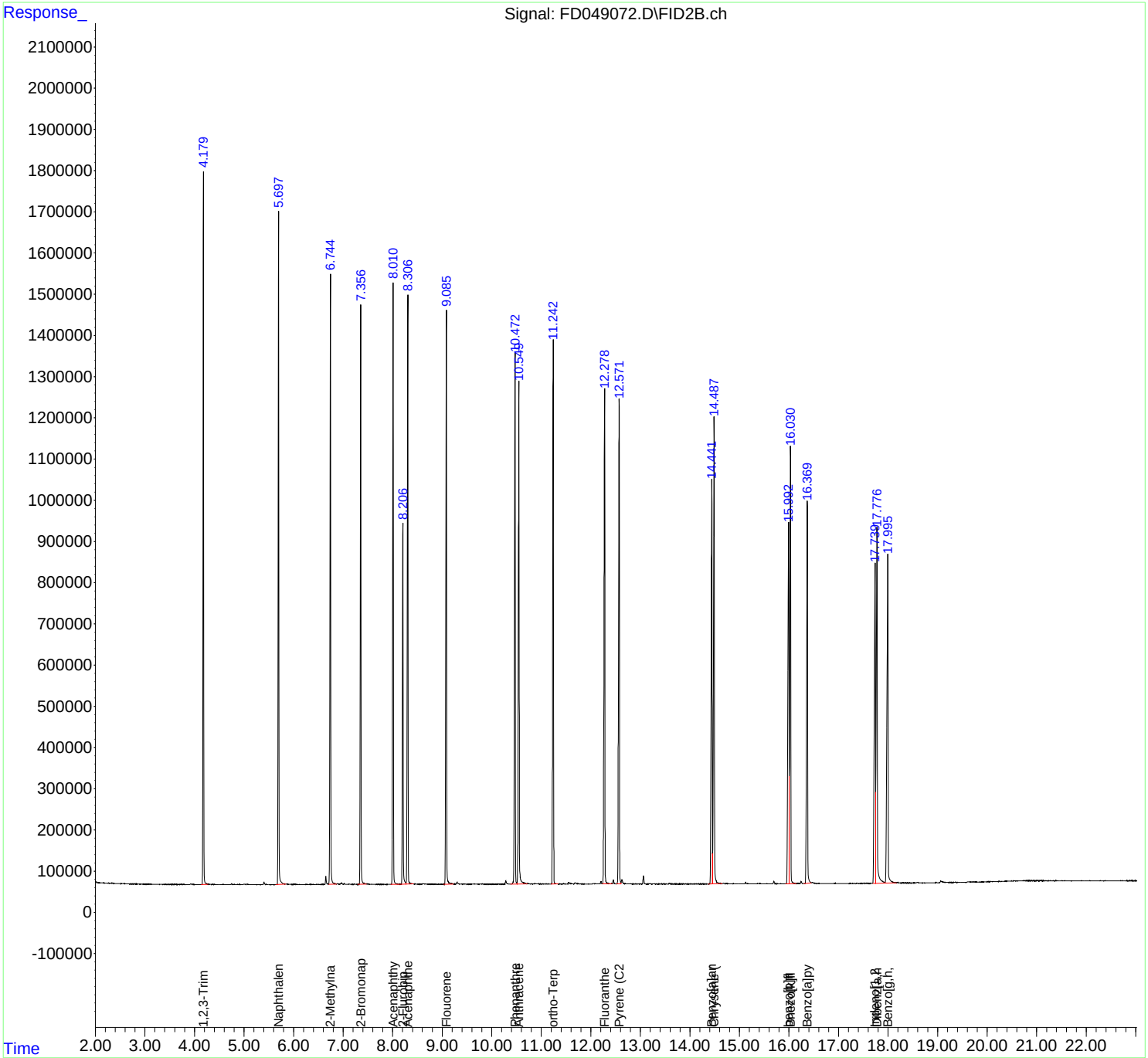
(f)=RT Delta > 1/2 Window (m)=manual int.

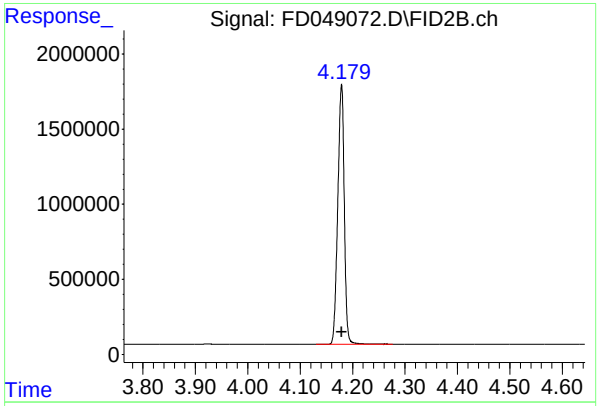
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049072.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 13:22
Operator : YP/AJ
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1

Integration File: autoint1.e
Quant Time: Feb 10 15:30:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:28:06 2025
Response via : Initial Calibration
Integrator: ChemStation

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

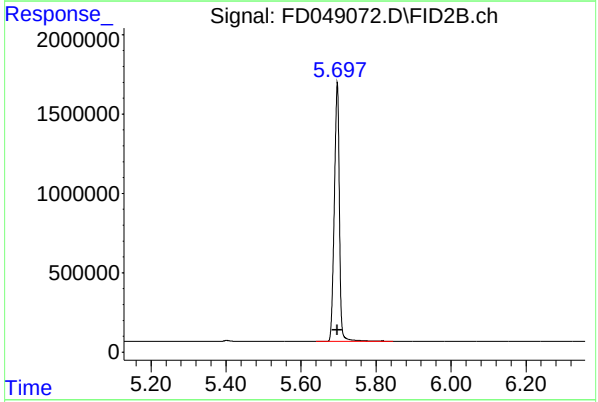




#1 1,2,3-Trimethylbenzene (C10.1)

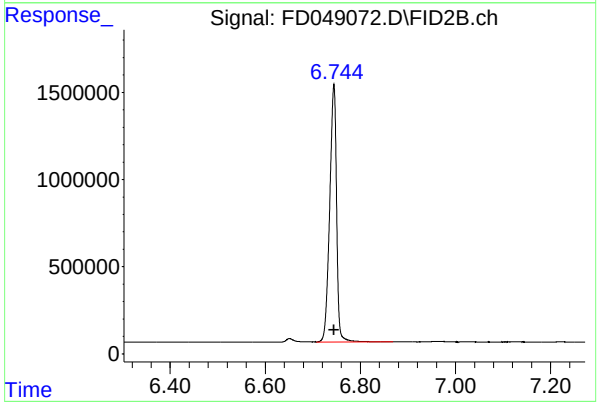
R.T.: 4.179 min
Delta R.T.: 0.000 min
Response: 14869075
Conc: 97.56 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



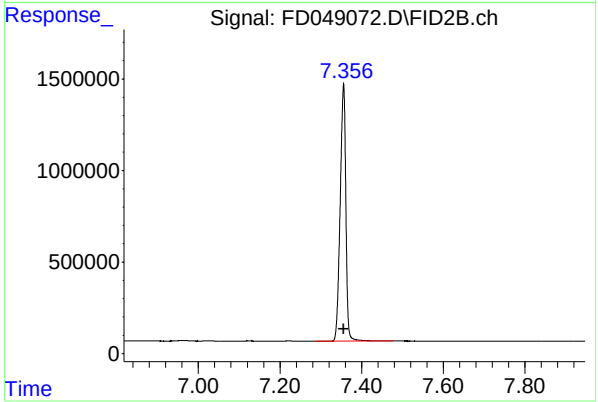
#2 Naphthalene (C11.7)

R.T.: 5.697 min
Delta R.T.: 0.000 min
Response: 15264707
Conc: 98.58 ug/ml



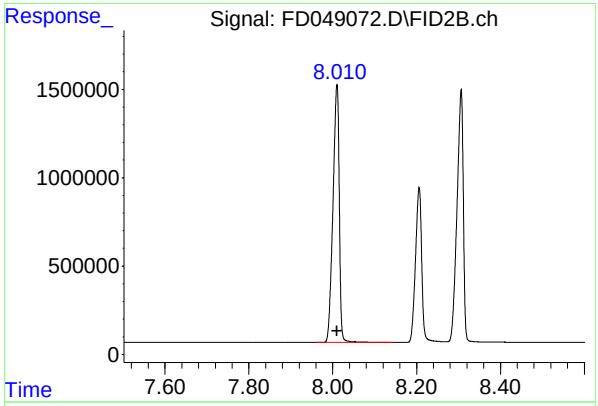
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.744 min
Delta R.T.: 0.000 min
Response: 14901306
Conc: 97.97 ug/ml



#4 2-Bromonaphthalene (SURR)

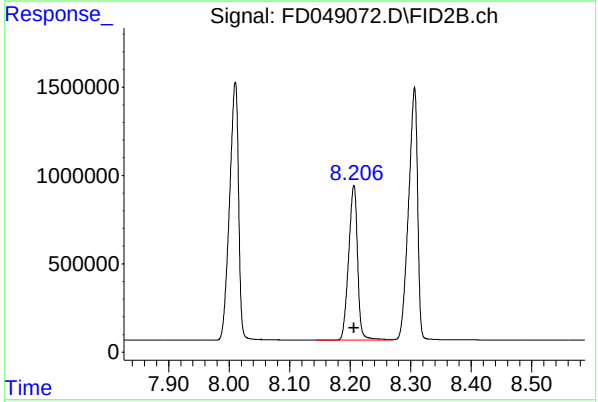
R.T.: 7.356 min
Delta R.T.: 0.000 min
Response: 13521753
Conc: 97.61 ug/ml



#5 Acenaphthylene (C15.06)

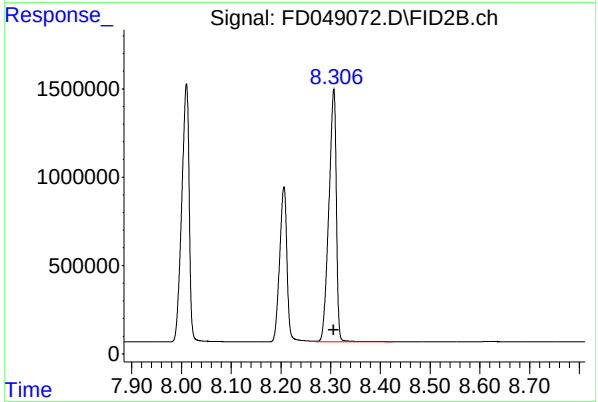
R.T.: 8.010 min
Delta R.T.: 0.000 min
Response: 15174302
Conc: 97.40 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



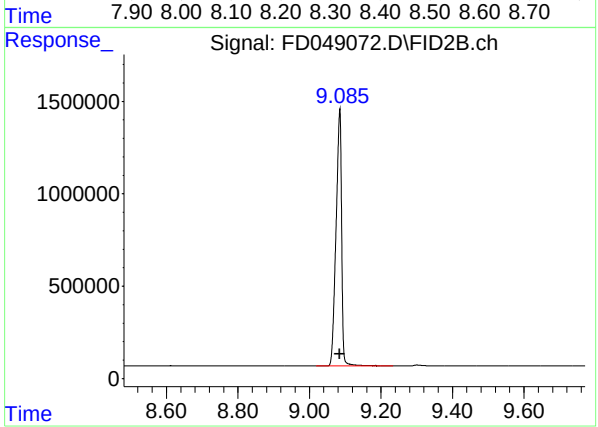
#6 2-Flurobiphenyl (SURR)

R.T.: 8.206 min
Delta R.T.: 0.000 min
Response: 9031094
Conc: 100.73 ug/ml



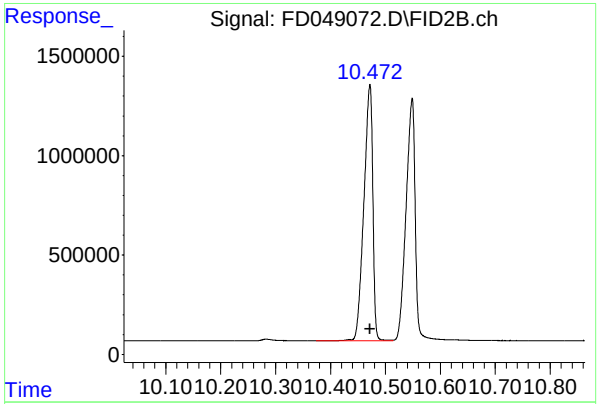
#7 Acenaphthene (C15.5)

R.T.: 8.306 min
Delta R.T.: 0.000 min
Response: 14902082
Conc: 96.33 ug/ml



#8 Flouorene (C16.55)

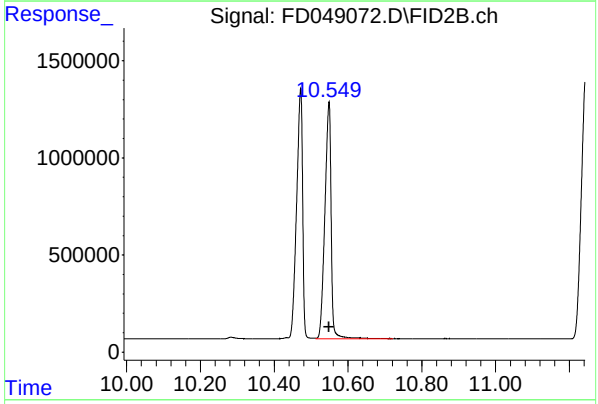
R.T.: 9.085 min
Delta R.T.: 0.000 min
Response: 14990417
Conc: 97.89 ug/ml



#9 Phenanthrene (C19.36)

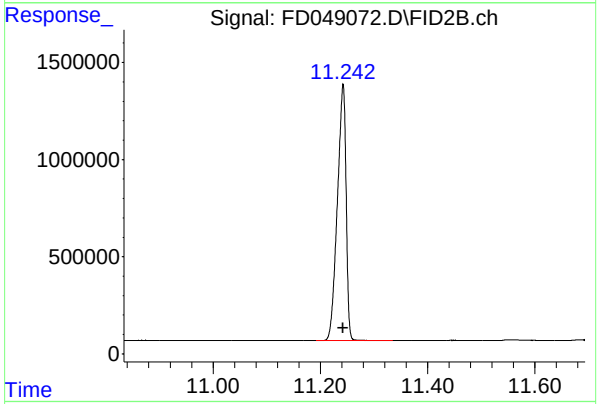
R.T.: 10.472 min
Delta R.T.: 0.000 min
Response: 14561159
Conc: 98.63 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



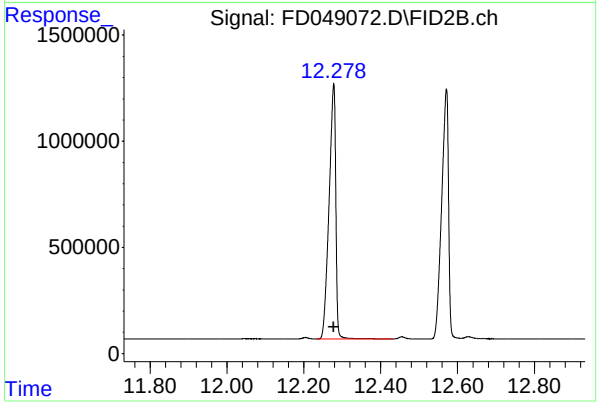
#10 Anthracene (C19.43)

R.T.: 10.548 min
Delta R.T.: 0.000 min
Response: 14369869
Conc: 97.70 ug/ml



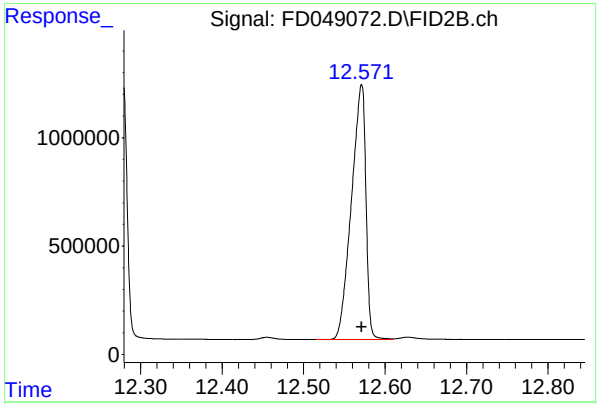
#11 ortho-Terphenyl (SURR)

R.T.: 11.242 min
Delta R.T.: 0.000 min
Response: 14903579
Conc: 96.77 ug/ml



#12 Fluoranthene (C21.85)

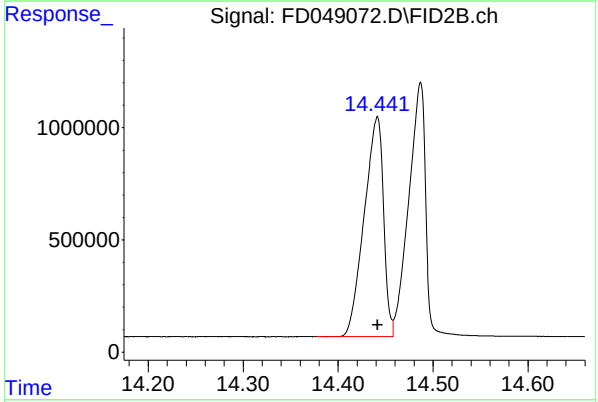
R.T.: 12.278 min
Delta R.T.: 0.000 min
Response: 14577451
Conc: 97.40 ug/ml



#13 Pyrene (C20.8)

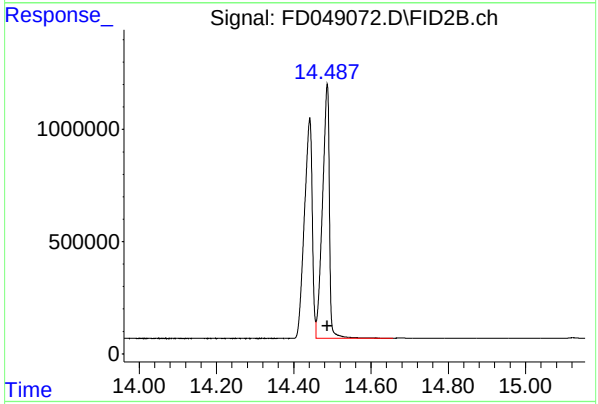
R.T.: 12.571 min
Delta R.T.: 0.000 min
Response: 14514202
Conc: 98.10 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



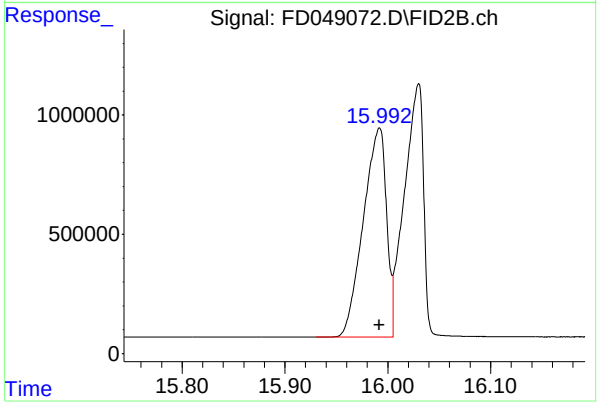
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.441 min
Delta R.T.: 0.000 min
Response: 13838427
Conc: 101.14 ug/ml



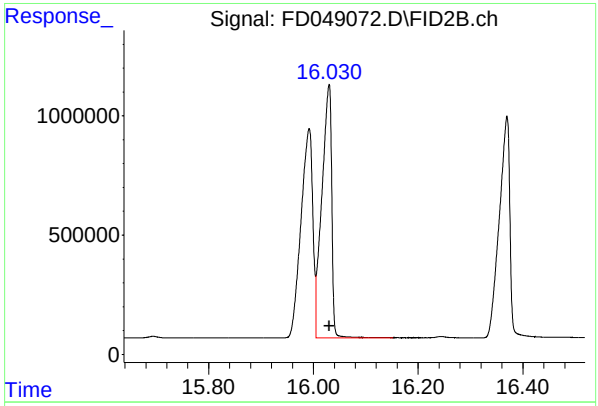
#15 Chrysene (C27.41)

R.T.: 14.487 min
Delta R.T.: 0.000 min
Response: 14067276
Conc: 95.04 ug/ml



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

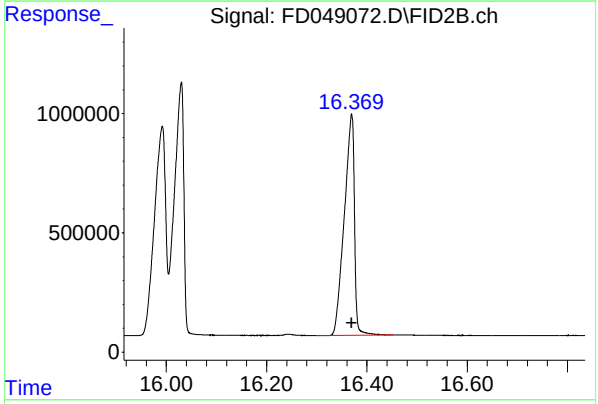
R.T.: 15.992 min
Delta R.T.: 0.000 min
Response: 13742882
Conc: 98.94 ug/ml



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

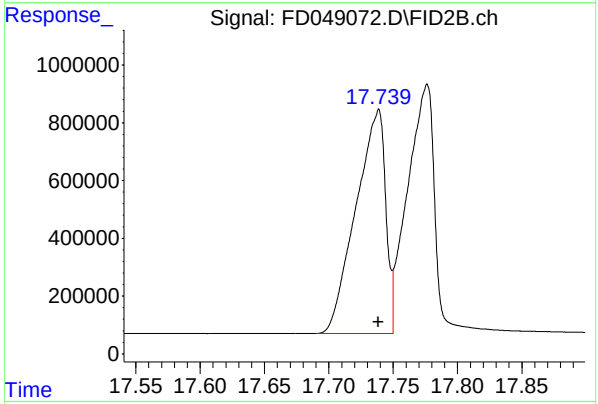
R.T.: 16.030 min
Delta R.T.: 0.000 min
Response: 13818927
Conc: 96.45 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



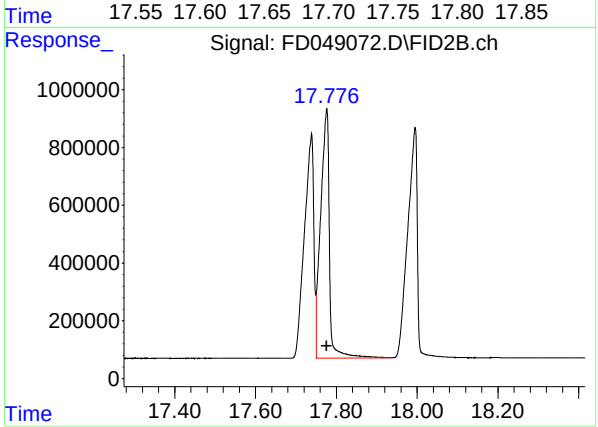
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.370 min
Delta R.T.: 0.000 min
Response: 13061093
Conc: 98.61 ug/ml



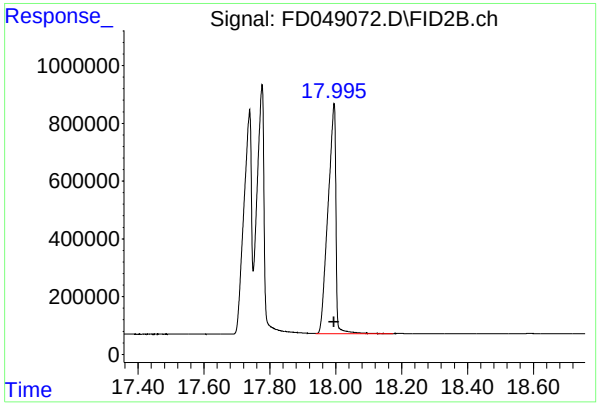
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.738 min
Delta R.T.: 0.000 min
Response: 12478937
Conc: 107.61 ug/ml



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

R.T.: 17.776 min
Delta R.T.: 0.000 min
Response: 13100134
Conc: 91.49 ug/ml



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

R.T.: 17.995 min
Delta R.T.: 0.000 mi
Response: 13295971
Conc: 96.86 ug/m

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049072.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 13:22
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.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	4.179	4.130	4.277	BV	1725911	14869075	97.41%	5.075%
2	5.697	5.640	5.845	BV	1634675	15264707	100.00%	5.210%
3	6.744	6.707	6.869	VV	1483646	14901306	97.62%	5.086%
4	7.356	7.289	7.477	BB	1400044	13521753	88.58%	4.615%
5	8.010	7.960	8.144	BB	1461744	15174302	99.41%	5.179%
6	8.206	8.144	8.271	BV	877931	9031094	59.16%	3.082%
7	8.306	8.271	8.425	VB	1434092	14902082	97.62%	5.086%
8	9.085	9.019	9.234	BB	1398721	14990417	98.20%	5.116%
9	10.472	10.374	10.514	BV	1291889	14561159	95.39%	4.970%
10	10.548	10.514	10.722	VB	1219536	14369869	94.14%	4.905%
11	11.242	11.192	11.335	BB	1319058	14903579	97.63%	5.087%
12	12.278	12.232	12.432	VV	1208983	14577451	95.50%	4.976%
13	12.571	12.515	12.610	BV	1180482	14514202	95.08%	4.954%
14	14.441	14.377	14.458	BV	983584	13838427	90.66%	4.723%
15	14.487	14.458	14.657	VV	1134752	14067276	92.16%	4.801%
16	15.992	15.930	16.005	BV	877521	13742882	90.03%	4.691%
17	16.030	16.005	16.152	VB	1064780	13818927	90.53%	4.717%
18	16.370	16.299	16.452	BV	929001	13061093	85.56%	4.458%
19	17.738	17.690	17.750	BV	775881	12478937	81.75%	4.259%
20	17.776	17.750	17.940	VV	865574	13100134	85.82%	4.471%
21	17.995	17.940	18.174	VV	799393	13295971	87.10%	4.538%

Sum of corrected areas: 292984644

Aromatic EPH 021125.M Tue Feb 11 00:32:56 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049073.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 13:58
Operator : YP/AJ
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 63 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2

Integration File: autoint1.e
Quant Time: Feb 10 15:32:44 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:28:06 2025
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...	7.352	6832671	49.548 ug/ml
	Spiked Amount 50.000		Recovery = 99.10%	
6)	S 2-Flurobiphenyl (SURR)	8.201	4519240	50.269 ug/ml
	Spiked Amount 50.000 Range 0 - 131		Recovery = 100.54%	
11)	S ortho-Terphenyl (SURR)	11.236	7609409	49.605 ug/ml
	Spiked Amount 50.000		Recovery = 99.21%	
	Target Compounds			
1)	T 1,2,3-Trimethylbenzen...	4.176	7483064	49.395 ug/ml
2)	T Naphthalene (C11.7)	5.693	7711753	49.870 ug/ml
3)	T 2-Methylnaphthalene (...	6.740	7516774	49.613 ug/ml
5)	T Acenaphthylene (C15.06)	8.005	7704821	49.636 ug/ml
7)	T Acenaphthene (C15.5)	8.300	7602127	49.425 ug/ml
8)	T Flouorene (C16.55)	9.078	7593219	49.722 ug/ml
9)	T Phenanthrene (C19.36)	10.465	7379729	49.990 ug/ml
10)	T Anthracene (C19.43)	10.541	7344304	49.955 ug/ml
12)	T Fluoranthene (C21.85)	12.270	7455312	49.876 ug/ml
13)	T Pyrene (C20.8)	12.562	7417138	50.088 ug/ml
14)	T Benzo[a]anthracene (C...	14.434	6964194	50.597 ug/ml
15)	T Chrysene (C27.41)	14.475	7274381	49.429 ug/ml
16)	T benzo[b]fluoranthene ...	15.983	6978240	50.160 ug/ml
17)	T Bnezo[k]fluoranthene ...	16.015	7115728	49.346 ug/ml
18)	T Benzo[a]pyrene (C31.34)	16.357	6633881	50.057 ug/ml
19)	T Indeno[1,2,3-cd]pyren...	17.724	5940391	50.812 ug/ml
20)	T Dibenz[a,h]anthracene...	17.760	7026106	49.374 ug/ml
21)	T Benzo[g,h,i]perylene ...	17.977	6832759	49.851 ug/ml

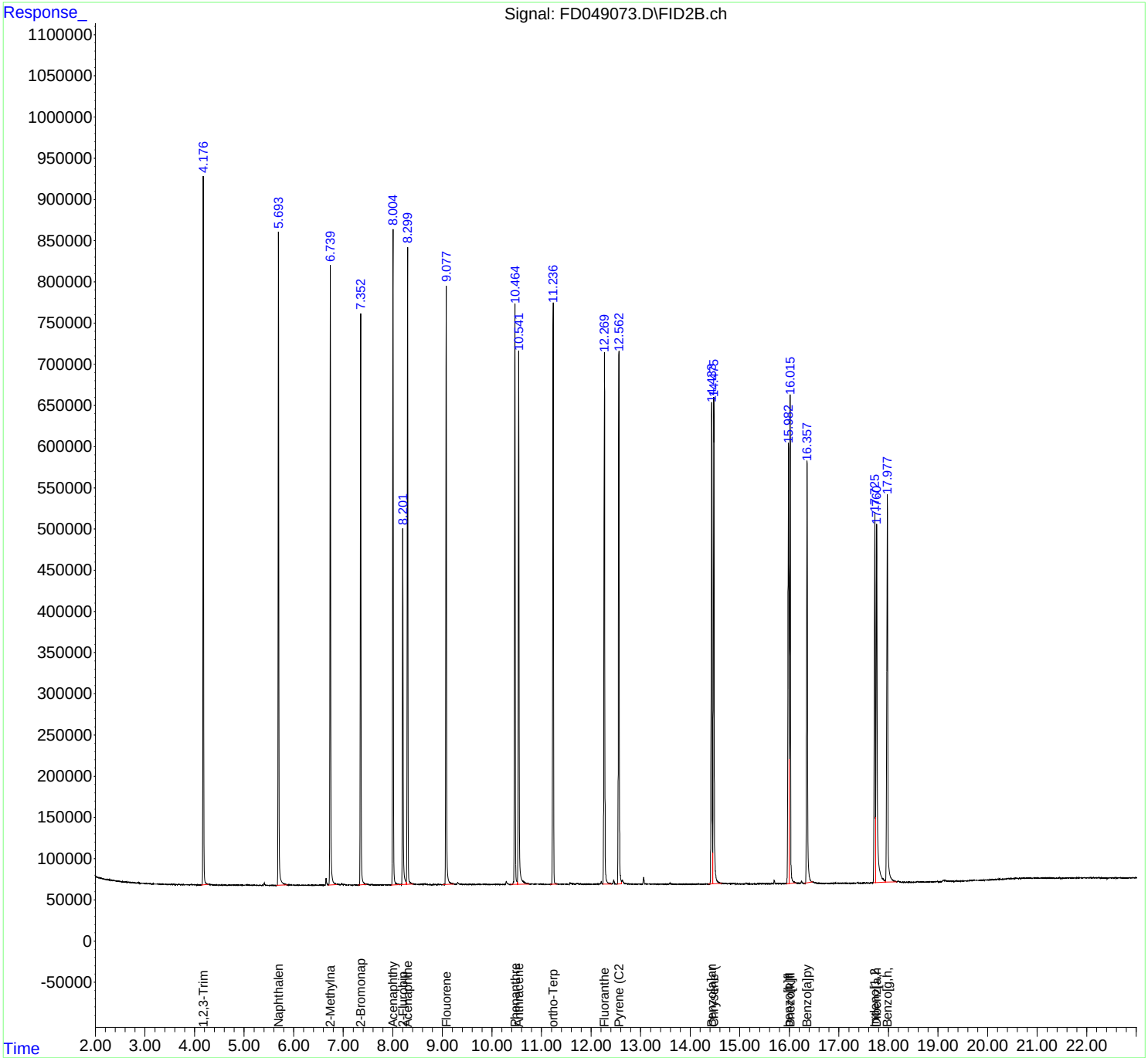
(f)=RT Delta > 1/2 Window (m)=manual int.

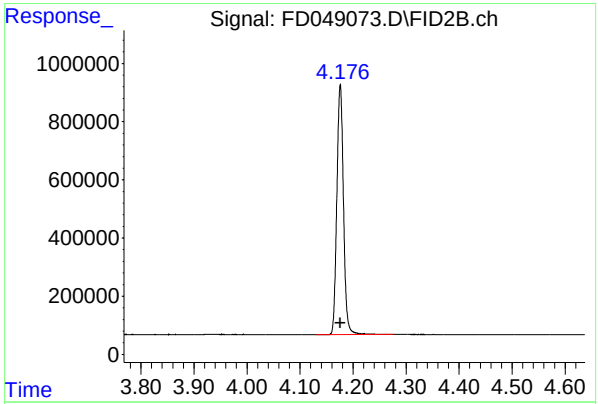
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049073.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 13:58
Operator : YP/AJ
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 63 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2

Integration File: autoint1.e
Quant Time: Feb 10 15:32:44 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:28:06 2025
Response via : Initial Calibration
Integrator: ChemStation

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

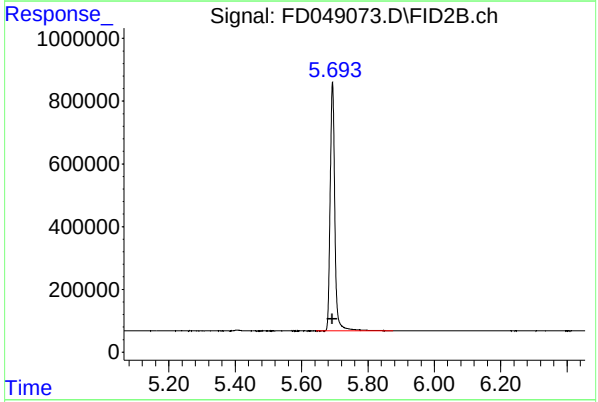




#1 1,2,3-Trimethylbenzene (C10.1)

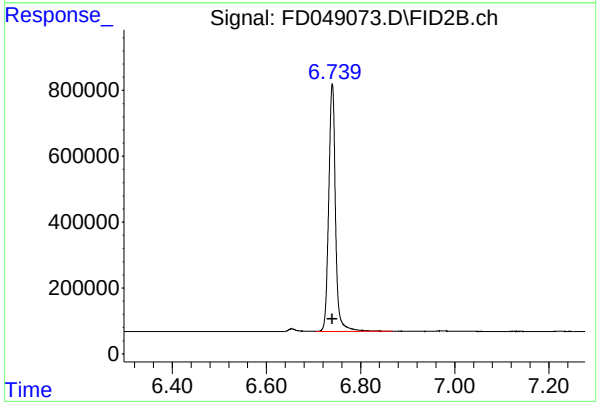
R.T.: 4.176 min
Delta R.T.: 0.000 min
Response: 7483064
Conc: 49.40 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



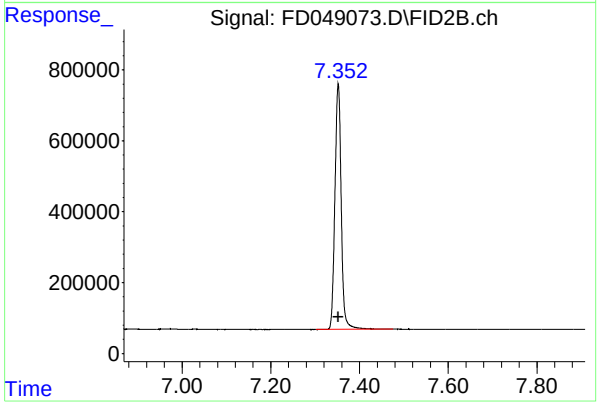
#2 Naphthalene (C11.7)

R.T.: 5.693 min
Delta R.T.: 0.000 min
Response: 7711753
Conc: 49.87 ug/ml



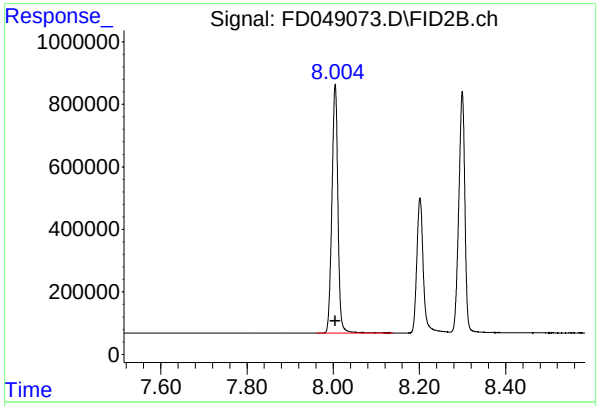
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.740 min
Delta R.T.: 0.000 min
Response: 7516774
Conc: 49.61 ug/ml



#4 2-Bromonaphthalene (SURR)

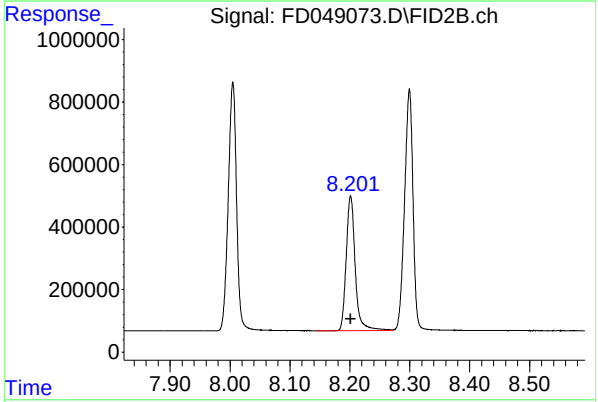
R.T.: 7.352 min
Delta R.T.: 0.000 min
Response: 6832671
Conc: 49.55 ug/ml



#5 Acenaphthylene (C15.06)

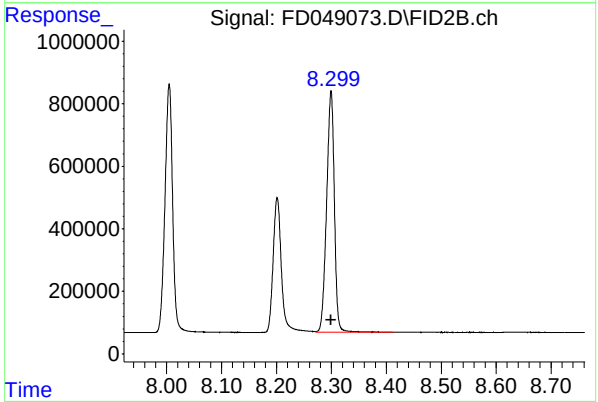
R.T.: 8.005 min
Delta R.T.: 0.000 min
Response: 7704821
Conc: 49.64 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



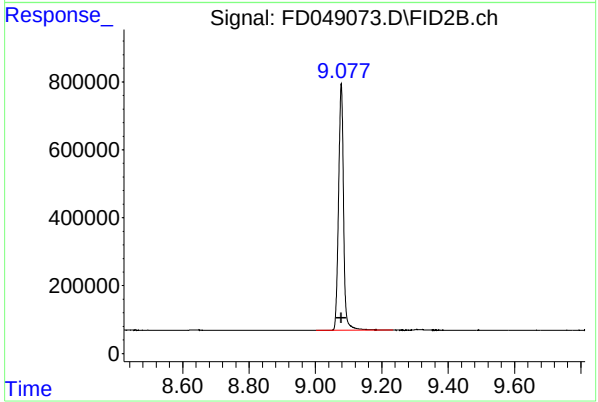
#6 2-Flurobiphenyl (SURR)

R.T.: 8.201 min
Delta R.T.: 0.000 min
Response: 4519240
Conc: 50.27 ug/ml



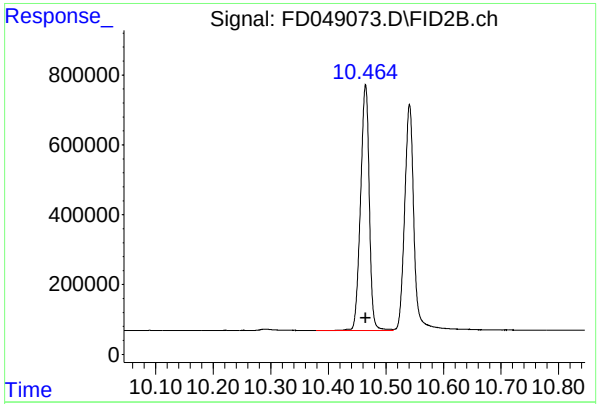
#7 Acenaphthene (C15.5)

R.T.: 8.300 min
Delta R.T.: 0.000 min
Response: 7602127
Conc: 49.42 ug/ml



#8 Flouorene (C16.55)

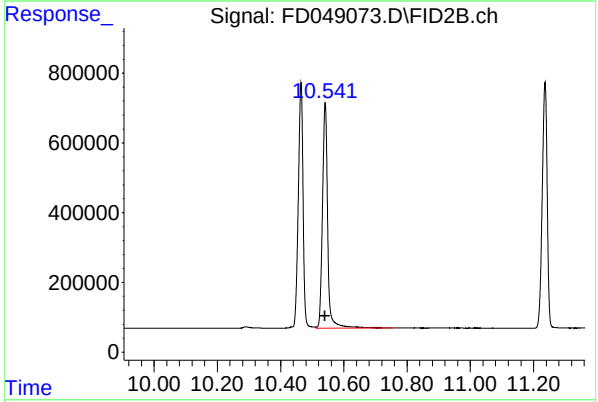
R.T.: 9.078 min
Delta R.T.: 0.000 min
Response: 7593219
Conc: 49.72 ug/ml



#9 Phenanthrene (C19.36)

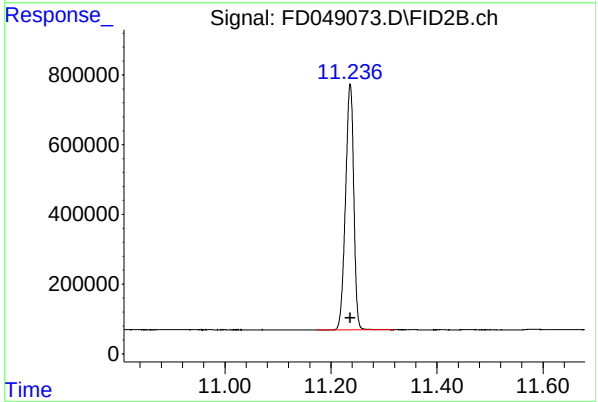
R.T.: 10.465 min
Delta R.T.: 0.000 min
Response: 7379729
Conc: 49.99 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



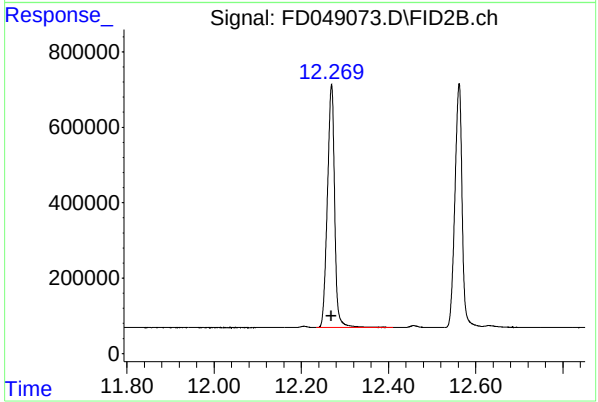
#10 Anthracene (C19.43)

R.T.: 10.541 min
Delta R.T.: 0.000 min
Response: 7344304
Conc: 49.96 ug/ml



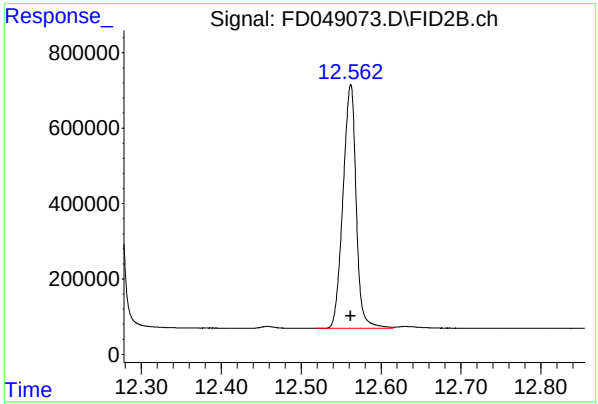
#11 ortho-Terphenyl (SURR)

R.T.: 11.236 min
Delta R.T.: 0.000 min
Response: 7609409
Conc: 49.60 ug/ml



#12 Fluoranthene (C21.85)

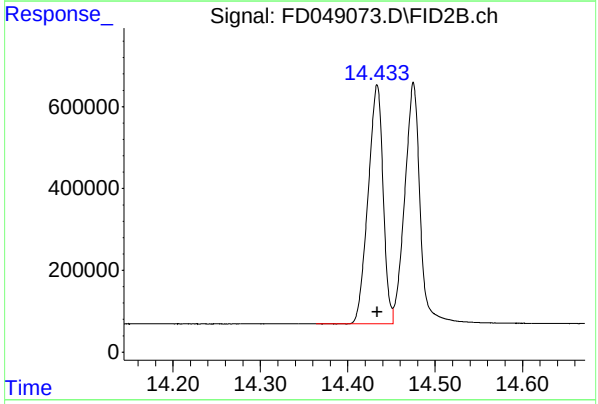
R.T.: 12.270 min
Delta R.T.: 0.000 min
Response: 7455312
Conc: 49.88 ug/ml



#13 Pyrene (C20.8)

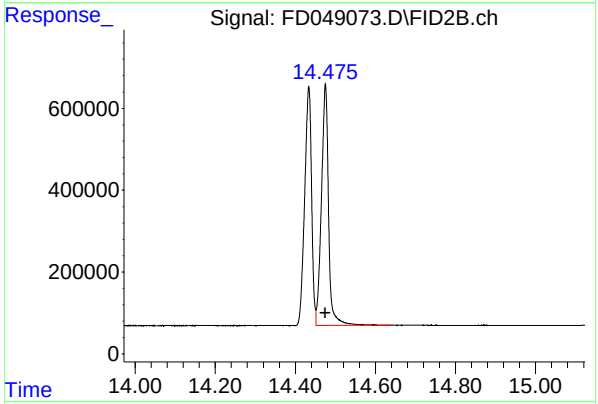
R.T.: 12.562 min
Delta R.T.: 0.000 min
Response: 7417138
Conc: 50.09 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



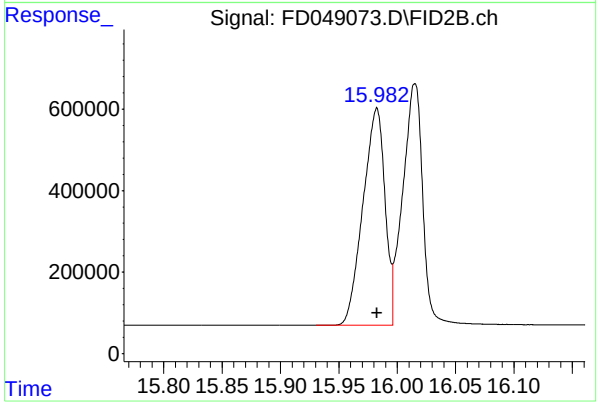
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.434 min
Delta R.T.: 0.000 min
Response: 6964194
Conc: 50.60 ug/ml



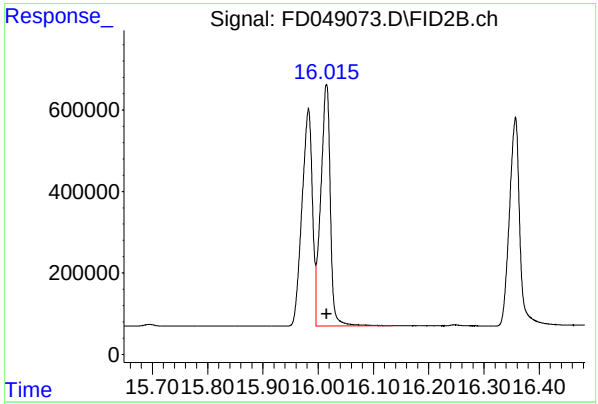
#15 Chrysene (C27.41)

R.T.: 14.475 min
Delta R.T.: 0.000 min
Response: 7274381
Conc: 49.43 ug/ml



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

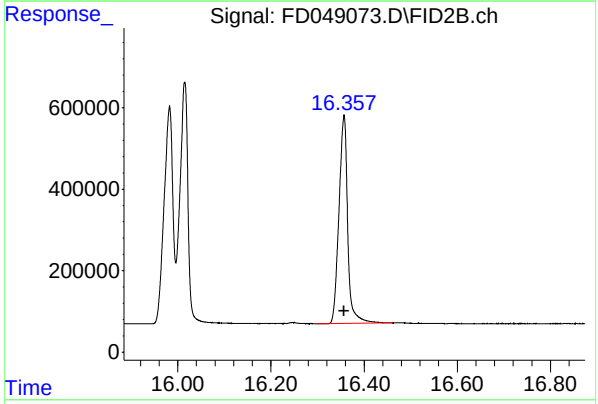
R.T.: 15.983 min
Delta R.T.: 0.000 min
Response: 6978240
Conc: 50.16 ug/ml



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

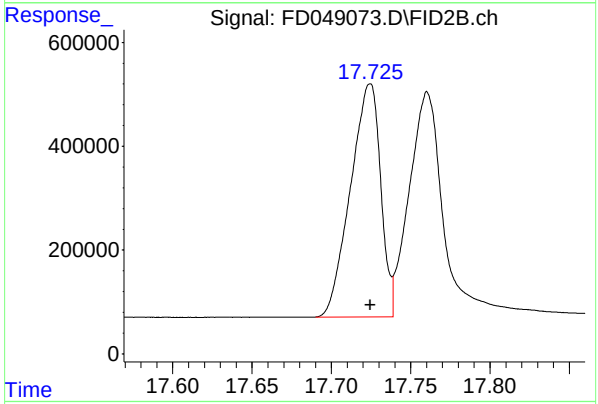
R.T.: 16.015 min
Delta R.T.: 0.000 min
Response: 7115728
Conc: 49.35 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



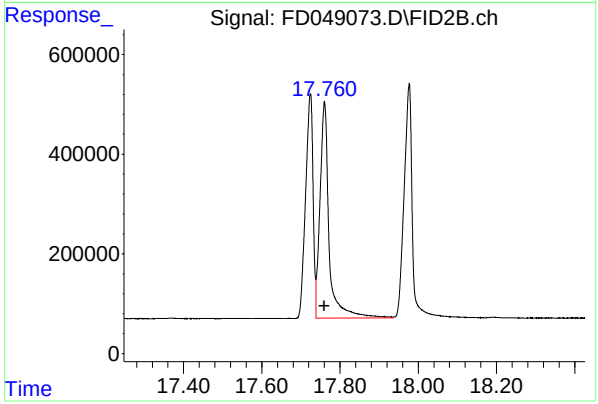
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.357 min
Delta R.T.: 0.000 min
Response: 6633881
Conc: 50.06 ug/ml



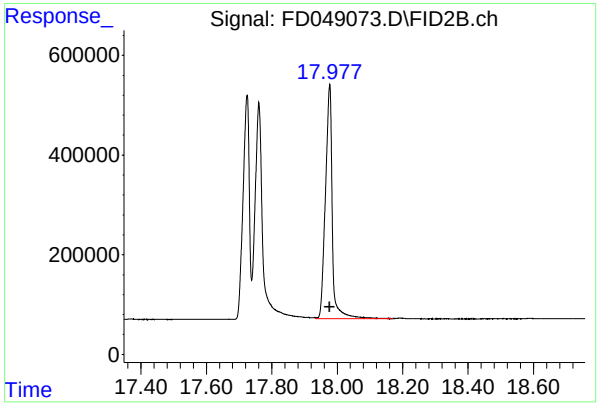
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.724 min
Delta R.T.: 0.000 min
Response: 5940391
Conc: 50.81 ug/ml



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

R.T.: 17.760 min
Delta R.T.: 0.000 min
Response: 7026106
Conc: 49.37 ug/ml



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

R.T.: 17.977 min
Delta R.T.: 0.000 mi
Response: 6832759
Conc: 49.85 ug/m

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049073.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 13:58
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.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	4.176	4.130	4.275	BB	856930	7483064	97.03%	5.024%
2	5.693	5.644	5.875	BB	793670	7711753	100.00%	5.178%
3	6.740	6.705	6.869	VV	752280	7516774	97.47%	5.047%
4	7.352	7.302	7.475	BB	692518	6832671	88.60%	4.588%
5	8.005	7.960	8.139	BB	796415	7704821	99.91%	5.173%
6	8.201	8.144	8.272	BV	430213	4519240	58.60%	3.034%
7	8.300	8.272	8.412	VB	773593	7602127	98.58%	5.104%
8	9.078	9.002	9.234	BB	724789	7593219	98.46%	5.098%
9	10.465	10.379	10.512	BV	704297	7379729	95.69%	4.955%
10	10.541	10.512	10.755	VB	647346	7344304	95.24%	4.931%
11	11.236	11.172	11.317	BB	704623	7609409	98.67%	5.109%
12	12.270	12.234	12.410	PV	646673	7455312	96.67%	5.006%
13	12.562	12.519	12.615	BV	647073	7417138	96.18%	4.980%
14	14.434	14.364	14.452	BV	584665	6964194	90.31%	4.676%
15	14.475	14.452	14.644	VB	589498	7274381	94.33%	4.884%
16	15.983	15.930	15.996	BV	532011	6978240	90.49%	4.685%
17	16.015	15.996	16.135	VB	592968	7115728	92.27%	4.778%
18	16.357	16.297	16.462	BV	511495	6633881	86.02%	4.454%
19	17.724	17.690	17.739	BV	449892	5940391	77.03%	3.989%
20	17.760	17.739	17.935	VV	434204	7026106	91.11%	4.718%
21	17.977	17.935	18.170	VV	469618	6832759	88.60%	4.588%

Sum of corrected areas: 148935240

Aromatic EPH 021125.M Tue Feb 11 00:33:22 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049074.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 14:35
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 64 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3

Integration File: autoint1.e
Quant Time: Feb 10 15:28:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:28:06 2025
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...	7.351	2836644	20.000 ug/ml
	Spiked Amount 50.000		Recovery = 40.00%	
6)	S 2-Flurobiphenyl (SURR)	8.202	1780140	20.000 ug/ml
	Spiked Amount 50.000 Range 0 - 131		Recovery = 40.00%	
11)	S ortho-Terphenyl (SURR)	11.233	3179603	20.000 ug/ml
	Spiked Amount 50.000		Recovery = 40.00%	
	Target Compounds			
1)	T 1,2,3-Trimethylbenzen...	4.176	3122576	20.000 ug/ml
2)	T Naphthalene (C11.7)	5.693	3140580	20.000 ug/ml
3)	T 2-Methylnaphthalene (...	6.739	3103501	20.000 ug/ml
5)	T Acenaphthylene (C15.06)	8.003	3196723	20.000 ug/ml
7)	T Acenaphthene (C15.5)	8.296	3207497	20.000 ug/ml
8)	T Flouorene (C16.55)	9.076	3127465	20.000 ug/ml
9)	T Phenanthrene (C19.36)	10.463	2993262	20.000 ug/ml
10)	T Anthracene (C19.43)	10.540	3009407	20.000 ug/ml
12)	T Fluoranthene (C21.85)	12.267	3071055	20.000 ug/ml
13)	T Pyrene (C20.8)	12.558	3015302	20.000 ug/ml
14)	T Benzo[a]anthracene (C...	14.429	2705035	20.000 ug/ml
15)	T Chrysene (C27.41)	14.469	3106970	20.000 ug/ml
16)	T benzo[b]fluoranthene ...	15.976	2807258	20.000 ug/ml
17)	T Bnezo[k]fluoranthene ...	16.006	3041925	20.000 ug/ml
18)	T Benzo[a]pyrene (C31.34)	16.354	2685830	20.000 ug/ml
19)	T Indeno[1,2,3-cd]pyren...	17.718	2142662	20.000 ug/ml
20)	T Dibenz[a,h]anthracene...	17.759	3107681	20.000 ug/ml
21)	T Benzo[g,h,i]perylene ...	17.966	2831461	20.000 ug/ml

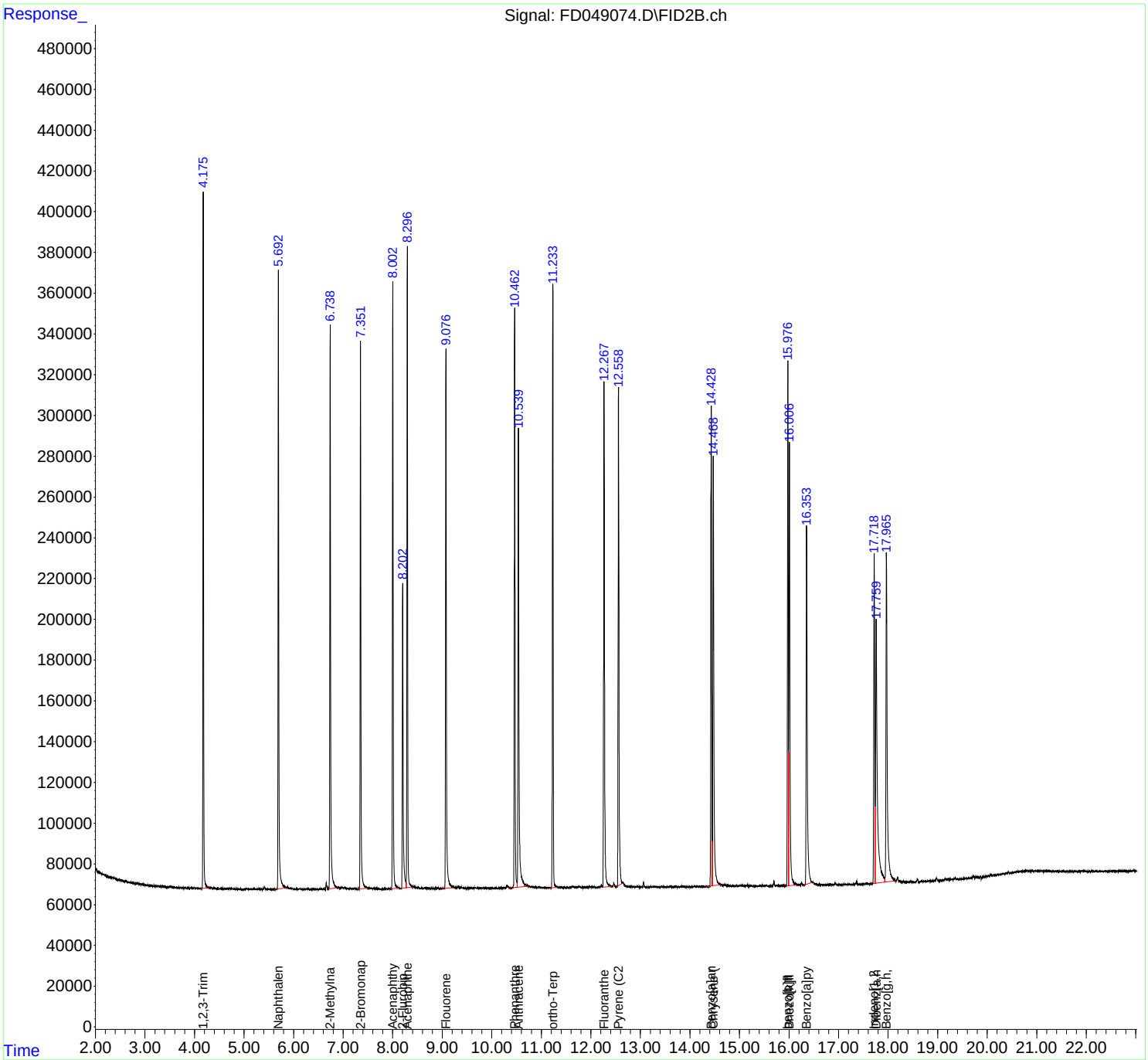
(f)=RT Delta > 1/2 Window (m)=manual int.

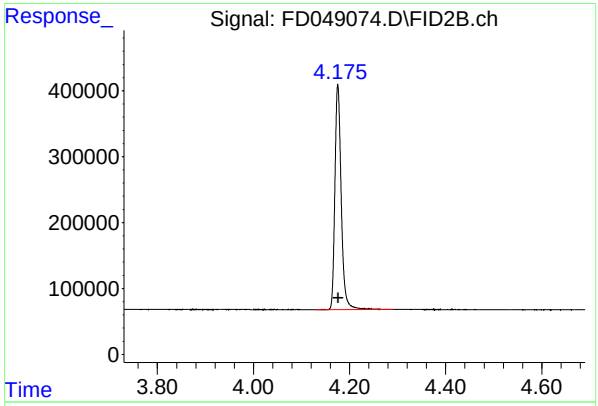
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049074.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 14:35
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 64 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3

Integration File: autoint1.e
Quant Time: Feb 10 15:28:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:28:06 2025
Response via : Initial Calibration
Integrator: ChemStation

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

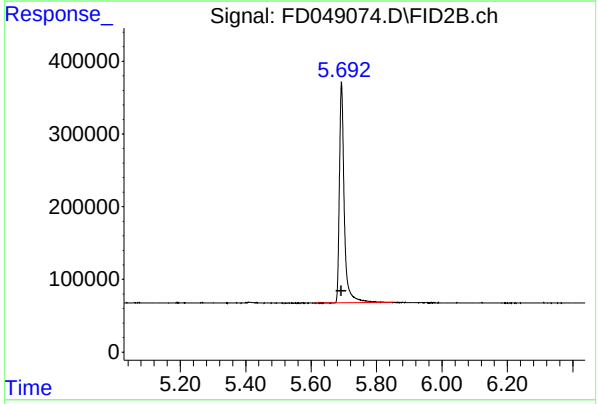




#1 1,2,3-Trimethylbenzene (C10.1)

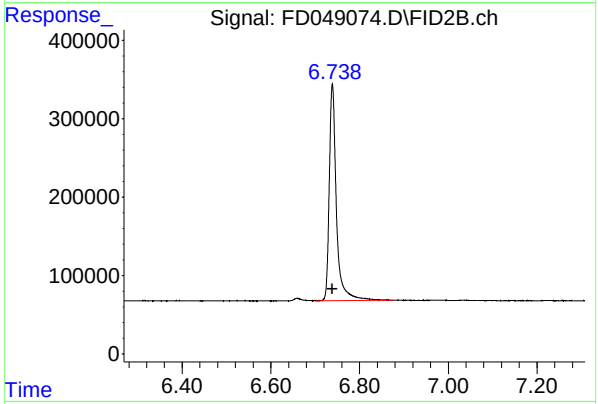
R.T.: 4.176 min
Delta R.T.: 0.000 min
Response: 3122576
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



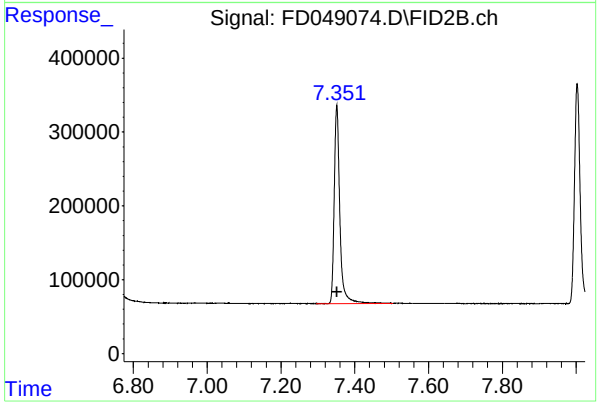
#2 Naphthalene (C11.7)

R.T.: 5.693 min
Delta R.T.: 0.000 min
Response: 3140580
Conc: 20.00 ug/ml



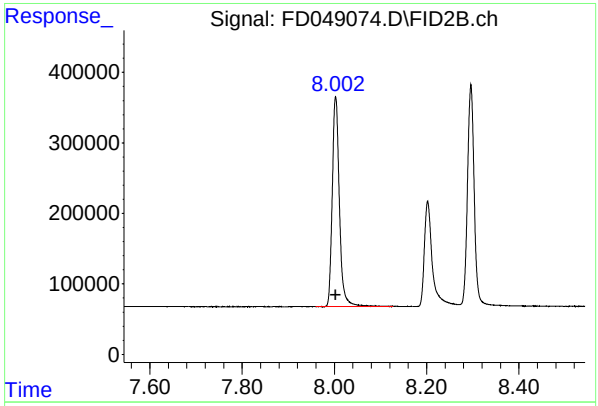
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.739 min
Delta R.T.: 0.000 min
Response: 3103501
Conc: 20.00 ug/ml



#4 2-Bromonaphthalene (SURR)

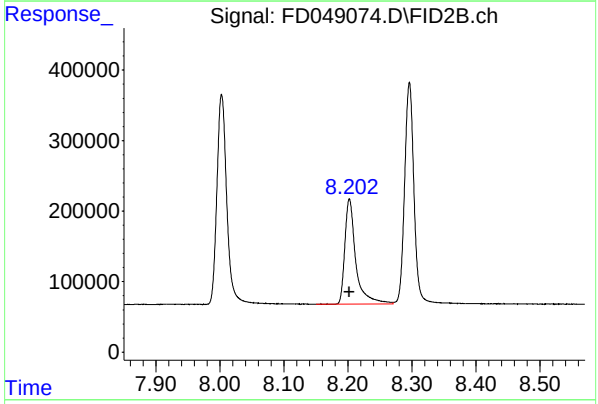
R.T.: 7.351 min
Delta R.T.: 0.000 min
Response: 2836644
Conc: 20.00 ug/ml



#5 Acenaphthylene (C15.06)

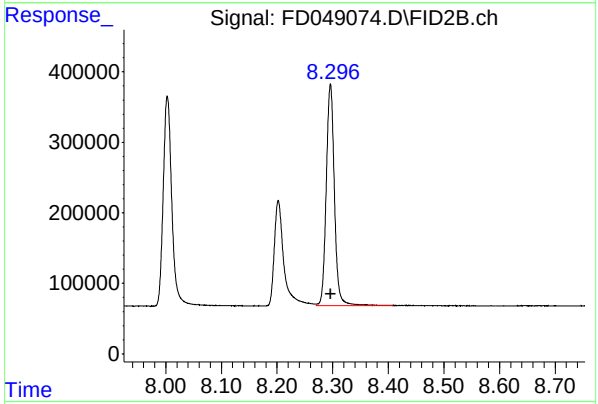
R.T.: 8.003 min
Delta R.T.: 0.000 min
Response: 3196723
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



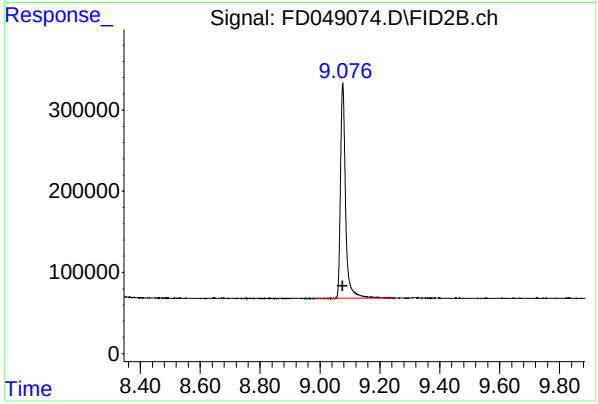
#6 2-Flurobiphenyl (SURR)

R.T.: 8.202 min
Delta R.T.: 0.000 min
Response: 1780140
Conc: 20.00 ug/ml



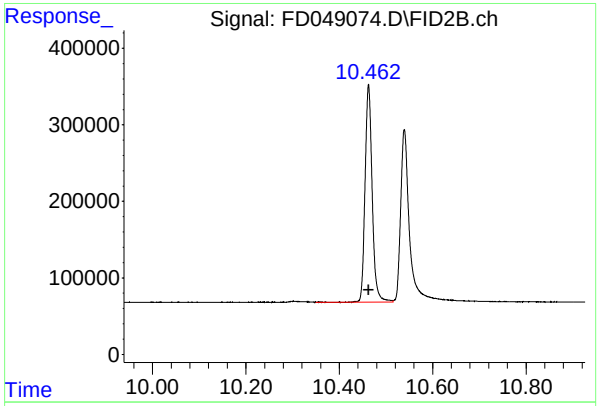
#7 Acenaphthene (C15.5)

R.T.: 8.296 min
Delta R.T.: 0.000 min
Response: 3207497
Conc: 20.00 ug/ml



#8 Flouorene (C16.55)

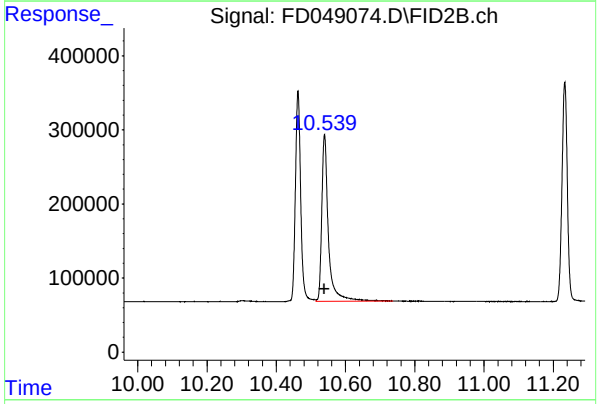
R.T.: 9.076 min
Delta R.T.: 0.000 min
Response: 3127465
Conc: 20.00 ug/ml



#9 Phenanthrene (C19.36)

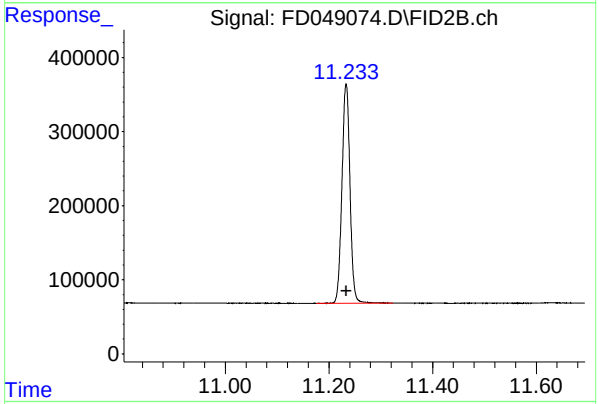
R.T.: 10.463 min
Delta R.T.: 0.000 min
Response: 2993262
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



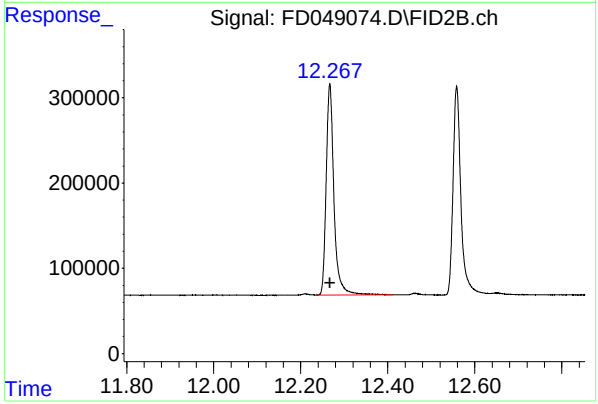
#10 Anthracene (C19.43)

R.T.: 10.540 min
Delta R.T.: 0.000 min
Response: 3009407
Conc: 20.00 ug/ml



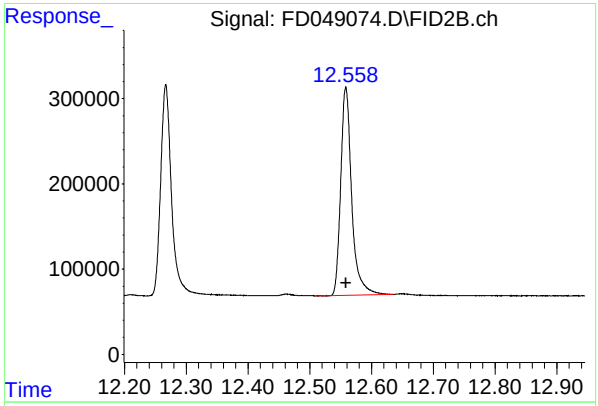
#11 ortho-Terphenyl (SURR)

R.T.: 11.233 min
Delta R.T.: 0.000 min
Response: 3179603
Conc: 20.00 ug/ml



#12 Fluoranthene (C21.85)

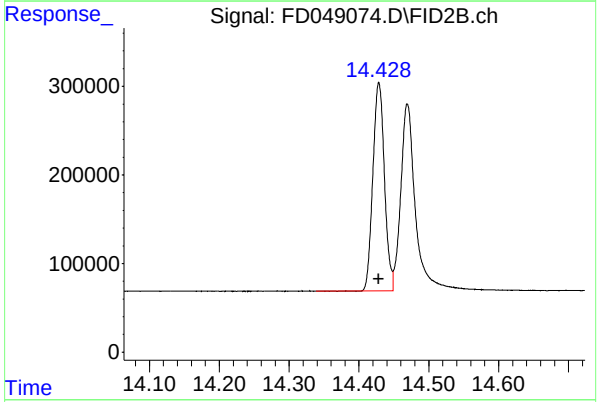
R.T.: 12.267 min
Delta R.T.: 0.000 min
Response: 3071055
Conc: 20.00 ug/ml



#13 Pyrene (C20.8)

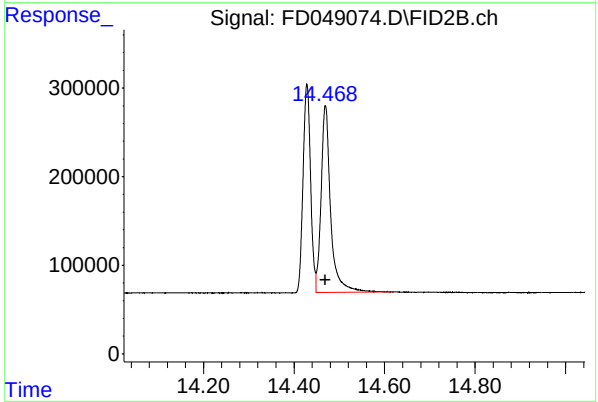
R.T.: 12.558 min
Delta R.T.: 0.000 min
Response: 3015302
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



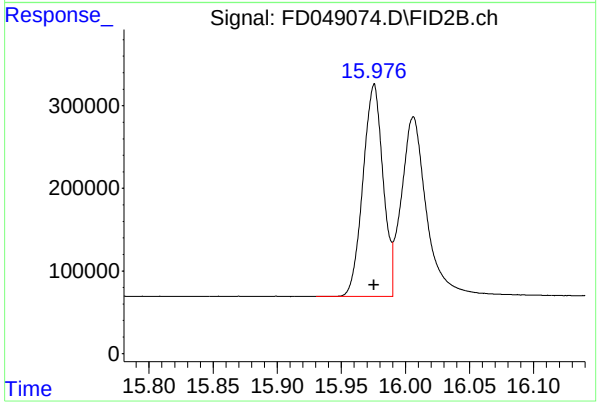
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.429 min
Delta R.T.: 0.000 min
Response: 2705035
Conc: 20.00 ug/ml



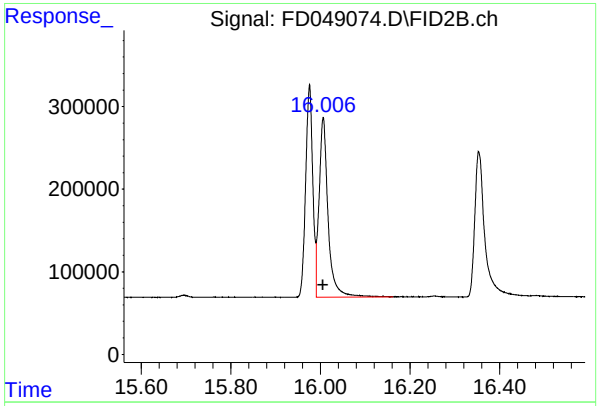
#15 Chrysene (C27.41)

R.T.: 14.469 min
Delta R.T.: 0.000 min
Response: 3106970
Conc: 20.00 ug/ml



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

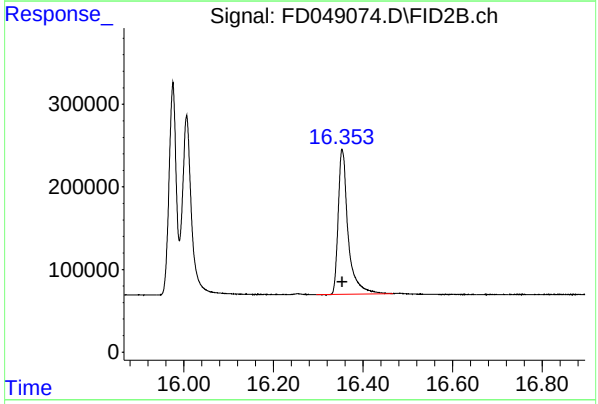
R.T.: 15.976 min
Delta R.T.: 0.000 min
Response: 2807258
Conc: 20.00 ug/ml



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

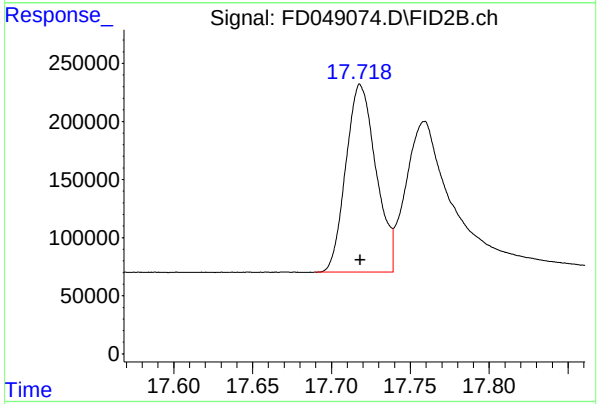
R.T.: 16.006 min
Delta R.T.: 0.000 min
Response: 3041925
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



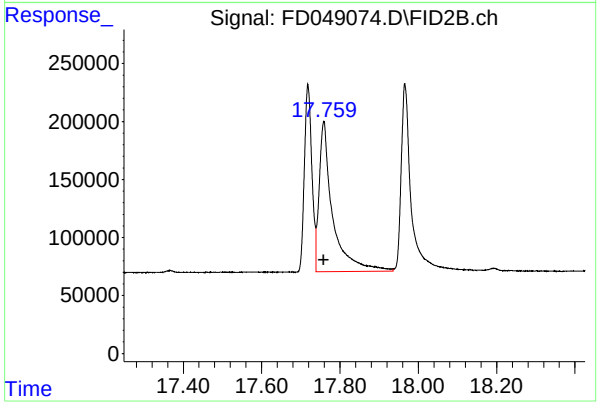
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.354 min
Delta R.T.: 0.000 min
Response: 2685830
Conc: 20.00 ug/ml



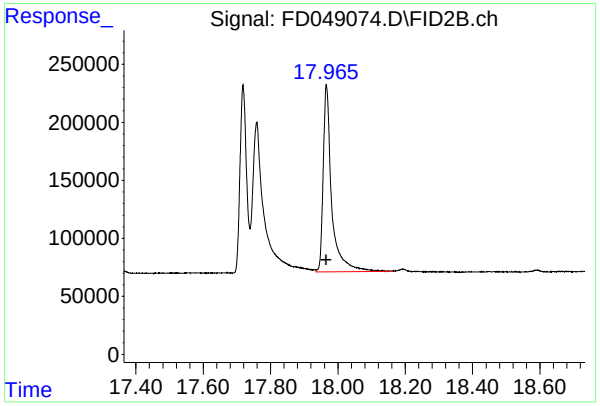
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.718 min
Delta R.T.: 0.000 min
Response: 2142662
Conc: 20.00 ug/ml



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

R.T.: 17.759 min
Delta R.T.: 0.000 min
Response: 3107681
Conc: 20.00 ug/ml



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

R.T.: 17.966 min
Delta R.T.: 0.000 mi
Response: 2831461
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\FD021125AR\
Data File : FD049074.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 14:35
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.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	4.176	4.130	4.290	BB	341507	3122576	97.35%	5.101%
2	5.693	5.615	5.850	BB	302052	3140580	97.91%	5.131%
3	6.739	6.702	6.875	PV	276834	3103501	96.76%	5.070%
4	7.351	7.295	7.504	BB	268948	2836644	88.44%	4.634%
5	8.003	7.960	8.127	BB	296889	3196723	99.66%	5.222%
6	8.202	8.150	8.270	BV	149509	1780140	55.50%	2.908%
7	8.296	8.270	8.409	VB	315086	3207497	100.00%	5.240%
8	9.076	8.987	9.244	BB	264582	3127465	97.50%	5.109%
9	10.463	10.350	10.515	BV	283529	2993262	93.32%	4.890%
10	10.540	10.515	10.737	VB	225555	3009407	93.82%	4.916%
11	11.233	11.175	11.324	BB	295969	3179603	99.13%	5.194%
12	12.267	12.235	12.412	PB	247743	3071055	95.75%	5.017%
13	12.558	12.510	12.635	PV	244074	3015302	94.01%	4.926%
14	14.429	14.339	14.449	BV	235372	2705035	84.33%	4.419%
15	14.469	14.449	14.619	VB	210710	3106970	96.87%	5.076%
16	15.976	15.930	15.990	BV	256347	2807258	87.52%	4.586%
17	16.006	15.990	16.162	VB	217937	3041925	94.84%	4.969%
18	16.354	16.295	16.467	BV	175364	2685830	83.74%	4.388%
19	17.718	17.690	17.739	BV	161338	2142662	66.80%	3.500%
20	17.759	17.739	17.935	VV	129645	3107681	96.89%	5.077%
21	17.966	17.935	18.164	VV	161614	2831461	88.28%	4.626%

Sum of corrected areas: 61212576

Aromatic EPH 021125.M Tue Feb 11 00:33:40 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049075.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 15:12
Operator : YP/AJ
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 65 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

Integration File: autoint1.e
Quant Time: Feb 10 15:56:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:56:39 2025
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...	7.353	1471043	10.492 ug/ml
Spiked Amount	50.000		Recovery =	20.98%
6) S	2-Flurobiphenyl (SURR)	8.207	875829	9.805 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	19.61%
11) S	ortho-Terphenyl (SURR)	11.234	1694149	10.763 ug/ml
Spiked Amount	50.000		Recovery =	21.53%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.177	1656548	10.685 ug/ml
2) T	Naphthalene (C11.7)	5.695	1661529	10.548 ug/ml
3) T	2-Methylnaphthalene (...	6.741	1621317	10.517 ug/ml
5) T	Acenaphthylene (C15.06)	8.005	1694814	10.673 ug/ml
7) T	Acenaphthene (C15.5)	8.297	1725833	10.888 ug/ml
8) T	Flouorene (C16.55)	9.079	1621856	10.458 ug/ml
9) T	Phenanthrene (C19.36)	10.465	1539045	10.316 ug/ml
10) T	Anthracene (C19.43)	10.542	1567931	10.490 ug/ml
12) T	Fluoranthene (C21.85)	12.271	1592182	10.481 ug/ml
13) T	Pyrene (C20.8)	12.562	1566919	10.430 ug/ml
14) T	Benzo[a]anthracene (C...	14.431	1271690	9.418 ug/ml
15) T	Chrysene (C27.41)	14.471	1725375	11.239 ug/ml
16) T	benzo[b]fluoranthene ...	15.977	1376748	9.922 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.009	1686985	11.222 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.362	1358701	10.188 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.728	1005197	8.910 ug/ml
20) T	Dibenz[a,h]anthracene...	17.771	1692264	11.355 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.973	1516030	10.775 ug/ml

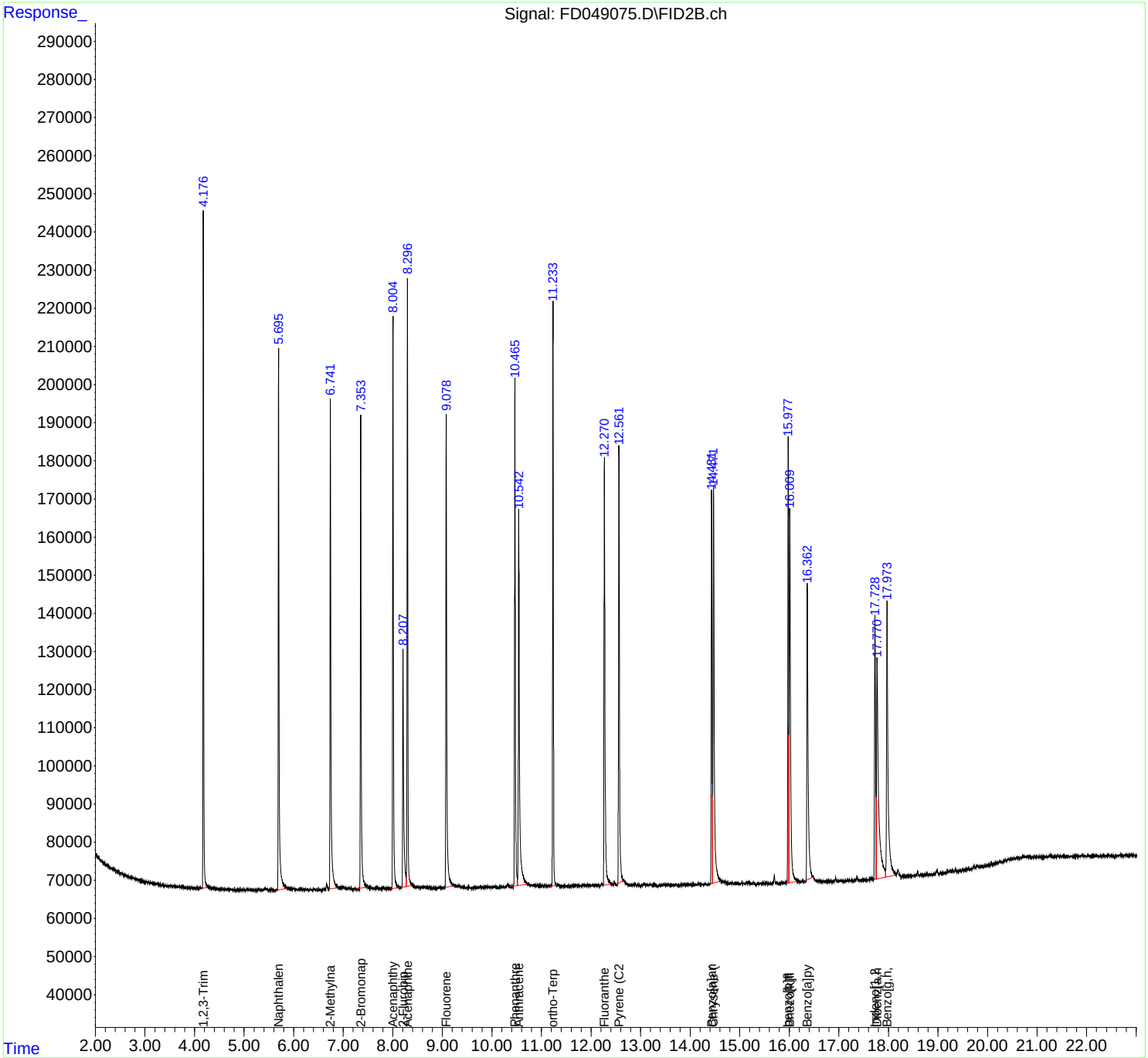
(f)=RT Delta > 1/2 Window (m)=manual int.

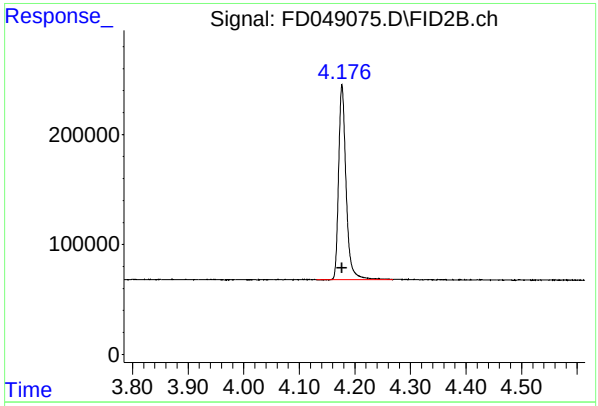
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049075.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 15:12
Operator : YP/AJ
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 65 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

Integration File: autoint1.e
Quant Time: Feb 10 15:56:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:56:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

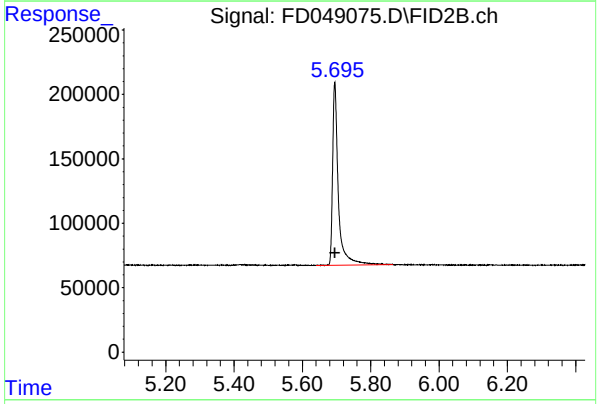




#1 1,2,3-Trimethylbenzene (C10.1)

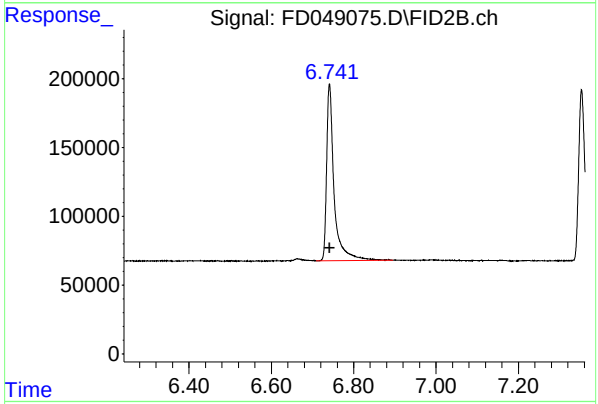
R.T.: 4.177 min
Delta R.T.: 0.000 min
Response: 1656548
Conc: 10.69 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



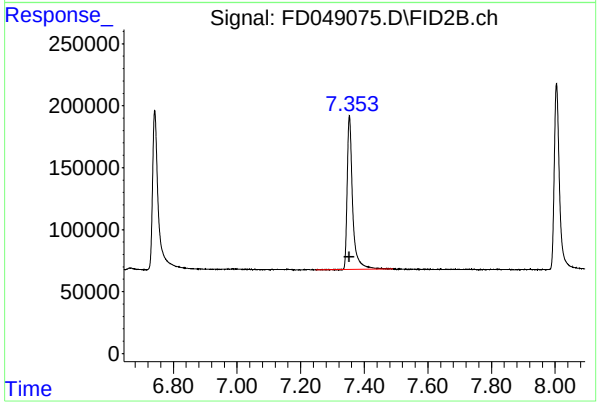
#2 Naphthalene (C11.7)

R.T.: 5.695 min
Delta R.T.: 0.000 min
Response: 1661529
Conc: 10.55 ug/ml



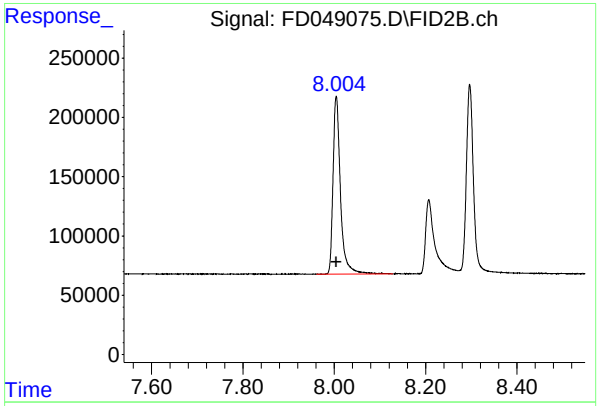
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.741 min
Delta R.T.: 0.000 min
Response: 1621317
Conc: 10.52 ug/ml



#4 2-Bromonaphthalene (SURR)

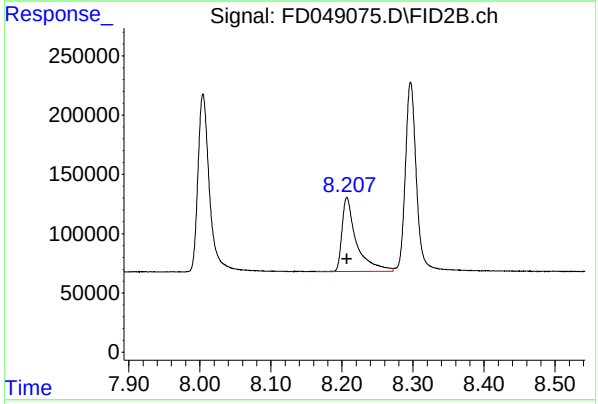
R.T.: 7.353 min
Delta R.T.: 0.000 min
Response: 1471043
Conc: 10.49 ug/ml



#5 Acenaphthylene (C15.06)

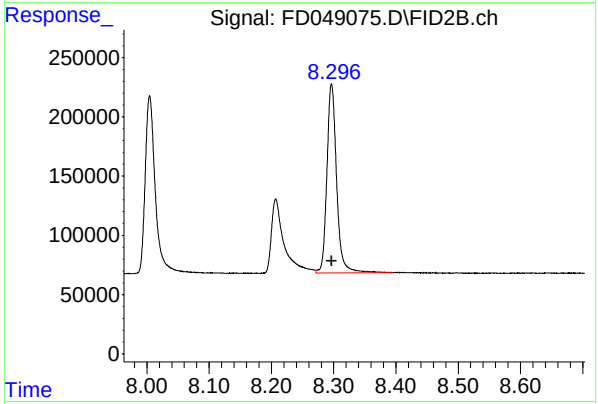
R.T.: 8.005 min
Delta R.T.: 0.000 min
Response: 1694814
Conc: 10.67 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



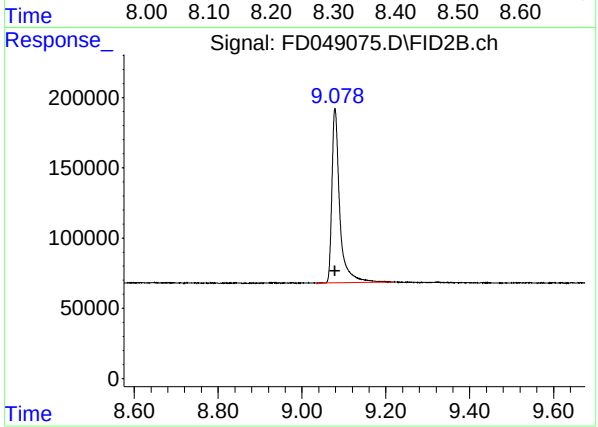
#6 2-Flurobiphenyl (SURR)

R.T.: 8.207 min
Delta R.T.: 0.000 min
Response: 875829
Conc: 9.81 ug/ml



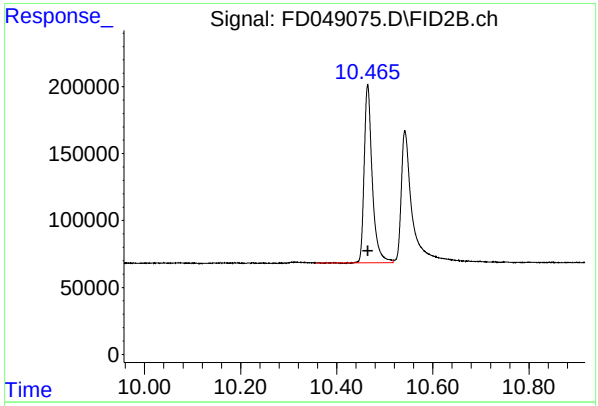
#7 Acenaphthene (C15.5)

R.T.: 8.297 min
Delta R.T.: 0.000 min
Response: 1725833
Conc: 10.89 ug/ml



#8 Flouorene (C16.55)

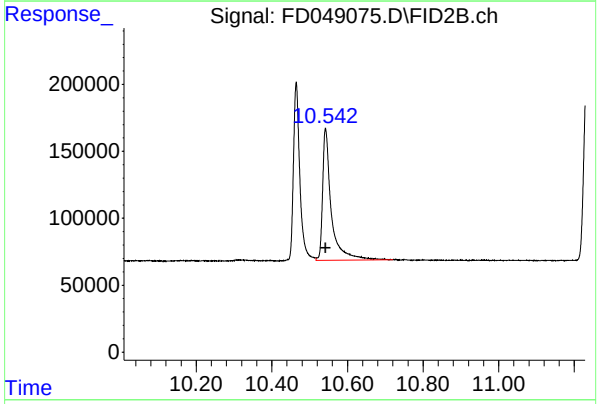
R.T.: 9.079 min
Delta R.T.: 0.000 min
Response: 1621856
Conc: 10.46 ug/ml



#9 Phenanthrene (C19.36)

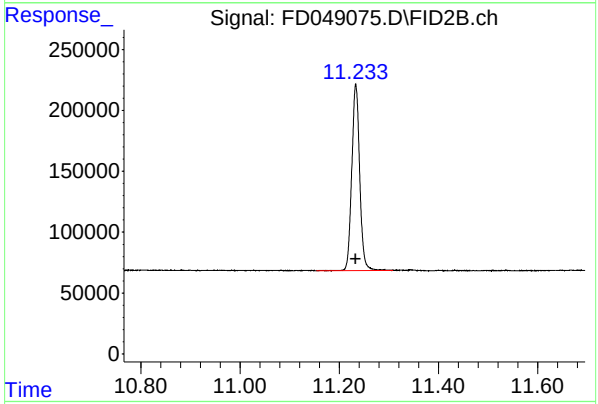
R.T.: 10.465 min
Delta R.T.: 0.000 min
Response: 1539045
Conc: 10.32 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



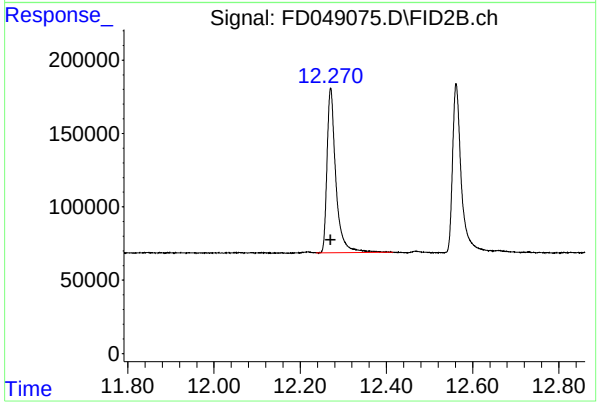
#10 Anthracene (C19.43)

R.T.: 10.542 min
Delta R.T.: 0.000 min
Response: 1567931
Conc: 10.49 ug/ml



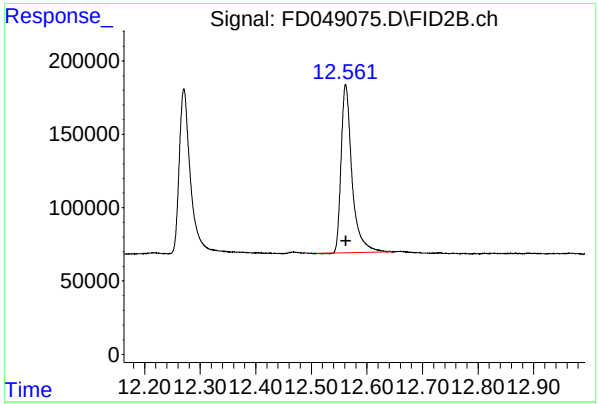
#11 ortho-Terphenyl (SURR)

R.T.: 11.234 min
Delta R.T.: 0.000 min
Response: 1694149
Conc: 10.76 ug/ml



#12 Fluoranthene (C21.85)

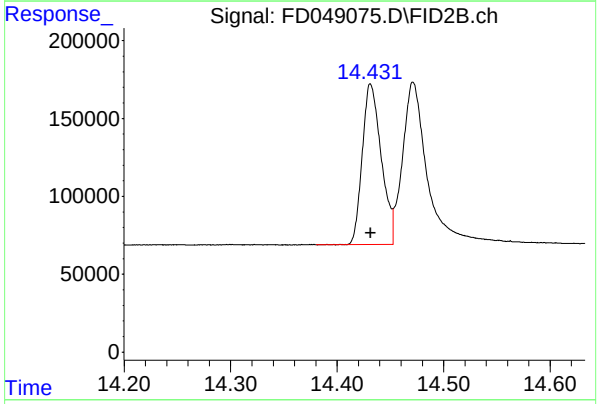
R.T.: 12.271 min
Delta R.T.: 0.000 min
Response: 1592182
Conc: 10.48 ug/ml



#13 Pyrene (C20.8)

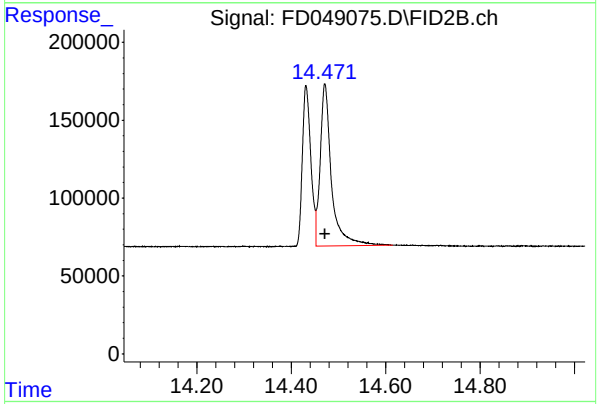
R.T.: 12.562 min
Delta R.T.: 0.000 min
Response: 1566919
Conc: 10.43 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



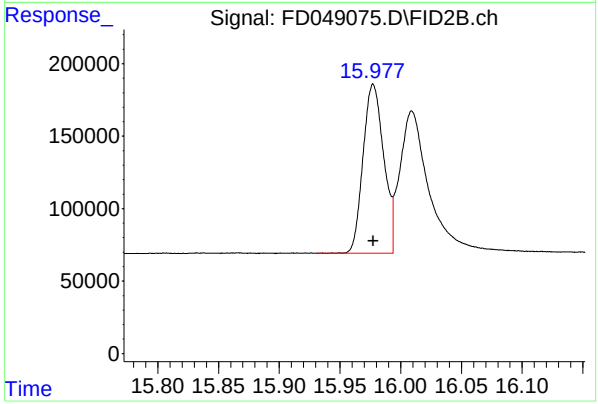
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.431 min
Delta R.T.: 0.000 min
Response: 1271690
Conc: 9.42 ug/ml



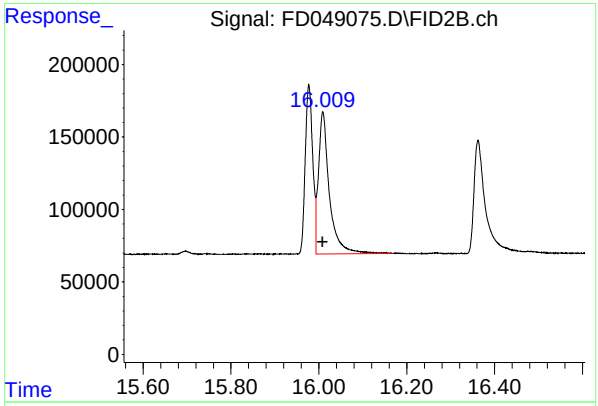
#15 Chrysene (C27.41)

R.T.: 14.471 min
Delta R.T.: 0.000 min
Response: 1725375
Conc: 11.24 ug/ml



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

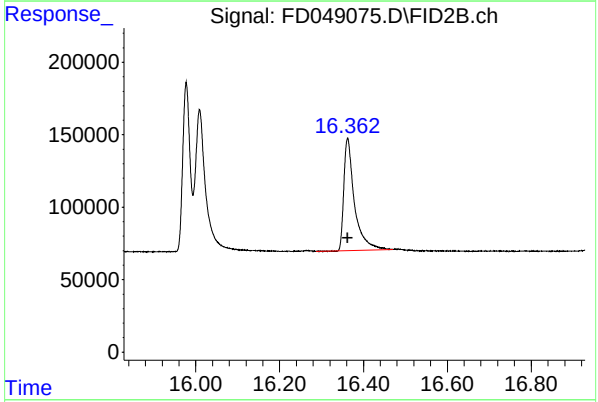
R.T.: 15.977 min
Delta R.T.: 0.000 min
Response: 1376748
Conc: 9.92 ug/ml



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

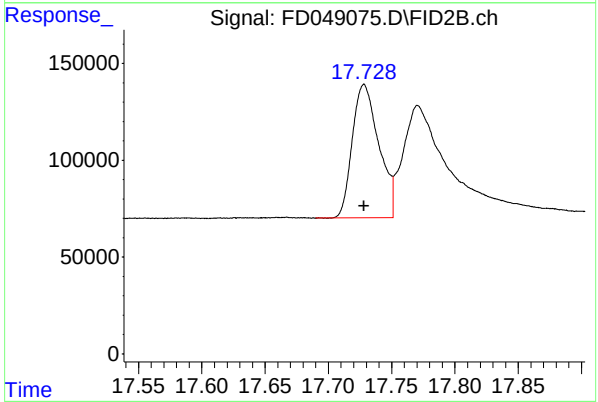
R.T.: 16.009 min
Delta R.T.: 0.000 min
Response: 1686985
Conc: 11.22 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



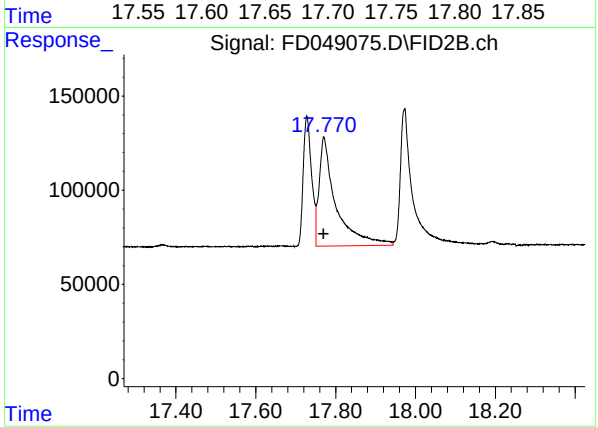
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.362 min
Delta R.T.: 0.000 min
Response: 1358701
Conc: 10.19 ug/ml



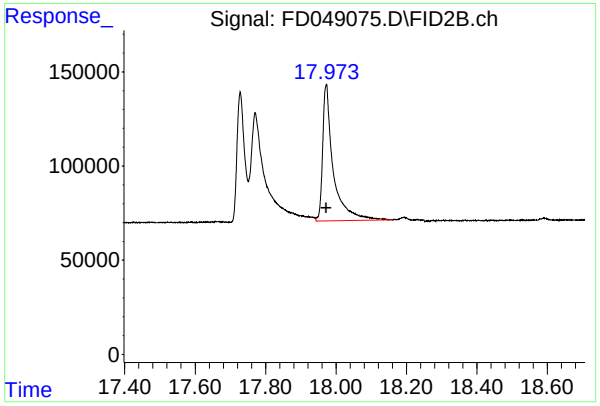
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.728 min
Delta R.T.: 0.000 min
Response: 1005197
Conc: 8.91 ug/ml



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

R.T.: 17.771 min
Delta R.T.: 0.000 min
Response: 1692264
Conc: 11.35 ug/ml



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

R.T.: 17.973 min
Delta R.T.: 0.000 mi
Response: 1516030
Conc: 10.78 ug/m

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049075.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 15:12
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.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	4.177	4.130	4.269	BV	177205	1656548	95.99%	5.189%
2	5.695	5.640	5.865	BB	141933	1661529	96.27%	5.205%
3	6.741	6.709	6.895	BB	128539	1621317	93.94%	5.079%
4	7.353	7.249	7.490	BB	124068	1471043	85.24%	4.608%
5	8.005	7.960	8.129	BB	150103	1694814	98.20%	5.309%
6	8.207	8.164	8.272	BV	62427	875829	50.75%	2.744%
7	8.297	8.272	8.395	VB	159429	1725833	100.00%	5.406%
8	9.079	9.034	9.217	BB	124112	1621856	93.98%	5.081%
9	10.465	10.357	10.517	BV	133260	1539045	89.18%	4.821%
10	10.542	10.517	10.720	VB	98455	1567931	90.85%	4.912%
11	11.234	11.154	11.309	BB	153221	1694149	98.16%	5.307%
12	12.271	12.237	12.415	BB	112182	1592182	92.26%	4.988%
13	12.562	12.509	12.647	BV	114740	1566919	90.79%	4.909%
14	14.431	14.380	14.452	BV	102861	1271690	73.69%	3.984%
15	14.471	14.452	14.615	VB	104040	1725375	99.97%	5.405%
16	15.977	15.930	15.994	BV	116644	1376748	79.77%	4.313%
17	16.009	15.994	16.169	VB	98055	1686985	97.75%	5.285%
18	16.362	16.287	16.470	BV	77646	1358701	78.73%	4.256%
19	17.728	17.690	17.751	BV	69162	1005197	58.24%	3.149%
20	17.771	17.751	17.944	VV	57989	1692264	98.05%	5.301%
21	17.973	17.944	18.162	VV	72731	1516030	87.84%	4.749%

Sum of corrected areas: 31921984

Aromatic EPH 021125.M Tue Feb 11 00:33:53 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049076.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 15:48
Operator : YP/AJ
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 66 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

Integration File: autoint1.e
Quant Time: Feb 10 16:26:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 16:26:18 2025
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	2-Bromonaphthalene (S...	7.358	773691	5.406 ug/ml
Spiked Amount	50.000		Recovery =	10.81%
6) S	2-Flurobiphenyl (SURR)	8.218	411369	4.679 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	9.36%
11) S	ortho-Terphenyl (SURR)	11.234	896262	5.540 ug/ml
Spiked Amount	50.000		Recovery =	11.08%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.178	880662	5.530 ug/ml
2) T	Naphthalene (C11.7)	5.699	819370	5.160 ug/ml
3) T	2-Methylnaphthalene (...	6.746	809055	5.196 ug/ml
5) T	Acenaphthylene (C15.06)	8.007	889357	5.469 ug/ml
7) T	Acenaphthene (C15.5)	8.298	942609	5.730 ug/ml
8) T	Flouorene (C16.55)	9.085	839593	5.326 ug/ml
9) T	Phenanthrene (C19.36)	10.472	783663	5.200 ug/ml
10) T	Anthracene (C19.43)	10.552	786469	5.207 ug/ml
12) T	Fluoranthene (C21.85)	12.279	819618	5.311 ug/ml
13) T	Pyrene (C20.8)	12.567	846750	5.496 ug/ml
14) T	Benzo[a]anthracene (C...	14.443	584303	4.447 ug/ml
15) T	Chrysene (C27.41)	14.479	971932	6.011 ug/ml
16) T	benzo[b]fluoranthene ...	15.986	664702	4.831 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.019	942068	5.965 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.376	726171	5.350 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.745	475672	4.353 ug/ml
20) T	Dibenz[a,h]anthracene...	17.788	897828	5.787 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.982	809816	5.587 ug/ml

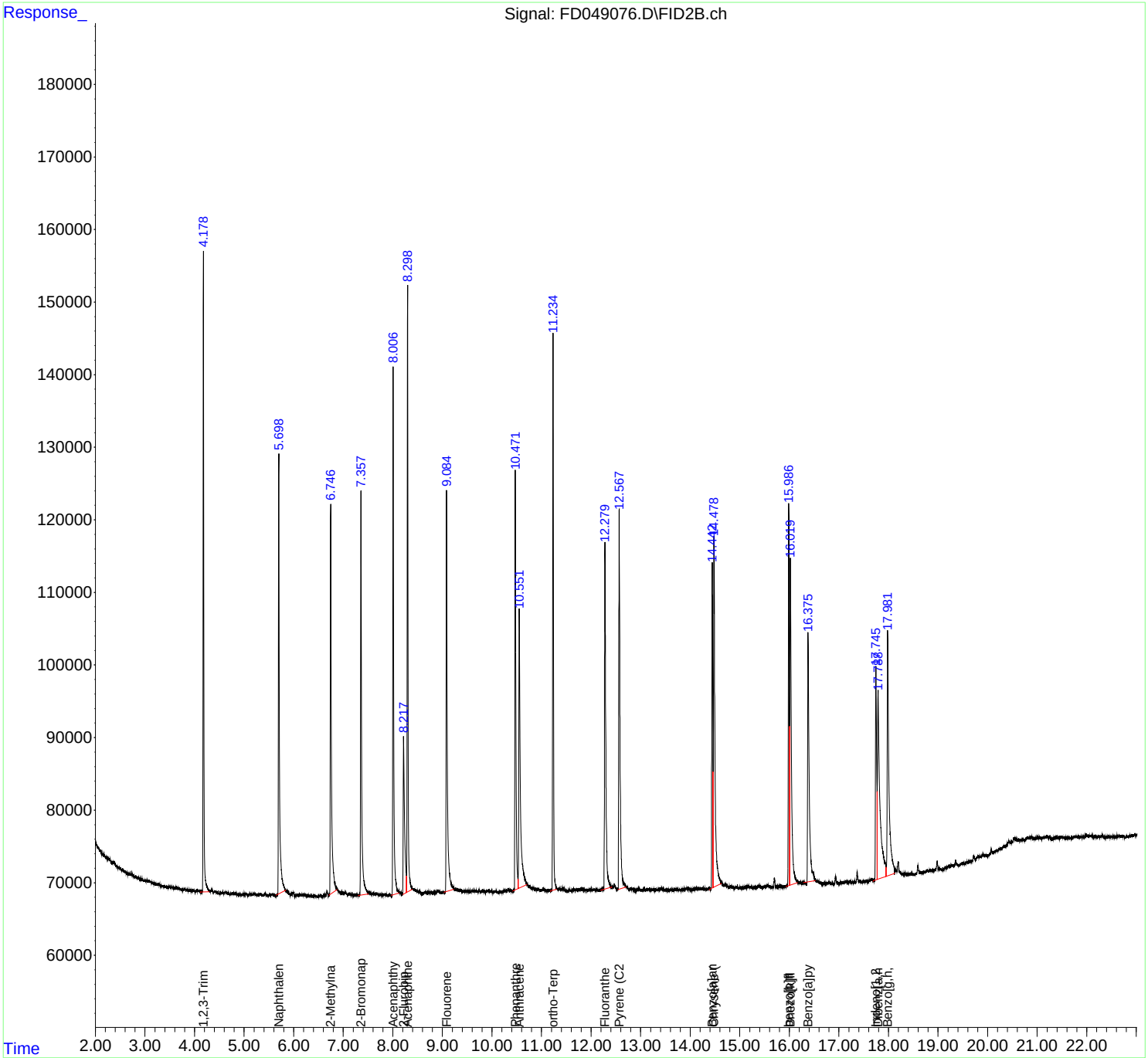
(f)=RT Delta > 1/2 Window (m)=manual int.

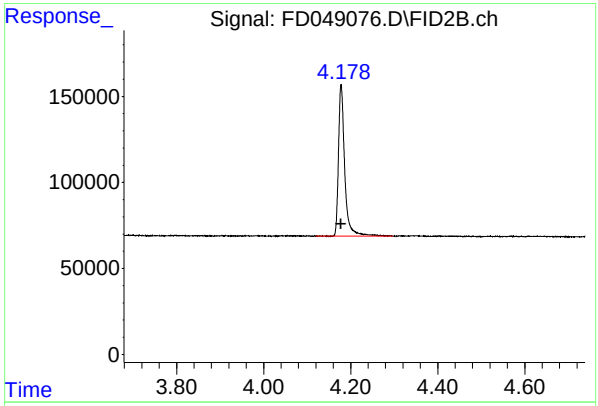
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049076.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 15:48
Operator : YP/AJ
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 66 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

Integration File: autoint1.e
Quant Time: Feb 10 16:26:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 16:26:18 2025
Response via : Initial Calibration
Integrator: ChemStation

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

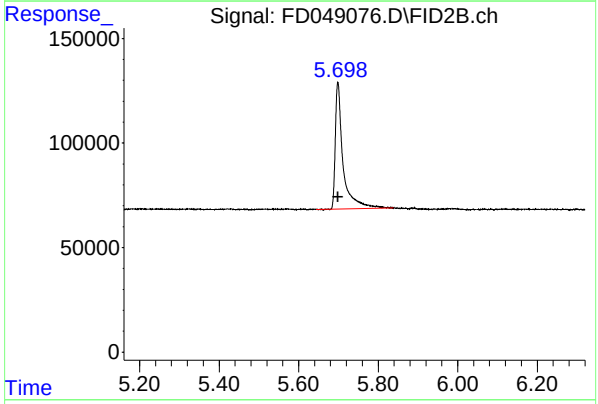




#1 1,2,3-Trimethylbenzene (C10.1)

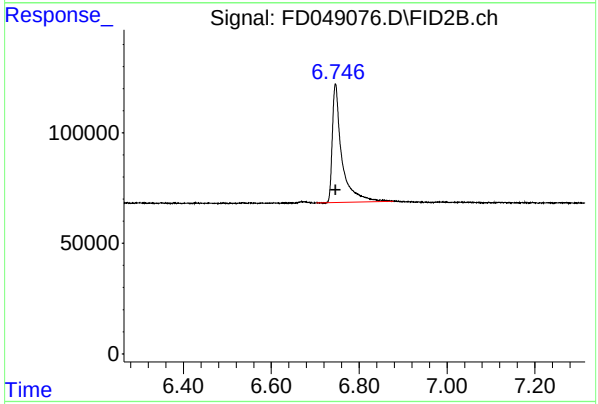
R.T.: 4.178 min
Delta R.T.: 0.000 min
Response: 880662
Conc: 5.53 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



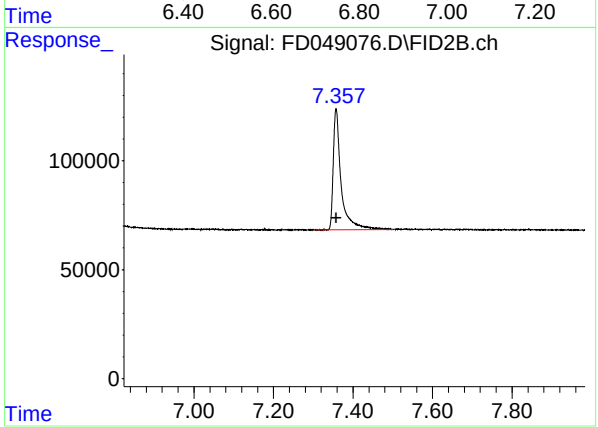
#2 Naphthalene (C11.7)

R.T.: 5.699 min
Delta R.T.: 0.000 min
Response: 819370
Conc: 5.16 ug/ml



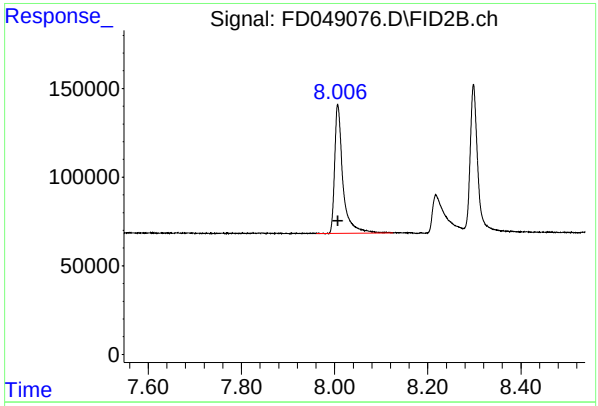
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.746 min
Delta R.T.: 0.000 min
Response: 809055
Conc: 5.20 ug/ml



#4 2-Bromonaphthalene (SURR)

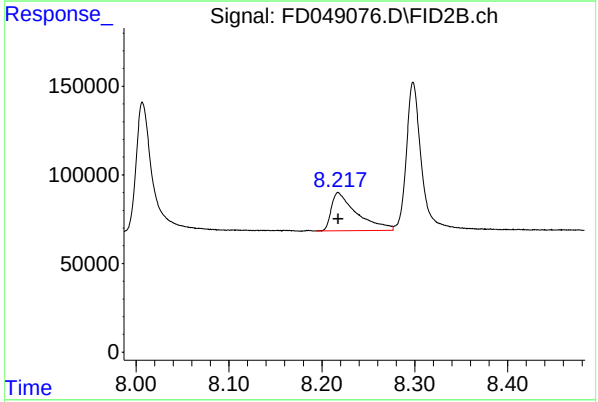
R.T.: 7.358 min
Delta R.T.: 0.000 min
Response: 773691
Conc: 5.41 ug/ml



#5 Acenaphthylene (C15.06)

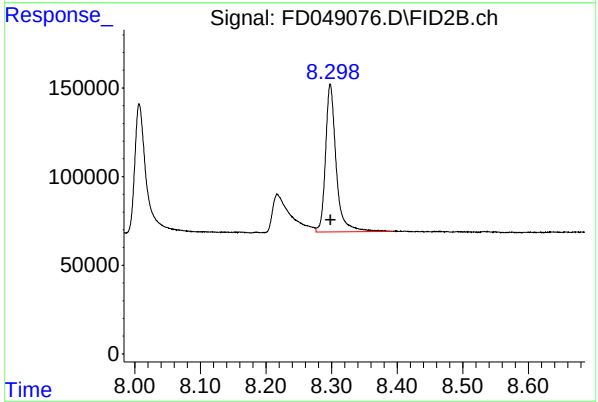
R.T.: 8.007 min
Delta R.T.: 0.000 min
Response: 889357
Conc: 5.47 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



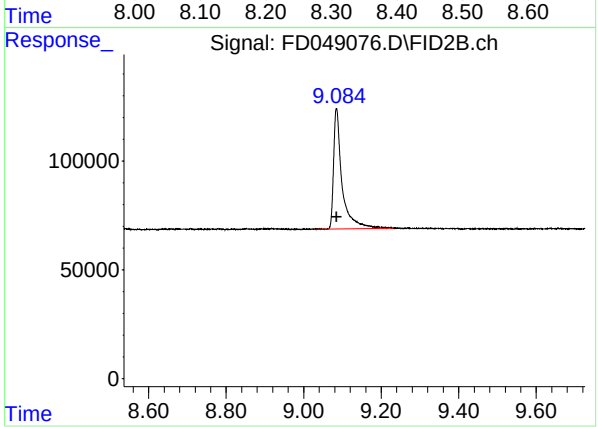
#6 2-Flurobiphenyl (SURR)

R.T.: 8.218 min
Delta R.T.: 0.000 min
Response: 411369
Conc: 4.68 ug/ml



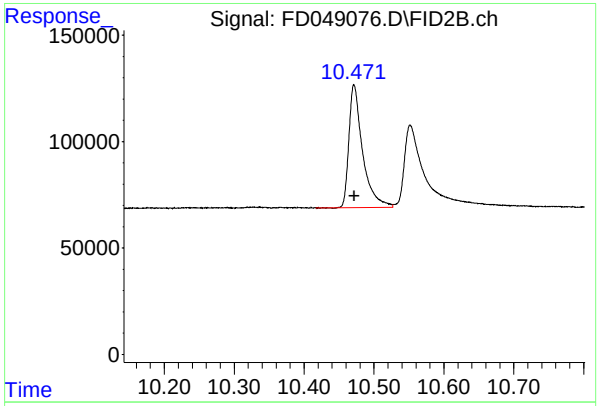
#7 Acenaphthene (C15.5)

R.T.: 8.298 min
Delta R.T.: 0.000 min
Response: 942609
Conc: 5.73 ug/ml



#8 Flouorene (C16.55)

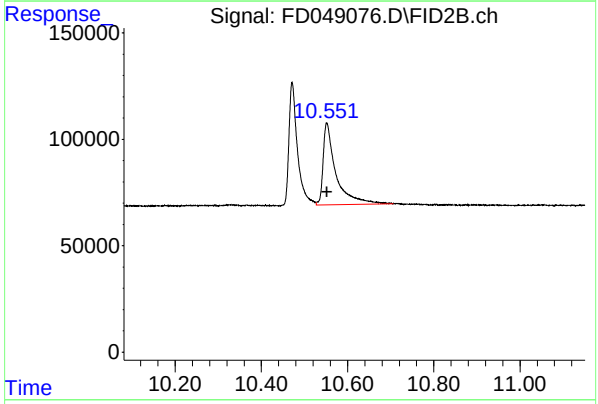
R.T.: 9.085 min
Delta R.T.: 0.000 min
Response: 839593
Conc: 5.33 ug/ml



#9 Phenanthrene (C19.36)

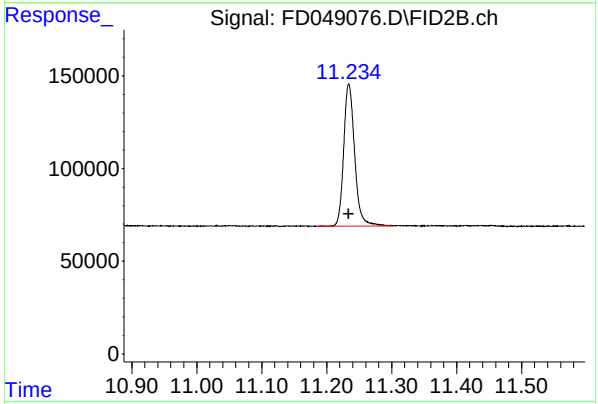
R.T.: 10.472 min
Delta R.T.: 0.000 min
Response: 783663
Conc: 5.20 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



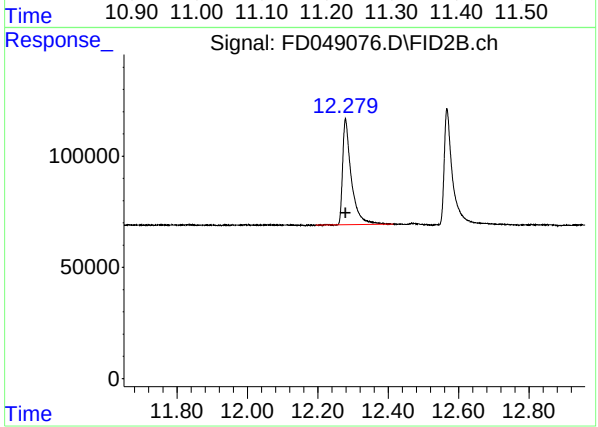
#10 Anthracene (C19.43)

R.T.: 10.552 min
Delta R.T.: 0.000 min
Response: 786469
Conc: 5.21 ug/ml



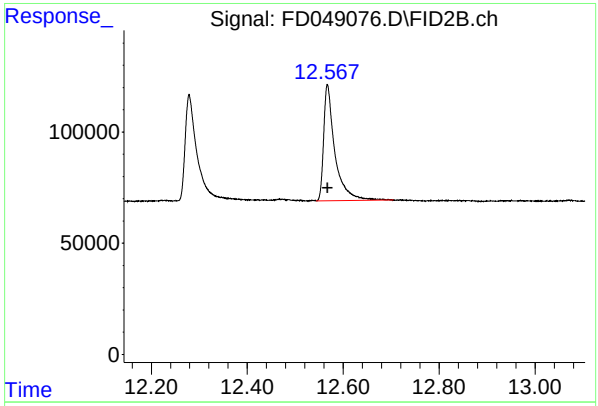
#11 ortho-Terphenyl (SURR)

R.T.: 11.234 min
Delta R.T.: 0.000 min
Response: 896262
Conc: 5.54 ug/ml



#12 Fluoranthene (C21.85)

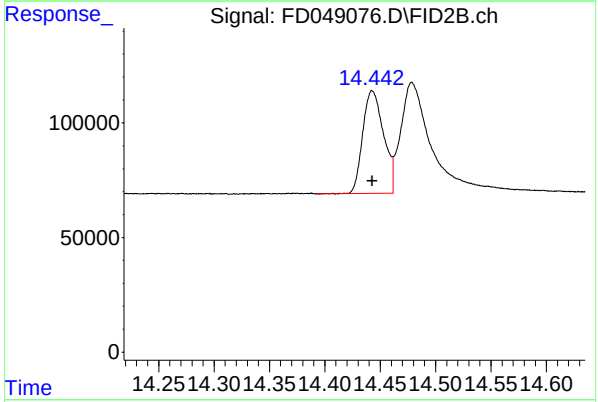
R.T.: 12.279 min
Delta R.T.: 0.000 min
Response: 819618
Conc: 5.31 ug/ml



#13 Pyrene (C20.8)

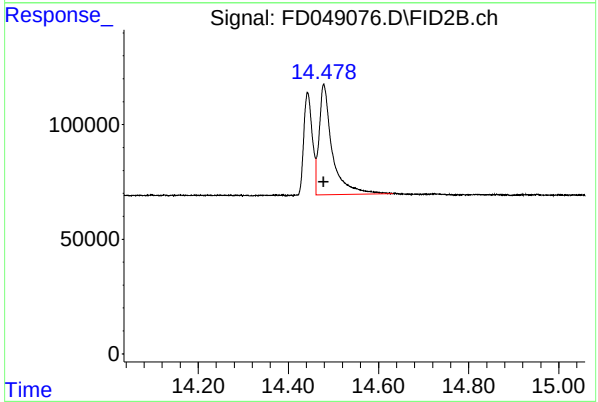
R.T.: 12.567 min
Delta R.T.: 0.000 min
Response: 846750
Conc: 5.50 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



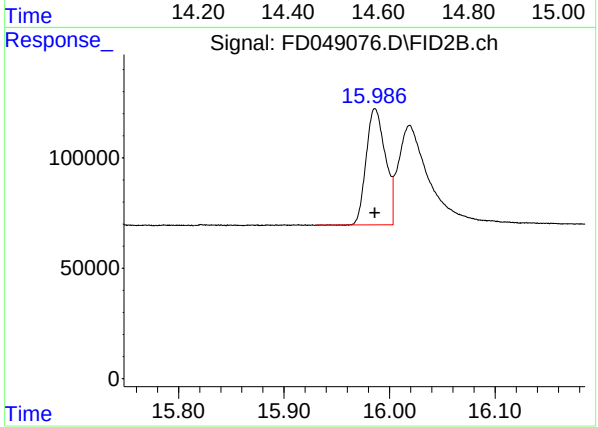
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.443 min
Delta R.T.: 0.000 min
Response: 584303
Conc: 4.45 ug/ml



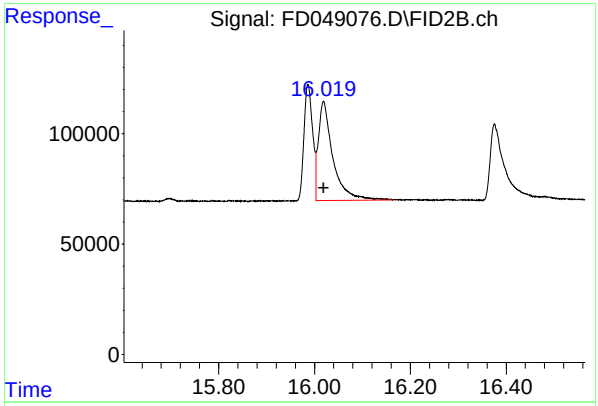
#15 Chrysene (C27.41)

R.T.: 14.479 min
Delta R.T.: 0.000 min
Response: 971932
Conc: 6.01 ug/ml



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

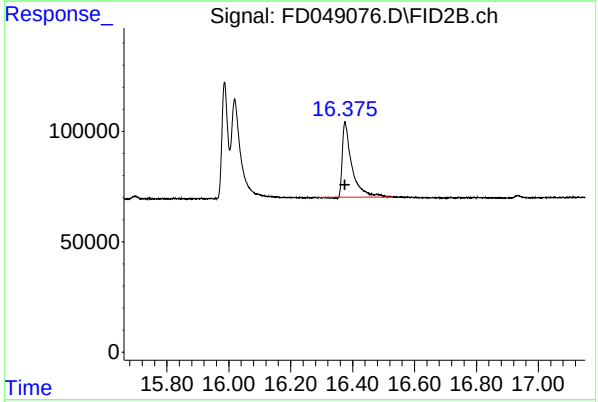
R.T.: 15.986 min
Delta R.T.: 0.000 min
Response: 664702
Conc: 4.83 ug/ml



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

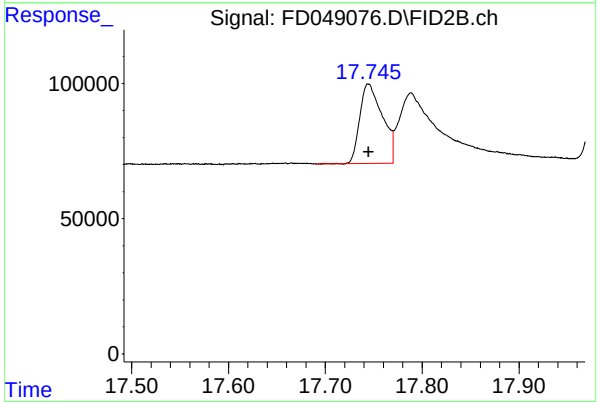
R.T.: 16.019 min
Delta R.T.: 0.000 min
Response: 942068
Conc: 5.96 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



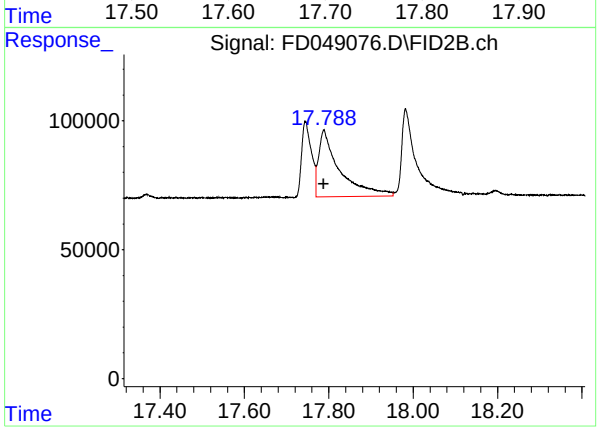
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.376 min
Delta R.T.: 0.000 min
Response: 726171
Conc: 5.35 ug/ml



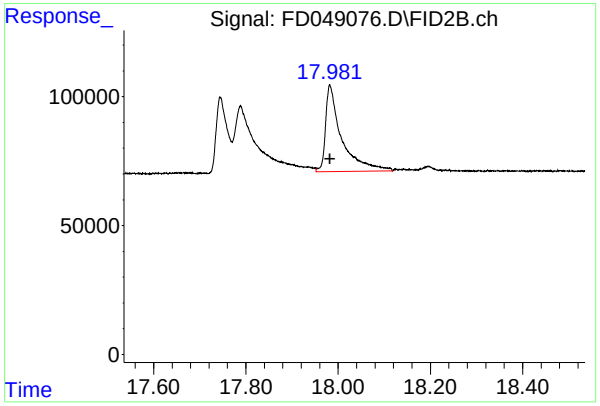
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.745 min
Delta R.T.: 0.000 min
Response: 475672
Conc: 4.35 ug/ml



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

R.T.: 17.788 min
Delta R.T.: 0.000 min
Response: 897828
Conc: 5.79 ug/ml



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

R.T.: 17.982 min
Delta R.T.: 0.000 mi
Response: 809816
Conc: 5.59 ug/m

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049076.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 15:48
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.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	4.178	4.120	4.297	BB	88104	880662	90.61%	5.314%
2	5.699	5.644	5.837	BB	60647	819370	84.30%	4.945%
3	6.746	6.702	6.877	BB	53740	809055	83.24%	4.882%
4	7.358	7.307	7.500	BV	55653	773691	79.60%	4.669%
5	8.007	7.960	8.125	BB	72554	889357	91.50%	5.367%
6	8.218	8.194	8.276	PV	21681	411369	42.32%	2.482%
7	8.298	8.276	8.394	VB	83456	942609	96.98%	5.688%
8	9.085	9.032	9.230	BB	55303	839593	86.38%	5.067%
9	10.472	10.417	10.527	BV	57501	783663	80.63%	4.729%
10	10.552	10.527	10.705	VB	38447	786469	80.92%	4.746%
11	11.234	11.184	11.302	BB	76762	896262	92.21%	5.409%
12	12.279	12.195	12.414	BB	47695	819618	84.33%	4.946%
13	12.567	12.543	12.704	PB	52249	846750	87.12%	5.110%
14	14.443	14.392	14.461	BV	44649	584303	60.12%	3.526%
15	14.479	14.461	14.632	VB	48318	971932	100.00%	5.865%
16	15.986	15.930	16.003	BV	52690	664702	68.39%	4.011%
17	16.019	16.003	16.164	VB	44953	942068	96.93%	5.685%
18	16.376	16.282	16.530	BB	34288	726171	74.71%	4.382%
19	17.745	17.690	17.770	BV	29384	475672	48.94%	2.871%
20	17.788	17.770	17.952	VV	26033	897828	92.38%	5.418%
21	17.982	17.952	18.119	VV	33694	809816	83.32%	4.887%
			Sum of corrected areas:			16570960		

Aromatic EPH 021125.M Tue Feb 11 00:34:06 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049077.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 16:24
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 67 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025

Integration File: autoint1.e
Quant Time: Feb 10 18:23:28 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 16:27:29 2025
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...	7.352	2822907	19.726 ug/ml
Spiked Amount	50.000		Recovery =	39.45%
6) S	2-Flurobiphenyl (SURR)	8.203	1781261	20.262 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	40.52%
11) S	ortho-Terphenyl (SURR)	11.233	3178458	19.647 ug/ml
Spiked Amount	50.000		Recovery =	39.29%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.176	3134755	19.684 ug/ml
2) T	Naphthalene (C11.7)	5.693	3146803	19.818 ug/ml
3) T	2-Methylnaphthalene (...	6.739	3087751	19.832 ug/ml
5) T	Acenaphthylene (C15.06)	8.003	3188327	19.608 ug/ml
7) T	Acenaphthene (C15.5)	8.296	3203234	19.472 ug/ml
8) T	Flouorene (C16.55)	9.076	3106009	19.702 ug/ml
9) T	Phenanthrene (C19.36)	10.462	2995357	19.876 ug/ml
10) T	Anthracene (C19.43)	10.539	3001671	19.875 ug/ml
12) T	Fluoranthene (C21.85)	12.266	3059686	19.828 ug/ml
13) T	Pyrene (C20.8)	12.559	3015618	19.575 ug/ml
14) T	Benzo[a]anthracene (C...	14.428	2707067	20.603 ug/ml
15) T	Chrysene (C27.41)	14.470	3142097	19.433 ug/ml
16) T	benzo[b]fluoranthene ...	15.976	2807062	20.401 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.007	3031459	19.193 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.354	2694826	19.853 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.718	2162922	19.793 ug/mlm
20) T	Dibenz[a,h]anthracene...	17.759	3098291	19.971 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.967	2849147	19.656 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049077.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 16:24
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 67 Sample Multiplier: 1

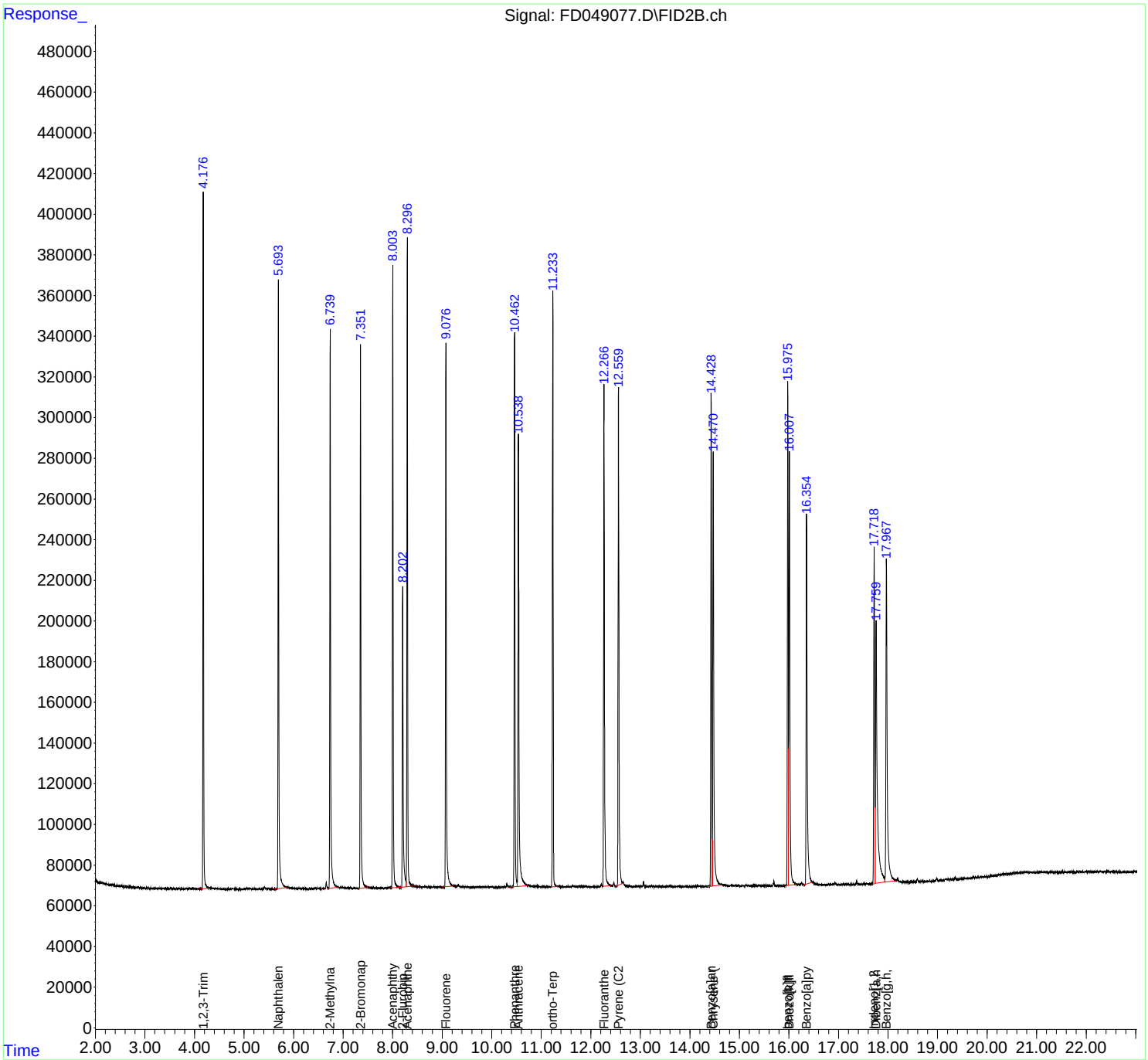
Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

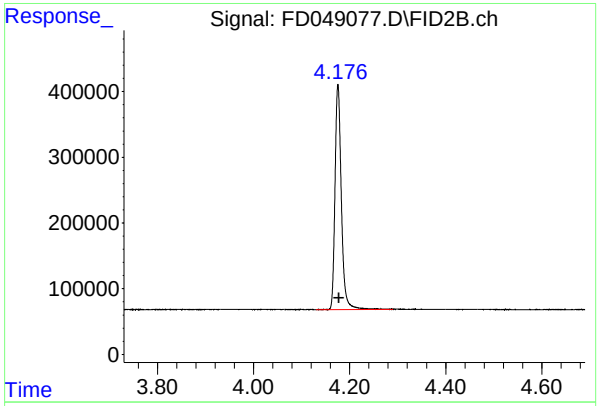
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025

Integration File: autoint1.e
Quant Time: Feb 10 18:23:28 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 16:27:29 2025
Response via : Initial Calibration
Integrator: ChemStation

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





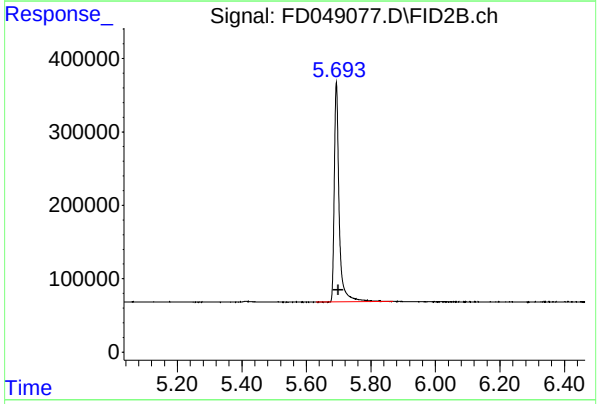
#1 1,2,3-Trimethylbenzene (C10.1)

R.T.: 4.176 min
Delta R.T.: -0.002 min
Response: 3134755
Conc: 19.68 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

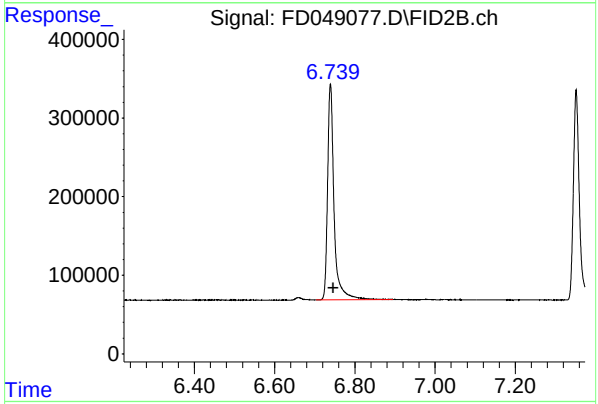
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025



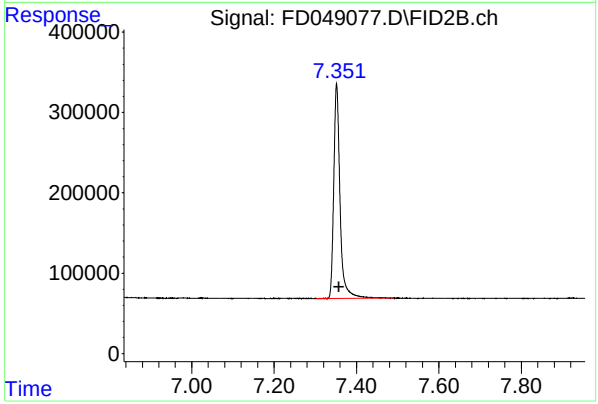
#2 Naphthalene (C11.7)

R.T.: 5.693 min
Delta R.T.: -0.006 min
Response: 3146803
Conc: 19.82 ug/ml



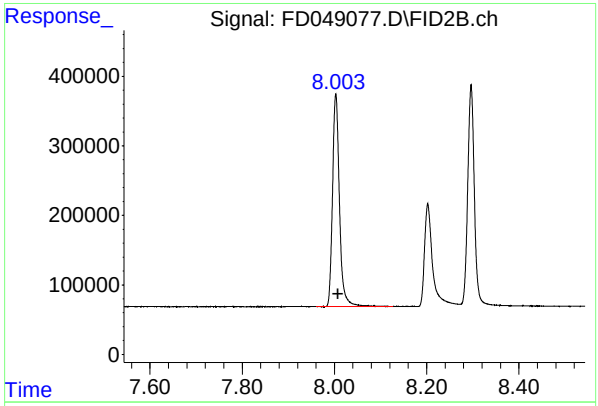
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.739 min
Delta R.T.: -0.007 min
Response: 3087751
Conc: 19.83 ug/ml



#4 2-Bromonaphthalene (SURR)

R.T.: 7.352 min
Delta R.T.: -0.006 min
Response: 2822907
Conc: 19.73 ug/ml



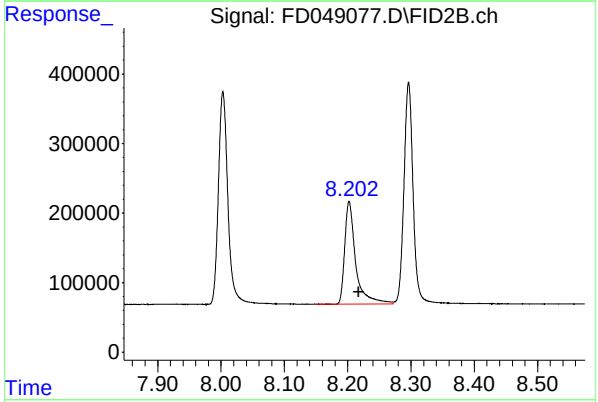
#5 Acenaphthylene (C15.06)

R.T.: 8.003 min
Delta R.T.: -0.004 min
Response: 3188327
Conc: 19.61 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

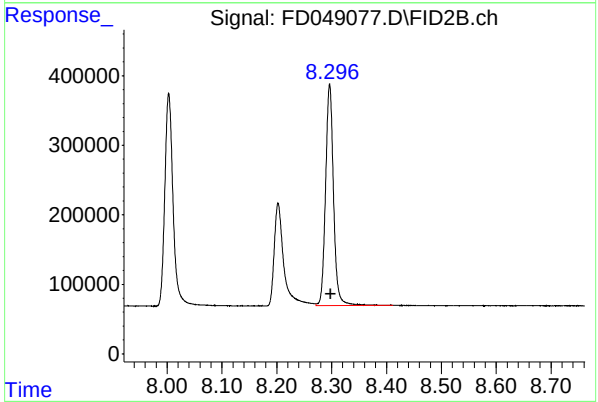
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025



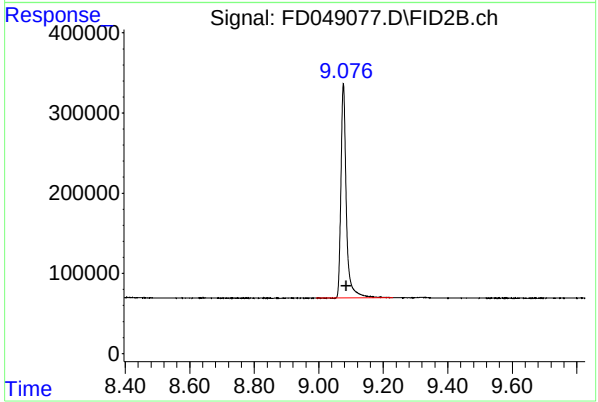
#6 2-Flurobiphenyl (SURR)

R.T.: 8.203 min
Delta R.T.: -0.015 min
Response: 1781261
Conc: 20.26 ug/ml



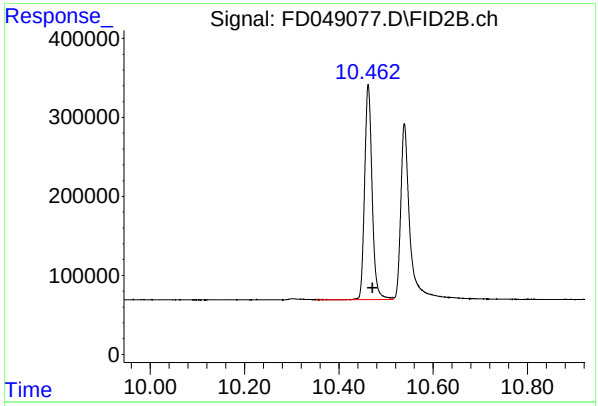
#7 Acenaphthene (C15.5)

R.T.: 8.296 min
Delta R.T.: -0.002 min
Response: 3203234
Conc: 19.47 ug/ml



#8 Flouorene (C16.55)

R.T.: 9.076 min
Delta R.T.: -0.008 min
Response: 3106009
Conc: 19.70 ug/ml



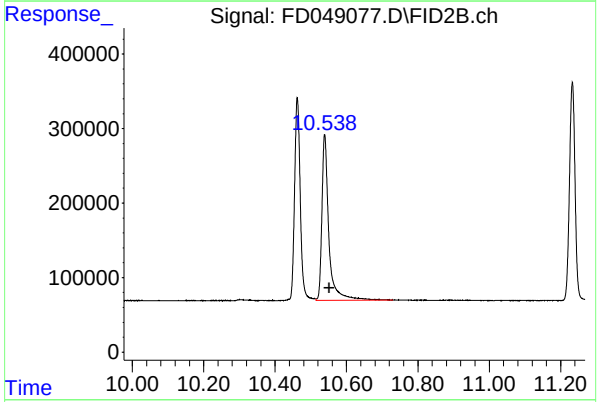
#9 Phenanthrene (C19.36)

R.T.: 10.462 min
Delta R.T.: -0.009 min
Response: 2995357
Conc: 19.88 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

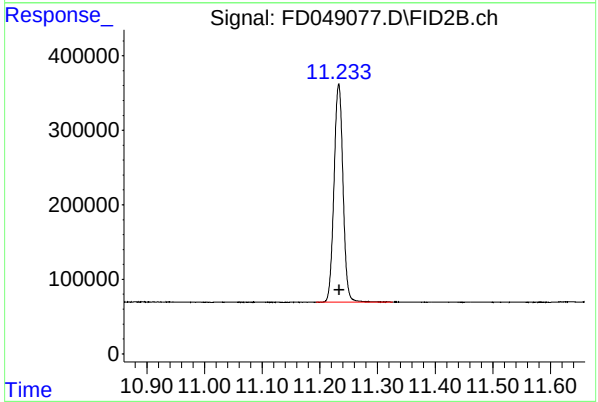
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025



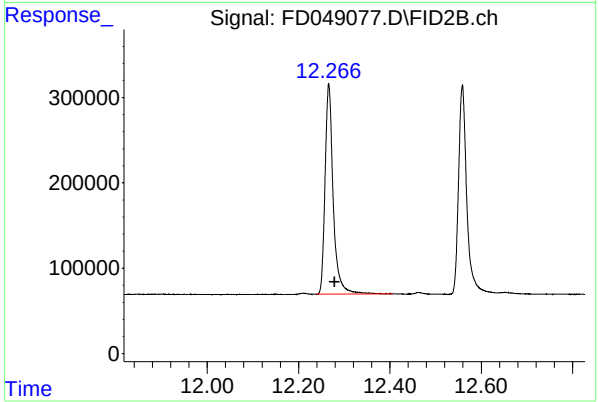
#10 Anthracene (C19.43)

R.T.: 10.539 min
Delta R.T.: -0.013 min
Response: 3001671
Conc: 19.87 ug/ml



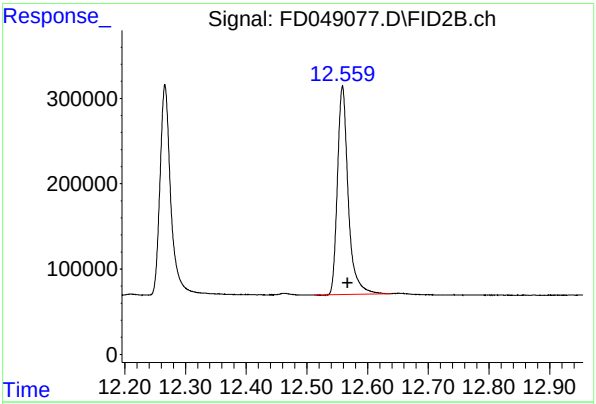
#11 ortho-Terphenyl (SURR)

R.T.: 11.233 min
Delta R.T.: -0.001 min
Response: 3178458
Conc: 19.65 ug/ml



#12 Fluoranthene (C21.85)

R.T.: 12.266 min
Delta R.T.: -0.013 min
Response: 3059686
Conc: 19.83 ug/ml



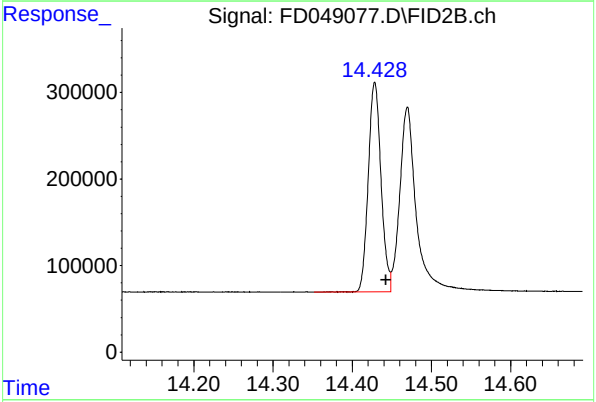
#13 Pyrene (C20.8)

R.T.: 12.559 min
Delta R.T.: -0.008 min
Response: 3015618
Conc: 19.57 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

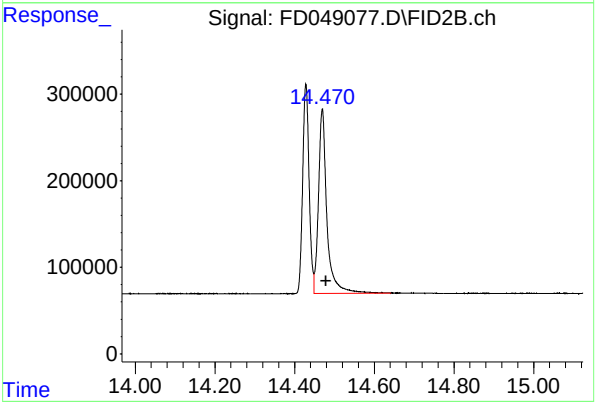
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025



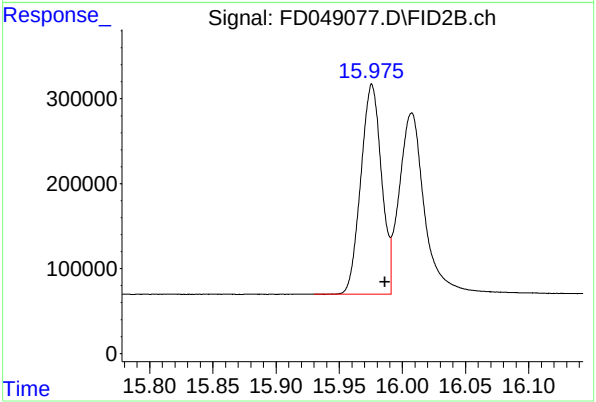
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.428 min
Delta R.T.: -0.014 min
Response: 2707067
Conc: 20.60 ug/ml



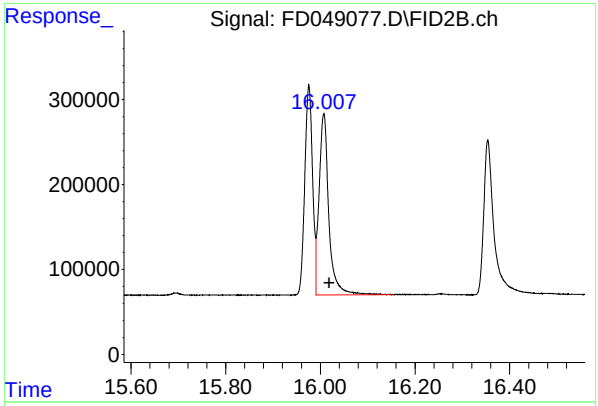
#15 Chrysene (C27.41)

R.T.: 14.470 min
Delta R.T.: -0.009 min
Response: 3142097
Conc: 19.43 ug/ml



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

R.T.: 15.976 min
Delta R.T.: -0.010 min
Response: 2807062
Conc: 20.40 ug/ml



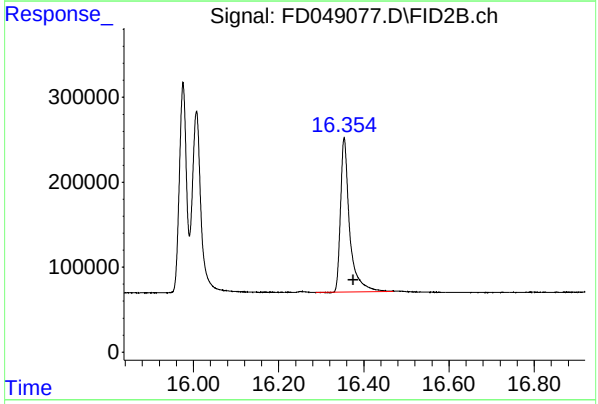
#17 Bnezo[k]fluoranthene (C30.14)

R.T.: 16.007 min
Delta R.T.: -0.012 min
Response: 3031459
Conc: 19.19 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

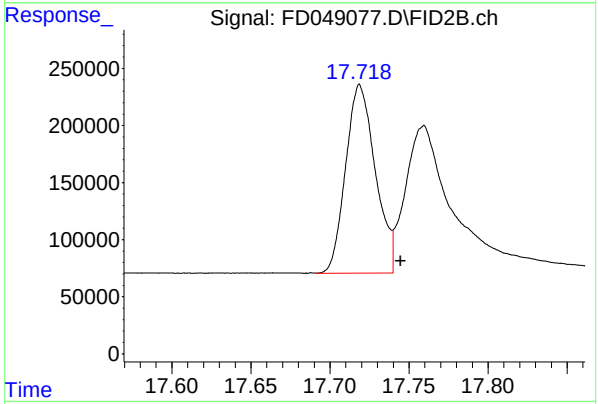
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025



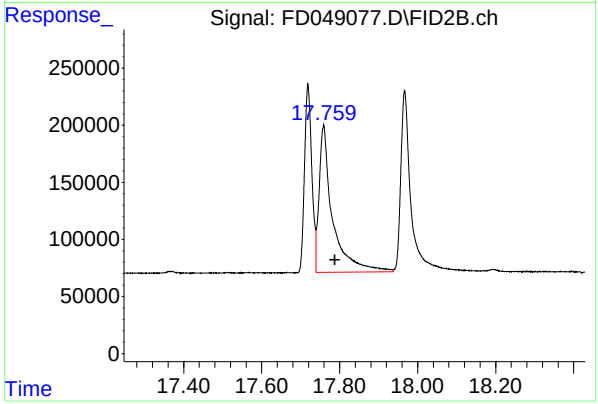
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.354 min
Delta R.T.: -0.022 min
Response: 2694826
Conc: 19.85 ug/ml



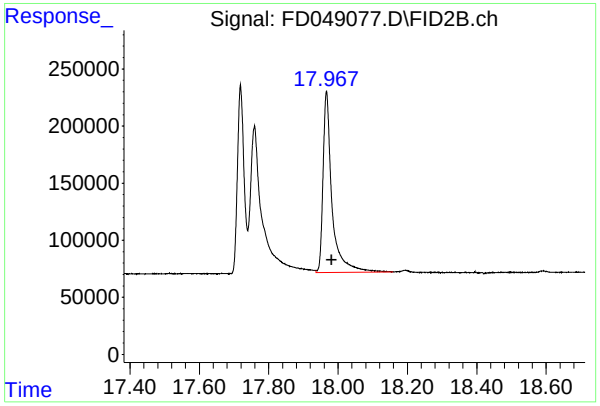
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.718 min
Delta R.T.: -0.026 min
Response: 2162922
Conc: 19.79 ug/ml m



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

R.T.: 17.759 min
Delta R.T.: -0.029 min
Response: 3098291
Conc: 19.97 ug/ml



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

R.T.: 17.967 min
Delta R.T.: -0.015 mi
Response: 2849147
Conc: 19.66 ug/m

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD02112
Data File : FD049077.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 16:24
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.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	4.176	4.130	4.290	BV	342184	3134755	97.86%	5.122%
2	5.693	5.630	5.868	BB	299016	3146803	98.24%	5.142%
3	6.739	6.703	6.895	BB	275219	3087751	96.39%	5.046%
4	7.352	7.302	7.488	BB	267137	2822907	88.13%	4.613%
5	8.003	7.960	8.127	BB	305766	3188327	99.53%	5.210%
6	8.203	8.150	8.272	BV	147711	1781261	55.61%	2.911%
7	8.296	8.272	8.412	VB	318821	3203234	100.00%	5.234%
8	9.076	8.992	9.230	BB	267490	3106009	96.96%	5.075%
9	10.462	10.352	10.515	BV	272649	2995357	93.51%	4.895%
10	10.539	10.515	10.730	VV	223108	3001671	93.71%	4.905%
11	11.233	11.193	11.327	BB	293357	3178458	99.23%	5.194%
12	12.266	12.238	12.407	BB	246286	3059686	95.52%	5.000%
13	12.559	12.512	12.638	BV	244060	3015618	94.14%	4.928%
14	14.428	14.352	14.449	BV	242288	2707067	84.51%	4.424%
15	14.470	14.449	14.642	VB	214017	3142097	98.09%	5.134%
16	15.976	15.930	15.991	BV	246799	2807062	87.63%	4.587%
17	16.007	15.991	16.153	VB	213051	3031459	94.64%	4.954%
18	16.354	16.288	16.468	PV	181424	2694826	84.13%	4.404%
19	17.719	17.690	17.740	BV	165163	2144691	66.95%	3.505%
20	17.759	17.740	17.937	VV	128285	3098291	96.72%	5.063%
21	17.967	17.937	18.158	VB	158807	2849147	88.95%	4.656%
			Sum of corrected areas:			61196477		

Aromatic EPH 021125.M Tue Feb 11 00:34:31 2025

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

Inital Calibration Report for SequenceID : FE030325AL

AreaCount

Parameter Range	FE052574.D	FE052575.D	FE052576.D	FE052577.D	FE052578.D	
Aliphatic C9-C12	42442133.000	21908913.000	9597805.000	4926333.000	2520517.000	
Aliphatic C12-C16	27580281.000	14251729.000	6250320.000	3204581.000	1635867.000	
Aliphatic C16-C21	39738338.000	20559097.000	9010211.000	4640638.000	2375408.000	
Aliphatic C21-C28	50608585.000	26547978.000	11639338.000	6148197.000	3076025.000	
Aliphatic C28-C40	66374736.000	34517397.000	15630021.000	8240673.000	4340048.000	
Aliphatic EPH	226744073.000	117785114.000	52127695.000	27160422.000	13947865.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aliphatic C9-C12	155948.4359996	7.435				
Aliphatic C12-C16	152098.489	7.415				
Aliphatic C16-C21	146548.0846662	7.685				
Aliphatic C21-C28	142451.8505	8.689				
Aliphatic C28-C40	127589.1083332	11.35				
Aliphatic EPH	141501.5884438	8.903				

Concentration

Parameter Range	FE052574.D	FE052575.D	FE052576.D	FE052577.D	FE052578.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	FE052574.D	FE052575.D	FE052576.D	FE052577.D	FE052578.D	
Aliphatic C9-C12	141473.776666	146059.420000	159963.416666	164211.100000	168034.466666	
Aliphatic C12-C16	137901.405000	142517.290000	156258.000000	160229.050000	163586.700000	
Aliphatic C16-C21	132461.126666	137060.646666	150170.183333	154687.933333	158360.533333	

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

Inital Calibration Report for SequenceID : FE030325AL

Aliphatic C21-C28	126521.462500	132739.890000	145491.725000	153704.925000	153801.250000	
Aliphatic C28-C40	110624.560000	115057.990000	130250.175000	137344.550000	144668.266666	
Aliphatic EPH	125968.929444	130872.348888	144799.152777	150891.233333	154976.277777	

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052574.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 11:03
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: Mar 03 12:35:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 12:32:42 2025
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)	11.921	15249190	93.747 ug/ml
Spiked Amount	50.000		Recovery =	187.49%
12)	S 1-chlorooctadecane (S...	13.362	11123183	94.425 ug/ml
Spiked Amount	50.000		Recovery =	188.85%
	Target Compounds			
1)	T n-Nonane (C9)	3.257	14069581	93.932 ug/ml
2)	T n-Decane (C10)	4.520	14244956	93.842 ug/ml
3)	T A~Naphthalene (C11.7)	6.234	15515805	94.126 ug/ml
4)	T n-Dodecane (C12)	6.701	14127596	93.824 ug/ml
5)	T A~2-methylnaphthalene...	7.337	14872839	94.265 ug/ml
6)	T n-Tetradecane (C14)	8.538	13725919	93.771 ug/ml
7)	T n-Hexadecane (C16)	10.153	13854362	93.748 ug/ml
8)	T n-Octadecane (C18)	11.603	13752507	93.737 ug/ml
10)	T n-Eicosane (C20)	12.917	13115140	93.713 ug/ml
11)	T n-Heneicosane (C21)	13.531	12870691	93.753 ug/ml
13)	T n-Docosane (C22)	14.119	12800111	93.460 ug/ml
14)	T n-Tetracosane (C24)	15.226	12766560	93.227 ug/ml
15)	T n-Hexacosane (C26)	16.249	12617268	93.065 ug/ml
16)	T n-Octacosane (C28)	17.201	12424646	92.341 ug/ml
17)	T n-Tricontane (C30)	18.092	12609210	91.462 ug/ml
18)	T n-Dotriacontane (C32)	18.928	12252844	90.798 ug/ml
19)	T n-Tetratriacontane (C34)	19.714	11540152	91.301 ug/ml
20)	T n-Hexatriacontane (C36)	20.455	10354123	91.810 ug/ml
21)	T n-Octatriacontane (C38)	21.198	9888606	92.810 ug/ml
22)	T n-Tetracontane (C40)	22.124	9729801	93.471 ug/ml

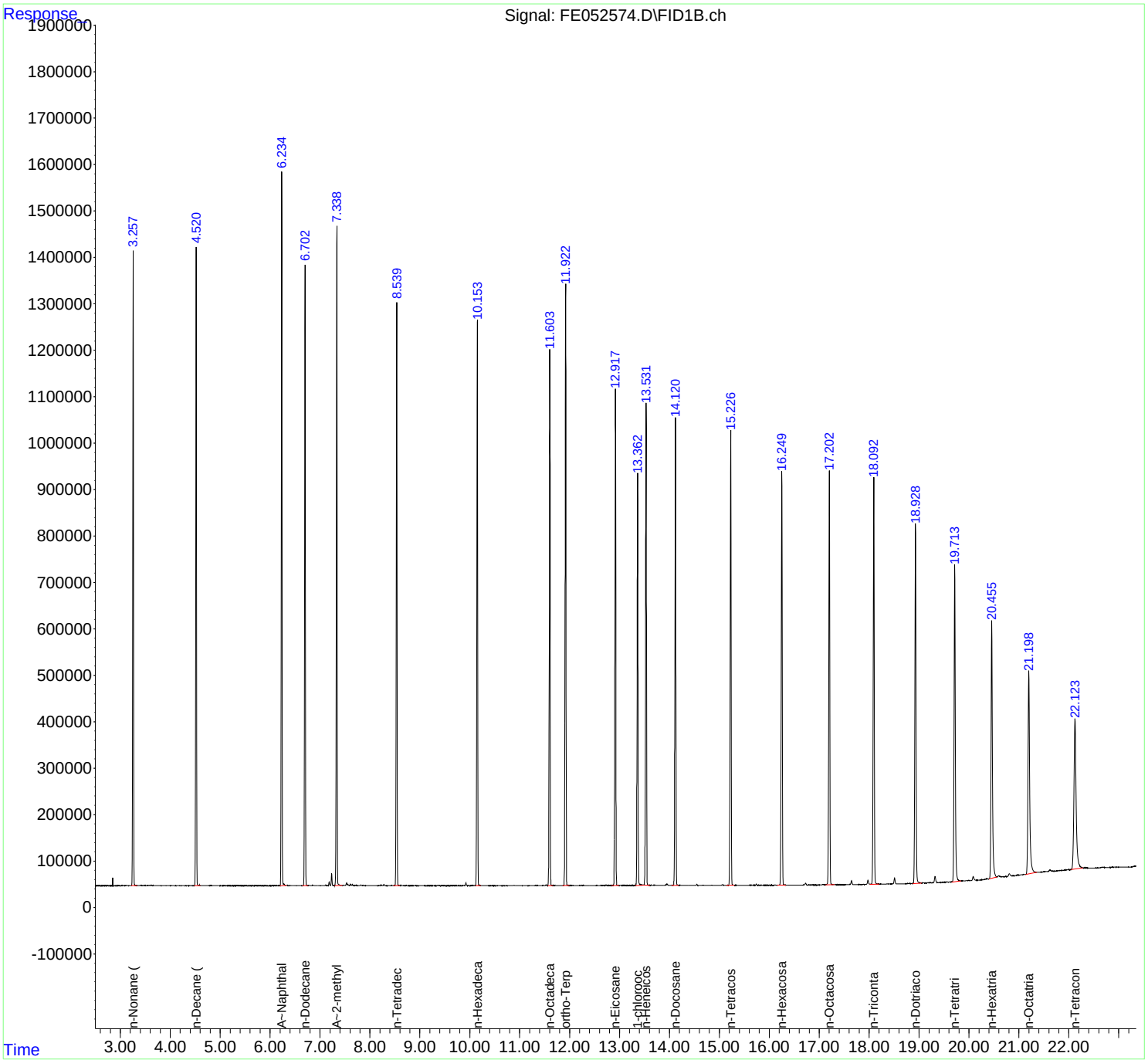
(f)=RT Delta > 1/2 Window (m)=manual int.

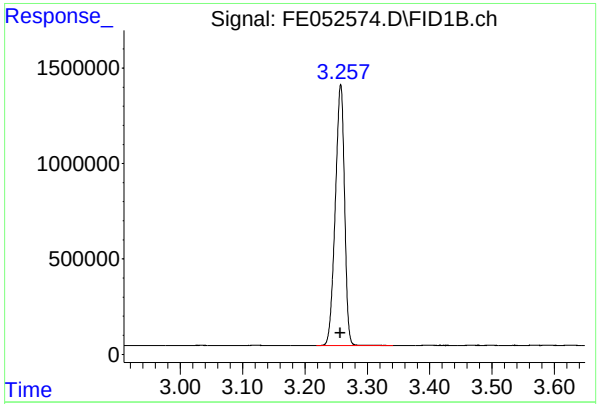
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052574.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 11:03
Operator : YP\AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Mar 03 12:35:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 12:32:42 2025
Response via : Initial Calibration
Integrator: ChemStation

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

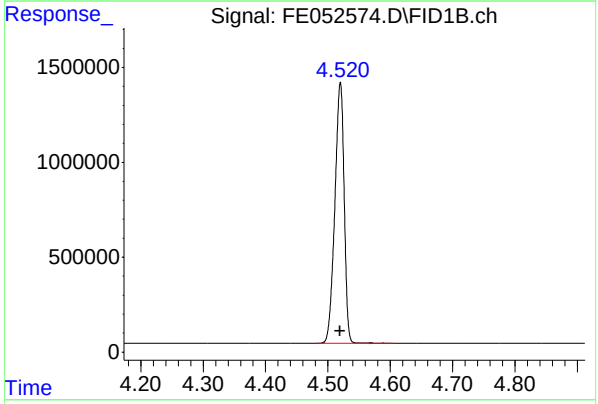




#1 n-Nonane (C9)

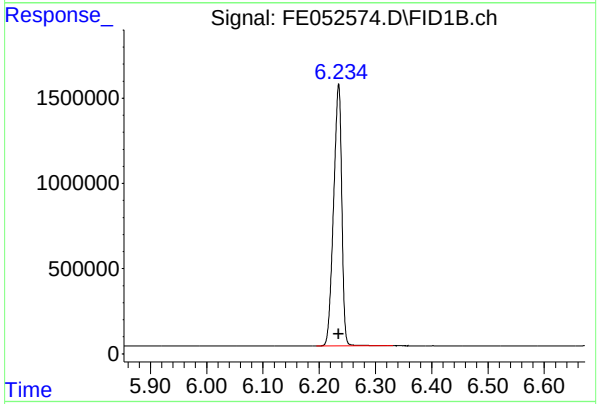
R.T.: 3.257 min
Delta R.T.: 0.000 min
Response: 14069581
Conc: 93.93 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



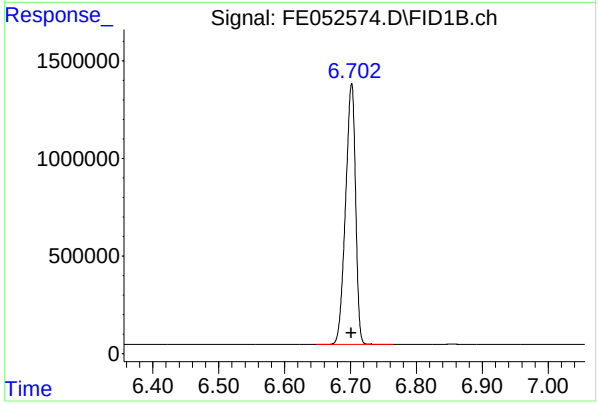
#2 n-Decane (C10)

R.T.: 4.520 min
Delta R.T.: 0.000 min
Response: 14244956
Conc: 93.84 ug/ml



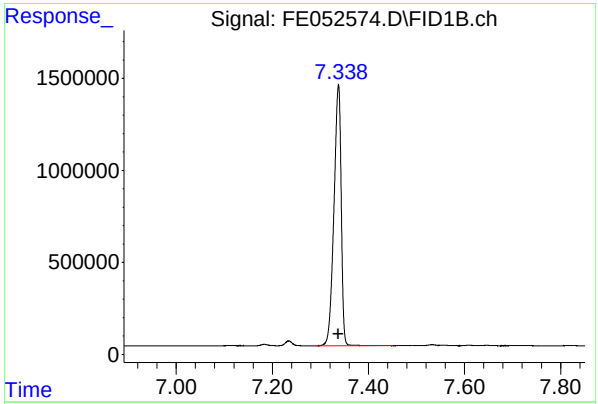
#3 A~Naphthalene (C11.7)

R.T.: 6.234 min
Delta R.T.: 0.000 min
Response: 15515805
Conc: 94.13 ug/ml



#4 n-Dodecane (C12)

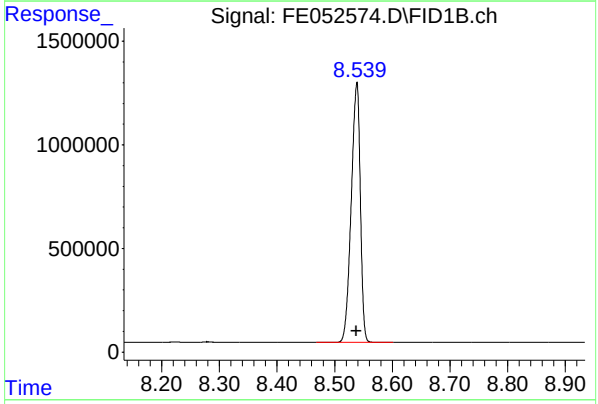
R.T.: 6.701 min
Delta R.T.: 0.000 min
Response: 14127596
Conc: 93.82 ug/ml



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

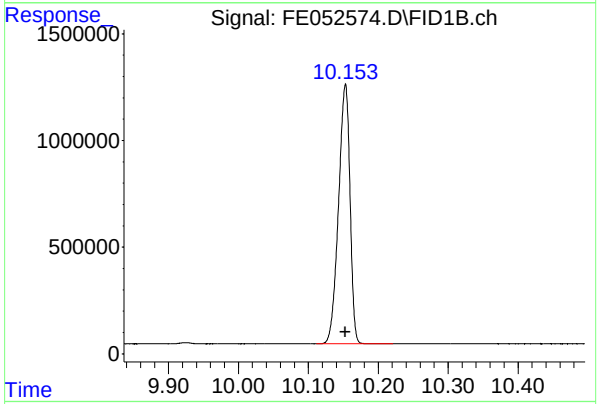
R.T.: 7.337 min
Delta R.T.: 0.000 min
Response: 14872839
Conc: 94.27 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



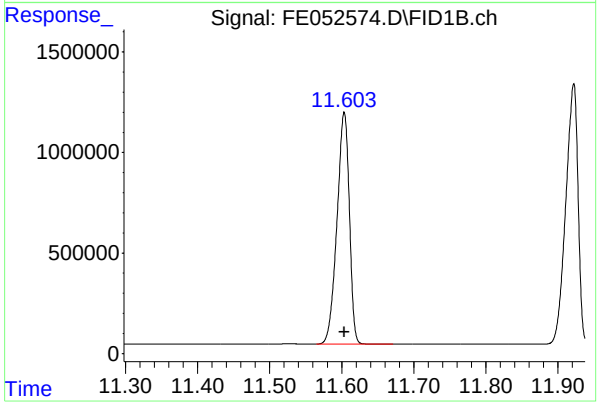
#6 n-Tetradecane (C14)

R.T.: 8.538 min
Delta R.T.: 0.000 min
Response: 13725919
Conc: 93.77 ug/ml



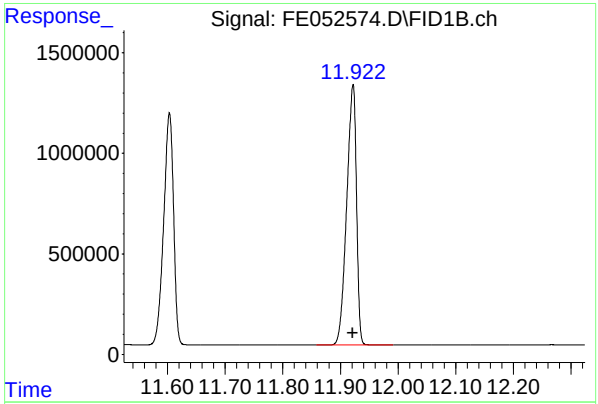
#7 n-Hexadecane (C16)

R.T.: 10.153 min
Delta R.T.: 0.000 min
Response: 13854362
Conc: 93.75 ug/ml



#8 n-Octadecane (C18)

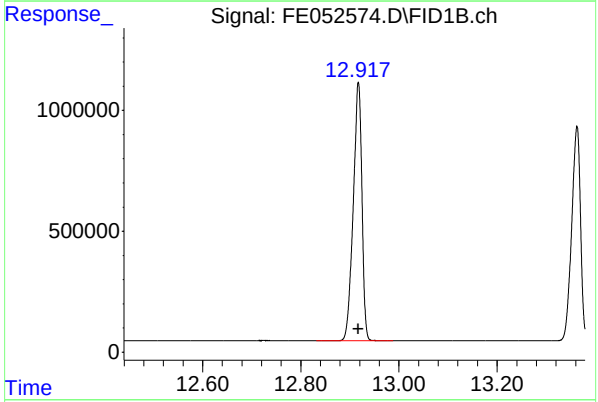
R.T.: 11.603 min
Delta R.T.: 0.000 min
Response: 13752507
Conc: 93.74 ug/ml



#9 ortho-Terphenyl (SURR)

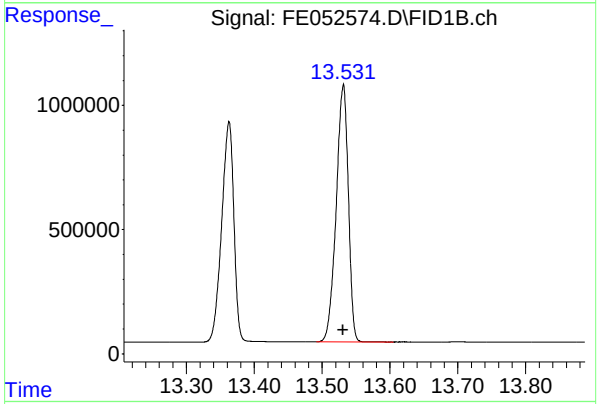
R.T.: 11.921 min
Delta R.T.: 0.000 min
Response: 15249190
Conc: 93.75 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



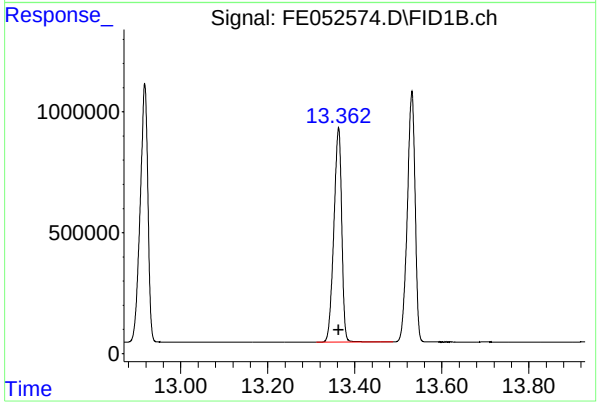
#10 n-Eicosane (C20)

R.T.: 12.917 min
Delta R.T.: 0.000 min
Response: 13115140
Conc: 93.71 ug/ml



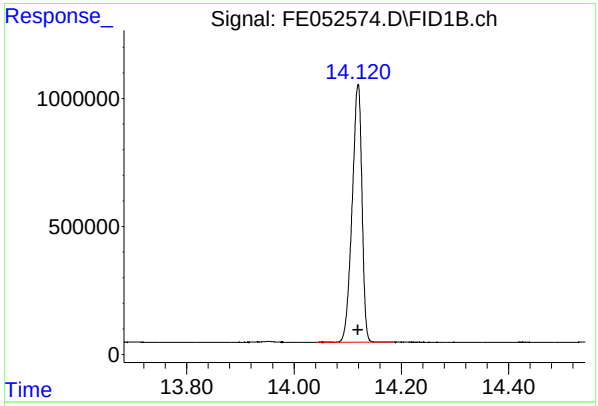
#11 n-Heneicosane (C21)

R.T.: 13.531 min
Delta R.T.: 0.000 min
Response: 12870691
Conc: 93.75 ug/ml



#12 1-chlorooctadecane (SURR)

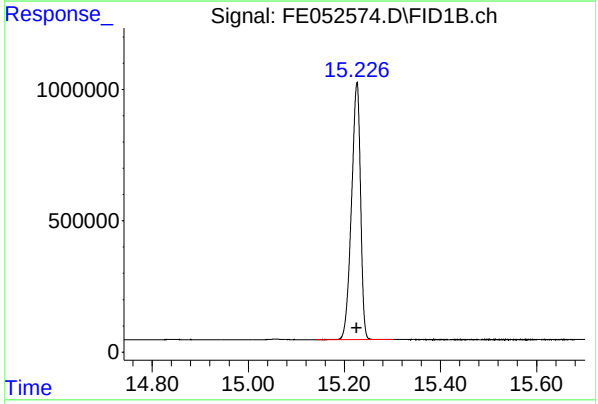
R.T.: 13.362 min
Delta R.T.: 0.000 min
Response: 11123183
Conc: 94.43 ug/ml



#13 n-Docosane (C22)

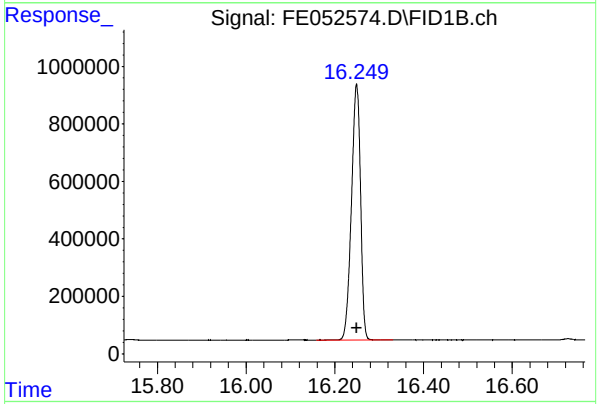
R.T.: 14.119 min
Delta R.T.: 0.000 min
Response: 12800111
Conc: 93.46 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



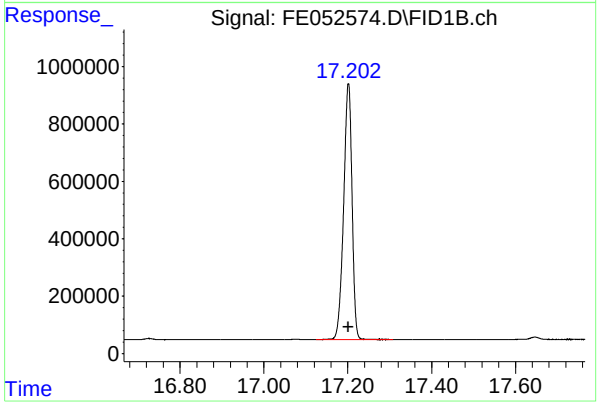
#14 n-Tetracosane (C24)

R.T.: 15.226 min
Delta R.T.: 0.000 min
Response: 12766560
Conc: 93.23 ug/ml



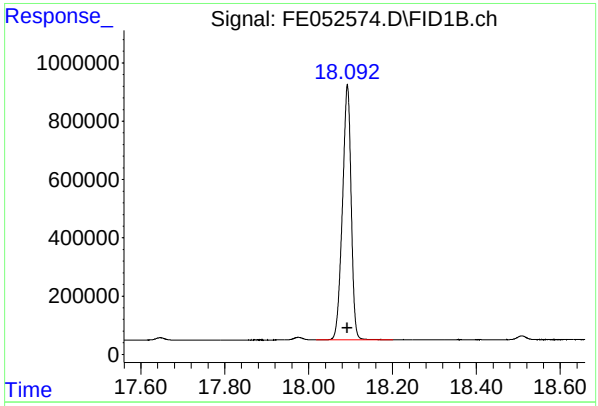
#15 n-Hexacosane (C26)

R.T.: 16.249 min
Delta R.T.: 0.000 min
Response: 12617268
Conc: 93.06 ug/ml



#16 n-Octacosane (C28)

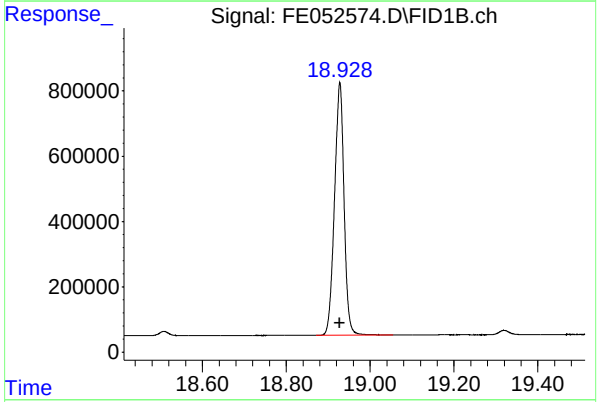
R.T.: 17.201 min
Delta R.T.: 0.000 min
Response: 12424646
Conc: 92.34 ug/ml



#17 n-Tricontane (C30)

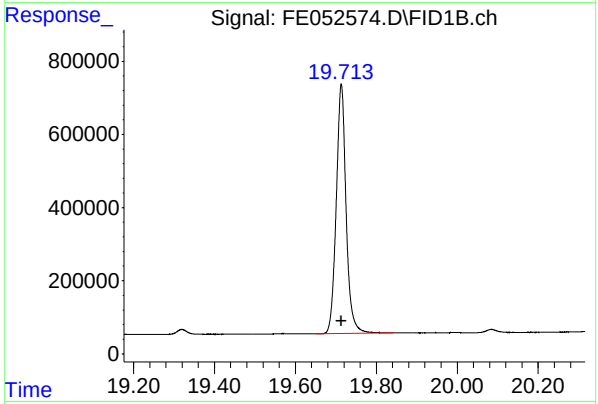
R.T.: 18.092 min
Delta R.T.: 0.000 min
Response: 12609210
Conc: 91.46 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



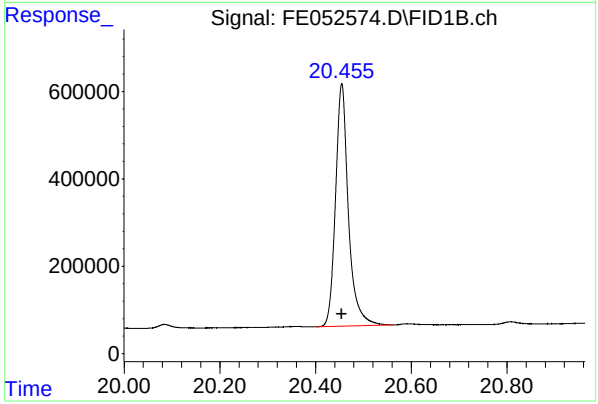
#18 n-Dotriacontane (C32)

R.T.: 18.928 min
Delta R.T.: 0.000 min
Response: 12252844
Conc: 90.80 ug/ml



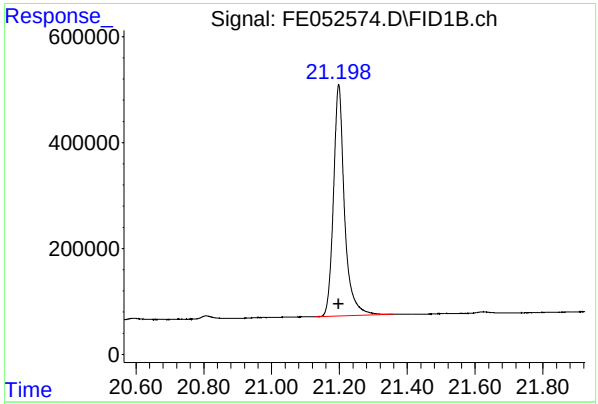
#19 n-Tetratriacontane (C34)

R.T.: 19.714 min
Delta R.T.: 0.000 min
Response: 11540152
Conc: 91.30 ug/ml



#20 n-Hexatriacontane (C36)

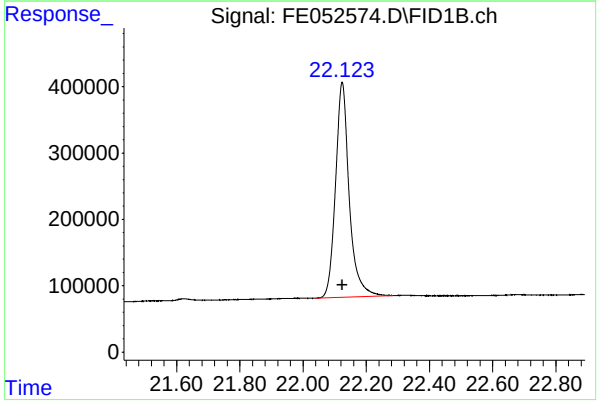
R.T.: 20.455 min
Delta R.T.: 0.000 min
Response: 10354123
Conc: 91.81 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.198 min
Delta R.T.: 0.000 min
Response: 9888606
Conc: 92.81 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



#22 n-Tetracontane (C40)

R.T.: 22.124 min
Delta R.T.: 0.000 min
Response: 9729801
Conc: 93.47 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052574.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 11:03
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 030325.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	3.257	3.218	3.341	BB	1376737	14069581	90.68%	4.963%
2	4.520	4.481	4.604	BB	1385573	14244956	91.81%	5.025%
3	6.234	6.194	6.331	BB	1543497	15515805	100.00%	5.473%
4	6.701	6.648	6.764	BB	1337401	14127596	91.05%	4.983%
5	7.337	7.291	7.451	PB	1429684	14872839	95.86%	5.246%
6	8.538	8.468	8.601	BB	1246041	13725919	88.46%	4.842%
7	10.153	10.111	10.221	BB	1228361	13854362	89.29%	4.887%
8	11.603	11.564	11.671	BB	1158280	13752507	88.64%	4.851%
9	11.921	11.858	11.991	BB	1294746	15249190	98.28%	5.379%
10	12.917	12.831	12.988	BB	1073457	13115140	84.53%	4.626%
11	13.362	13.311	13.488	BB	878519	11123183	71.69%	3.923%
12	13.531	13.491	13.604	BB	1034118	12870691	82.95%	4.540%
13	14.119	14.041	14.184	BB	1007279	12800111	82.50%	4.515%
14	15.226	15.141	15.301	BB	971384	12766560	82.28%	4.503%
15	16.249	16.158	16.331	BB	889127	12617268	81.32%	4.450%
16	17.201	17.124	17.308	BB	895534	12424646	80.08%	4.383%
17	18.092	18.018	18.201	VB	871317	12609210	81.27%	4.448%
18	18.928	18.871	19.054	BB	775818	12252844	78.97%	4.322%
19	19.714	19.651	19.841	BV	682323	11540152	74.38%	4.071%
20	20.455	20.401	20.562	BV	555199	10354123	66.73%	3.652%
21	21.198	21.131	21.358	BB	437475	9888606	63.73%	3.488%
22	22.124	22.041	22.284	BV	324105	9729801	62.71%	3.432%

Sum of corrected areas: 283505085

Aliphatic EPH 030325.M Tue Mar 04 04:13:47 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052575.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 11:34
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: Mar 03 12:40:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 12:40:45 2025
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)	11.915	7890446	48.995 ug/ml
Spiked Amount	50.000		Recovery =	97.99%
12) S	1-chlorooctadecane (S...	13.358	5721300	49.036 ug/ml
Spiked Amount	50.000		Recovery =	98.07%
	Target Compounds			
1) T	n-Nonane (C9)	3.254	7262625	48.981 ug/ml
2) T	n-Decane (C10)	4.517	7350604	48.938 ug/ml
3) T	A~Naphthalene (C11.7)	6.230	8003588	49.026 ug/ml
4) T	n-Dodecane (C12)	6.698	7295684	48.957 ug/ml
5) T	A~2-methylnaphthalene...	7.333	7667442	49.056 ug/ml
6) T	n-Tetradecane (C14)	8.535	7087970	48.937 ug/ml
7) T	n-Hexadecane (C16)	10.150	7163759	48.973 ug/ml
8) T	n-Octadecane (C18)	11.599	7114585	48.985 ug/ml
10) T	n-Eicosane (C20)	12.913	6790047	49.002 ug/ml
11) T	n-Heneicosane (C21)	13.527	6654465	48.971 ug/ml
13) T	n-Docosane (C22)	14.115	6651959	49.037 ug/ml
14) T	n-Tetracosane (C24)	15.221	6697431	49.266 ug/ml
15) T	n-Hexacosane (C26)	16.246	6641490	49.320 ug/ml
16) T	n-Octacosane (C28)	17.198	6557098	49.148 ug/ml
17) T	n-Tricontane (C30)	18.088	6637939	48.751 ug/ml
18) T	n-Dotriacontane (C32)	18.923	6417064	48.341 ug/ml
19) T	n-Tetratriacontane (C34)	19.709	5988221	48.220 ug/ml
20) T	n-Hexatriacontane (C36)	20.451	5353171	48.282 ug/ml
21) T	n-Octatriacontane (C38)	21.193	5101404	48.566 ug/ml
22) T	n-Tetracontane (C40)	22.116	5019598	48.800 ug/ml

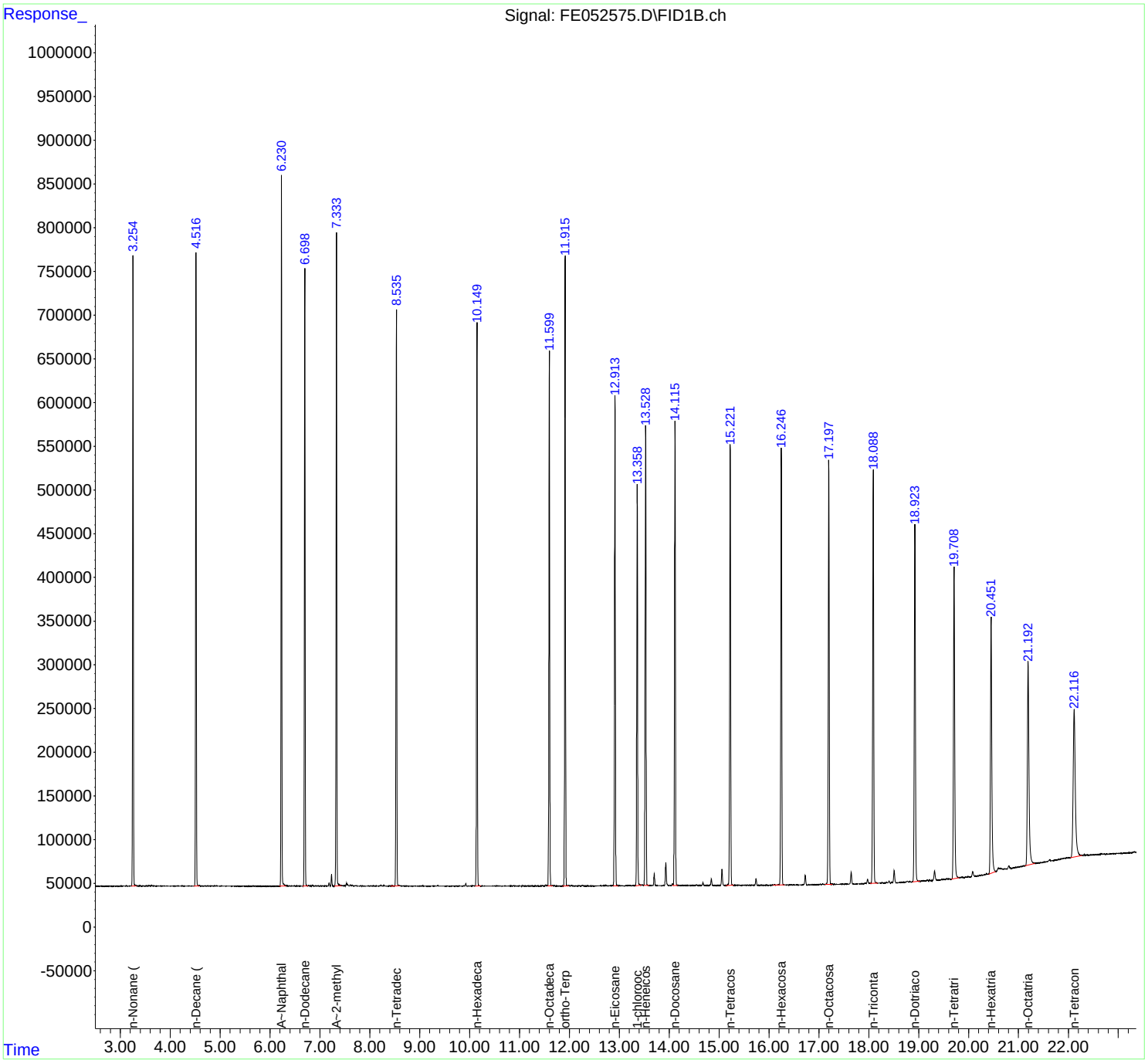
(f)=RT Delta > 1/2 Window (m)=manual int.

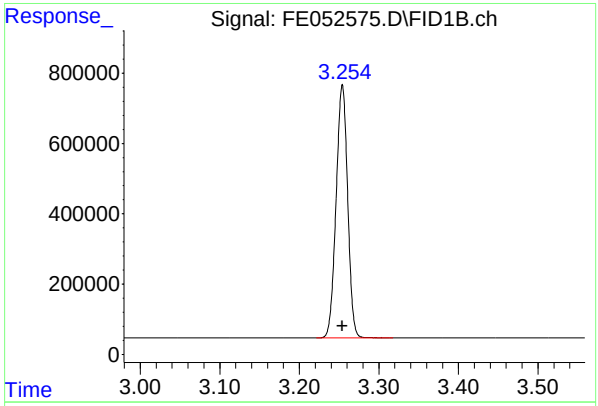
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052575.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 11:34
Operator : YP\AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Mar 03 12:40:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 12:40:45 2025
Response via : Initial Calibration
Integrator: ChemStation

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

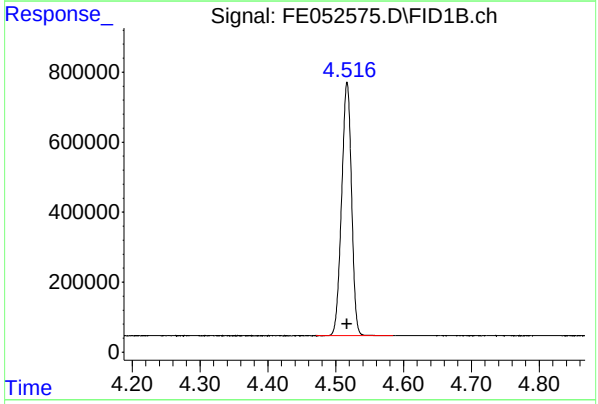




#1 n-Nonane (C9)

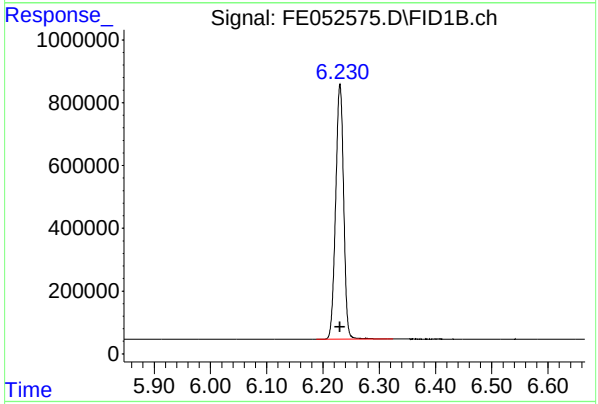
R.T.: 3.254 min
Delta R.T.: 0.000 min
Response: 7262625
Conc: 48.98 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



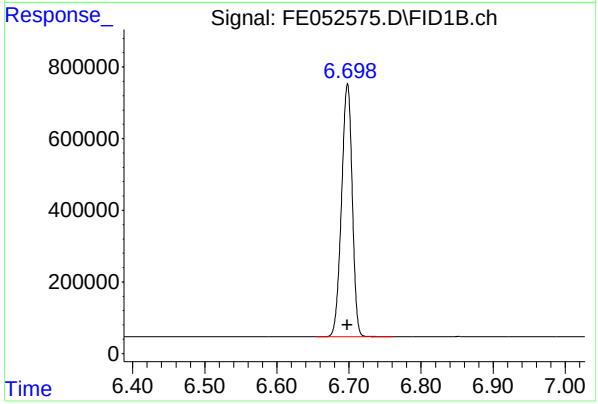
#2 n-Decane (C10)

R.T.: 4.517 min
Delta R.T.: 0.000 min
Response: 7350604
Conc: 48.94 ug/ml



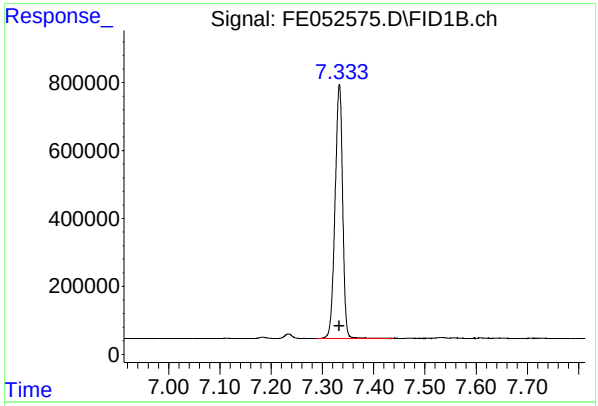
#3 A~Naphthalene (C11.7)

R.T.: 6.230 min
Delta R.T.: 0.000 min
Response: 8003588
Conc: 49.03 ug/ml



#4 n-Dodecane (C12)

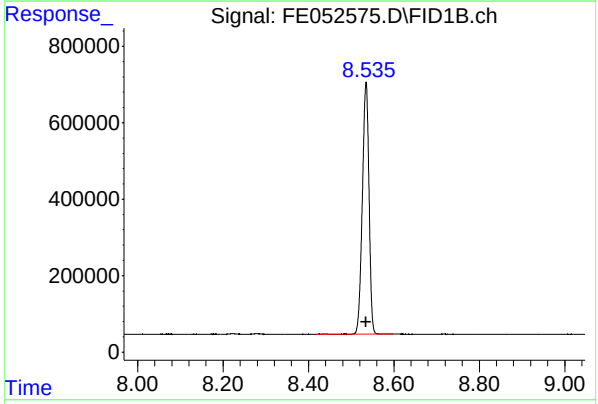
R.T.: 6.698 min
Delta R.T.: 0.000 min
Response: 7295684
Conc: 48.96 ug/ml



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

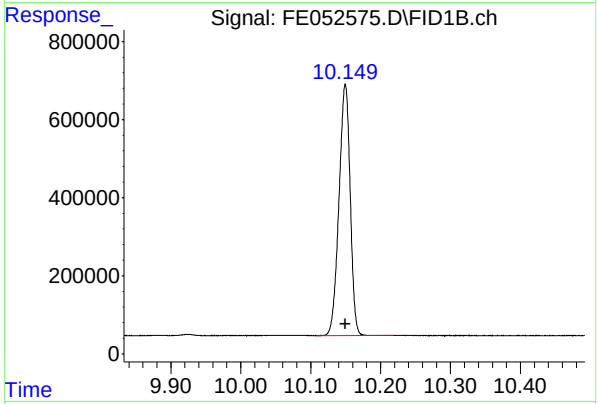
R.T.: 7.333 min
Delta R.T.: 0.000 min
Response: 7667442
Conc: 49.06 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



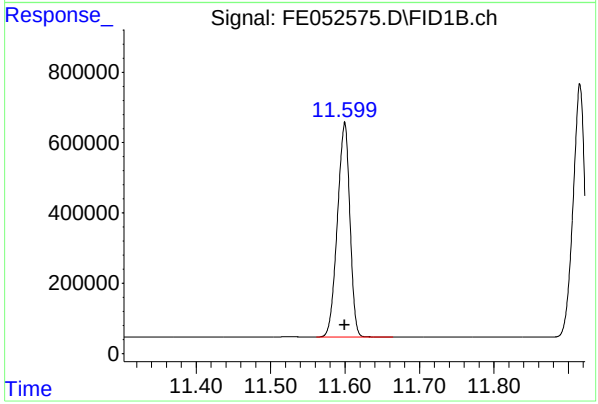
#6 n-Tetradecane (C14)

R.T.: 8.535 min
Delta R.T.: 0.000 min
Response: 7087970
Conc: 48.94 ug/ml



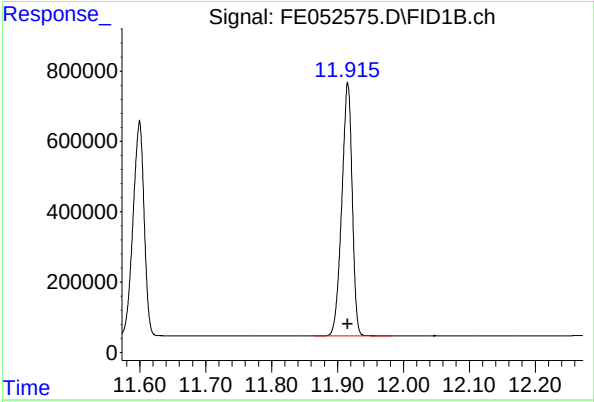
#7 n-Hexadecane (C16)

R.T.: 10.150 min
Delta R.T.: 0.000 min
Response: 7163759
Conc: 48.97 ug/ml



#8 n-Octadecane (C18)

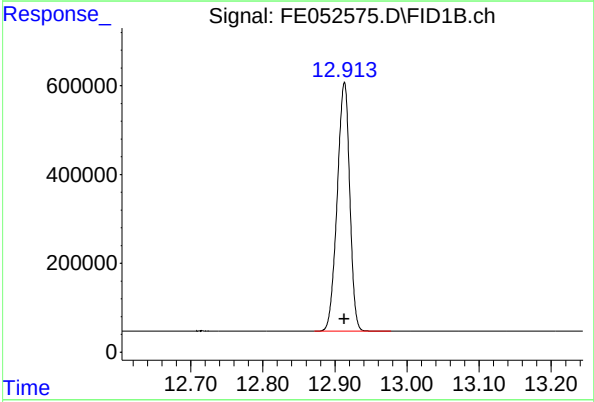
R.T.: 11.599 min
Delta R.T.: 0.000 min
Response: 7114585
Conc: 48.99 ug/ml



#9 ortho-Terphenyl (SURR)

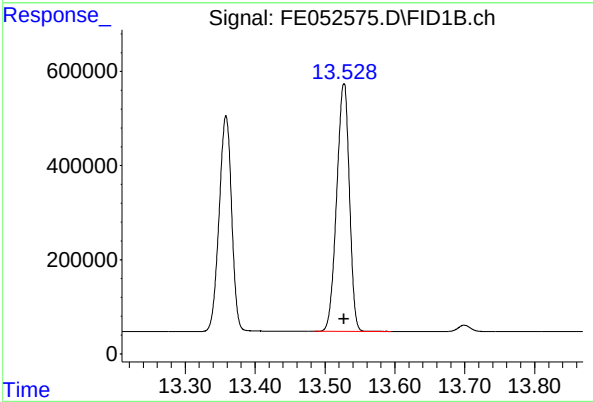
R.T.: 11.915 min
Delta R.T.: 0.000 min
Response: 7890446
Conc: 49.00 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



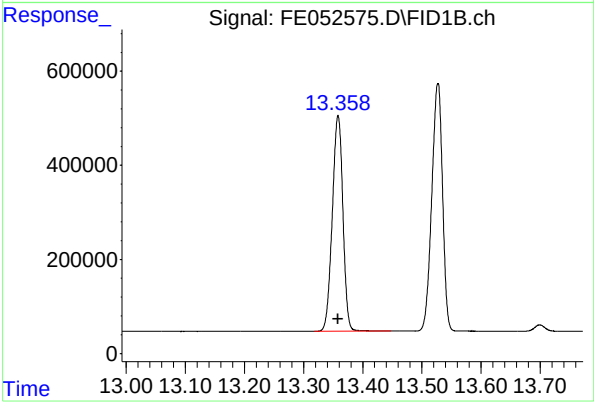
#10 n-Eicosane (C20)

R.T.: 12.913 min
Delta R.T.: 0.000 min
Response: 6790047
Conc: 49.00 ug/ml



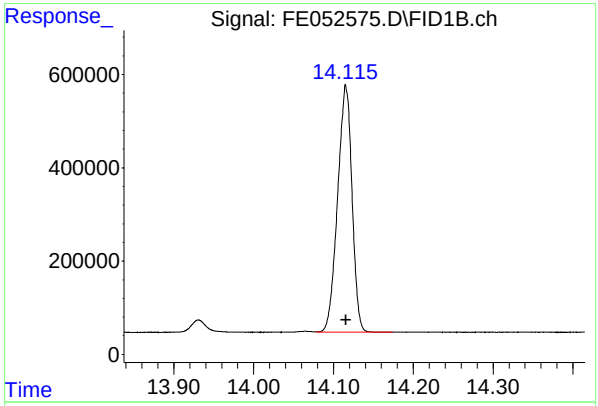
#11 n-Heneicosane (C21)

R.T.: 13.527 min
Delta R.T.: 0.000 min
Response: 6654465
Conc: 48.97 ug/ml



#12 1-chlorooctadecane (SURR)

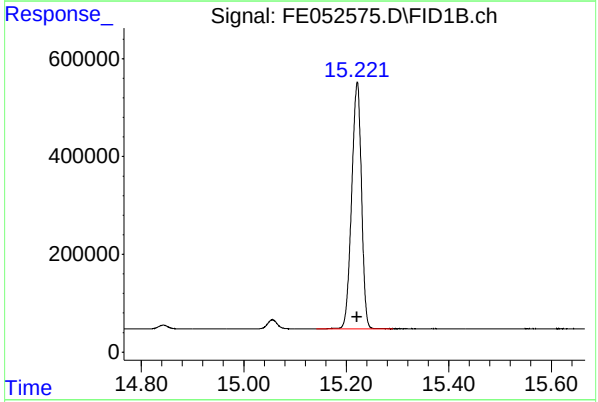
R.T.: 13.358 min
Delta R.T.: 0.000 min
Response: 5721300
Conc: 49.04 ug/ml



#13 n-Docosane (C22)

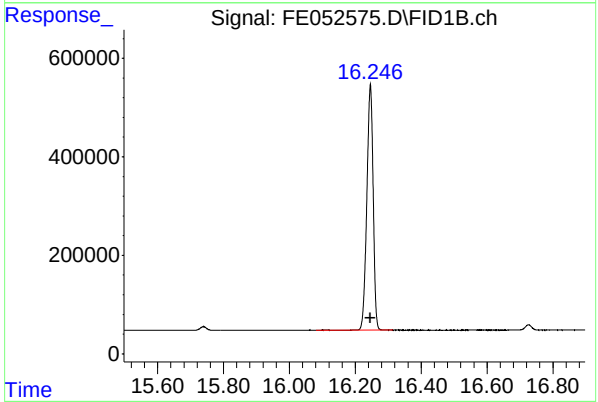
R.T.: 14.115 min
Delta R.T.: 0.000 min
Response: 6651959
Conc: 49.04 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



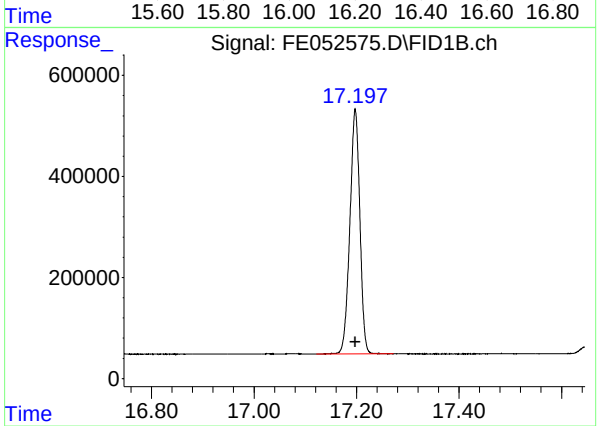
#14 n-Tetracosane (C24)

R.T.: 15.221 min
Delta R.T.: 0.000 min
Response: 6697431
Conc: 49.27 ug/ml



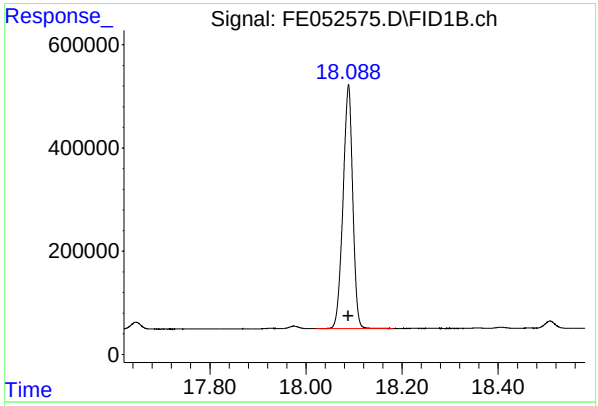
#15 n-Hexacosane (C26)

R.T.: 16.246 min
Delta R.T.: 0.000 min
Response: 6641490
Conc: 49.32 ug/ml



#16 n-Octacosane (C28)

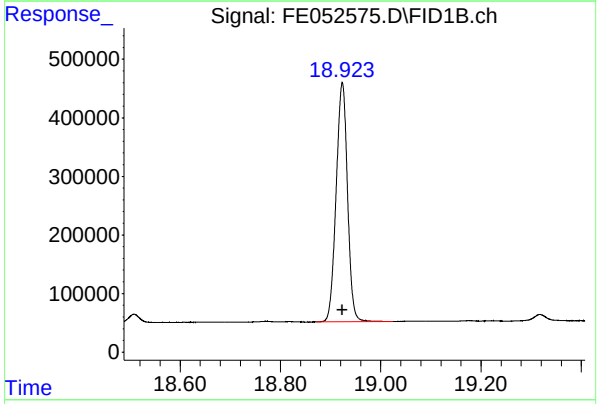
R.T.: 17.198 min
Delta R.T.: 0.000 min
Response: 6557098
Conc: 49.15 ug/ml



#17 n-Tricontane (C30)

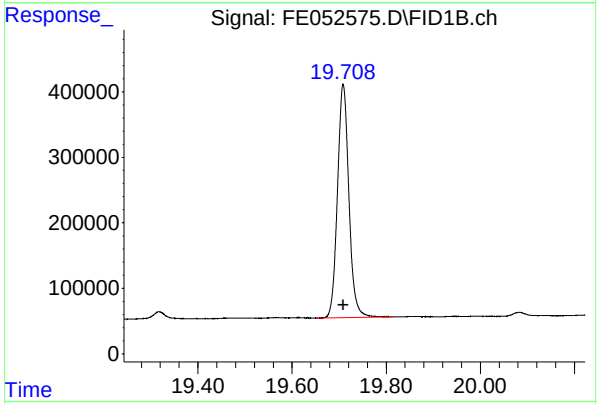
R.T.: 18.088 min
Delta R.T.: 0.000 min
Response: 6637939
Conc: 48.75 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



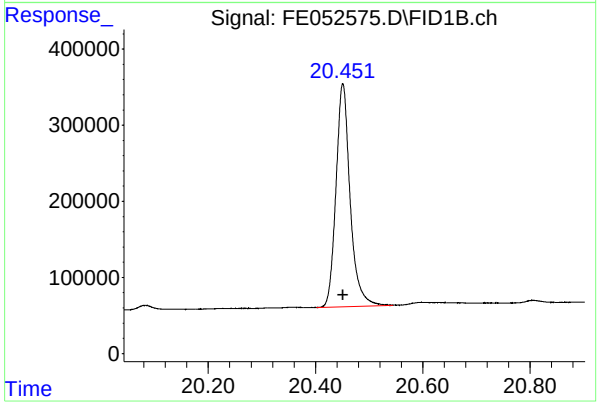
#18 n-Dotriacontane (C32)

R.T.: 18.923 min
Delta R.T.: 0.000 min
Response: 6417064
Conc: 48.34 ug/ml



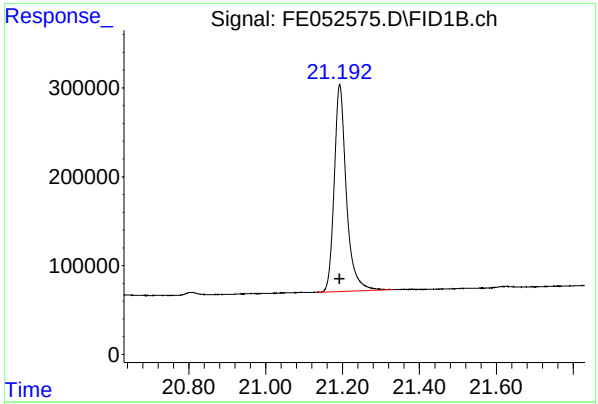
#19 n-Tetratriacontane (C34)

R.T.: 19.709 min
Delta R.T.: 0.000 min
Response: 5988221
Conc: 48.22 ug/ml



#20 n-Hexatriacontane (C36)

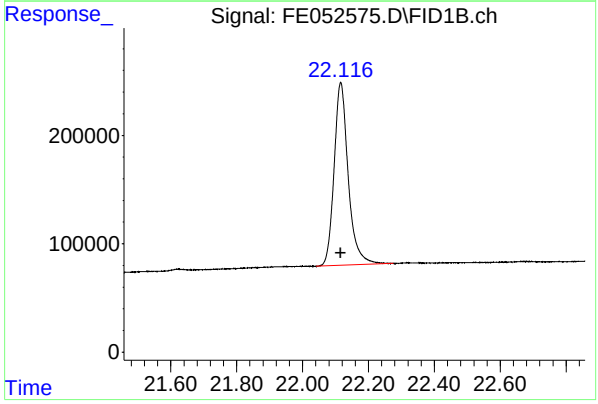
R.T.: 20.451 min
Delta R.T.: 0.000 min
Response: 5353171
Conc: 48.28 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.193 min
Delta R.T.: 0.000 mi
Response: 5101404
Conc: 48.57 ug/m

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



#22 n-Tetracontane (C40)

R.T.: 22.116 min
Delta R.T.: 0.000 min
Response: 5019598
Conc: 48.80 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052575.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 11:34
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 030325.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	3.318	BB	720805	7262625	90.74%	4.938%
2	4.517	4.471	4.584	BB	725655	7350604	91.84%	4.998%
3	6.230	6.188	6.324	BB	812229	8003588	100.00%	5.442%
4	6.698	6.654	6.761	BB	705384	7295684	91.16%	4.961%
5	7.333	7.288	7.438	PB	756176	7667442	95.80%	5.214%
6	8.535	8.418	8.598	BB	657816	7087970	88.56%	4.820%
7	10.150	10.108	10.218	BB	647411	7163759	89.51%	4.871%
8	11.599	11.561	11.664	BB	599043	7114585	88.89%	4.838%
9	11.915	11.864	11.981	BB	717321	7890446	98.59%	5.365%
10	12.913	12.871	12.978	BB	565753	6790047	84.84%	4.617%
11	13.358	13.318	13.448	BB	458678	5721300	71.48%	3.890%
12	13.527	13.484	13.594	BB	530789	6654465	83.14%	4.525%
13	14.115	14.078	14.174	VB	526625	6651959	83.11%	4.523%
14	15.221	15.141	15.291	BB	504373	6697431	83.68%	4.554%
15	16.246	16.081	16.314	BB	495717	6641490	82.98%	4.516%
16	17.198	17.121	17.271	BB	483594	6557098	81.93%	4.459%
17	18.088	18.021	18.181	BB	469897	6637939	82.94%	4.514%
18	18.923	18.871	19.024	BB	409189	6417064	80.18%	4.363%
19	19.709	19.651	19.814	BB	357009	5988221	74.82%	4.072%
20	20.451	20.401	20.544	BV	293191	5353171	66.88%	3.640%
21	21.193	21.131	21.331	BB	232996	5101404	63.74%	3.469%
22	22.116	22.041	22.274	BV	168917	5019598	62.72%	3.413%
			Sum of corrected areas:			147067888		

Aliphatic EPH 030325.M Tue Mar 04 04:14:28 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052576.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 12:04
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: Mar 03 12:32:58 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 12:32:42 2025
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)	11.910	3456693	20.000 ug/ml
Spiked Amount	50.000		Recovery =	40.00%
12)	S 1-chlorooctadecane (S...	13.355	2487317	20.000 ug/ml
Spiked Amount	50.000		Recovery =	40.00%
	Target Compounds			
1)	T n-Nonane (C9)	3.253	3177459	20.000 ug/ml
2)	T n-Decane (C10)	4.514	3222867	20.000 ug/ml
3)	T A~Naphthalene (C11.7)	6.228	3490467	20.000 ug/ml
4)	T n-Dodecane (C12)	6.696	3197479	20.000 ug/ml
5)	T A~2-methylnaphthalene...	7.330	3336499	20.000 ug/ml
6)	T n-Tetradecane (C14)	8.531	3109866	20.000 ug/ml
7)	T n-Hexadecane (C16)	10.146	3140454	20.000 ug/ml
8)	T n-Octadecane (C18)	11.595	3118030	20.000 ug/ml
10)	T n-Eicosane (C20)	12.909	2974997	20.000 ug/ml
11)	T n-Heneicosane (C21)	13.523	2917184	20.000 ug/ml
13)	T n-Docosane (C22)	14.111	2918322	20.000 ug/ml
14)	T n-Tetracosane (C24)	15.217	2924292	20.000 ug/ml
15)	T n-Hexacosane (C26)	16.242	2899563	20.000 ug/ml
16)	T n-Octacosane (C28)	17.194	2897161	20.000 ug/ml
17)	T n-Tricontane (C30)	18.085	2992644	20.000 ug/ml
18)	T n-Dotriacontane (C32)	18.920	2947304	20.000 ug/ml
19)	T n-Tetratriacontane (C34)	19.706	2747820	20.000 ug/ml
20)	T n-Hexatriacontane (C36)	20.448	2440276	20.000 ug/ml
21)	T n-Octatriacontane (C38)	21.189	2284145	20.000 ug/ml
22)	T n-Tetracontane (C40)	22.109	2217832	20.000 ug/ml

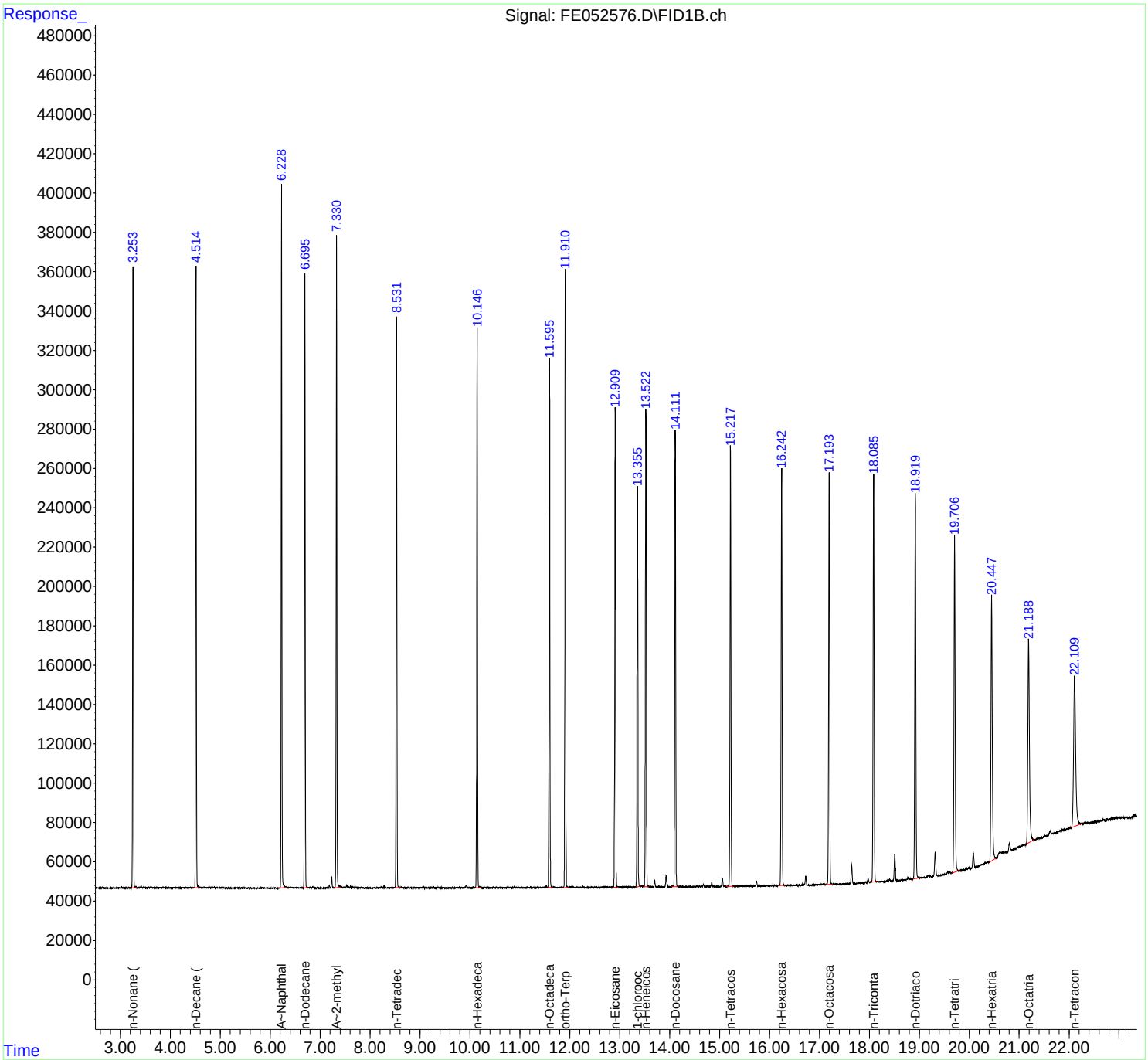
(f)=RT Delta > 1/2 Window (m)=manual int.

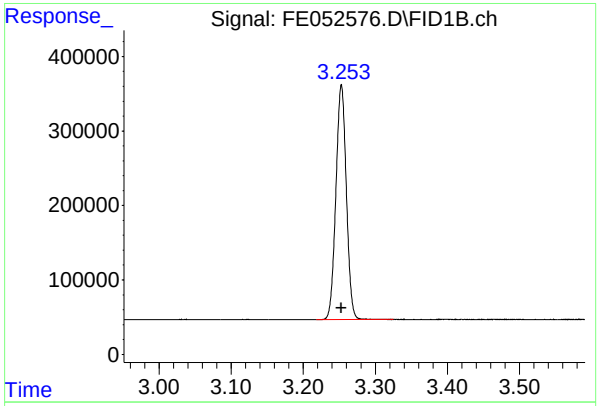
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052576.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 12:04
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Mar 03 12:32:58 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 12:32:42 2025
Response via : Initial Calibration
Integrator: ChemStation

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

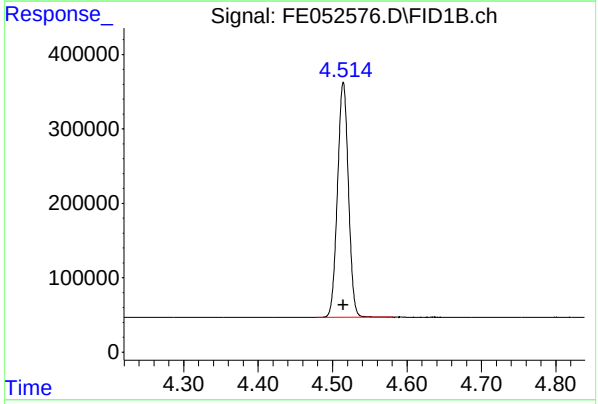




#1 n-Nonane (C9)

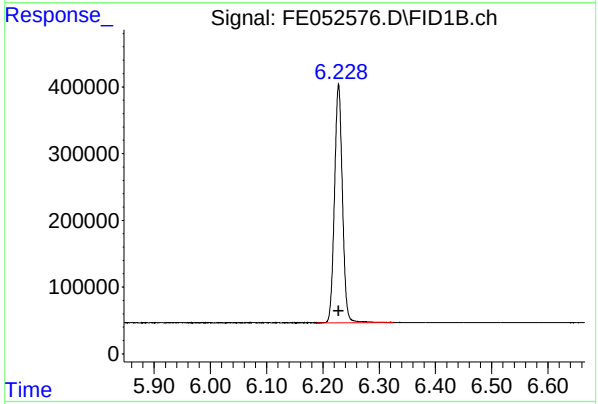
R.T.: 3.253 min
Delta R.T.: 0.000 min
Response: 3177459
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



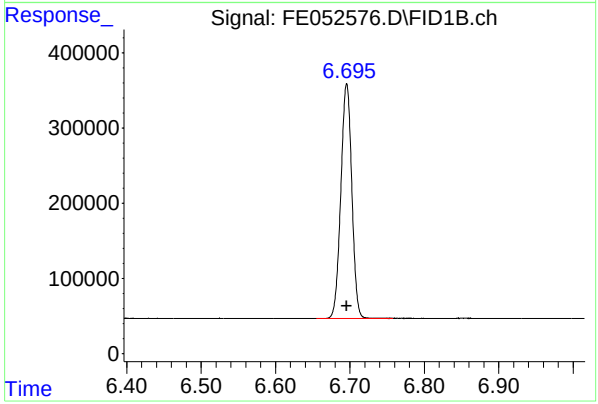
#2 n-Decane (C10)

R.T.: 4.514 min
Delta R.T.: 0.000 min
Response: 3222867
Conc: 20.00 ug/ml



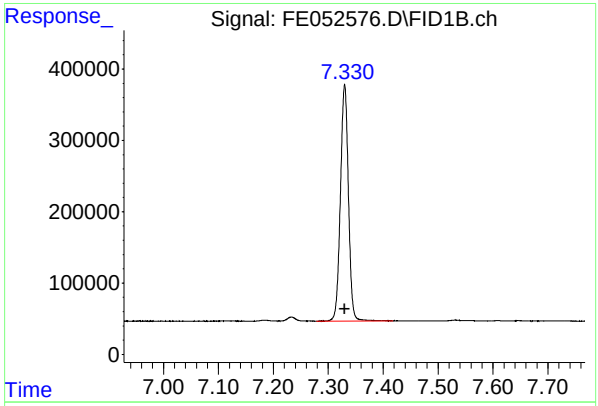
#3 A~Naphthalene (C11.7)

R.T.: 6.228 min
Delta R.T.: 0.000 min
Response: 3490467
Conc: 20.00 ug/ml



#4 n-Dodecane (C12)

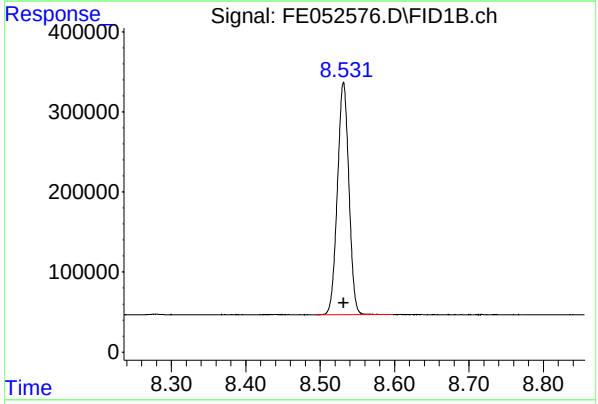
R.T.: 6.696 min
Delta R.T.: 0.000 min
Response: 3197479
Conc: 20.00 ug/ml



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

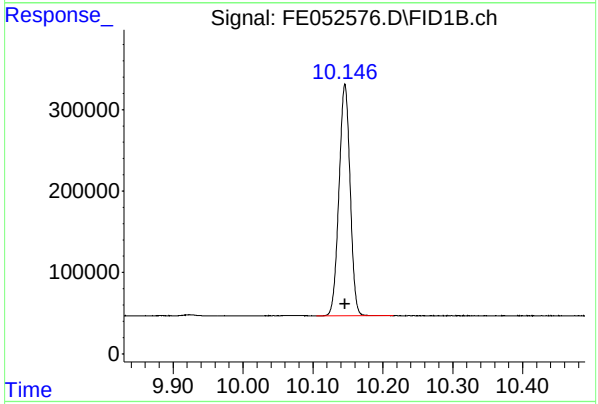
R.T.: 7.330 min
Delta R.T.: 0.000 min
Response: 3336499
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



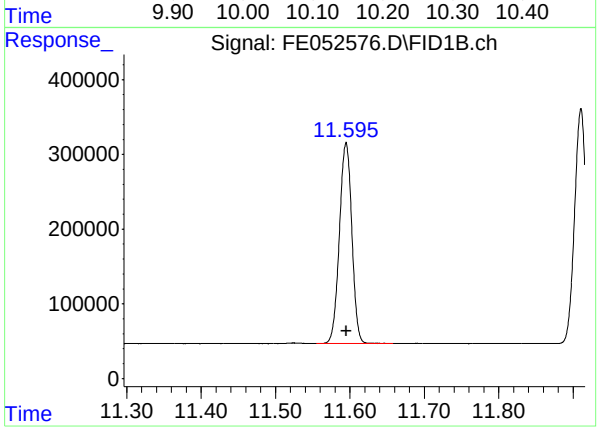
#6 n-Tetradecane (C14)

R.T.: 8.531 min
Delta R.T.: 0.000 min
Response: 3109866
Conc: 20.00 ug/ml



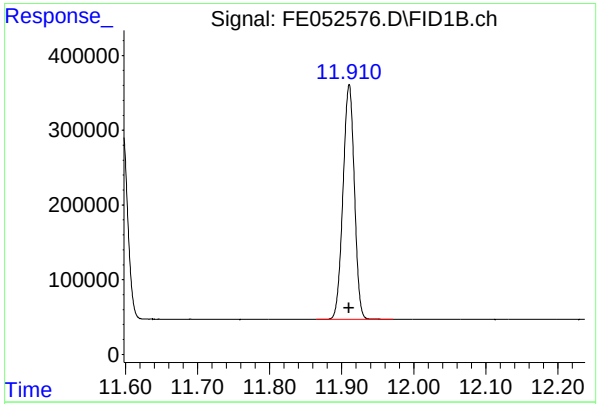
#7 n-Hexadecane (C16)

R.T.: 10.146 min
Delta R.T.: 0.000 min
Response: 3140454
Conc: 20.00 ug/ml



#8 n-Octadecane (C18)

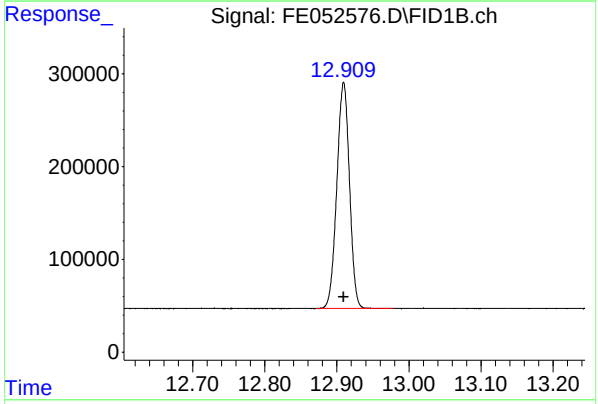
R.T.: 11.595 min
Delta R.T.: 0.000 min
Response: 3118030
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURR)

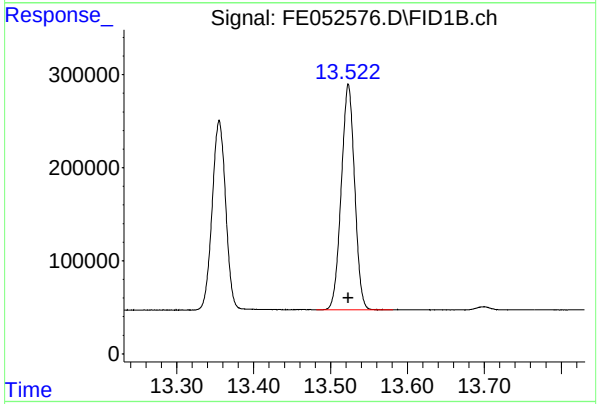
R.T.: 11.910 min
Delta R.T.: 0.000 min
Response: 3456693
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



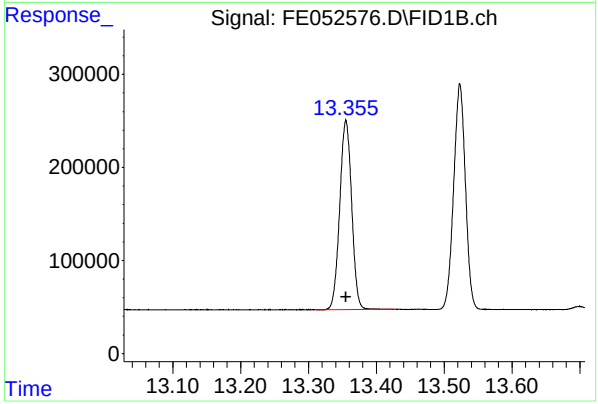
#10 n-Eicosane (C20)

R.T.: 12.909 min
Delta R.T.: 0.000 min
Response: 2974997
Conc: 20.00 ug/ml



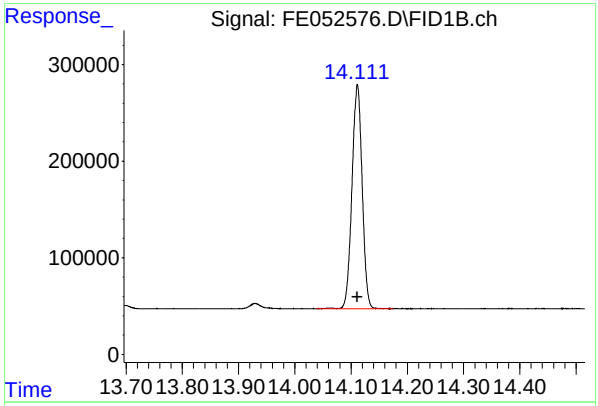
#11 n-Heneicosane (C21)

R.T.: 13.523 min
Delta R.T.: 0.000 min
Response: 2917184
Conc: 20.00 ug/ml



#12 1-chlorooctadecane (SURR)

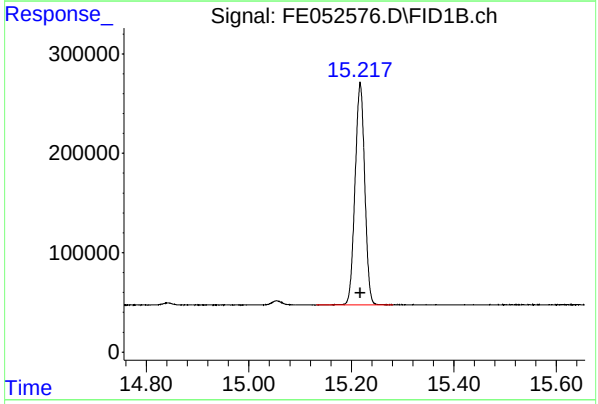
R.T.: 13.355 min
Delta R.T.: 0.000 min
Response: 2487317
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

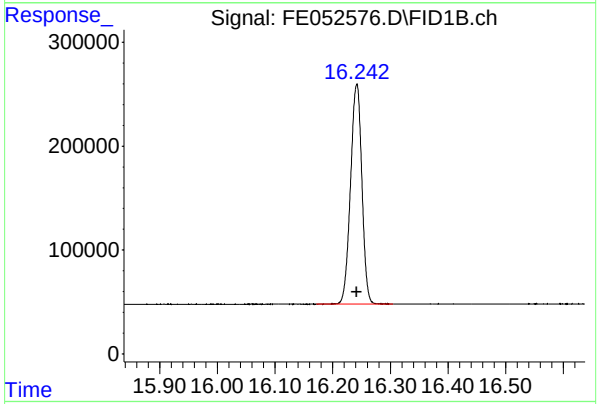
R.T.: 14.111 min
Delta R.T.: 0.000 min
Response: 2918322
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



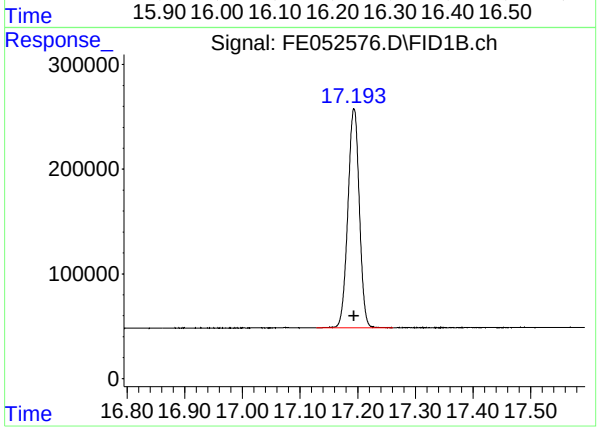
#14 n-Tetracosane (C24)

R.T.: 15.217 min
Delta R.T.: 0.000 min
Response: 2924292
Conc: 20.00 ug/ml



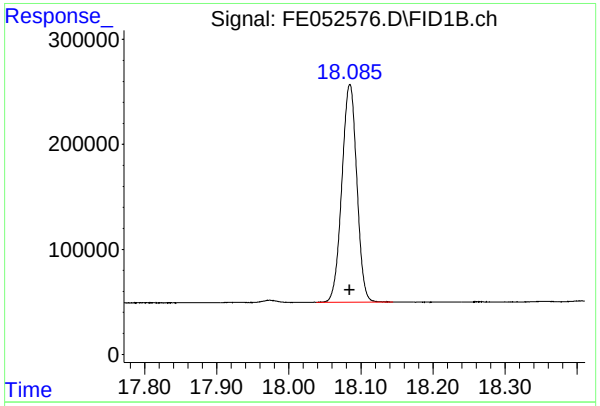
#15 n-Hexacosane (C26)

R.T.: 16.242 min
Delta R.T.: 0.000 min
Response: 2899563
Conc: 20.00 ug/ml



#16 n-Octacosane (C28)

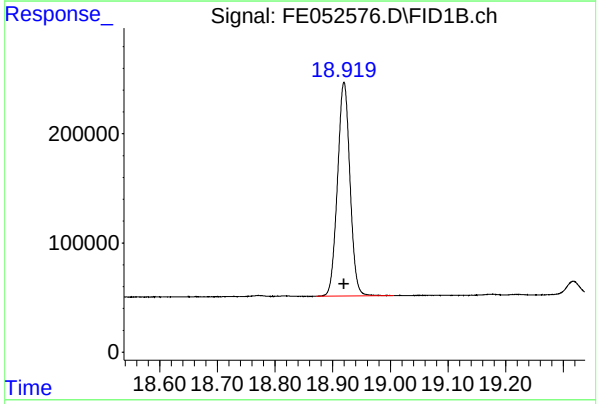
R.T.: 17.194 min
Delta R.T.: 0.000 min
Response: 2897161
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

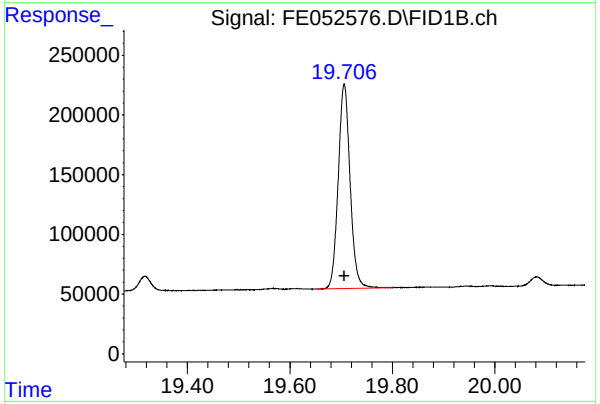
R.T.: 18.085 min
Delta R.T.: 0.000 min
Response: 2992644
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



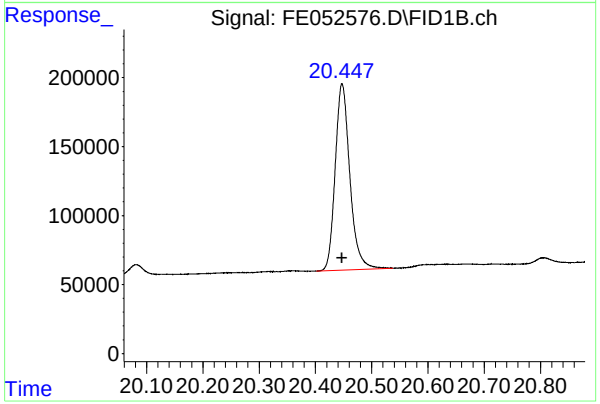
#18 n-Dotriacontane (C32)

R.T.: 18.920 min
Delta R.T.: 0.000 min
Response: 2947304
Conc: 20.00 ug/ml



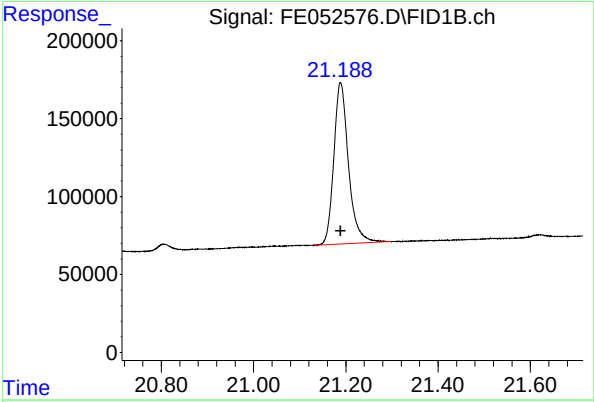
#19 n-Tetratriacontane (C34)

R.T.: 19.706 min
Delta R.T.: 0.000 min
Response: 2747820
Conc: 20.00 ug/ml



#20 n-Hexatriacontane (C36)

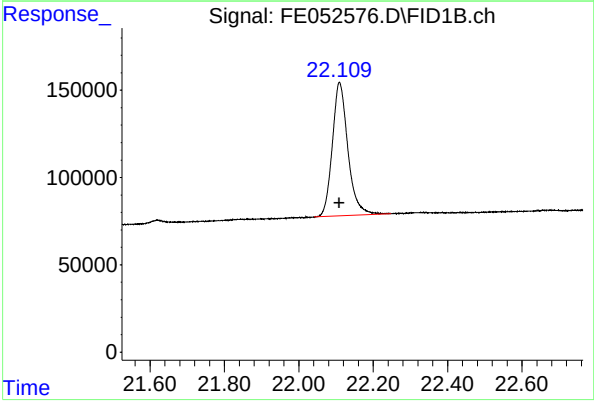
R.T.: 20.448 min
Delta R.T.: 0.000 min
Response: 2440276
Conc: 20.00 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.189 min
Delta R.T.: 0.000 min
Response: 2284145
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



#22 n-Tetracontane (C40)

R.T.: 22.109 min
Delta R.T.: 0.000 min
Response: 2217832
Conc: 20.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052576.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 12:04
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 030325.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	3.325	BB	314137	3177459	91.03%	4.896%
2	4.514	4.478	4.581	BB	315822	3222867	92.33%	4.966%
3	6.228	6.188	6.325	BB	355761	3490467	100.00%	5.378%
4	6.696	6.655	6.758	BB	311337	3197479	91.61%	4.927%
5	7.330	7.278	7.418	BB	331214	3336499	95.59%	5.141%
6	8.531	8.495	8.598	BB	289879	3109866	89.10%	4.792%
7	10.146	10.105	10.215	BB	282742	3140454	89.97%	4.839%
8	11.595	11.555	11.658	BB	268071	3118030	89.33%	4.804%
9	11.910	11.865	11.971	BB	315131	3456693	99.03%	5.326%
10	12.909	12.871	12.978	BB	241865	2974997	85.23%	4.584%
11	13.355	13.311	13.425	BB	202368	2487317	71.26%	3.833%
12	13.523	13.481	13.581	BB	241268	2917184	83.58%	4.495%
13	14.111	14.038	14.175	BB	232061	2918322	83.61%	4.497%
14	15.217	15.131	15.281	BB	222983	2924292	83.78%	4.506%
15	16.242	16.171	16.305	BB	211679	2899563	83.07%	4.468%
16	17.194	17.128	17.261	BB	210130	2897161	83.00%	4.464%
17	18.085	18.038	18.145	BB	207605	2992644	85.74%	4.611%
18	18.920	18.871	19.005	BB	195997	2947304	84.44%	4.541%
19	19.706	19.651	19.801	BB	170743	2747820	78.72%	4.234%
20	20.448	20.401	20.538	BV	134980	2440276	69.91%	3.760%
21	21.189	21.131	21.298	BB	103725	2284145	65.44%	3.520%
22	22.109	22.041	22.248	BB	76593	2217832	63.54%	3.417%
			Sum of corrected areas:			64898671		

Aliphatic EPH 030325.M Tue Mar 04 04:15:00 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052577.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 12:34
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

Integration File: autoint1.e
Quant Time: Mar 03 12:57:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 12:57:44 2025
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)	11.909	1779109	10.765 ug/ml
Spiked Amount	50.000		Recovery =	21.53%
12)	S 1-chlorooctadecane (S...	13.354	1275538	10.683 ug/ml
Spiked Amount	50.000		Recovery =	21.37%
	Target Compounds			
1)	T n-Nonane (C9)	3.253	1633896	10.746 ug/ml
2)	T n-Decane (C10)	4.514	1652277	10.732 ug/ml
3)	T A~Naphthalene (C11.7)	6.228	1784418	10.682 ug/ml
4)	T n-Dodecane (C12)	6.695	1640160	10.736 ug/ml
5)	T A~2-methylnaphthalene...	7.330	1702988	10.657 ug/ml
6)	T n-Tetradecane (C14)	8.531	1594378	10.737 ug/ml
7)	T n-Hexadecane (C16)	10.145	1610203	10.737 ug/ml
8)	T n-Octadecane (C18)	11.594	1601994	10.753 ug/ml
10)	T n-Eicosane (C20)	12.909	1536447	10.794 ug/ml
11)	T n-Heneicosane (C21)	13.522	1502197	10.771 ug/ml
13)	T n-Docosane (C22)	14.111	1511879	10.835 ug/ml
14)	T n-Tetracosane (C24)	15.218	1545839	10.994 ug/ml
15)	T n-Hexacosane (C26)	16.242	1542744	11.054 ug/ml
16)	T n-Octacosane (C28)	17.194	1547735	11.154 ug/ml
17)	T n-Tricontane (C30)	18.083	1607077	11.294 ug/ml
18)	T n-Dotriacontane (C32)	18.918	1583504	11.380 ug/ml
19)	T n-Tetratriacontane (C34)	19.705	1456233	11.241 ug/ml
20)	T n-Hexatriacontane (C36)	20.447	1283640	11.138 ug/ml
21)	T n-Octatriacontane (C38)	21.188	1168118	10.818 ug/ml
22)	T n-Tetracontane (C40)	22.109	1142101	10.805 ug/ml

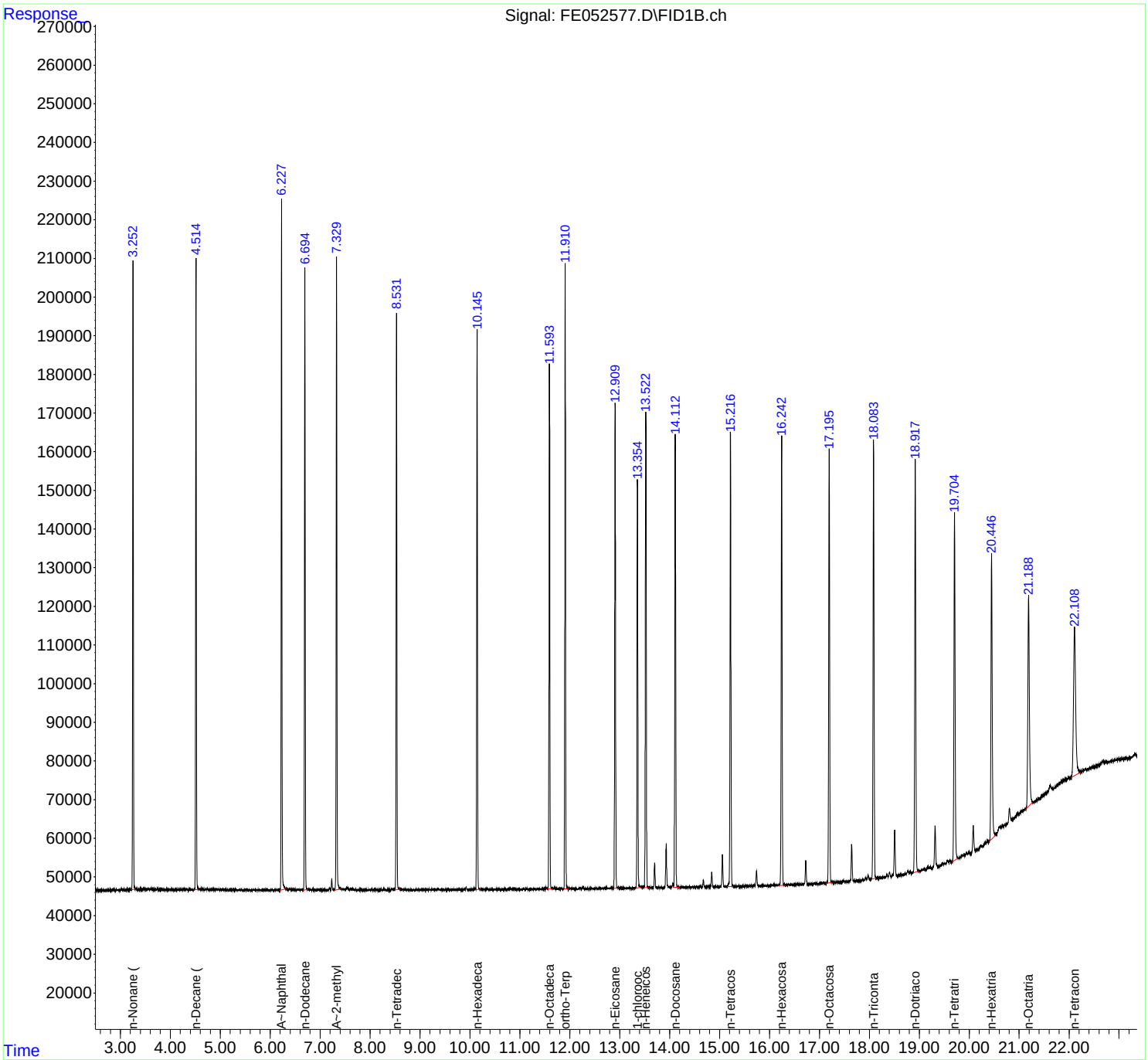
(f)=RT Delta > 1/2 Window (m)=manual int.

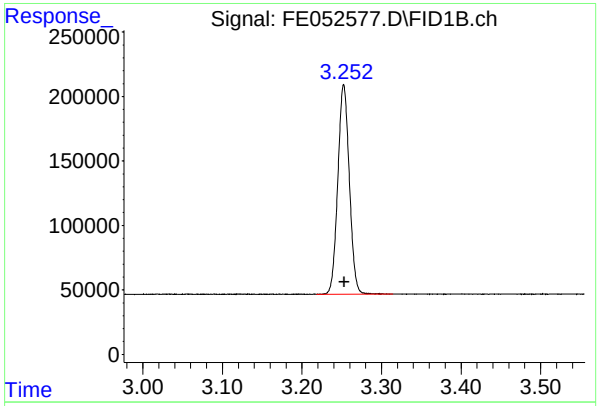
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052577.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 12:34
Operator : YP\AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
Quant Time: Mar 03 12:57:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 12:57:44 2025
Response via : Initial Calibration
Integrator: ChemStation

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

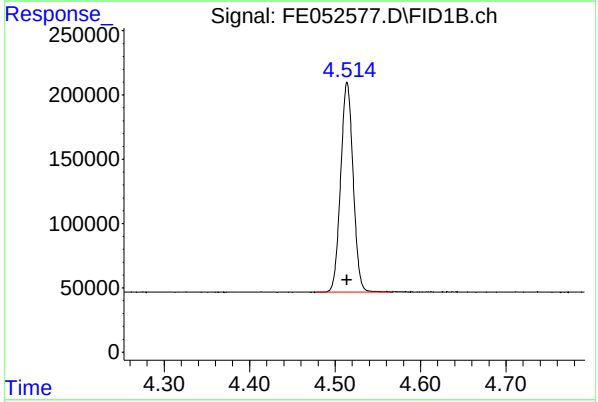




#1 n-Nonane (C9)

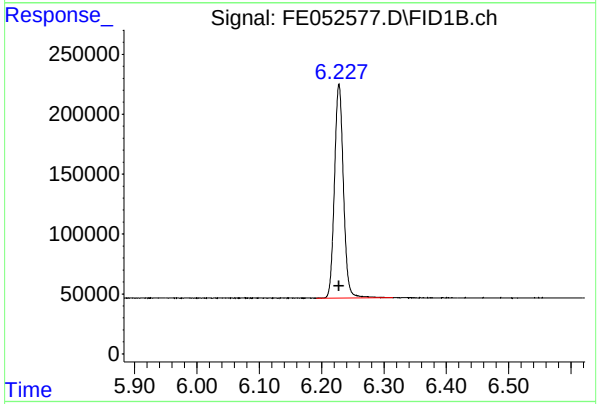
R.T.: 3.253 min
Delta R.T.: 0.000 min
Response: 1633896
Conc: 10.75 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



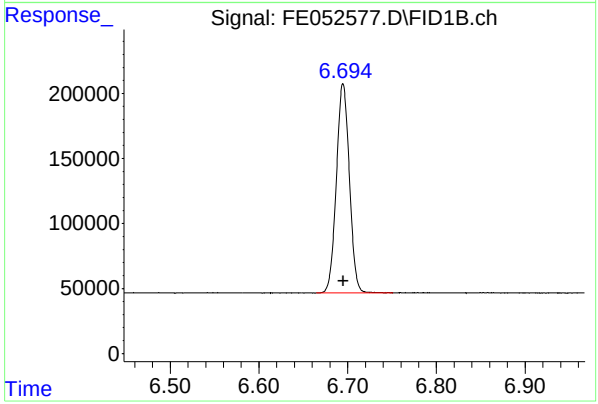
#2 n-Decane (C10)

R.T.: 4.514 min
Delta R.T.: 0.000 min
Response: 1652277
Conc: 10.73 ug/ml



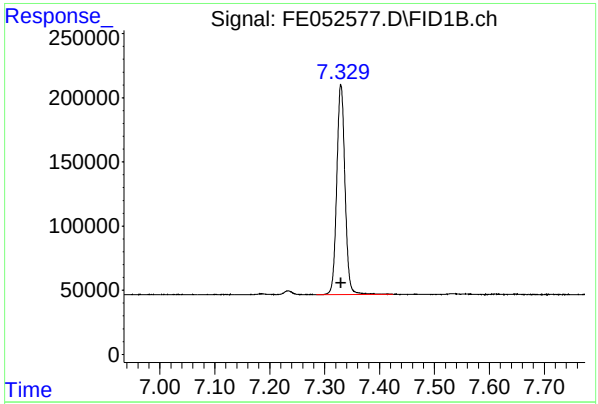
#3 A~Naphthalene (C11.7)

R.T.: 6.228 min
Delta R.T.: 0.000 min
Response: 1784418
Conc: 10.68 ug/ml



#4 n-Dodecane (C12)

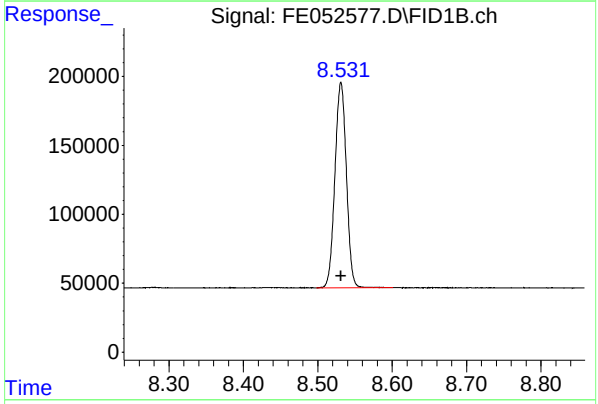
R.T.: 6.695 min
Delta R.T.: 0.000 min
Response: 1640160
Conc: 10.74 ug/ml



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

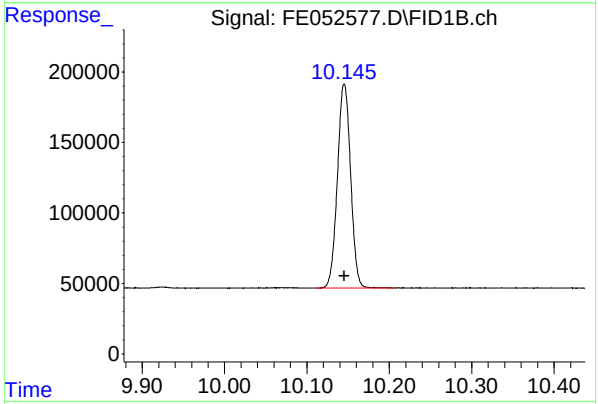
R.T.: 7.330 min
Delta R.T.: 0.000 min
Response: 1702988
Conc: 10.66 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



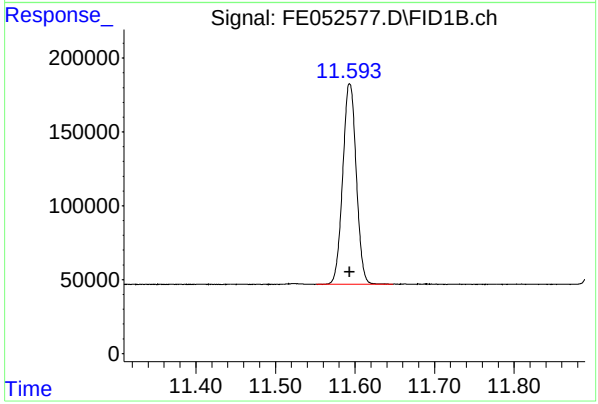
#6 n-Tetradecane (C14)

R.T.: 8.531 min
Delta R.T.: 0.000 min
Response: 1594378
Conc: 10.74 ug/ml



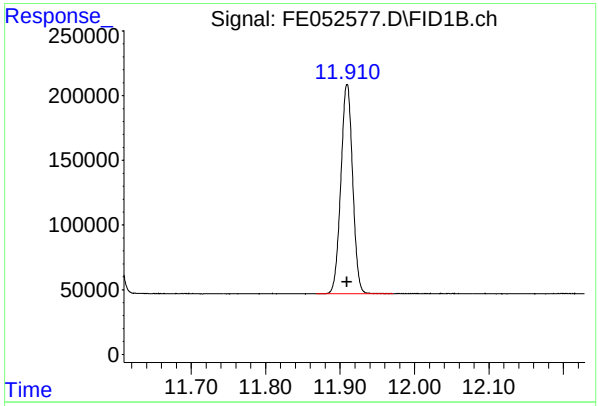
#7 n-Hexadecane (C16)

R.T.: 10.145 min
Delta R.T.: 0.000 min
Response: 1610203
Conc: 10.74 ug/ml



#8 n-Octadecane (C18)

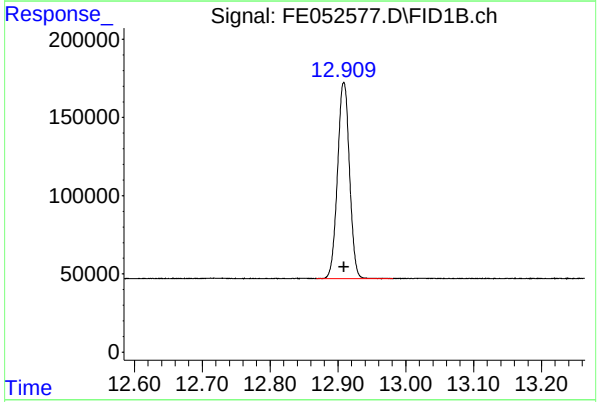
R.T.: 11.594 min
Delta R.T.: 0.000 min
Response: 1601994
Conc: 10.75 ug/ml



#9 ortho-Terphenyl (SURR)

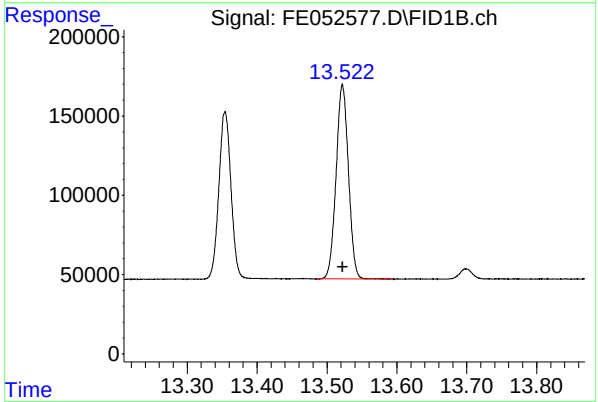
R.T.: 11.909 min
Delta R.T.: 0.000 min
Response: 1779109
Conc: 10.77 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



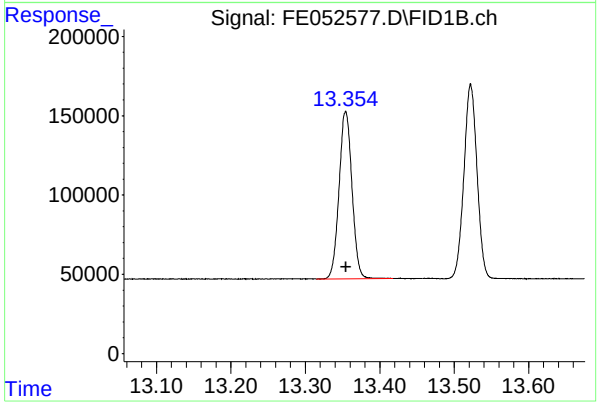
#10 n-Eicosane (C20)

R.T.: 12.909 min
Delta R.T.: 0.000 min
Response: 1536447
Conc: 10.79 ug/ml



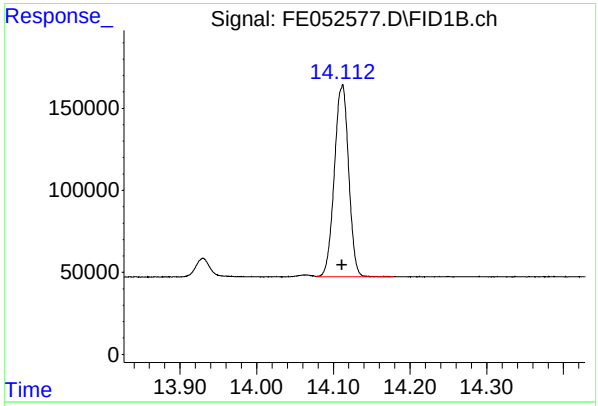
#11 n-Heneicosane (C21)

R.T.: 13.522 min
Delta R.T.: 0.000 min
Response: 1502197
Conc: 10.77 ug/ml



#12 1-chlorooctadecane (SURR)

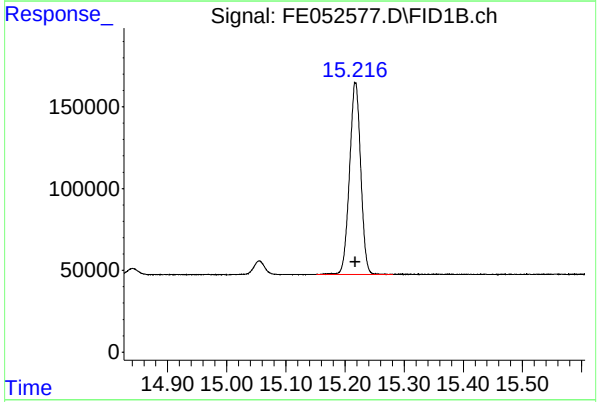
R.T.: 13.354 min
Delta R.T.: 0.000 min
Response: 1275538
Conc: 10.68 ug/ml



#13 n-Docosane (C22)

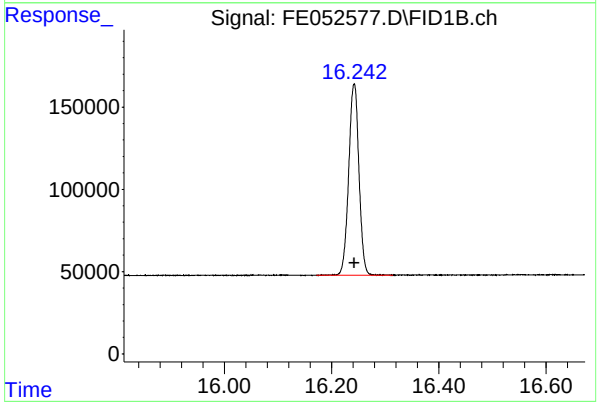
R.T.: 14.111 min
Delta R.T.: 0.000 min
Response: 1511879
Conc: 10.84 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



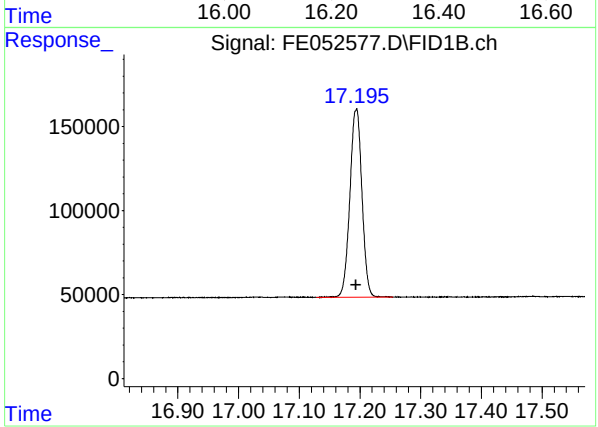
#14 n-Tetracosane (C24)

R.T.: 15.218 min
Delta R.T.: 0.000 min
Response: 1545839
Conc: 10.99 ug/ml



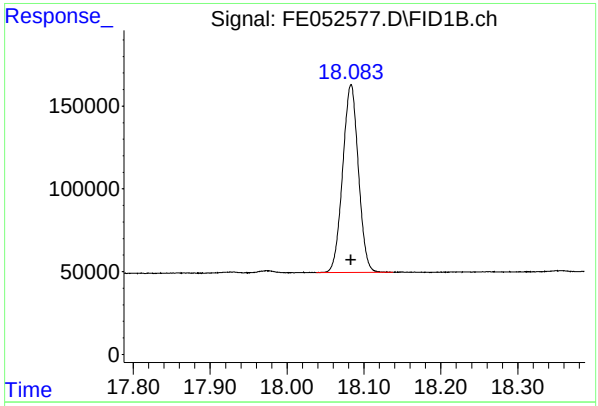
#15 n-Hexacosane (C26)

R.T.: 16.242 min
Delta R.T.: 0.000 min
Response: 1542744
Conc: 11.05 ug/ml



#16 n-Octacosane (C28)

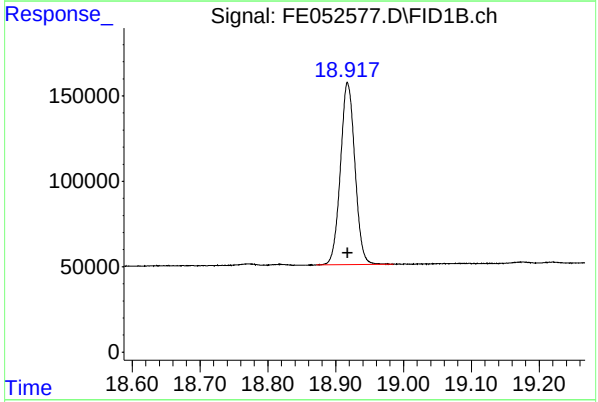
R.T.: 17.194 min
Delta R.T.: 0.000 min
Response: 1547735
Conc: 11.15 ug/ml



#17 n-Tricontane (C30)

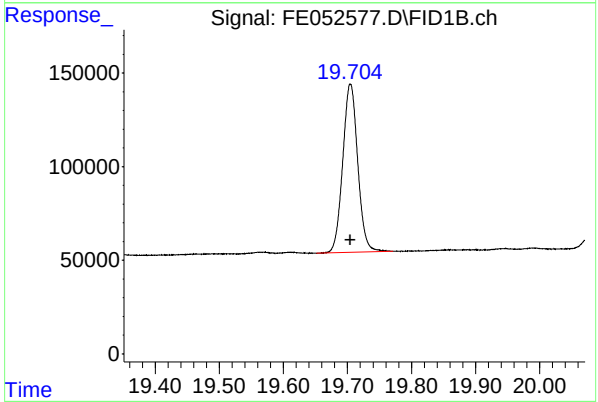
R.T.: 18.083 min
Delta R.T.: 0.000 min
Response: 1607077
Conc: 11.29 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



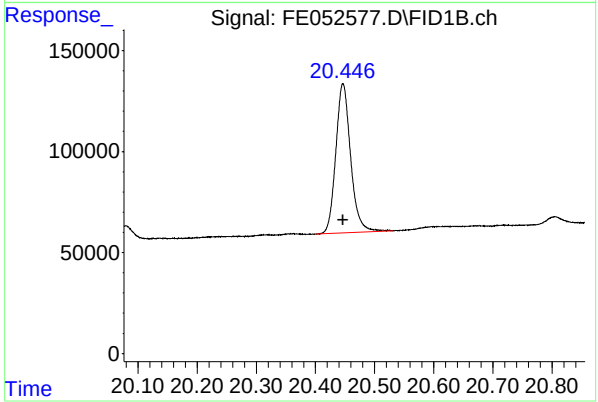
#18 n-Dotriacontane (C32)

R.T.: 18.918 min
Delta R.T.: 0.000 min
Response: 1583504
Conc: 11.38 ug/ml



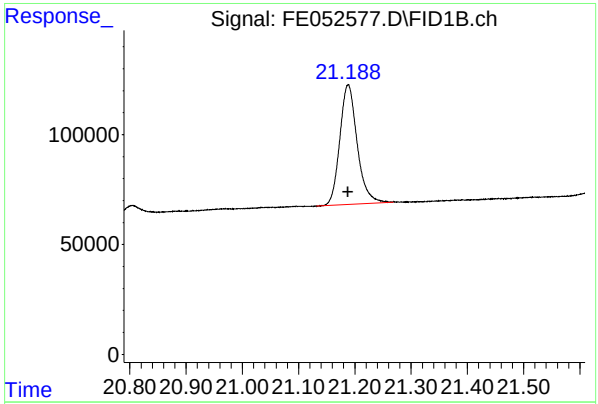
#19 n-Tetratriacontane (C34)

R.T.: 19.705 min
Delta R.T.: 0.000 min
Response: 1456233
Conc: 11.24 ug/ml



#20 n-Hexatriacontane (C36)

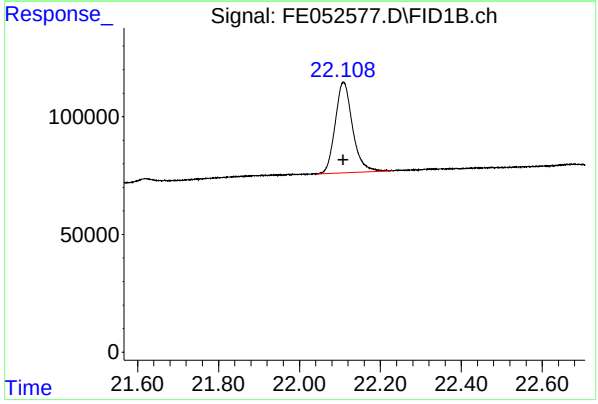
R.T.: 20.447 min
Delta R.T.: 0.000 min
Response: 1283640
Conc: 11.14 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.188 min
Delta R.T.: 0.000 min
Response: 1168118
Conc: 10.82 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



#22 n-Tetracontane (C40)

R.T.: 22.109 min
Delta R.T.: 0.000 min
Response: 1142101
Conc: 10.81 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052577.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 12:34
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 030325.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	3.314	BB	161729	1633896	91.56%	4.848%
2	4.514	4.478	4.568	BB	162683	1652277	92.59%	4.903%
3	6.228	6.191	6.314	BB	178423	1784418	100.00%	5.295%
4	6.695	6.664	6.751	BB	160841	1640160	91.92%	4.867%
5	7.330	7.284	7.424	BB	162983	1702988	95.44%	5.053%
6	8.531	8.498	8.601	BB	148819	1594378	89.35%	4.731%
7	10.145	10.111	10.204	BB	145207	1610203	90.24%	4.778%
8	11.594	11.551	11.648	BB	135761	1601994	89.78%	4.753%
9	11.909	11.868	11.971	BB	162025	1779109	99.70%	5.279%
10	12.909	12.868	12.981	BB	125833	1536447	86.10%	4.559%
11	13.354	13.314	13.418	BB	105376	1275538	71.48%	3.785%
12	13.522	13.484	13.594	BB	122287	1502197	84.18%	4.457%
13	14.111	14.078	14.178	VB	116146	1511879	84.73%	4.486%
14	15.218	15.151	15.281	BB	117810	1545839	86.63%	4.587%
15	16.242	16.171	16.314	BB	116219	1542744	86.46%	4.578%
16	17.194	17.128	17.254	BB	112172	1547735	86.74%	4.592%
17	18.083	18.038	18.138	BB	113962	1607077	90.06%	4.768%
18	18.918	18.871	18.984	BB	106365	1583504	88.74%	4.698%
19	19.705	19.651	19.771	BB	90061	1456233	81.61%	4.321%
20	20.447	20.401	20.531	BB	73836	1283640	71.94%	3.809%
21	21.188	21.131	21.268	BB	54530	1168118	65.46%	3.466%
22	22.109	22.041	22.231	BB	38465	1142101	64.00%	3.389%
			Sum of corrected areas:			33702476		

Aliphatic EPH 030325.M Tue Mar 04 04:15:29 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052578.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 13:04
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

Integration File: autoint1.e
Quant Time: Mar 03 13:38:46 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:37:33 2025
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)	11.909	909430	5.394 ug/ml
Spiked Amount	50.000		Recovery =	10.79%
12) S	1-chlorooctadecane (S...	13.354	647768	5.335 ug/ml
Spiked Amount	50.000		Recovery =	10.67%
	Target Compounds			
1) T	n-Nonane (C9)	3.252	835200	5.387 ug/ml
2) T	n-Decane (C10)	4.514	848233	5.399 ug/ml
3) T	A~Naphthalene (C11.7)	6.228	898827	5.300 ug/ml
4) T	n-Dodecane (C12)	6.695	837084	5.376 ug/ml
5) T	A~2-methylnaphthalene...	7.330	855434	5.279 ug/ml
6) T	n-Tetradecane (C14)	8.531	812990	5.373 ug/ml
7) T	n-Hexadecane (C16)	10.145	822877	5.382 ug/ml
8) T	n-Octadecane (C18)	11.593	823940	5.416 ug/ml
10) T	n-Eicosane (C20)	12.908	782621	5.391 ug/ml
11) T	n-Heneicosane (C21)	13.522	768847	5.402 ug/ml
13) T	n-Docosane (C22)	14.110	767013	5.390 ug/ml
14) T	n-Tetracosane (C24)	15.216	765651	5.350 ug/ml
15) T	n-Hexacosane (C26)	16.241	763577	5.370 ug/ml
16) T	n-Octacosane (C28)	17.192	779784	5.484 ug/ml
17) T	n-Tricontane (C30)	18.083	846559	5.732 ug/ml
18) T	n-Dotriacontane (C32)	18.917	846558	5.831 ug/ml
19) T	n-Tetratriacontane (C34)	19.703	778580	5.777 ug/ml
20) T	n-Hexatriacontane (C36)	20.445	665672	5.602 ug/ml
21) T	n-Octatriacontane (C38)	21.185	613739	5.532 ug/ml
22) T	n-Tetracontane (C40)	22.104	588940	5.447 ug/ml

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

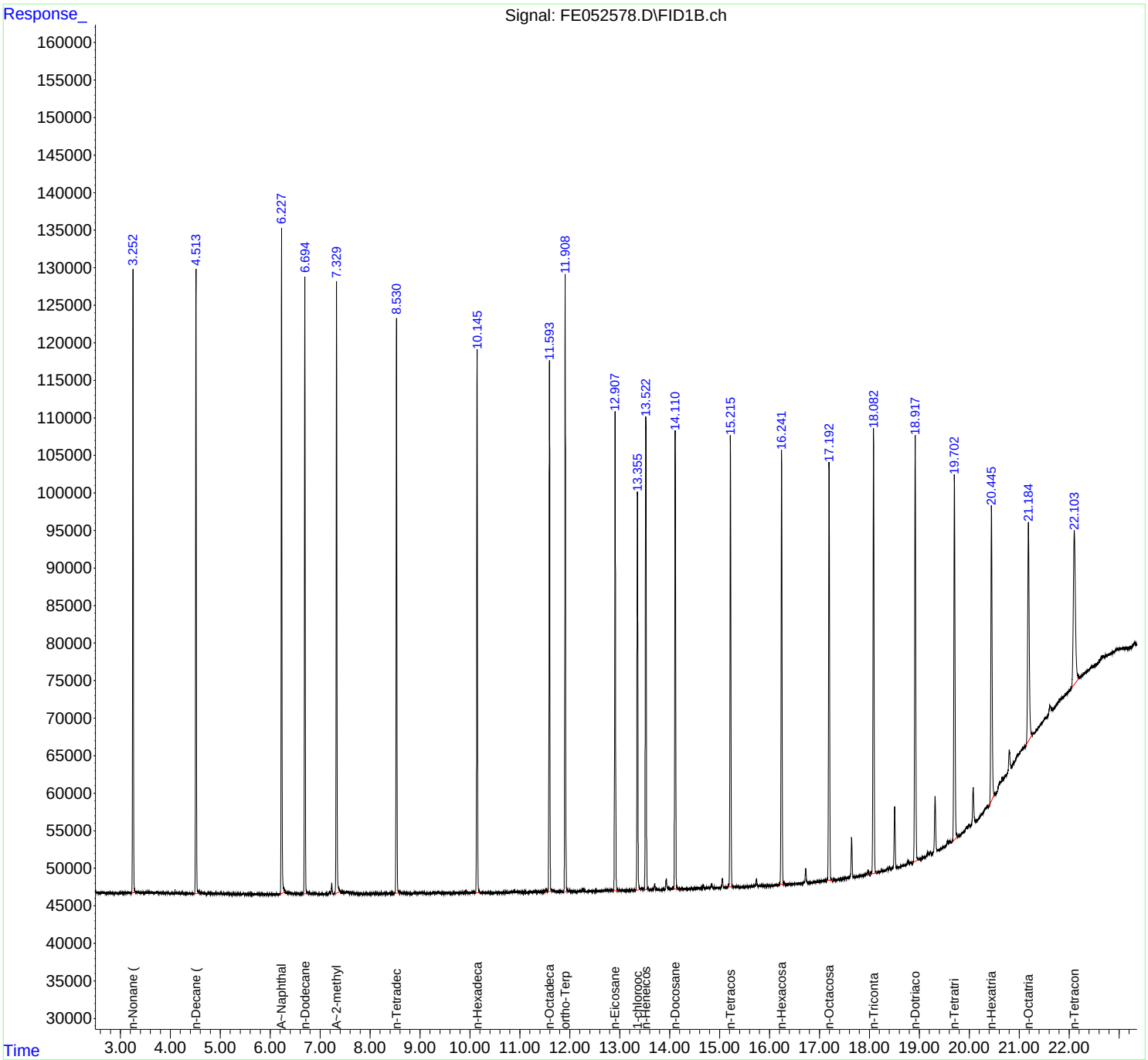
Quantitation Report (QT Reviewed)

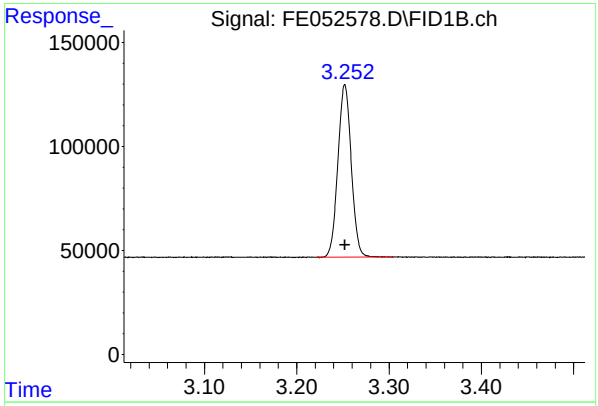
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052578.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 13:04
Operator : YP\AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
Quant Time: Mar 03 13:38:46 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:37:33 2025
Response via : Initial Calibration
Integrator: ChemStation

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

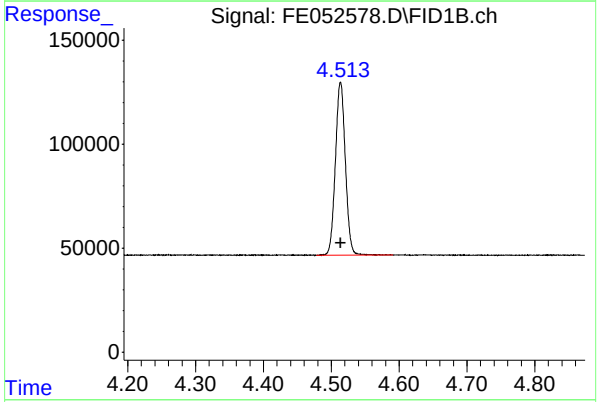




#1 n-Nonane (C9)

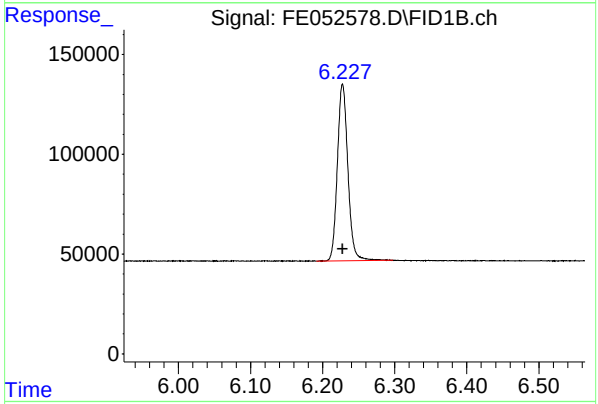
R.T.: 3.252 min
Delta R.T.: 0.000 min
Response: 835200
Conc: 5.39 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



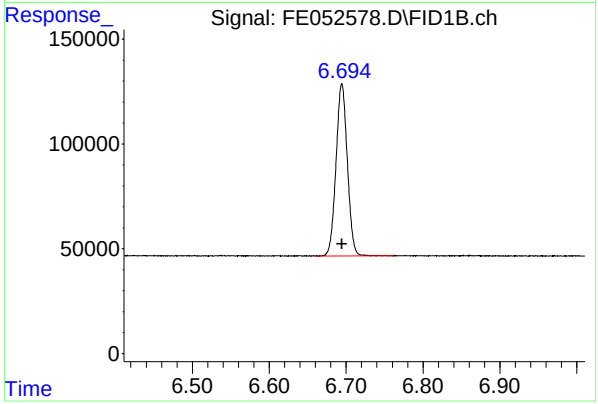
#2 n-Decane (C10)

R.T.: 4.514 min
Delta R.T.: 0.000 min
Response: 848233
Conc: 5.40 ug/ml



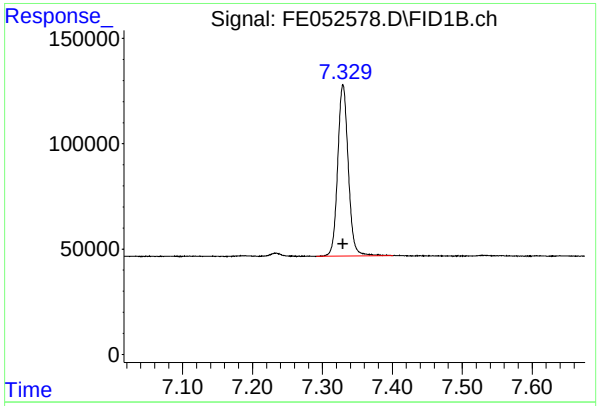
#3 A~Naphthalene (C11.7)

R.T.: 6.228 min
Delta R.T.: 0.000 min
Response: 898827
Conc: 5.30 ug/ml



#4 n-Dodecane (C12)

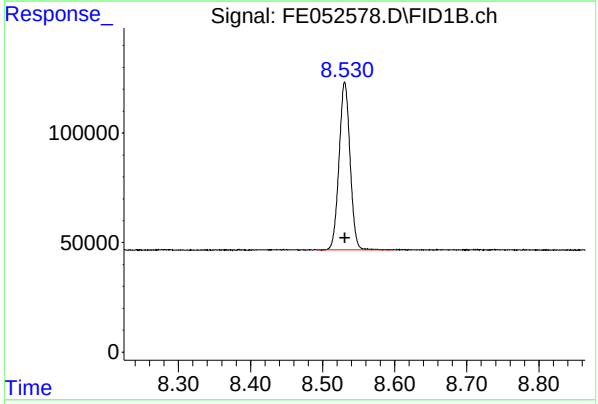
R.T.: 6.695 min
Delta R.T.: 0.000 min
Response: 837084
Conc: 5.38 ug/ml



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

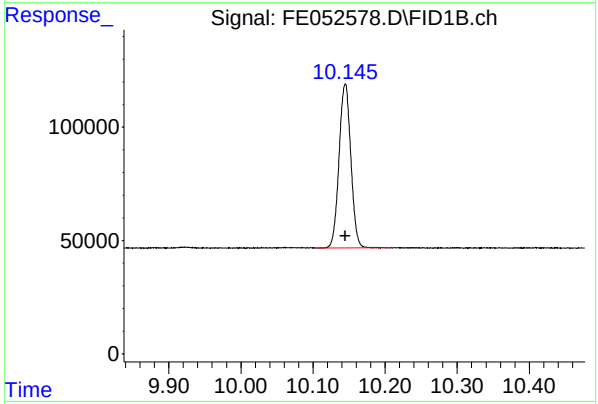
R.T.: 7.330 min
Delta R.T.: 0.000 min
Response: 855434
Conc: 5.28 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



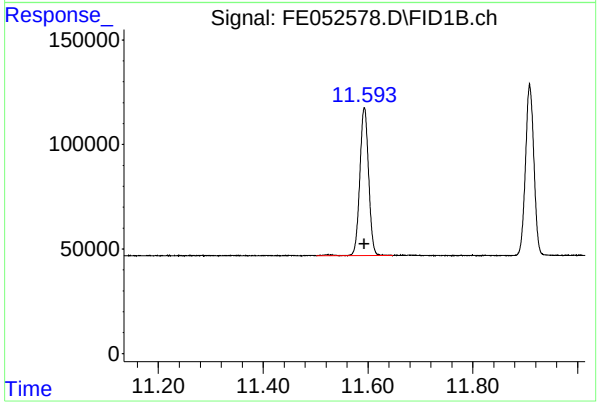
#6 n-Tetradecane (C14)

R.T.: 8.531 min
Delta R.T.: 0.000 min
Response: 812990
Conc: 5.37 ug/ml



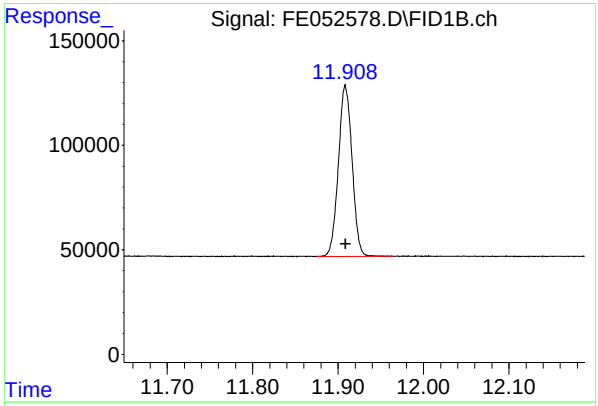
#7 n-Hexadecane (C16)

R.T.: 10.145 min
Delta R.T.: 0.000 min
Response: 822877
Conc: 5.38 ug/ml



#8 n-Octadecane (C18)

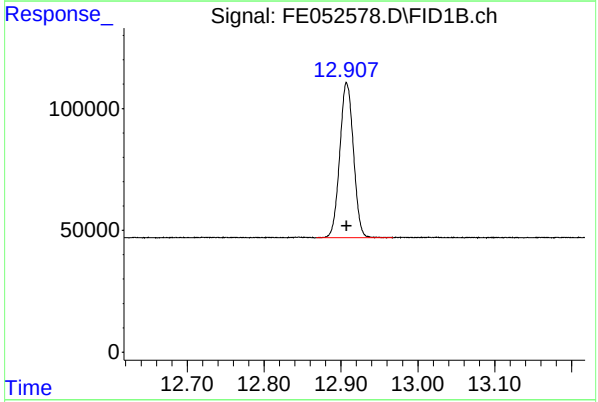
R.T.: 11.593 min
Delta R.T.: 0.000 min
Response: 823940
Conc: 5.42 ug/ml



#9 ortho-Terphenyl (SURR)

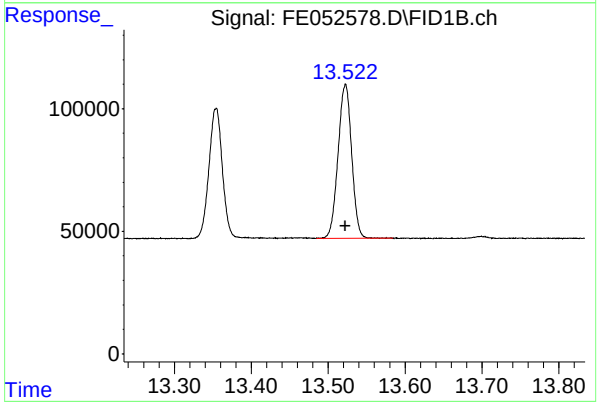
R.T.: 11.909 min
Delta R.T.: 0.000 min
Response: 909430
Conc: 5.39 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



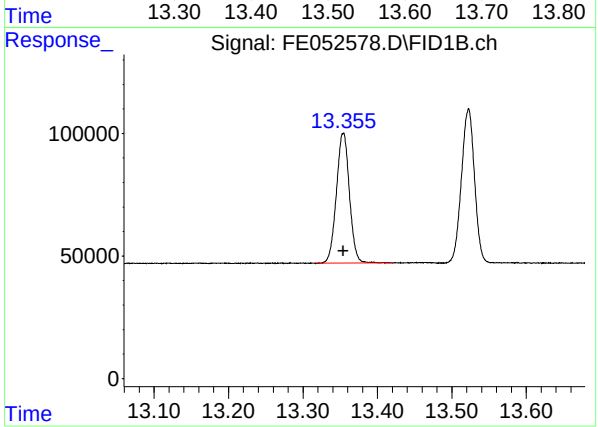
#10 n-Eicosane (C20)

R.T.: 12.908 min
Delta R.T.: 0.000 min
Response: 782621
Conc: 5.39 ug/ml



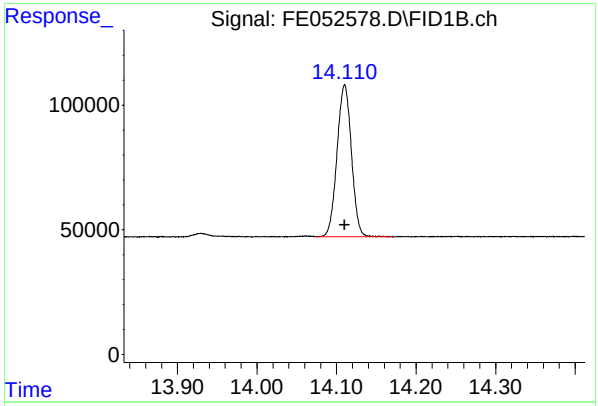
#11 n-Heneicosane (C21)

R.T.: 13.522 min
Delta R.T.: 0.000 min
Response: 768847
Conc: 5.40 ug/ml



#12 1-chlorooctadecane (SURR)

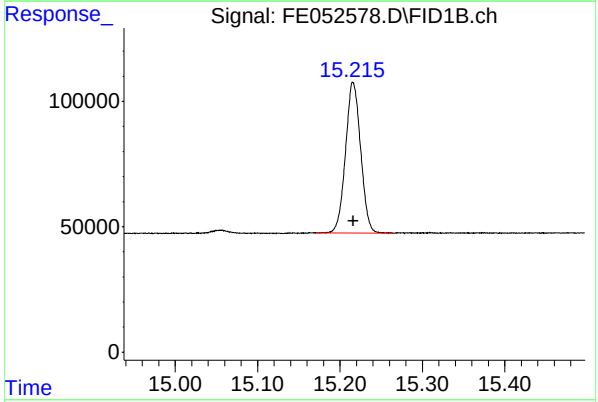
R.T.: 13.354 min
Delta R.T.: 0.000 min
Response: 647768
Conc: 5.33 ug/ml



#13 n-Docosane (C22)

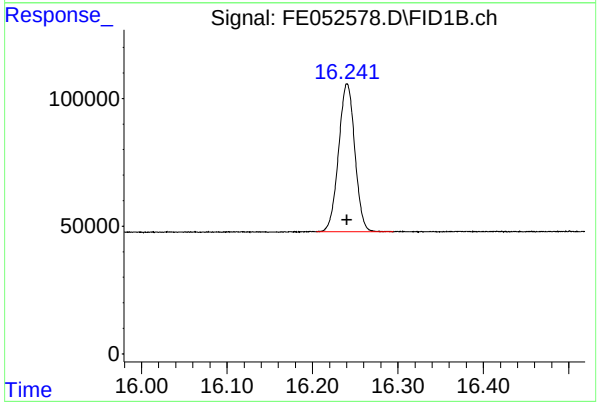
R.T.: 14.110 min
Delta R.T.: 0.000 min
Response: 767013
Conc: 5.39 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



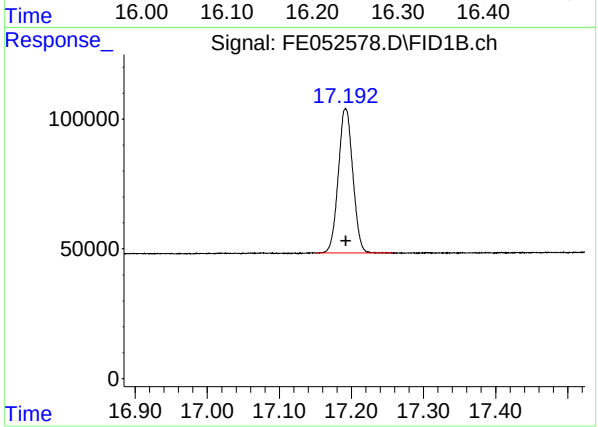
#14 n-Tetracosane (C24)

R.T.: 15.216 min
Delta R.T.: 0.000 min
Response: 765651
Conc: 5.35 ug/ml



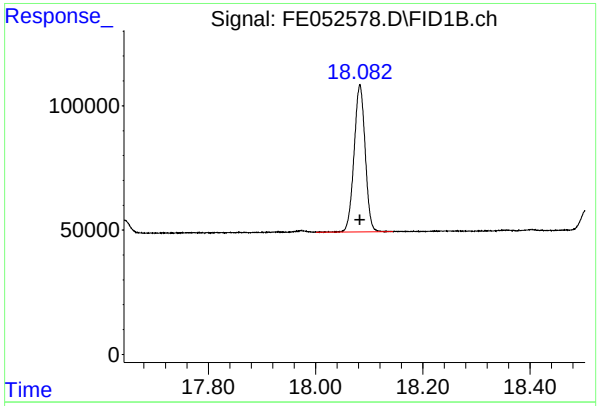
#15 n-Hexacosane (C26)

R.T.: 16.241 min
Delta R.T.: 0.000 min
Response: 763577
Conc: 5.37 ug/ml



#16 n-Octacosane (C28)

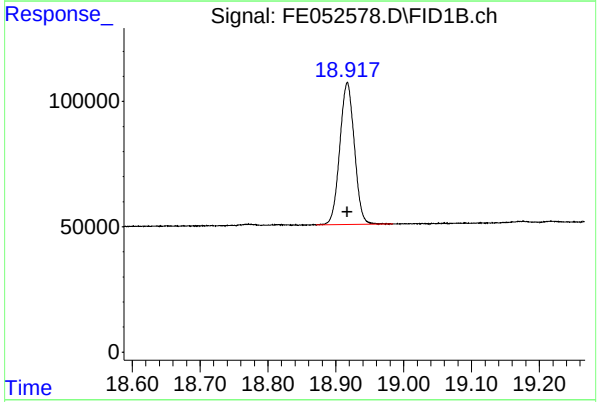
R.T.: 17.192 min
Delta R.T.: 0.000 min
Response: 779784
Conc: 5.48 ug/ml



#17 n-Tricontane (C30)

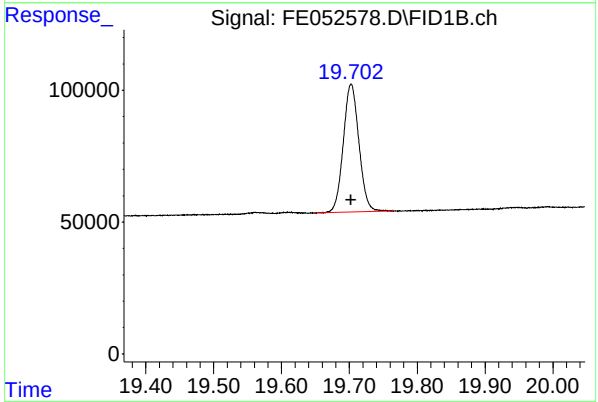
R.T.: 18.083 min
Delta R.T.: 0.000 min
Response: 846559
Conc: 5.73 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



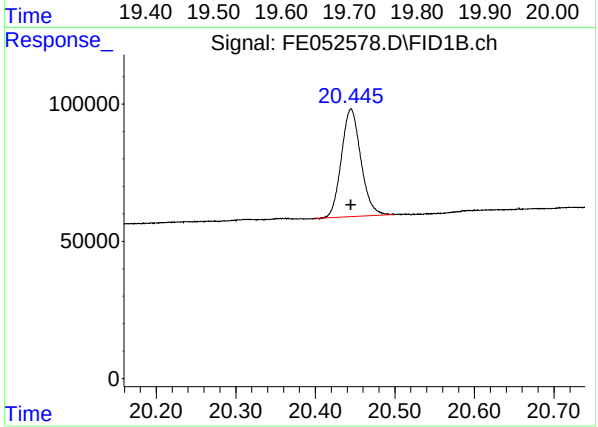
#18 n-Dotriacontane (C32)

R.T.: 18.917 min
Delta R.T.: 0.000 min
Response: 846558
Conc: 5.83 ug/ml



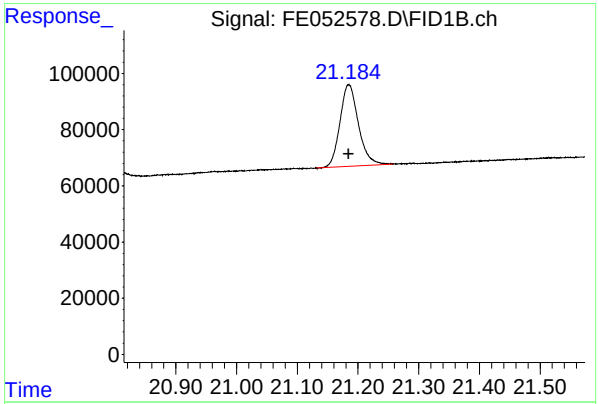
#19 n-Tetratriacontane (C34)

R.T.: 19.703 min
Delta R.T.: 0.000 min
Response: 778580
Conc: 5.78 ug/ml



#20 n-Hexatriacontane (C36)

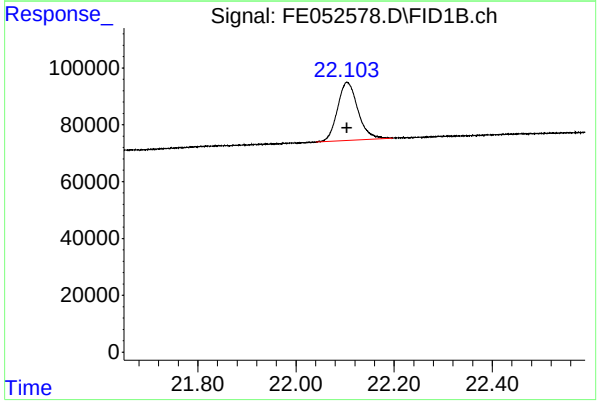
R.T.: 20.445 min
Delta R.T.: 0.000 min
Response: 665672
Conc: 5.60 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.185 min
Delta R.T.: 0.000 min
Response: 613739
Conc: 5.53 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



#22 n-Tetracontane (C40)

R.T.: 22.104 min
Delta R.T.: 0.000 min
Response: 588940
Conc: 5.45 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052578.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 13:04
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 030325.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	3.304	BB	82567	835200	91.84%	4.839%
2	4.514	4.478	4.591	BB	83234	848233	93.27%	4.915%
3	6.228	6.191	6.298	BB	88505	898827	98.83%	5.208%
4	6.695	6.661	6.761	BB	82093	837084	92.04%	4.850%
5	7.330	7.291	7.401	BB	81098	855434	94.06%	4.956%
6	8.531	8.491	8.598	BB	76461	812990	89.40%	4.710%
7	10.145	10.104	10.211	BB	72313	822877	90.48%	4.768%
8	11.593	11.501	11.648	BB	70861	823940	90.60%	4.774%
9	11.909	11.874	11.964	BB	81463	909430	100.00%	5.269%
10	12.908	12.868	12.968	BB	63441	782621	86.06%	4.534%
11	13.354	13.318	13.421	BB	53208	647768	71.23%	3.753%
12	13.522	13.484	13.584	BB	62420	768847	84.54%	4.455%
13	14.110	14.074	14.171	BB	61042	767013	84.34%	4.444%
14	15.216	15.171	15.264	BB	59393	765651	84.19%	4.436%
15	16.241	16.204	16.294	BB	57980	763577	83.96%	4.424%
16	17.192	17.151	17.258	BB	55884	779784	85.74%	4.518%
17	18.083	18.001	18.144	BB	58718	846559	93.09%	4.905%
18	18.917	18.871	18.984	BB	56748	846558	93.09%	4.905%
19	19.703	19.651	19.764	BB	48522	778580	85.61%	4.511%
20	20.445	20.401	20.498	BB	39239	665672	73.20%	3.857%
21	21.185	21.131	21.258	BB	29081	613739	67.49%	3.556%
22	22.104	22.041	22.198	BB	20470	588940	64.76%	3.412%
			Sum of corrected areas:			17259325		

Aliphatic EPH 030325.M Tue Mar 04 04:15:51 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052579.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 13:35
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: Mar 03 14:00:02 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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)	11.911	3455691	20.498 ug/ml
Spiked Amount	50.000		Recovery =	41.00%
12) S	1-chlorooctadecane (S...	13.356	2497681	20.570 ug/ml
Spiked Amount	50.000		Recovery =	41.14%
	Target Compounds			
1) T	n-Nonane (C9)	3.252	3187537	20.558 ug/ml
2) T	n-Decane (C10)	4.514	3233718	20.584 ug/ml
3) T	A~Naphthalene (C11.7)	6.228	3492595	20.594 ug/ml
4) T	n-Dodecane (C12)	6.696	3203904	20.578 ug/ml
5) T	A~2-methylnaphthalene...	7.330	3339319	20.606 ug/ml
6) T	n-Tetradecane (C14)	8.532	3105696	20.525 ug/ml
7) T	n-Hexadecane (C16)	10.147	3133929	20.498 ug/ml
8) T	n-Octadecane (C18)	11.595	3112121	20.455 ug/ml
10) T	n-Eicosane (C20)	12.910	2971006	20.465 ug/ml
11) T	n-Heneicosane (C21)	13.524	2915343	20.483 ug/ml
13) T	n-Docosane (C22)	14.111	2909985	20.448 ug/ml
14) T	n-Tetracosane (C24)	15.219	2928929	20.466 ug/ml
15) T	n-Hexacosane (C26)	16.241	2909458	20.461 ug/ml
16) T	n-Octacosane (C28)	17.194	2913880	20.492 ug/ml
17) T	n-Tricontane (C30)	18.084	3032387	20.531 ug/ml
18) T	n-Dotriacontane (C32)	18.919	2988204	20.583 ug/ml
19) T	n-Tetratriacontane (C34)	19.705	2786554	20.675 ug/ml
20) T	n-Hexatriacontane (C36)	20.448	2490703	20.961 ug/ml
21) T	n-Octatriacontane (C38)	21.189	2317135	20.887 ug/ml
22) T	n-Tetracontane (C40)	22.111	2256635	20.872 ug/ml

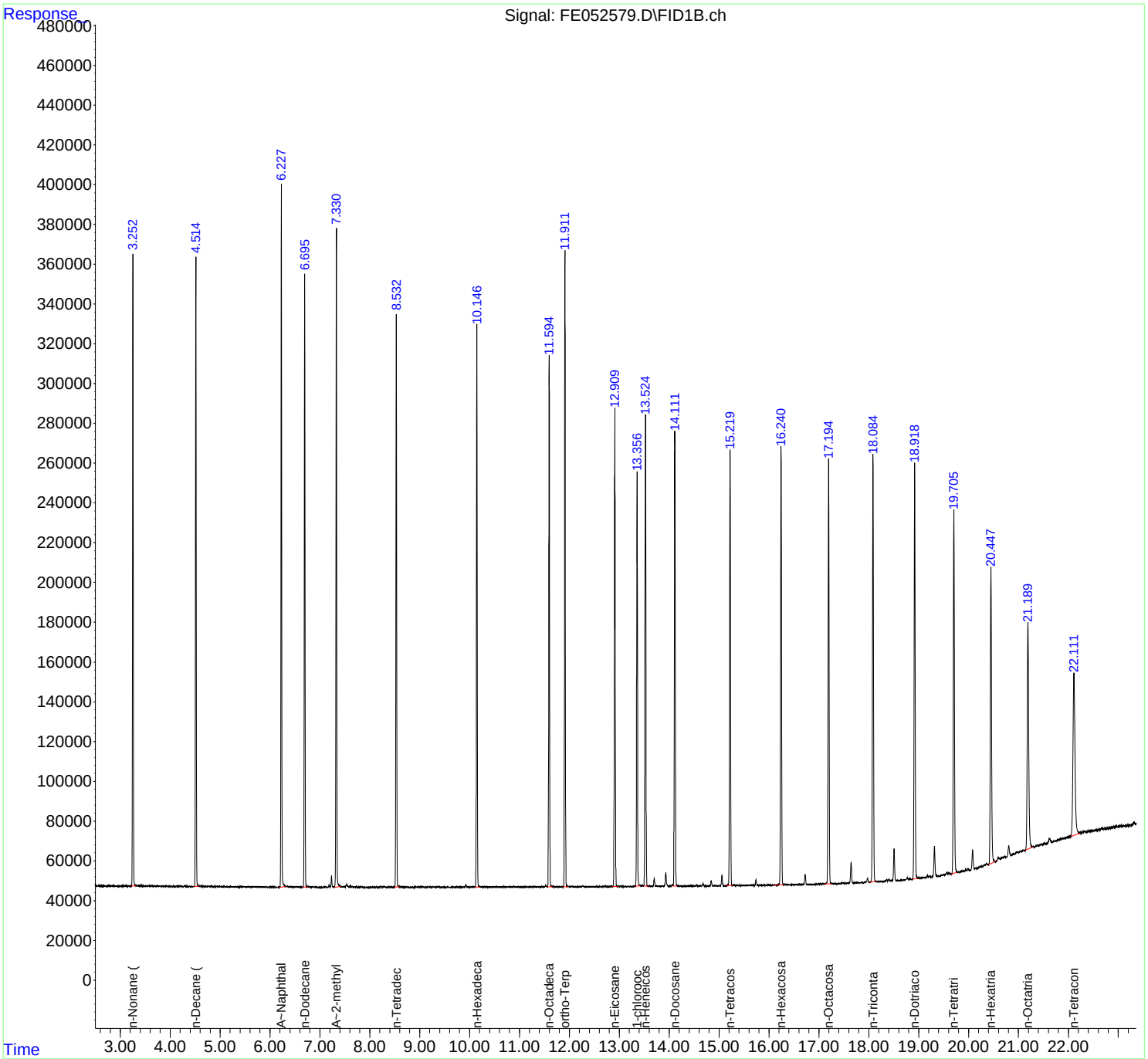
(f)=RT Delta > 1/2 Window (m)=manual int.

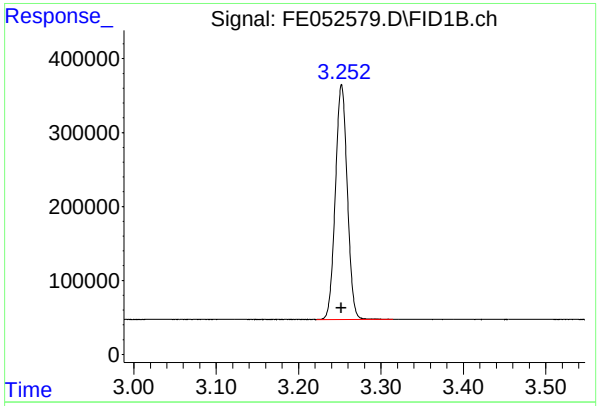
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052579.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 13:35
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Mar 03 14:00:02 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

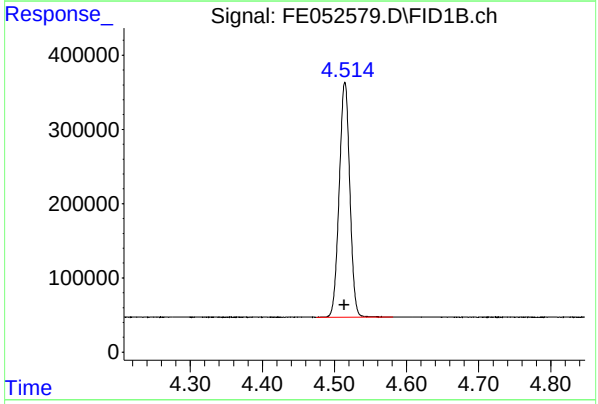




#1 n-Nonane (C9)

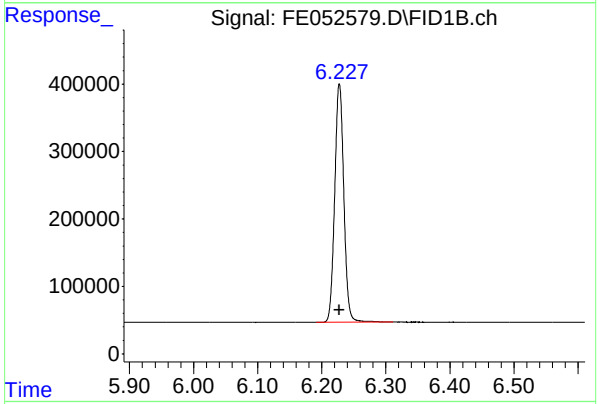
R.T.: 3.252 min
Delta R.T.: 0.000 min
Response: 3187537
Conc: 20.56 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



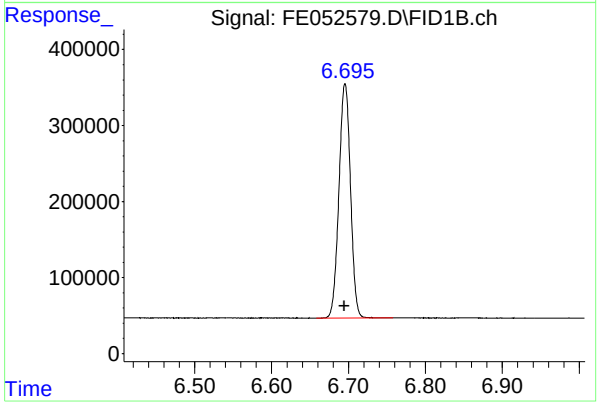
#2 n-Decane (C10)

R.T.: 4.514 min
Delta R.T.: 0.000 min
Response: 3233718
Conc: 20.58 ug/ml



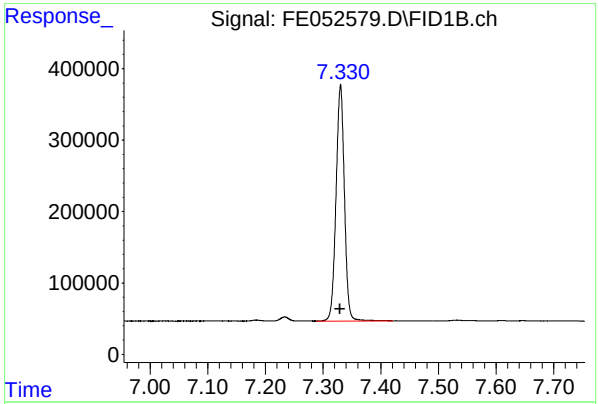
#3 A~Naphthalene (C11.7)

R.T.: 6.228 min
Delta R.T.: 0.000 min
Response: 3492595
Conc: 20.59 ug/ml



#4 n-Dodecane (C12)

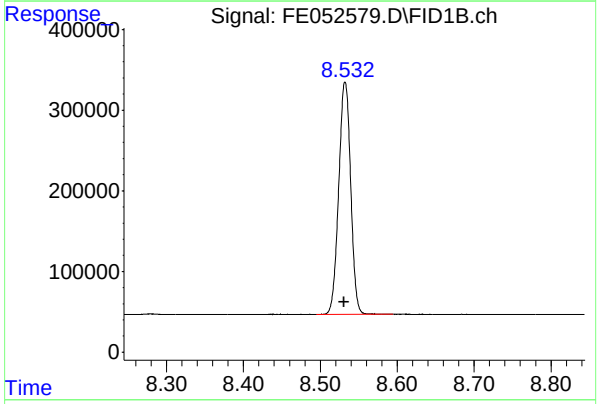
R.T.: 6.696 min
Delta R.T.: 0.000 min
Response: 3203904
Conc: 20.58 ug/ml



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

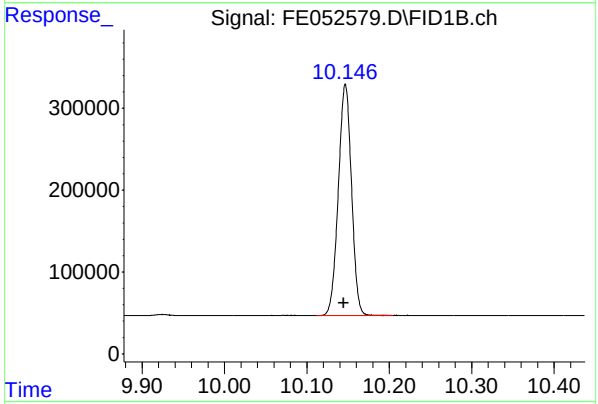
R.T.: 7.330 min
Delta R.T.: 0.000 min
Response: 3339319
Conc: 20.61 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



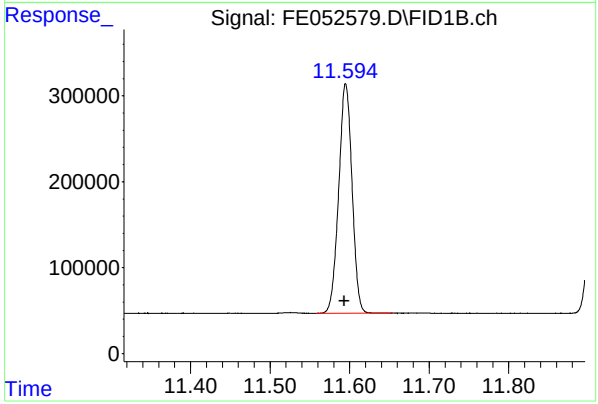
#6 n-Tetradecane (C14)

R.T.: 8.532 min
Delta R.T.: 0.001 min
Response: 3105696
Conc: 20.53 ug/ml



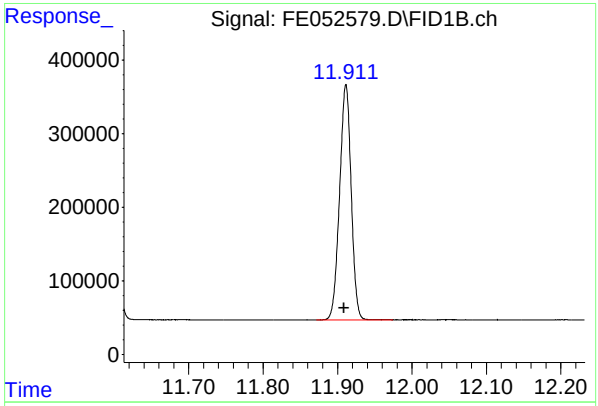
#7 n-Hexadecane (C16)

R.T.: 10.147 min
Delta R.T.: 0.002 min
Response: 3133929
Conc: 20.50 ug/ml



#8 n-Octadecane (C18)

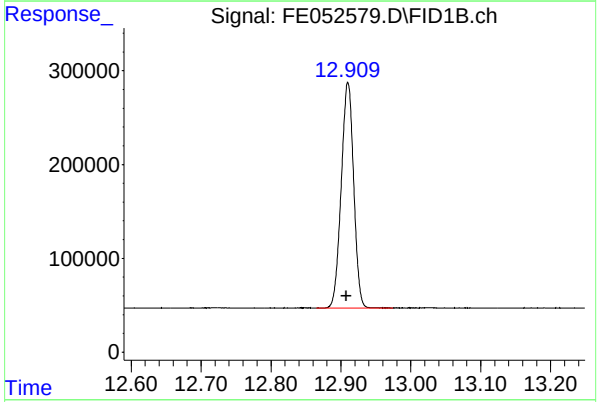
R.T.: 11.595 min
Delta R.T.: 0.002 min
Response: 3112121
Conc: 20.46 ug/ml



#9 ortho-Terphenyl (SURR)

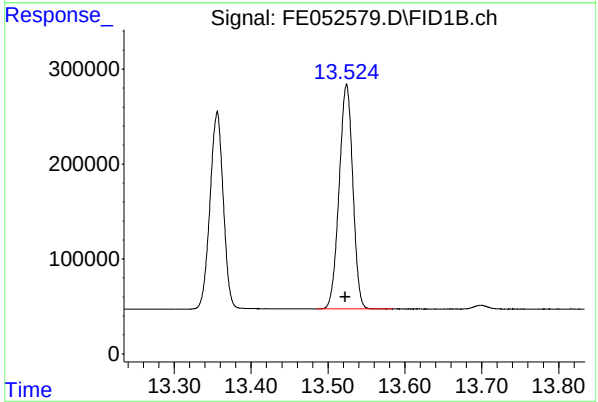
R.T.: 11.911 min
Delta R.T.: 0.003 min
Response: 3455691
Conc: 20.50 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



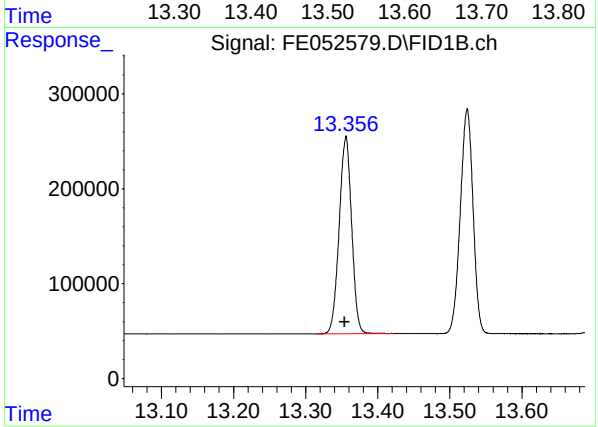
#10 n-Eicosane (C20)

R.T.: 12.910 min
Delta R.T.: 0.002 min
Response: 2971006
Conc: 20.47 ug/ml



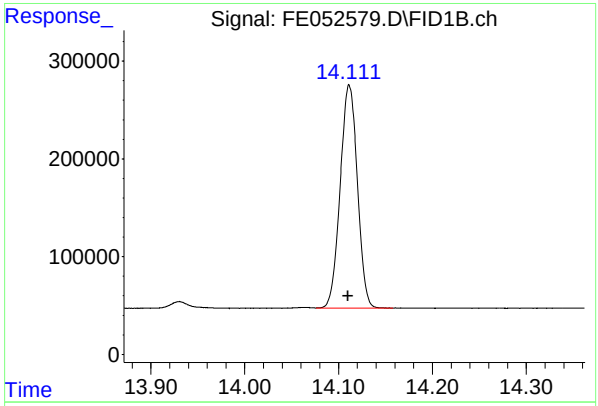
#11 n-Heneicosane (C21)

R.T.: 13.524 min
Delta R.T.: 0.002 min
Response: 2915343
Conc: 20.48 ug/ml



#12 1-chlorooctadecane (SURR)

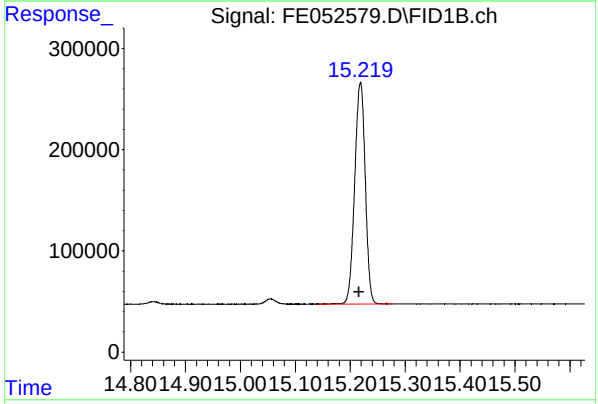
R.T.: 13.356 min
Delta R.T.: 0.002 min
Response: 2497681
Conc: 20.57 ug/ml



#13 n-Docosane (C22)

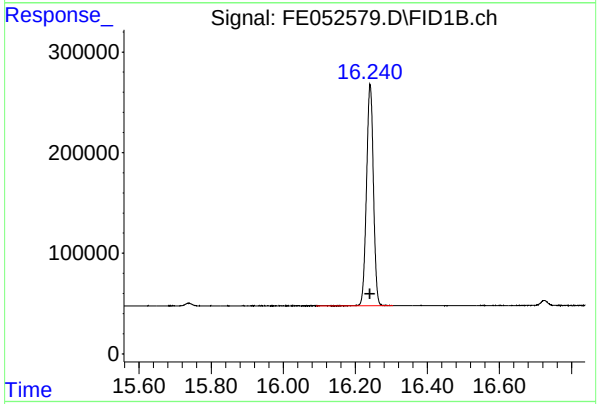
R.T.: 14.111 min
Delta R.T.: 0.001 min
Response: 2909985
Conc: 20.45 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



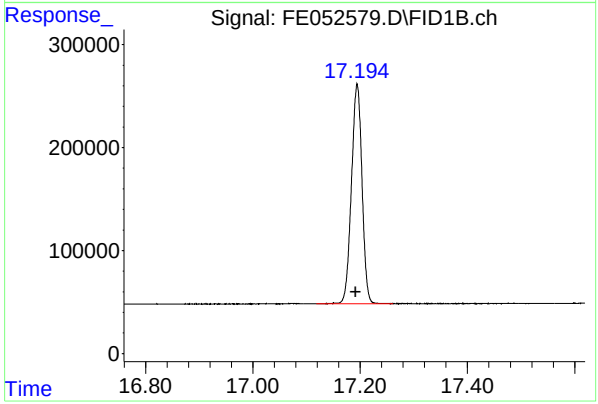
#14 n-Tetracosane (C24)

R.T.: 15.219 min
Delta R.T.: 0.003 min
Response: 2928929
Conc: 20.47 ug/ml



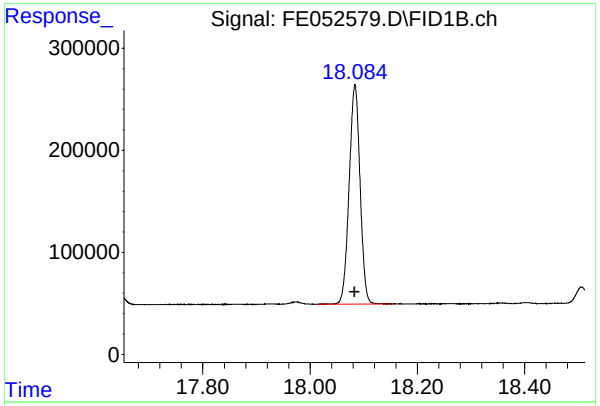
#15 n-Hexacosane (C26)

R.T.: 16.241 min
Delta R.T.: 0.000 min
Response: 2909458
Conc: 20.46 ug/ml



#16 n-Octacosane (C28)

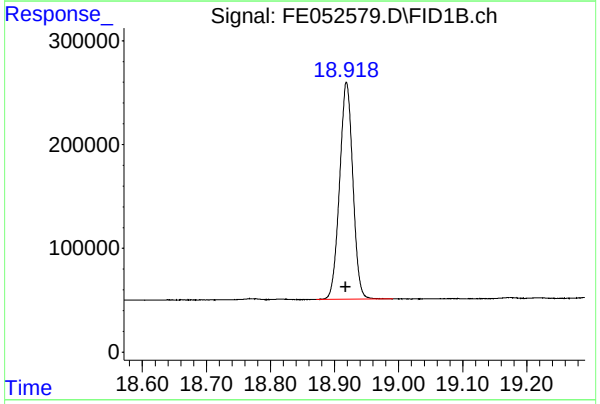
R.T.: 17.194 min
Delta R.T.: 0.002 min
Response: 2913880
Conc: 20.49 ug/ml



#17 n-Tricontane (C30)

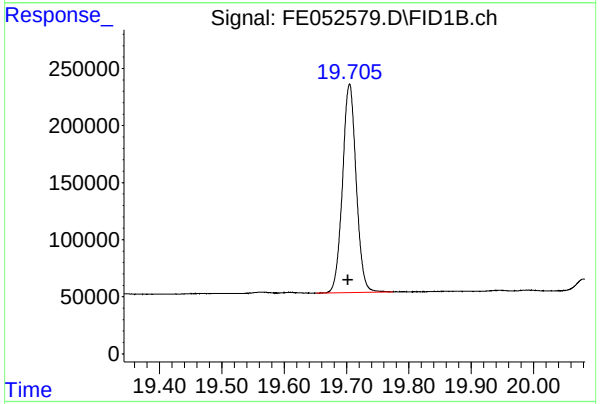
R.T.: 18.084 min
Delta R.T.: 0.001 min
Response: 3032387
Conc: 20.53 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



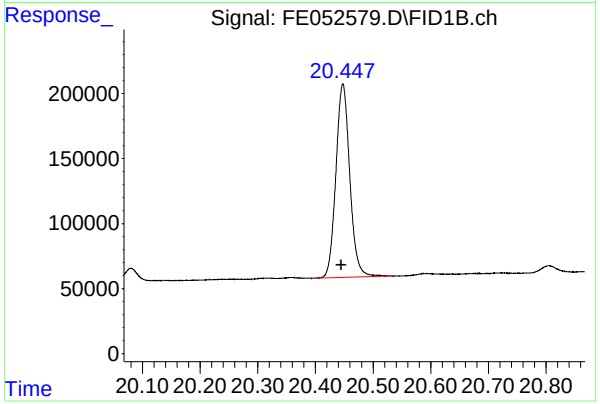
#18 n-Dotriacontane (C32)

R.T.: 18.919 min
Delta R.T.: 0.002 min
Response: 2988204
Conc: 20.58 ug/ml



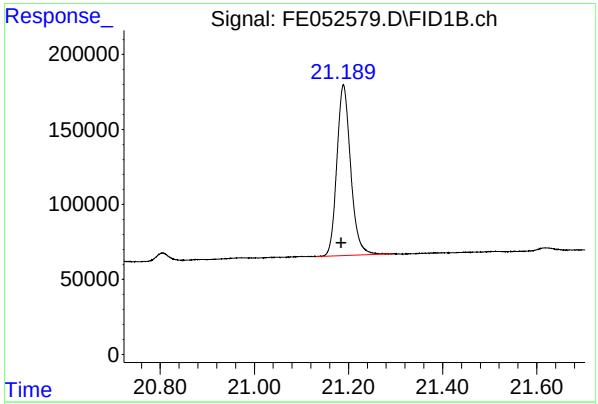
#19 n-Tetratriacontane (C34)

R.T.: 19.705 min
Delta R.T.: 0.002 min
Response: 2786554
Conc: 20.67 ug/ml



#20 n-Hexatriacontane (C36)

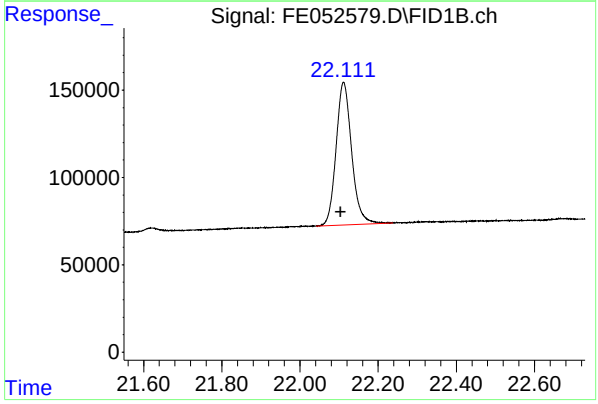
R.T.: 20.448 min
Delta R.T.: 0.003 min
Response: 2490703
Conc: 20.96 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.189 min
Delta R.T.: 0.005 mi
Response: 2317135
Conc: 20.89 ug/m

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



#22 n-Tetracontane (C40)

R.T.: 22.111 min
Delta R.T.: 0.007 min
Response: 2256635
Conc: 20.87 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE030325AL\
Data File : FE052579.D
Signal(s) : FID1B.ch
Acq On : 03 Mar 2025 13:35
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 030325.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	3.315	BB	316370	3187537	91.27%	4.890%
2	4.514	4.475	4.581	BB	317352	3233718	92.59%	4.961%
3	6.228	6.191	6.311	BB	353933	3492595	100.00%	5.358%
4	6.696	6.658	6.758	BB	308321	3203904	91.73%	4.915%
5	7.330	7.288	7.421	BB	330915	3339319	95.61%	5.123%
6	8.532	8.495	8.595	BB	289204	3105696	88.92%	4.765%
7	10.147	10.111	10.205	BB	283052	3133929	89.73%	4.808%
8	11.595	11.558	11.655	BB	267693	3112121	89.11%	4.774%
9	11.911	11.871	11.975	BB	320258	3455691	98.94%	5.302%
10	12.910	12.865	12.975	BB	241076	2971006	85.07%	4.558%
11	13.356	13.315	13.421	BB	205009	2497681	71.51%	3.832%
12	13.524	13.485	13.585	BB	236434	2915343	83.47%	4.473%
13	14.111	14.076	14.158	VB	228081	2909985	83.32%	4.464%
14	15.219	15.138	15.278	BB	218919	2928929	83.86%	4.493%
15	16.241	16.091	16.305	BB	220045	2909458	83.30%	4.464%
16	17.194	17.118	17.261	BB	212865	2913880	83.43%	4.470%
17	18.084	18.011	18.155	BB	215009	3032387	86.82%	4.652%
18	18.919	18.871	18.991	BB	209239	2988204	85.56%	4.584%
19	19.705	19.651	19.775	BB	182519	2786554	79.78%	4.275%
20	20.448	20.401	20.535	BB	148923	2490703	71.31%	3.821%
21	21.189	21.131	21.295	BB	113912	2317135	66.34%	3.555%
22	22.111	22.041	22.238	BB	81783	2256635	64.61%	3.462%
			Sum of corrected areas:			65182406		

Aliphatic EPH 030325.M Tue Mar 04 04:16:17 2025

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

Inital Calibration Report for SequenceID : FF022625AR

AreaCount

Parameter Range	FF015527.D	FF015528.D	FF015529.D	FF015530.D	FF015531.D	
Aromatic C10-C12	23792031.000	12461970.000	5148350.000	2881825.000	1254262.000	
Aromatic C12-C16	37158993.000	19494885.000	8182790.000	4664527.000	2074624.000	
Aromatic C16-C21	50062741.000	26061188.000	10794938.000	6008191.000	2491814.000	
Aromatic C21-C36	110416619.000	57062327.000	23513894.000	13223167.000	5545443.000	
Aromatic EPH	221430384.000	115080370.000	47639972.000	26777710.000	11366143.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aromatic C10-C12	128361.211	7.376				
Aromatic C12-C16	136800.3086664	8.692				
Aromatic C16-C21	133038.9985	7.877				
Aromatic C21-C36	130055.838444	7.654				
Aromatic EPH	131654.5493328	7.699				

Concentration

Parameter Range	FF015527.D	FF015528.D	FF015529.D	FF015530.D	FF015531.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	FF015527.D	FF015528.D	FF015529.D	FF015530.D	FF015531.D	
Aromatic C10-C12	118960.155000	124619.700000	128708.750000	144091.250000	125426.200000	
Aromatic C12-C16	123863.310000	129965.900000	136379.833333	155484.233333	138308.266666	
Aromatic C16-C21	125156.852500	130305.940000	134936.725000	150204.775000	124590.700000	
Aromatic C21-C36	122685.132222	126805.171111	130632.744444	146924.077777	123232.066666	
Aromatic EPH	123016.880000	127867.077777	132333.255555	148765.055555	126290.477777	

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015527.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 09:00
Operator : YP\AJ
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 71 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
100 PPM AROMATIC HC STD1

Integration File: autoint1.e
Quant Time: Feb 26 12:29:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:26:20 2025
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...	7.996	10994390	96.664 ug/ml
Spiked Amount	50.000		Recovery =	193.33%
6) S	2-Flurobiphenyl (SURR)	8.873	7467126	99.792 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	199.58%#
11) S	ortho-Terphenyl (SURR)	11.938	12986799	94.309 ug/ml
Spiked Amount	50.000		Recovery =	188.62%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.600	11629996	95.000 ug/ml
2) T	Naphthalene (C11.7)	6.272	12162035	97.104 ug/ml
3) T	2-Methylnaphthalene (...	7.370	12032920	96.653 ug/ml
5) T	Acenaphthylene (C15.06)	8.673	12653113	94.888 ug/ml
7) T	Acenaphthene (C15.5)	8.974	12472960	94.121 ug/ml
8) T	Flouorene (C16.55)	9.763	12619708	96.602 ug/ml
9) T	Phenanthrene (C19.36)	11.172	12461541	96.874 ug/ml
10) T	Anthracene (C19.43)	11.248	12126064	96.961 ug/ml
12) T	Fluoranthene (C21.85)	12.997	12920946	95.836 ug/ml
13) T	Pyrene (C20.8)	13.297	12855428	94.626 ug/ml
14) T	Benzo[a]anthracene (C...	15.181	12510176	99.595 ug/ml
15) T	Chrysene (C27.41)	15.228	12789815	93.112 ug/ml
16) T	benzo[b]fluoranthene ...	16.745	12667527	97.364 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.783	12754236	94.538 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.127	12145429	100.391 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.505	11376975	105.977 ug/ml
20) T	Dibenz[a,h]anthracene...	18.542	11542220	93.587 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.765	11709295	96.656 ug/ml

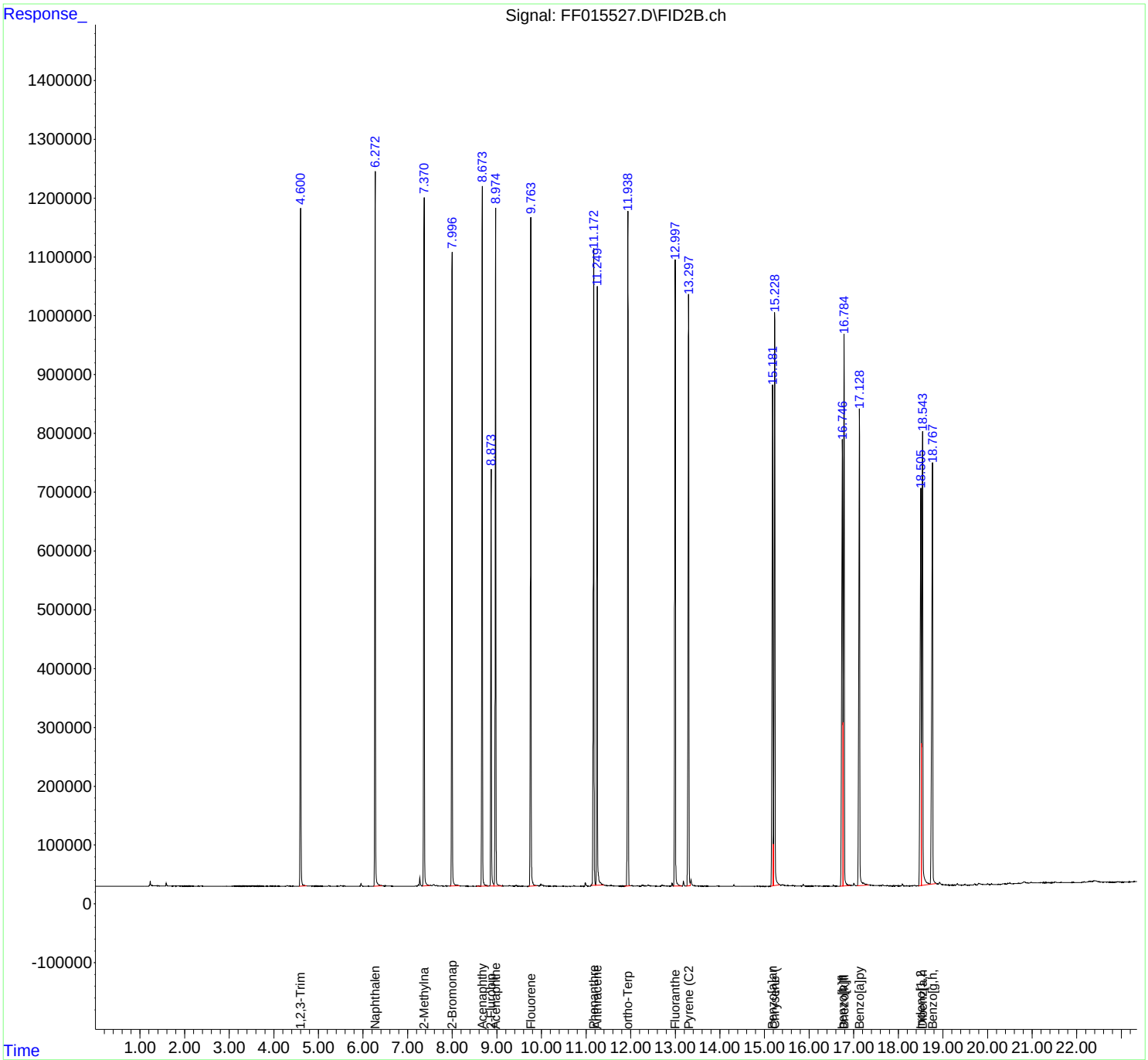
(f)=RT Delta > 1/2 Window (m)=manual int.

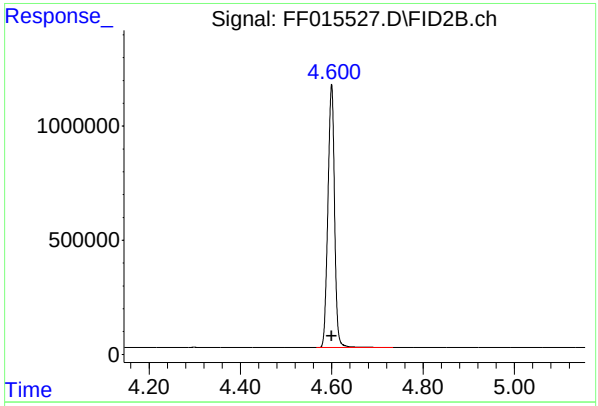
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015527.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 09:00
Operator : YP\AJ
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 71 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
100 PPM AROMATIC HC STD1

Integration File: autoint1.e
Quant Time: Feb 26 12:29:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:26:20 2025
Response via : Initial Calibration
Integrator: ChemStation

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

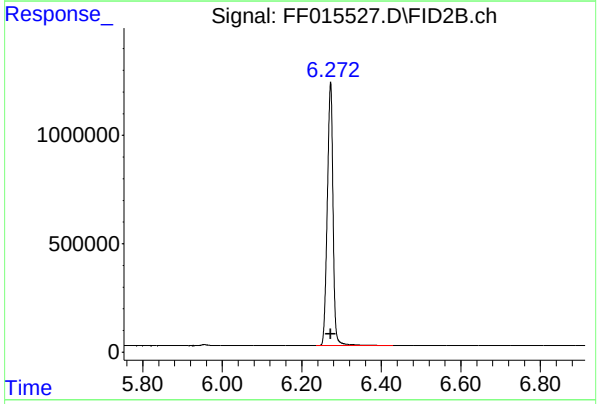




#1 1,2,3-Trimethylbenzene (C10.1)

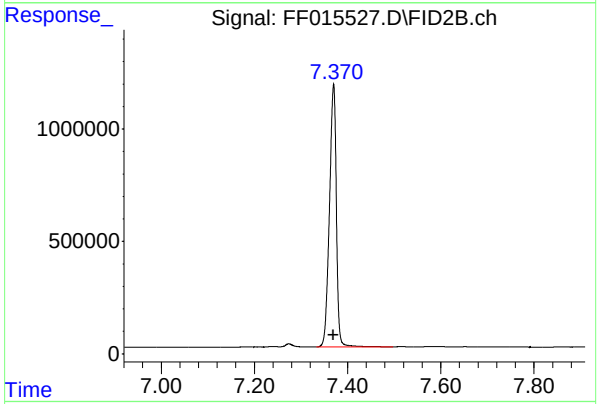
R.T.: 4.600 min
Delta R.T.: 0.000 min
Response: 11629996
Conc: 95.00 ug/ml

Instrument :
FID_F
ClientSampleId :
100 PPM AROMATIC HC STD1



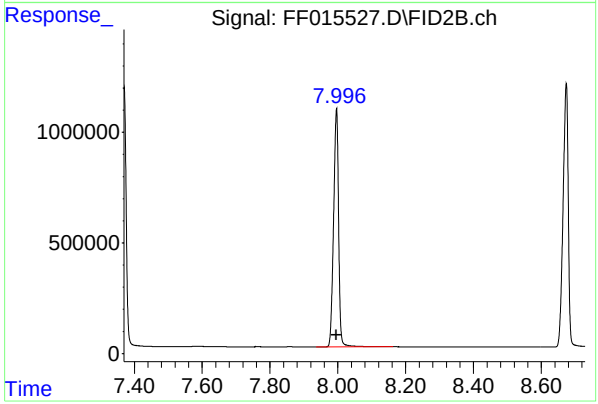
#2 Naphthalene (C11.7)

R.T.: 6.272 min
Delta R.T.: 0.000 min
Response: 12162035
Conc: 97.10 ug/ml



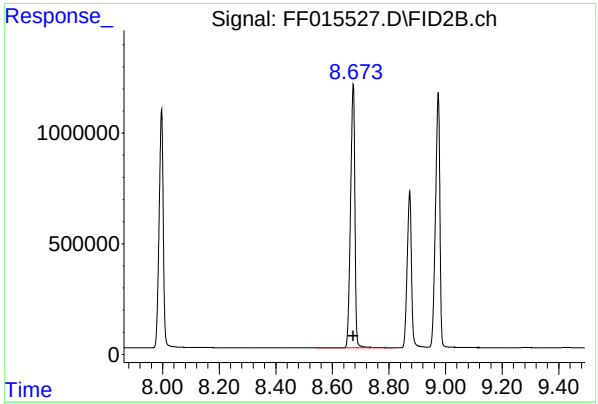
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.370 min
Delta R.T.: 0.000 min
Response: 12032920
Conc: 96.65 ug/ml



#4 2-Bromonaphthalene (SURR)

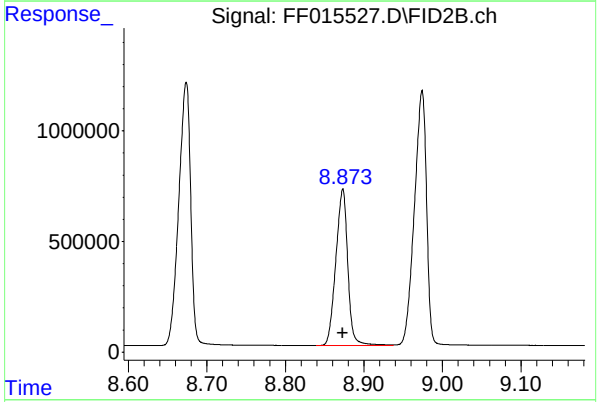
R.T.: 7.996 min
Delta R.T.: 0.000 min
Response: 10994390
Conc: 96.66 ug/ml



#5 Acenaphthylene (C15.06)

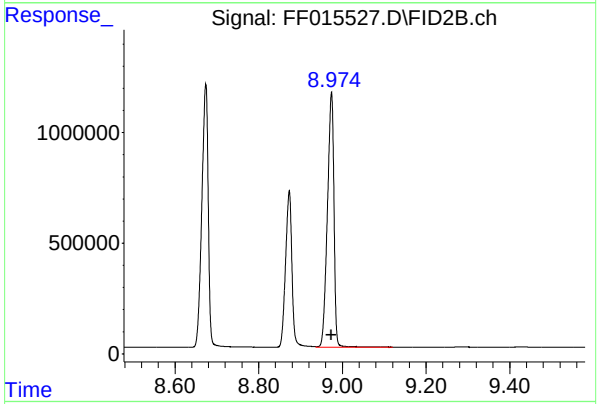
R.T.: 8.673 min
Delta R.T.: 0.000 min
Response: 12653113
Conc: 94.89 ug/ml

Instrument :
FID_F
ClientSampleId :
100 PPM AROMATIC HC STD1



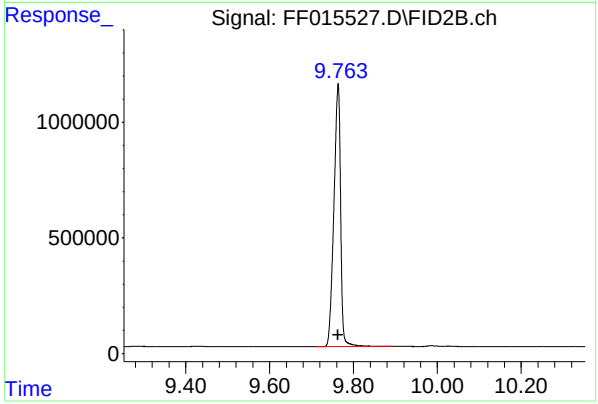
#6 2-Flurobiphenyl (SURR)

R.T.: 8.873 min
Delta R.T.: 0.000 min
Response: 7467126
Conc: 99.79 ug/ml



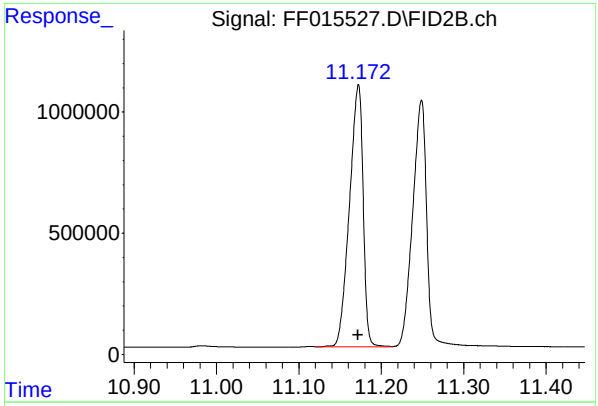
#7 Acenaphthene (C15.5)

R.T.: 8.974 min
Delta R.T.: 0.000 min
Response: 12472960
Conc: 94.12 ug/ml



#8 Flouorene (C16.55)

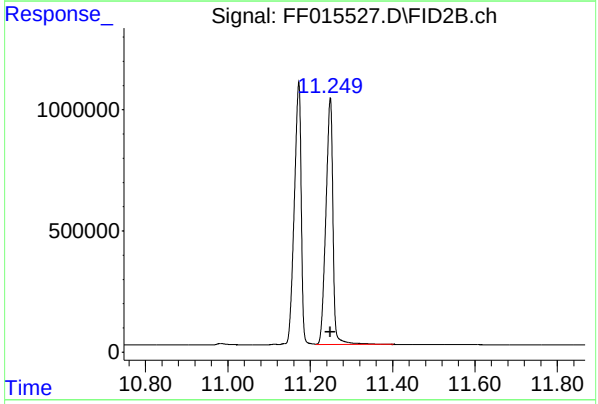
R.T.: 9.763 min
Delta R.T.: 0.000 min
Response: 12619708
Conc: 96.60 ug/ml



#9 Phenanthrene (C19.36)

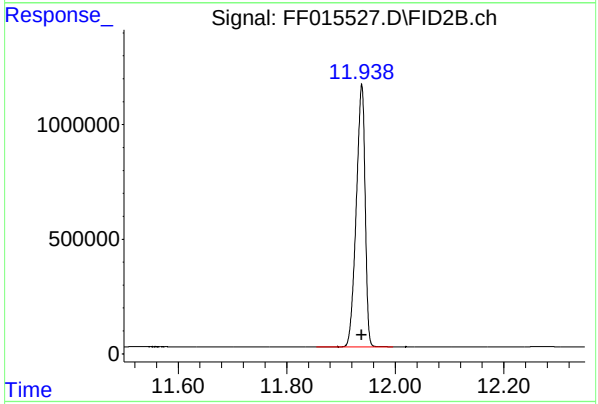
R.T.: 11.172 min
Delta R.T.: 0.000 min
Response: 12461541
Conc: 96.87 ug/ml

Instrument :
FID_F
ClientSampleId :
100 PPM AROMATIC HC STD1



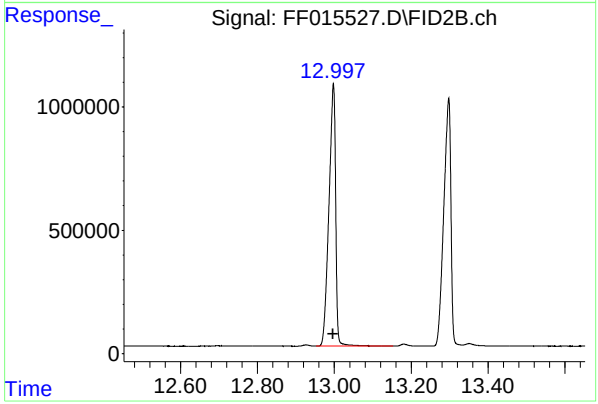
#10 Anthracene (C19.43)

R.T.: 11.248 min
Delta R.T.: 0.000 min
Response: 12126064
Conc: 96.96 ug/ml



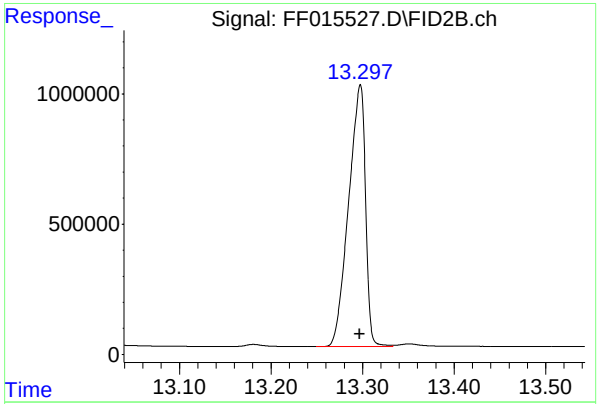
#11 ortho-Terphenyl (SURR)

R.T.: 11.938 min
Delta R.T.: 0.000 min
Response: 12986799
Conc: 94.31 ug/ml



#12 Fluoranthene (C21.85)

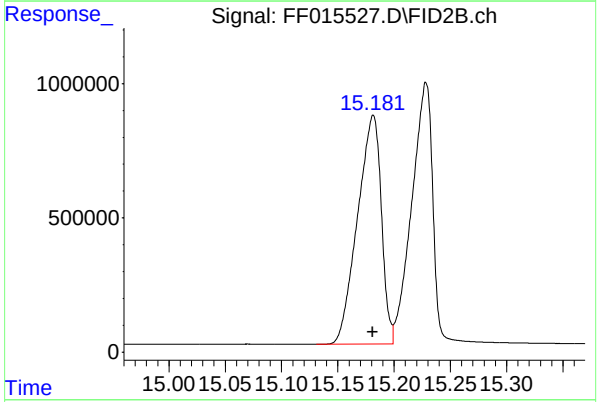
R.T.: 12.997 min
Delta R.T.: 0.000 min
Response: 12920946
Conc: 95.84 ug/ml



#13 Pyrene (C20.8)

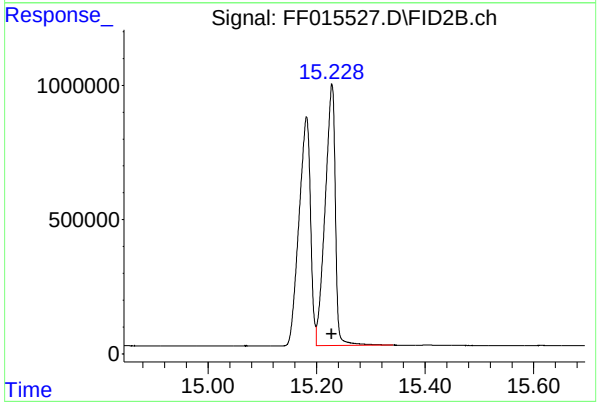
R.T.: 13.297 min
Delta R.T.: 0.000 min
Response: 12855428
Conc: 94.63 ug/ml

Instrument :
FID_F
ClientSampleId :
100 PPM AROMATIC HC STD1



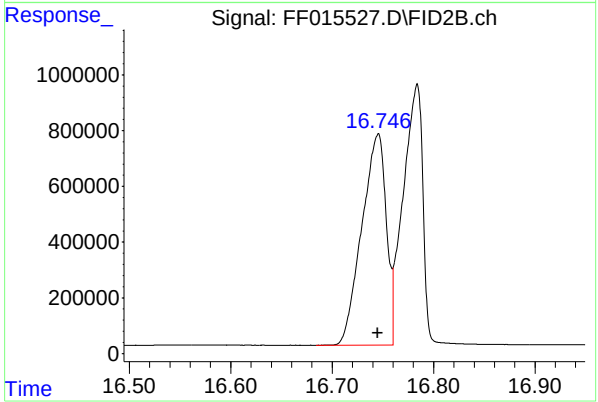
#14 Benzo[a]anthracene (C26.37)

R.T.: 15.181 min
Delta R.T.: 0.000 min
Response: 12510176
Conc: 99.60 ug/ml



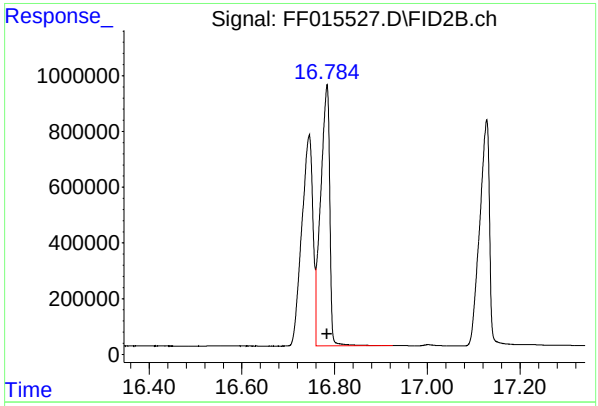
#15 Chrysene (C27.41)

R.T.: 15.228 min
Delta R.T.: 0.000 min
Response: 12789815
Conc: 93.11 ug/ml



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

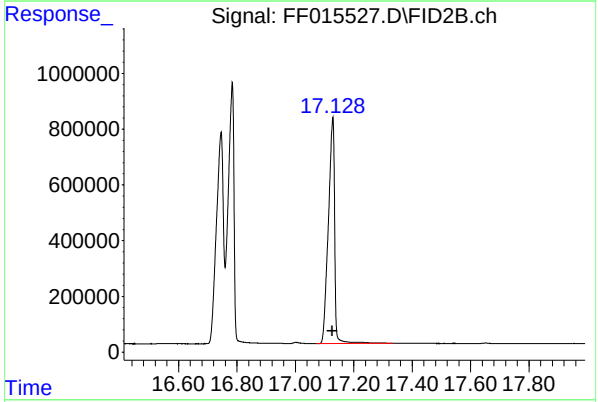
R.T.: 16.745 min
Delta R.T.: 0.000 min
Response: 12667527
Conc: 97.36 ug/ml



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

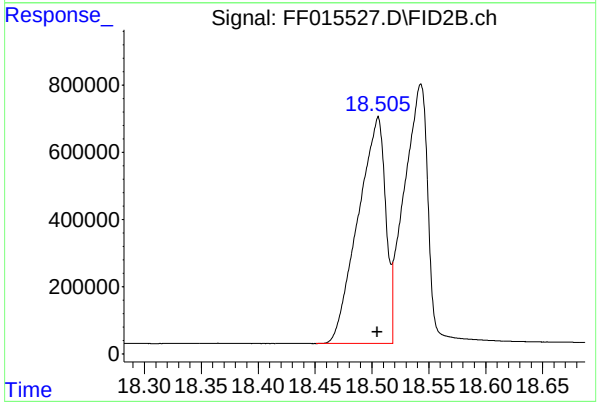
R.T.: 16.783 min
Delta R.T.: 0.000 min
Response: 12754236
Conc: 94.54 ug/ml

Instrument :
FID_F
ClientSampleId :
100 PPM AROMATIC HC STD1



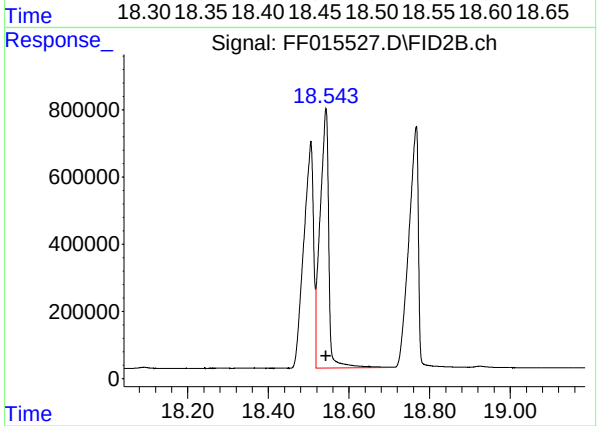
#18 Benzo[a]pyrene (C31.34)

R.T.: 17.127 min
Delta R.T.: 0.000 min
Response: 12145429
Conc: 100.39 ug/ml



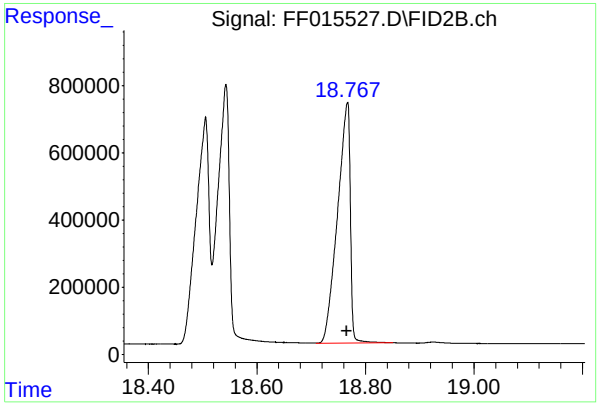
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.505 min
Delta R.T.: 0.000 min
Response: 11376975
Conc: 105.98 ug/ml



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

R.T.: 18.542 min
Delta R.T.: 0.000 min
Response: 11542220
Conc: 93.59 ug/ml



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

R.T.: 18.765 min
Delta R.T.: 0.000 mi
Response: 11709295
Conc: 96.66 ug/m

Instrument :
FID_F
ClientSampleId :
100 PPM AROMATIC HC STD1

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015527.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 09:00
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	4.600	4.566	4.734	BB	1152082	11629996	89.55%	4.599%
2	6.272	6.236	6.429	BB	1218951	12162035	93.65%	4.809%
3	7.370	7.332	7.497	PV	1161350	12032920	92.66%	4.758%
4	7.996	7.936	8.162	BB	1077251	10994390	84.66%	4.348%
5	8.673	8.542	8.814	BB	1185812	12653113	97.43%	5.004%
6	8.873	8.839	8.937	BV	704745	7467126	57.50%	2.953%
7	8.974	8.937	9.121	VB	1154825	12472960	96.04%	4.932%
8	9.763	9.711	9.894	BB	1124636	12619708	97.17%	4.990%
9	11.172	11.121	11.214	BV	1087677	12461541	95.96%	4.928%
10	11.248	11.214	11.401	VBA	1024153	12126064	93.37%	4.795%
11	11.938	11.854	11.996	BB	1143374	12986799	100.00%	5.136%
12	12.997	12.952	13.152	VB	1068279	12920946	99.49%	5.110%
13	13.297	13.249	13.333	BV	1008180	12855428	98.99%	5.084%
14	15.181	15.131	15.199	BV	852704	12510176	96.33%	4.947%
15	15.228	15.199	15.341	VBA	974664	12789815	98.48%	5.058%
16	16.745	16.684	16.760	BV	753666	12667527	97.54%	5.009%
17	16.783	16.760	16.926	VB	928653	12754236	98.21%	5.044%
18	17.127	17.071	17.334	BB	807969	12145429	93.52%	4.803%
19	18.505	18.451	18.518	BV	665896	11376975	87.60%	4.499%
20	18.542	18.518	18.709	VV	771751	11542220	88.88%	4.564%
21	18.765	18.709	18.851	VBA	712641	11709295	90.16%	4.630%

Sum of corrected areas: 252878700

Aromatic EPH 022625.M Wed Feb 26 12:47:18 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015528.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 09:30
Operator : YP\AJ
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 72 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
50 PPM AROMATIC HC STD2

Integration File: autoint1.e
Quant Time: Feb 26 12:31:16 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:26:20 2025
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...	7.996	5704504	50.103 ug/ml
Spiked Amount	50.000		Recovery =	100.21%
6) S	2-Flurobiphenyl (SURR)	8.871	3814026	50.643 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	101.29%
11) S	ortho-Terphenyl (SURR)	11.935	6832040	49.742 ug/ml
Spiked Amount	50.000		Recovery =	99.48%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.602	6140419	50.105 ug/ml
2) T	Naphthalene (C11.7)	6.273	6321551	50.314 ug/ml
3) T	2-Methylnaphthalene (...	7.370	6257474	50.175 ug/ml
5) T	Acenaphthylene (C15.06)	8.671	6644719	49.887 ug/ml
7) T	Acenaphthene (C15.5)	8.970	6592692	49.832 ug/ml
8) T	Flouorene (C16.55)	9.760	6568021	50.185 ug/ml
9) T	Phenanthrene (C19.36)	11.168	6485720	50.279 ug/ml
10) T	Anthracene (C19.43)	11.243	6294334	50.220 ug/ml
12) T	Fluoranthene (C21.85)	12.992	6736882	49.979 ug/ml
13) T	Pyrene (C20.8)	13.290	6713113	49.608 ug/ml
14) T	Benzo[a]anthracene (C...	15.173	6382398	50.538 ug/ml
15) T	Chrysene (C27.41)	15.217	6702862	49.192 ug/ml
16) T	benzo[b]fluoranthene ...	16.736	6507369	50.011 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.770	6701753	49.386 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.116	6283729	51.277 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.492	5436862	50.428 ug/ml
20) T	Dibenz[a,h]anthracene...	18.528	6261165	49.789 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.749	6049307	49.956 ug/ml

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

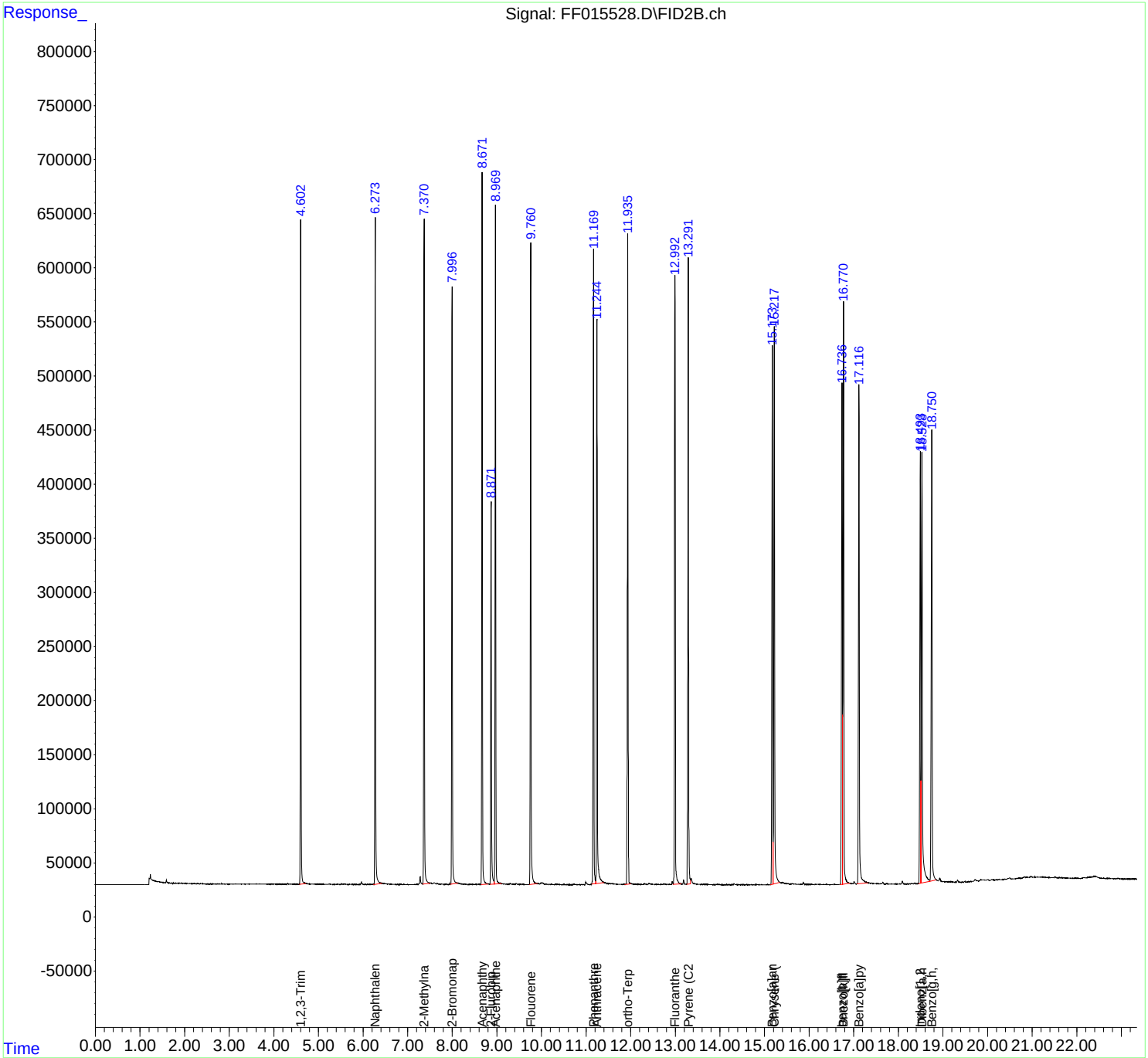
Quantitation Report (QT Reviewed)

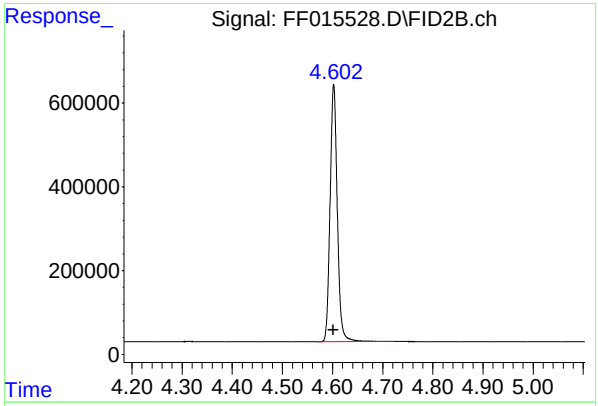
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015528.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 09:30
Operator : YP\AJ
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 72 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
50 PPM AROMATIC HC STD2

Integration File: autoint1.e
Quant Time: Feb 26 12:31:16 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:26:20 2025
Response via : Initial Calibration
Integrator: ChemStation

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

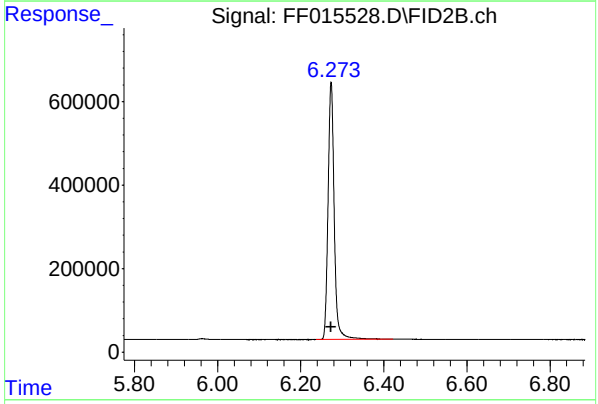




#1 1,2,3-Trimethylbenzene (C10.1)

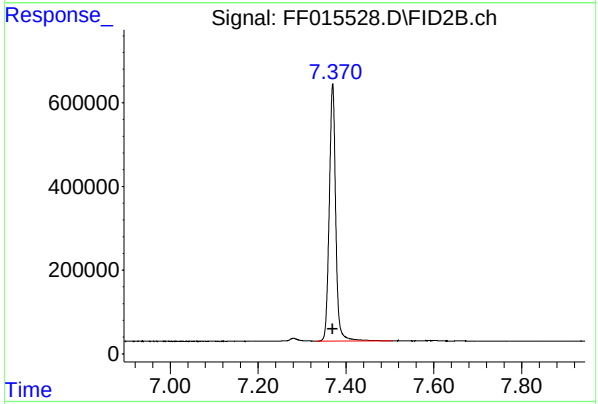
R.T.: 4.602 min
Delta R.T.: 0.000 min
Response: 6140419
Conc: 50.11 ug/ml

Instrument :
FID_F
ClientSampleId :
50 PPM AROMATIC HC STD2



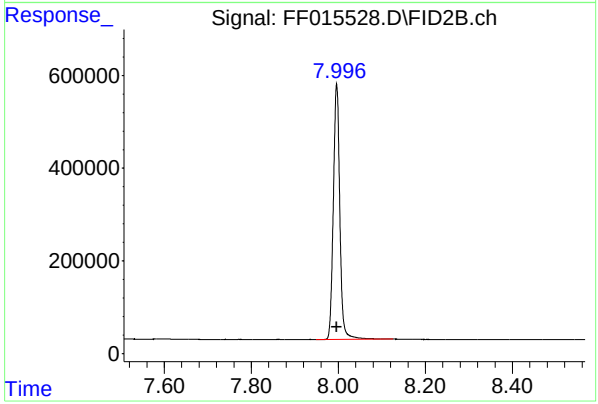
#2 Naphthalene (C11.7)

R.T.: 6.273 min
Delta R.T.: 0.000 min
Response: 6321551
Conc: 50.31 ug/ml



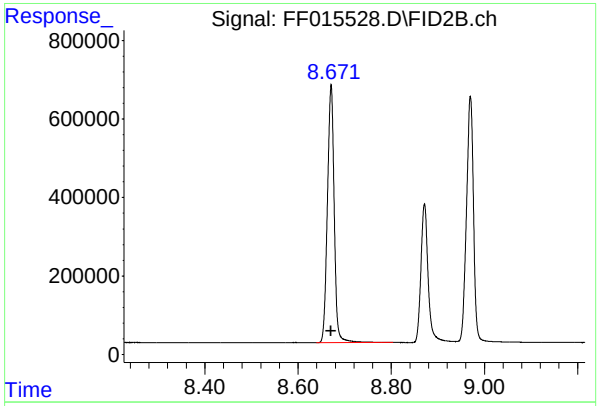
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.370 min
Delta R.T.: 0.000 min
Response: 6257474
Conc: 50.17 ug/ml



#4 2-Bromonaphthalene (SURR)

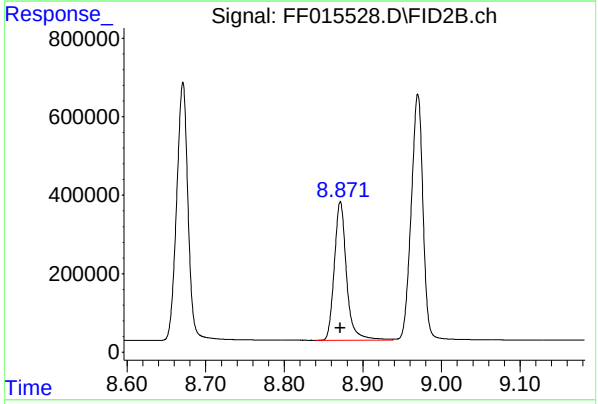
R.T.: 7.996 min
Delta R.T.: 0.000 min
Response: 5704504
Conc: 50.10 ug/ml



#5 Acenaphthylene (C15.06)

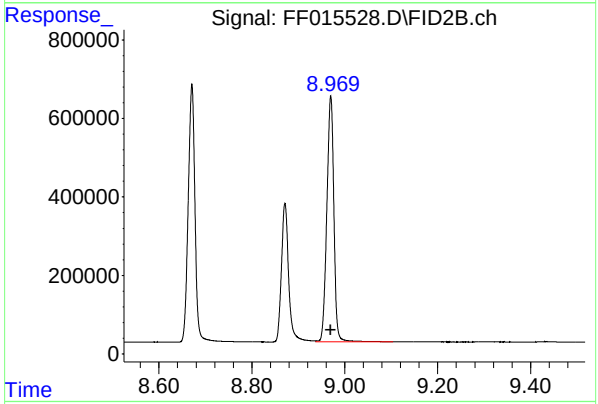
R.T.: 8.671 min
Delta R.T.: 0.000 min
Response: 6644719
Conc: 49.89 ug/ml

Instrument :
FID_F
ClientSampleId :
50 PPM AROMATIC HC STD2



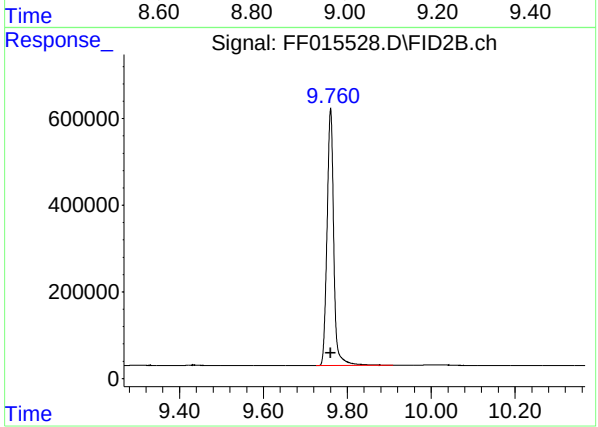
#6 2-Flurobiphenyl (SURR)

R.T.: 8.871 min
Delta R.T.: 0.000 min
Response: 3814026
Conc: 50.64 ug/ml



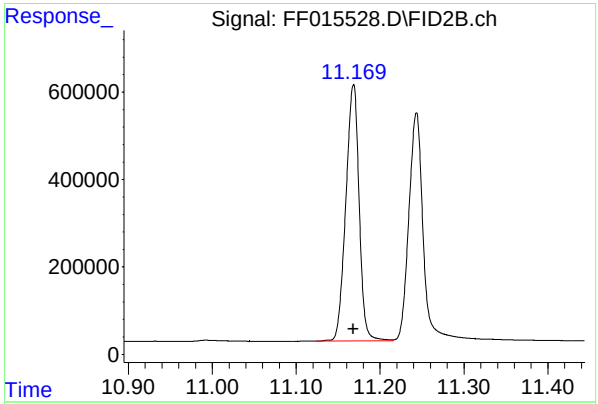
#7 Acenaphthene (C15.5)

R.T.: 8.970 min
Delta R.T.: 0.000 min
Response: 6592692
Conc: 49.83 ug/ml



#8 Flouorene (C16.55)

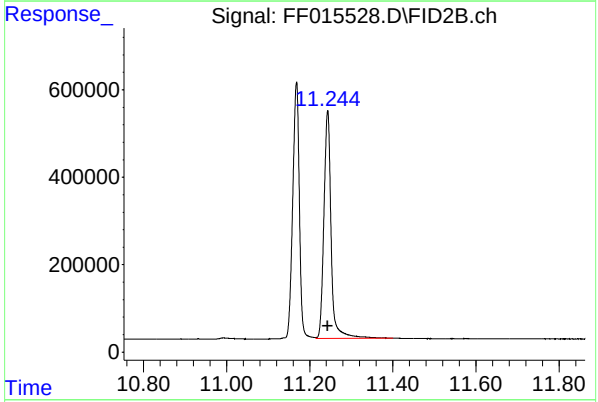
R.T.: 9.760 min
Delta R.T.: 0.000 min
Response: 6568021
Conc: 50.18 ug/ml



#9 Phenanthrene (C19.36)

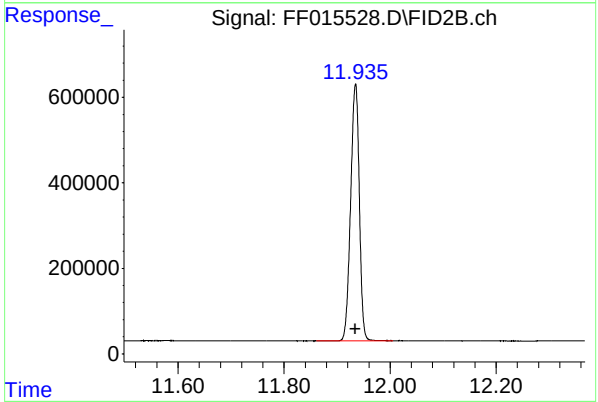
R.T.: 11.168 min
Delta R.T.: 0.000 min
Response: 6485720
Conc: 50.28 ug/ml

Instrument :
FID_F
ClientSampleId :
50 PPM AROMATIC HC STD2



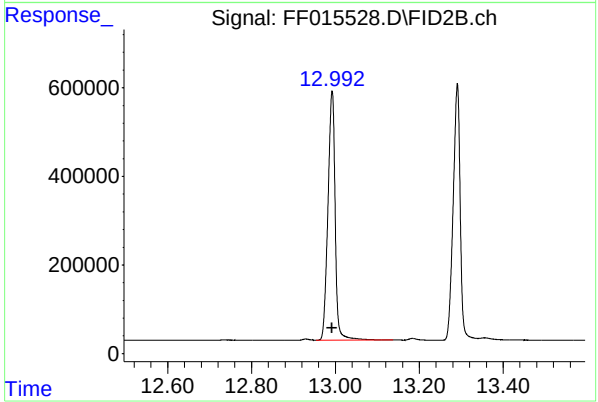
#10 Anthracene (C19.43)

R.T.: 11.243 min
Delta R.T.: 0.000 min
Response: 6294334
Conc: 50.22 ug/ml



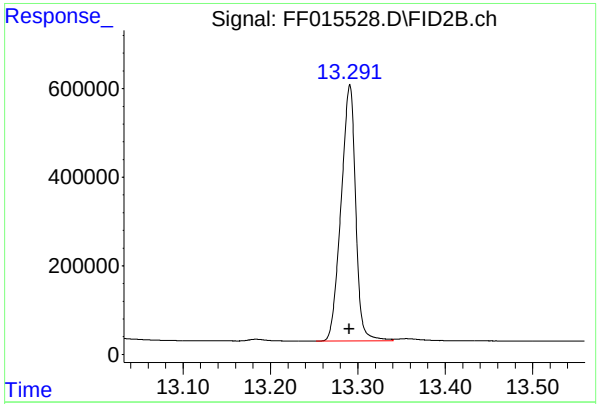
#11 ortho-Terphenyl (SURR)

R.T.: 11.935 min
Delta R.T.: 0.000 min
Response: 6832040
Conc: 49.74 ug/ml



#12 Fluoranthene (C21.85)

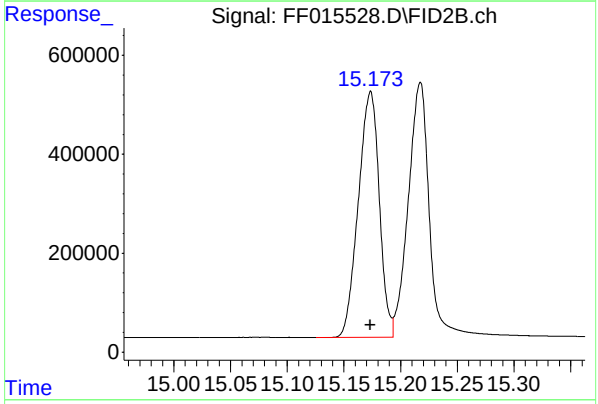
R.T.: 12.992 min
Delta R.T.: 0.000 min
Response: 6736882
Conc: 49.98 ug/ml



#13 Pyrene (C20.8)

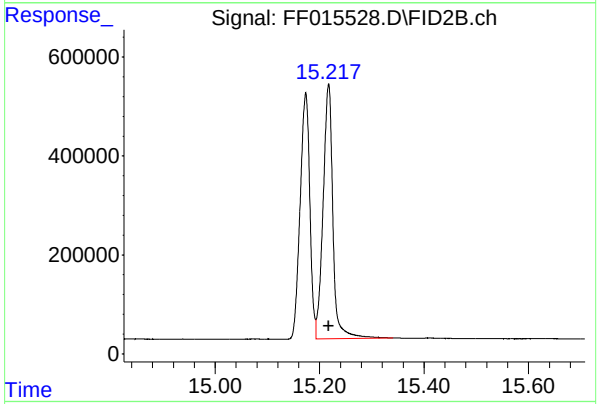
R.T.: 13.290 min
Delta R.T.: 0.000 min
Response: 6713113
Conc: 49.61 ug/ml

Instrument :
FID_F
ClientSampleId :
50 PPM AROMATIC HC STD2



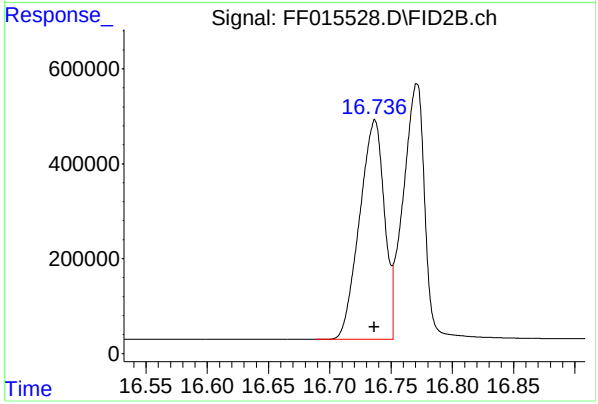
#14 Benzo[a]anthracene (C26.37)

R.T.: 15.173 min
Delta R.T.: 0.000 min
Response: 6382398
Conc: 50.54 ug/ml



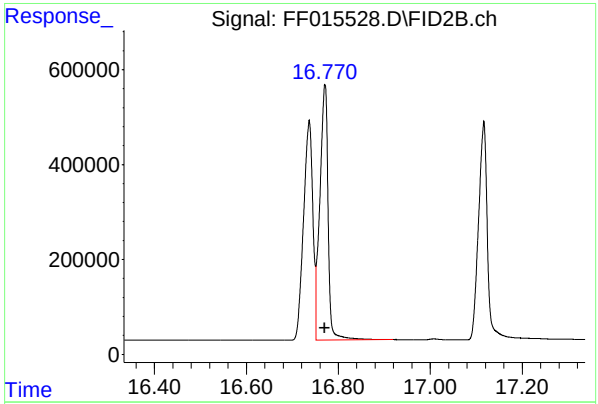
#15 Chrysene (C27.41)

R.T.: 15.217 min
Delta R.T.: 0.000 min
Response: 6702862
Conc: 49.19 ug/ml



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

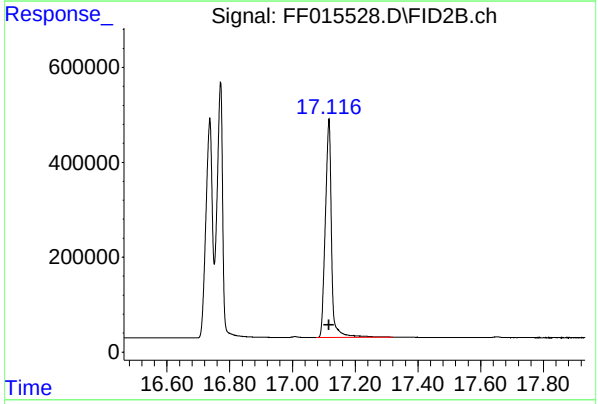
R.T.: 16.736 min
Delta R.T.: 0.000 min
Response: 6507369
Conc: 50.01 ug/ml



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

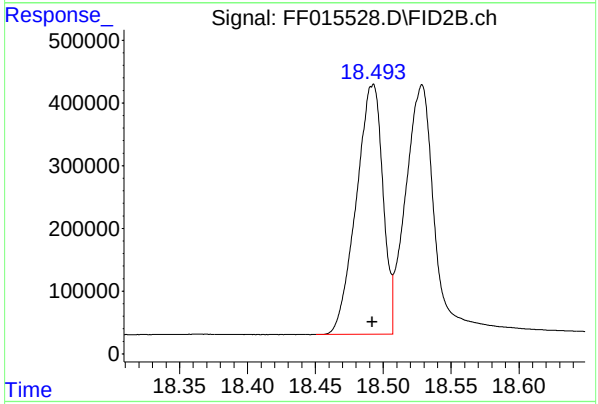
R.T.: 16.770 min
Delta R.T.: 0.000 min
Response: 6701753
Conc: 49.39 ug/ml

Instrument :
FID_F
ClientSampleId :
50 PPM AROMATIC HC STD2



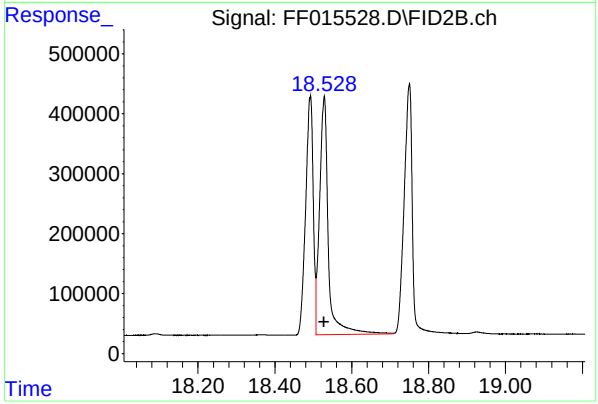
#18 Benzo[a]pyrene (C31.34)

R.T.: 17.116 min
Delta R.T.: 0.000 min
Response: 6283729
Conc: 51.28 ug/ml



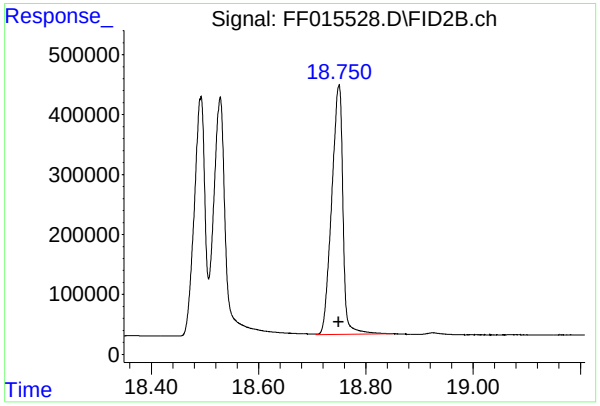
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.492 min
Delta R.T.: 0.000 min
Response: 5436862
Conc: 50.43 ug/ml



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

R.T.: 18.528 min
Delta R.T.: 0.000 min
Response: 6261165
Conc: 49.79 ug/ml



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

R.T.: 18.749 min
Delta R.T.: 0.000 mi
Response: 6049307
Conc: 49.96 ug/m

Instrument :
FID_F
ClientSampleId :
50 PPM AROMATIC HC STD2

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015528.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 09:30
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	4.602	4.567	4.720	BB	613956	6140419	89.88%	4.672%
2	6.273	6.237	6.422	BB	617127	6321551	92.53%	4.810%
3	7.370	7.332	7.507	VV	617635	6257474	91.59%	4.761%
4	7.996	7.949	8.125	BB	550176	5704504	83.50%	4.340%
5	8.671	8.639	8.804	BB	656770	6644719	97.26%	5.056%
6	8.871	8.840	8.938	BV	354018	3814026	55.83%	2.902%
7	8.970	8.938	9.104	VB	628126	6592692	96.50%	5.016%
8	9.760	9.725	9.909	BB	594268	6568021	96.14%	4.997%
9	11.168	11.124	11.215	BV	589305	6485720	94.93%	4.935%
10	11.243	11.215	11.400	VBA	523723	6294334	92.13%	4.789%
11	11.935	11.860	12.005	BB	604176	6832040	100.00%	5.198%
12	12.992	12.954	13.137	VB	564012	6736882	98.61%	5.126%
13	13.290	13.252	13.340	BV	578658	6713113	98.26%	5.108%
14	15.173	15.125	15.193	BV	498907	6382398	93.42%	4.856%
15	15.217	15.193	15.340	VBA	515294	6702862	98.11%	5.100%
16	16.736	16.689	16.752	BV	464318	6507369	95.25%	4.951%
17	16.770	16.752	16.919	VB	539771	6701753	98.09%	5.099%
18	17.116	17.075	17.320	BB	455878	6283729	91.97%	4.781%
19	18.492	18.450	18.507	BV	396677	5436862	79.58%	4.137%
20	18.528	18.507	18.707	VV	399735	6261165	91.64%	4.764%
21	18.749	18.707	18.850	VBA	414410	6049307	88.54%	4.603%

Sum of corrected areas: 131430938

Aromatic EPH 022625.M Wed Feb 26 12:46:47 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015529.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 09:59
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 73 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD3

Integration File: autoint1.e
Quant Time: Feb 26 12:27:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:26:20 2025
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...	7.996	2350631	20.000 ug/ml
	Spiked Amount 50.000		Recovery = 40.00%	
6)	S 2-Flurobiphenyl (SURR)	8.872	1499662	20.000 ug/ml
	Spiked Amount 50.000 Range 0 - 131		Recovery = 40.00%	
11)	S ortho-Terphenyl (SURR)	11.933	2910848	20.000 ug/ml
	Spiked Amount 50.000		Recovery = 40.00%	
	Target Compounds			
1)	T 1,2,3-Trimethylbenzen...	4.603	2570851	20.000 ug/ml
2)	T Naphthalene (C11.7)	6.274	2577499	20.000 ug/ml
3)	T 2-Methylnaphthalene (...	7.370	2573276	20.000 ug/ml
5)	T Acenaphthylene (C15.06)	8.670	2803283	20.000 ug/ml
7)	T Acenaphthene (C15.5)	8.968	2806231	20.000 ug/ml
8)	T Flouorene (C16.55)	9.760	2701482	20.000 ug/ml
9)	T Phenanthrene (C19.36)	11.166	2653141	20.000 ug/ml
10)	T Anthracene (C19.43)	11.242	2577211	20.000 ug/ml
12)	T Fluoranthene (C21.85)	12.988	2808741	20.000 ug/ml
13)	T Pyrene (C20.8)	13.287	2863104	20.000 ug/ml
14)	T Benzo[a]anthracene (C...	15.169	2522372	20.000 ug/ml
15)	T Chrysene (C27.41)	15.211	2936432	20.000 ug/ml
16)	T benzo[b]fluoranthene ...	16.730	2670667	20.000 ug/ml
17)	T Bnezo[k]fluoranthene ...	16.761	2910573	20.000 ug/ml
18)	T Benzo[a]pyrene (C31.34)	17.111	2410168	20.000 ug/ml
19)	T Indeno[1,2,3-cd]pyren...	18.484	2018742	20.000 ug/ml
20)	T Dibenz[a,h]anthracene...	18.522	2732285	20.000 ug/ml
21)	T Benzo[g,h,i]perylene ...	18.738	2503914	20.000 ug/ml

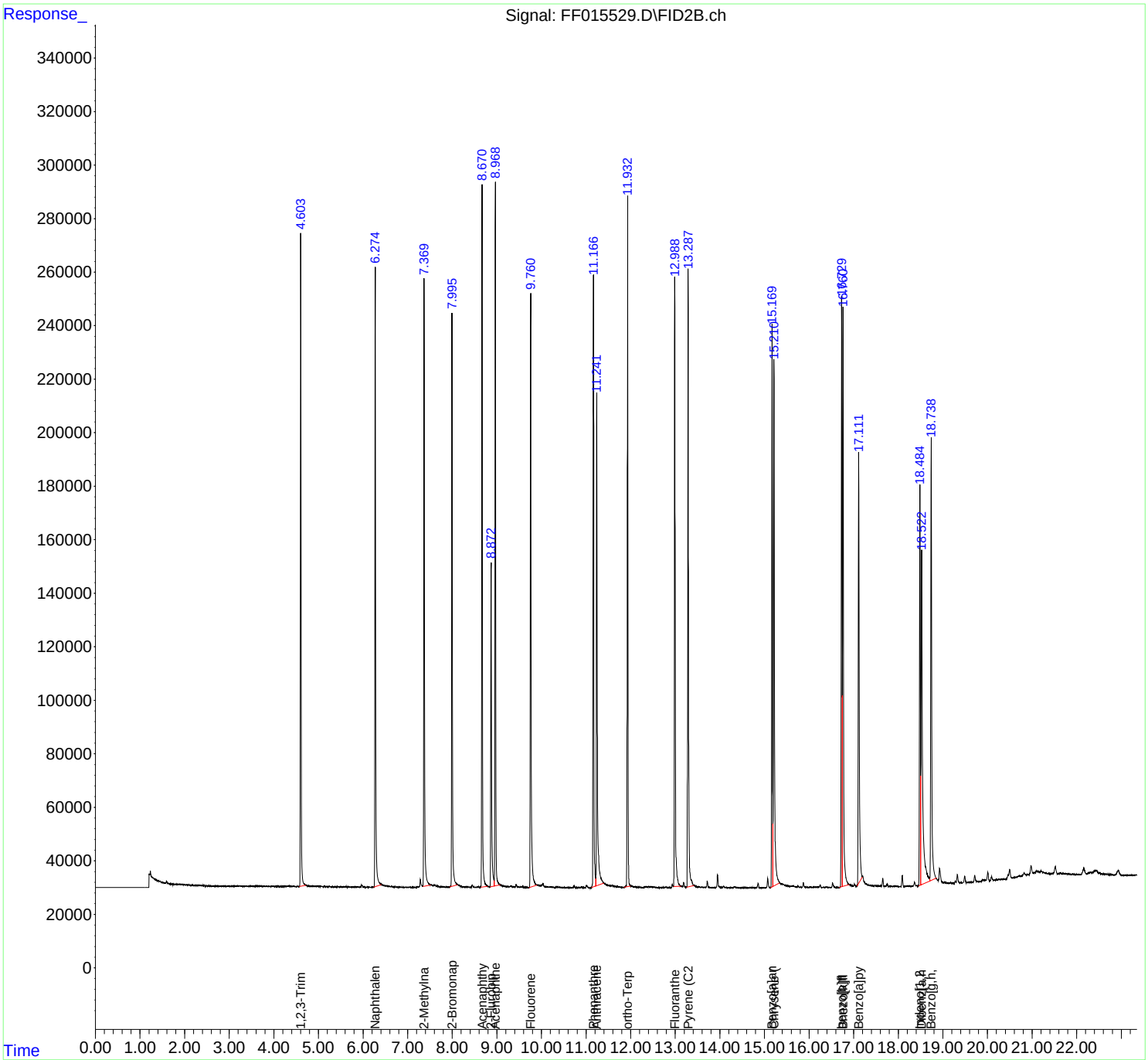
(f)=RT Delta > 1/2 Window (m)=manual int.

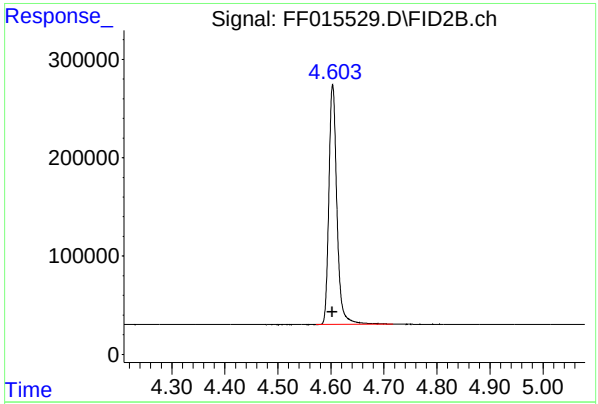
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015529.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 09:59
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 73 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD3

Integration File: autoint1.e
Quant Time: Feb 26 12:27:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:26:20 2025
Response via : Initial Calibration
Integrator: ChemStation

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

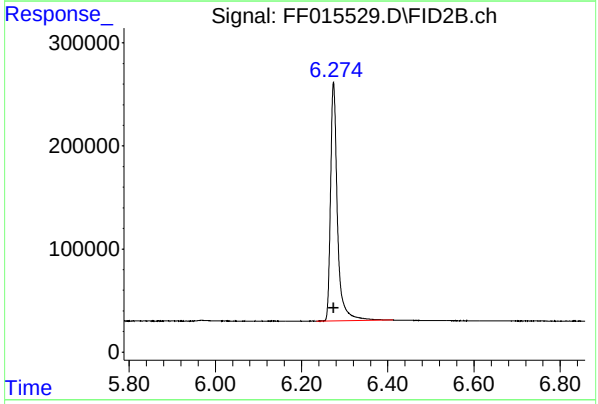




#1 1,2,3-Trimethylbenzene (C10.1)

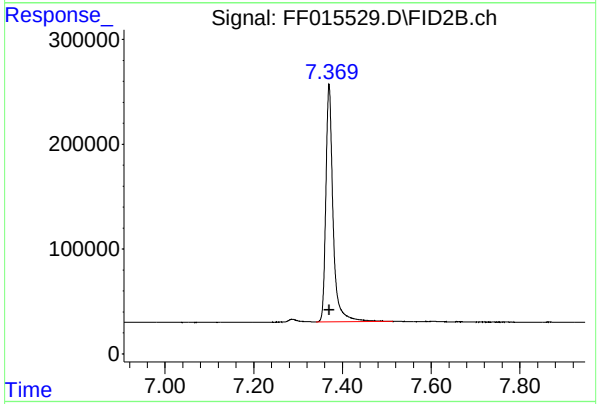
R.T.: 4.603 min
Delta R.T.: 0.000 min
Response: 2570851
Conc: 20.00 ug/ml

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD3



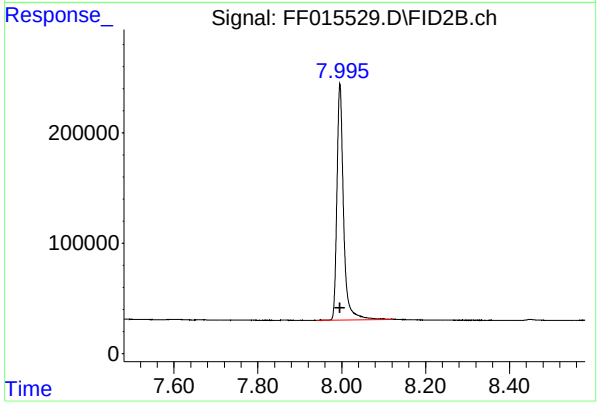
#2 Naphthalene (C11.7)

R.T.: 6.274 min
Delta R.T.: 0.000 min
Response: 2577499
Conc: 20.00 ug/ml



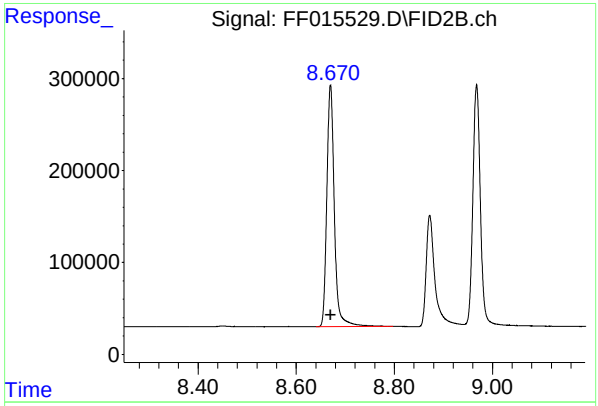
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.370 min
Delta R.T.: 0.000 min
Response: 2573276
Conc: 20.00 ug/ml



#4 2-Bromonaphthalene (SURR)

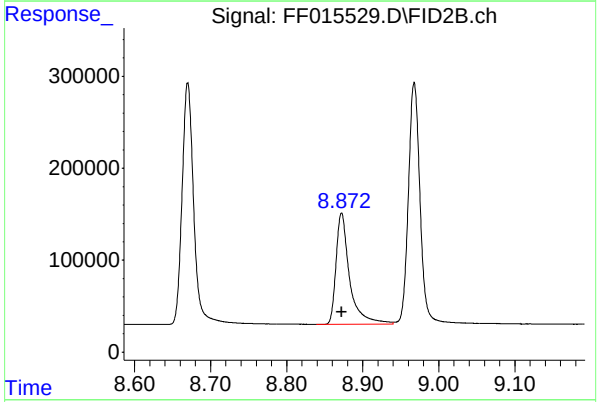
R.T.: 7.996 min
Delta R.T.: 0.000 min
Response: 2350631
Conc: 20.00 ug/ml



#5 Acenaphthylene (C15.06)

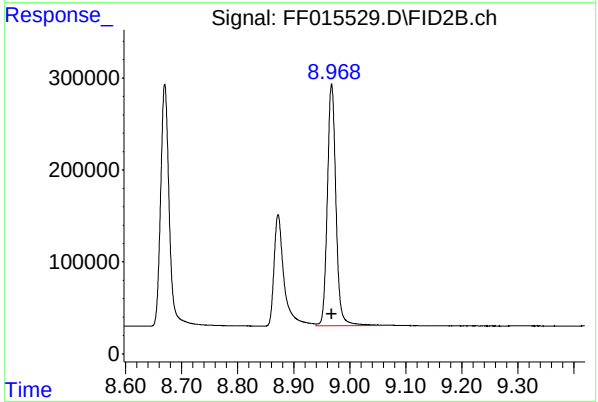
R.T.: 8.670 min
Delta R.T.: 0.000 min
Response: 2803283
Conc: 20.00 ug/ml

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD3



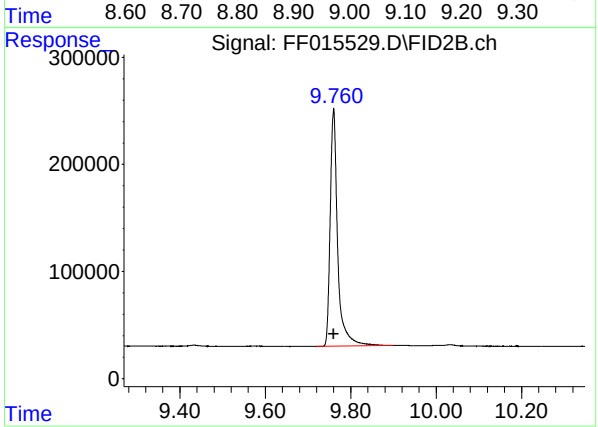
#6 2-Flurobiphenyl (SURR)

R.T.: 8.872 min
Delta R.T.: 0.000 min
Response: 1499662
Conc: 20.00 ug/ml



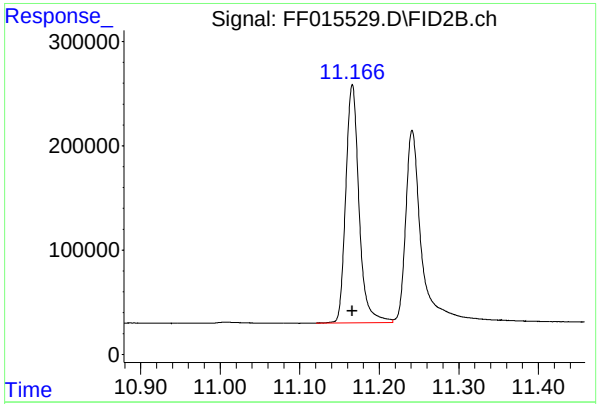
#7 Acenaphthene (C15.5)

R.T.: 8.968 min
Delta R.T.: 0.000 min
Response: 2806231
Conc: 20.00 ug/ml



#8 Flouorene (C16.55)

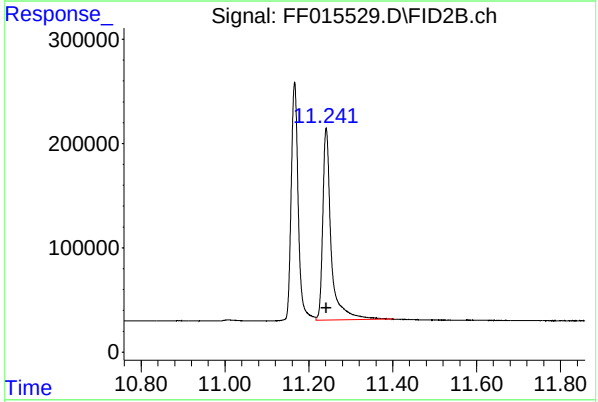
R.T.: 9.760 min
Delta R.T.: 0.000 min
Response: 2701482
Conc: 20.00 ug/ml



#9 Phenanthrene (C19.36)

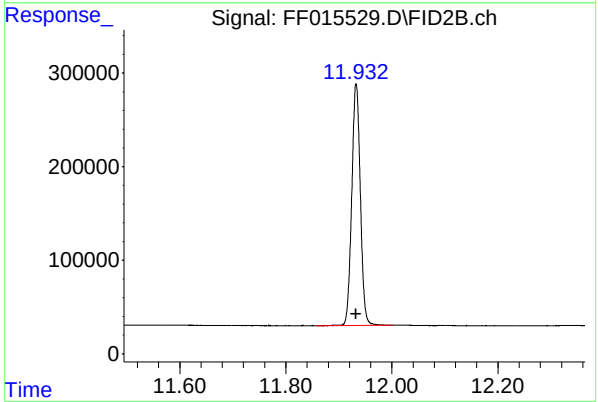
R.T.: 11.166 min
Delta R.T.: 0.000 min
Response: 2653141
Conc: 20.00 ug/ml

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD3



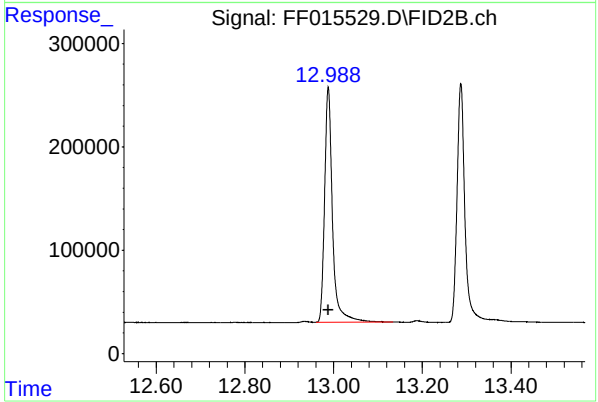
#10 Anthracene (C19.43)

R.T.: 11.242 min
Delta R.T.: 0.000 min
Response: 2577211
Conc: 20.00 ug/ml



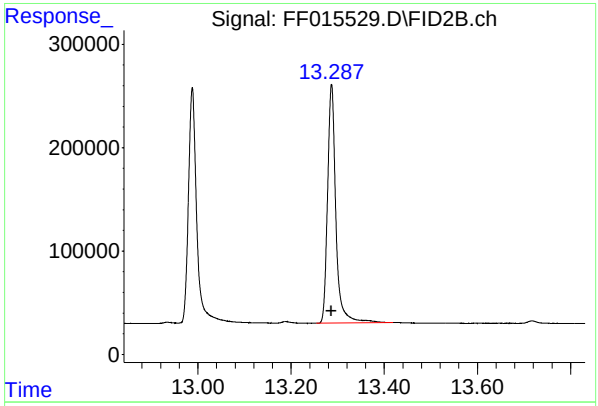
#11 ortho-Terphenyl (SURR)

R.T.: 11.933 min
Delta R.T.: 0.000 min
Response: 2910848
Conc: 20.00 ug/ml



#12 Fluoranthene (C21.85)

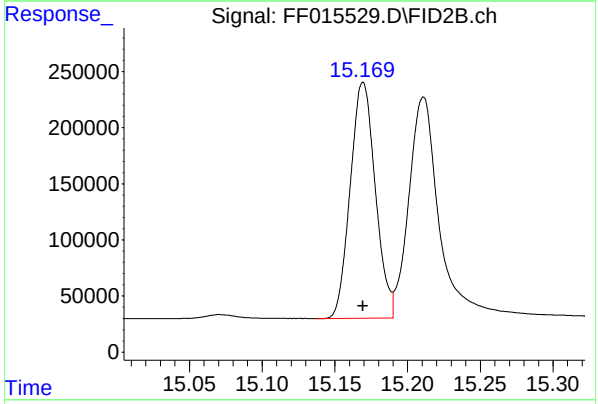
R.T.: 12.988 min
Delta R.T.: 0.000 min
Response: 2808741
Conc: 20.00 ug/ml



#13 Pyrene (C20.8)

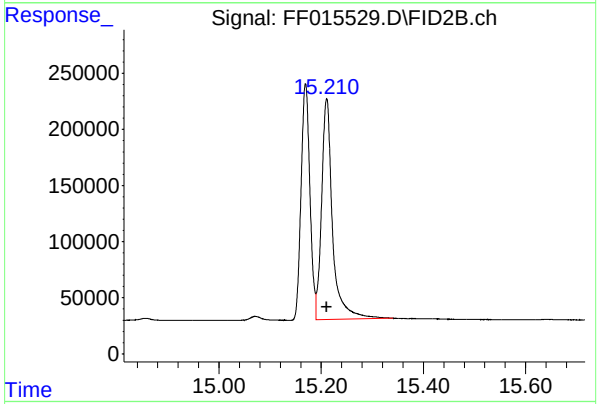
R.T.: 13.287 min
Delta R.T.: 0.000 min
Response: 2863104
Conc: 20.00 ug/ml

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD3



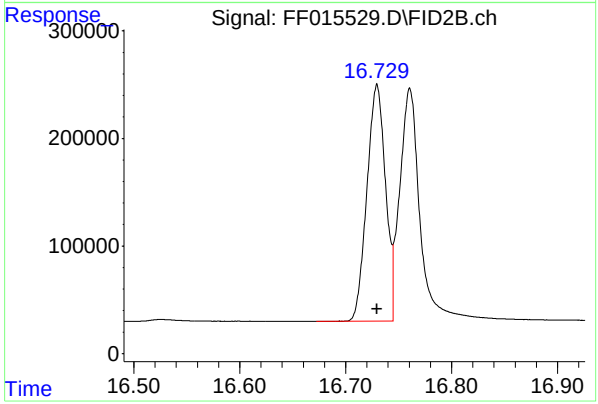
#14 Benzo[a]anthracene (C26.37)

R.T.: 15.169 min
Delta R.T.: 0.000 min
Response: 2522372
Conc: 20.00 ug/ml



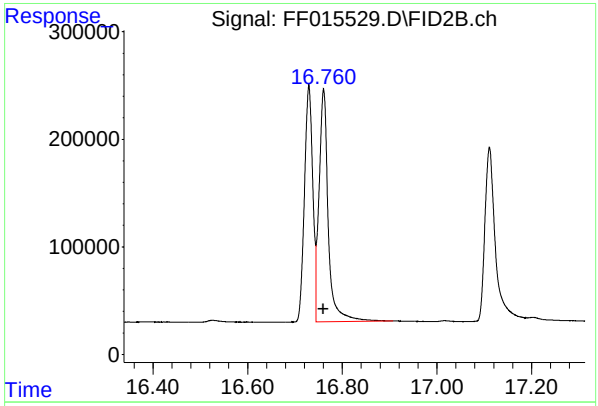
#15 Chrysene (C27.41)

R.T.: 15.211 min
Delta R.T.: 0.000 min
Response: 2936432
Conc: 20.00 ug/ml



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

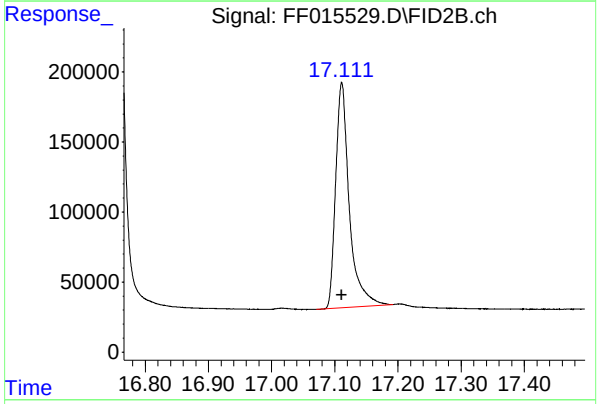
R.T.: 16.730 min
Delta R.T.: 0.000 min
Response: 2670667
Conc: 20.00 ug/ml



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

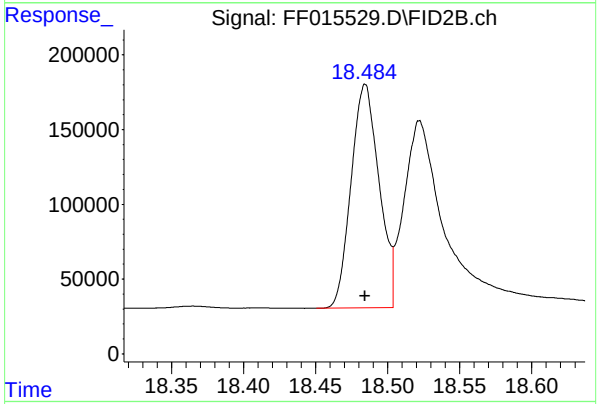
R.T.: 16.761 min
Delta R.T.: 0.000 min
Response: 2910573
Conc: 20.00 ug/ml

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD3



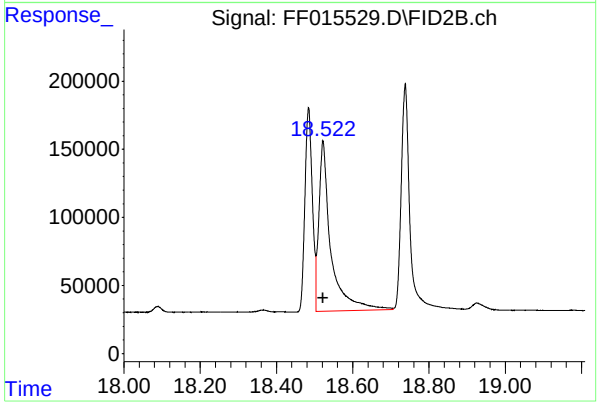
#18 Benzo[a]pyrene (C31.34)

R.T.: 17.111 min
Delta R.T.: 0.000 min
Response: 2410168
Conc: 20.00 ug/ml



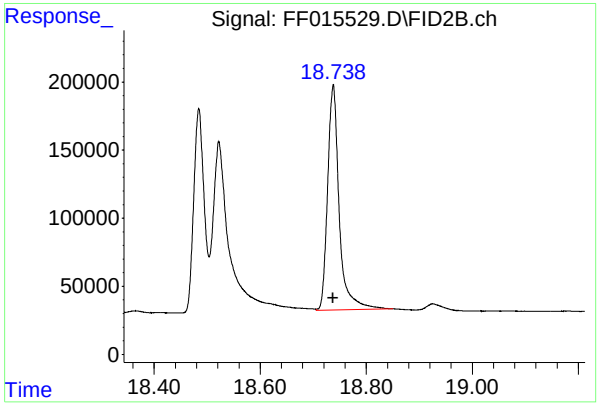
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.484 min
Delta R.T.: 0.000 min
Response: 2018742
Conc: 20.00 ug/ml



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

R.T.: 18.522 min
Delta R.T.: 0.000 min
Response: 2732285
Conc: 20.00 ug/ml



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

R.T.: 18.738 min
Delta R.T.: 0.000 mi
Response: 2503914
Conc: 20.00 ug/m

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD3

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015529.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 09:59
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	4.603	4.572	4.717	BB	243820	2570851	87.55%	4.726%
2	6.274	6.234	6.412	BB	230943	2577499	87.78%	4.738%
3	7.370	7.340	7.514	PB	226306	2573276	87.63%	4.730%
4	7.996	7.939	8.122	BB	214120	2350631	80.05%	4.321%
5	8.670	8.640	8.797	BB	262840	2803283	95.47%	5.153%
6	8.872	8.839	8.940	BV	121049	1499662	51.07%	2.757%
7	8.968	8.940	9.077	VB	261975	2806231	95.57%	5.158%
8	9.760	9.719	9.899	BB	222608	2701482	92.00%	4.966%
9	11.166	11.120	11.217	BV	228277	2653141	90.35%	4.877%
10	11.242	11.217	11.400	VBA	183733	2577211	87.77%	4.737%
11	11.933	11.857	12.002	BB	259102	2910848	99.13%	5.351%
12	12.988	12.960	13.134	BB	227893	2808741	95.65%	5.163%
13	13.287	13.254	13.419	BB	231291	2863104	97.50%	5.263%
14	15.169	15.137	15.190	BV	210310	2522372	85.90%	4.637%
15	15.211	15.190	15.340	VBA	196698	2936432	100.00%	5.398%
16	16.730	16.672	16.745	BV	219532	2670667	90.95%	4.909%
17	16.761	16.745	16.907	VB	216273	2910573	99.12%	5.350%
18	17.111	17.070	17.192	BV	160810	2410168	82.08%	4.430%
19	18.484	18.450	18.504	BV	149873	2018742	68.75%	3.711%
20	18.522	18.504	18.705	VV	124814	2732285	93.05%	5.022%
21	18.738	18.705	18.850	VBA	164694	2503914	85.27%	4.603%

Sum of corrected areas: 54401113

Aromatic EPH 022625.M Wed Feb 26 12:46:27 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015530.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 10:28
Operator : YP\AJ
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 74 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
10 PPM AROMATIC HC STD4

Integration File: autoint1.e
Quant Time: Feb 26 12:32:47 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:26:20 2025
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...	7.998	1328026	11.198 ug/ml
Spiked Amount	50.000		Recovery =	22.40%
6) S	2-Flurobiphenyl (SURR)	8.876	783654	10.301 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	20.60%
11) S	ortho-Terphenyl (SURR)	11.932	1681667	11.593 ug/ml
Spiked Amount	50.000		Recovery =	23.19%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.606	1453713	11.335 ug/ml
2) T	Naphthalene (C11.7)	6.277	1428112	10.991 ug/ml
3) T	2-Methylnaphthalene (...	7.372	1426121	11.039 ug/ml
5) T	Acenaphthylene (C15.06)	8.671	1616916	11.523 ug/ml
7) T	Acenaphthene (C15.5)	8.968	1621490	11.602 ug/ml
8) T	Flouorene (C16.55)	9.761	1494683	11.029 ug/ml
9) T	Phenanthrene (C19.36)	11.167	1458311	10.948 ug/ml
10) T	Anthracene (C19.43)	11.244	1405178	10.882 ug/ml
12) T	Fluoranthene (C21.85)	12.989	1604701	11.364 ug/ml
13) T	Pyrene (C20.8)	13.287	1650019	11.559 ug/ml
14) T	Benzo[a]anthracene (C...	15.170	1262368	9.997 ug/ml
15) T	Chrysene (C27.41)	15.211	1748922	11.986 ug/ml
16) T	benzo[b]fluoranthene ...	16.730	1459147	10.884 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.761	1716828	11.865 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.115	1455897	11.347 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.489	1036997	9.711 ug/ml
20) T	Dibenz[a,h]anthracene...	18.531	1527081	11.526 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.738	1411226	11.191 ug/ml

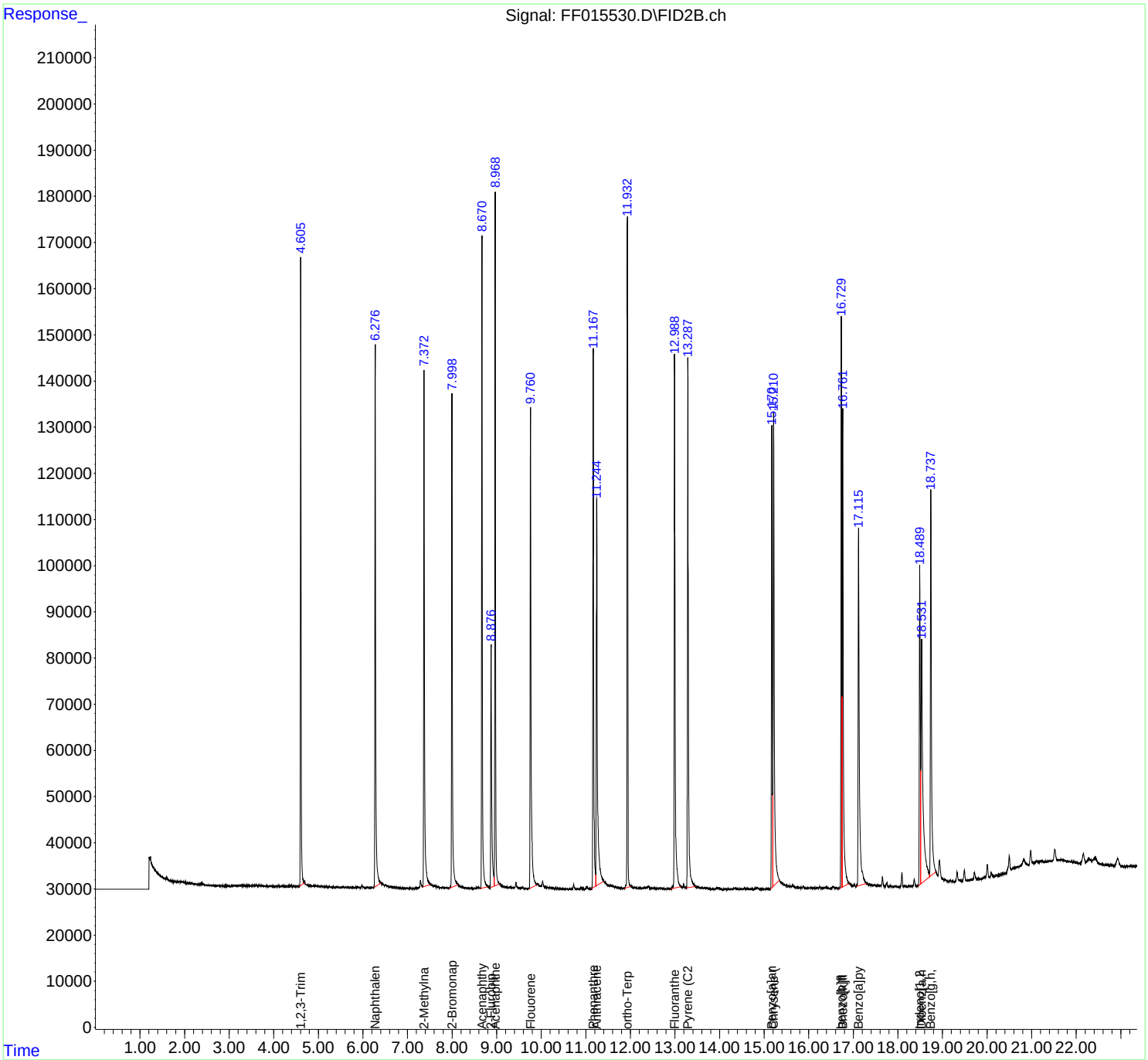
(f)=RT Delta > 1/2 Window (m)=manual int.

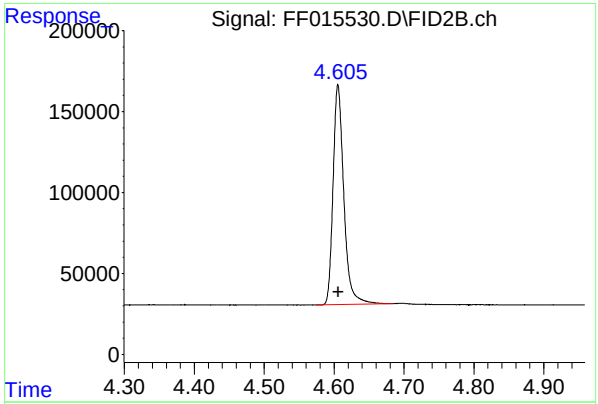
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015530.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 10:28
Operator : YP\AJ
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 74 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
10 PPM AROMATIC HC STD4

Integration File: autoint1.e
Quant Time: Feb 26 12:32:47 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:26:20 2025
Response via : Initial Calibration
Integrator: ChemStation

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

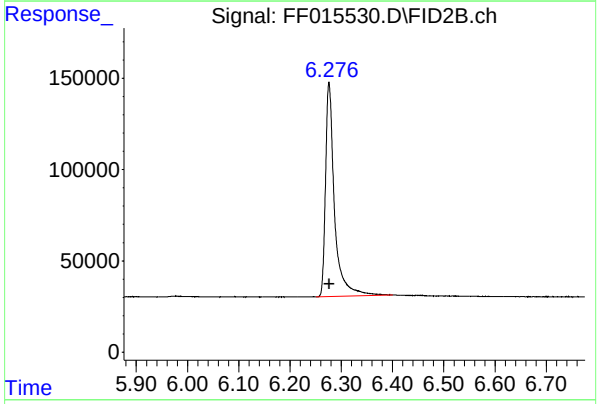




#1 1,2,3-Trimethylbenzene (C10.1)

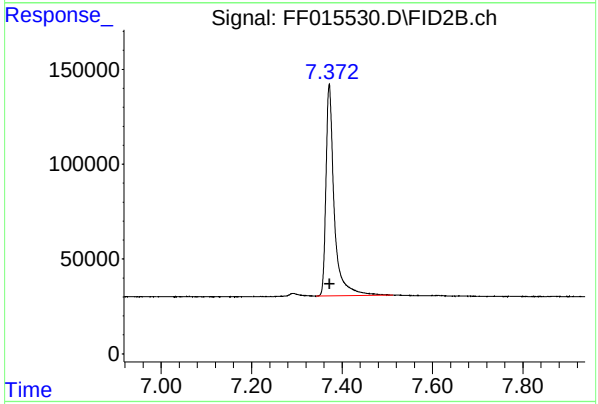
R.T.: 4.606 min
Delta R.T.: 0.000 min
Response: 1453713
Conc: 11.33 ug/ml

Instrument :
FID_F
ClientSampleId :
10 PPM AROMATIC HC STD4



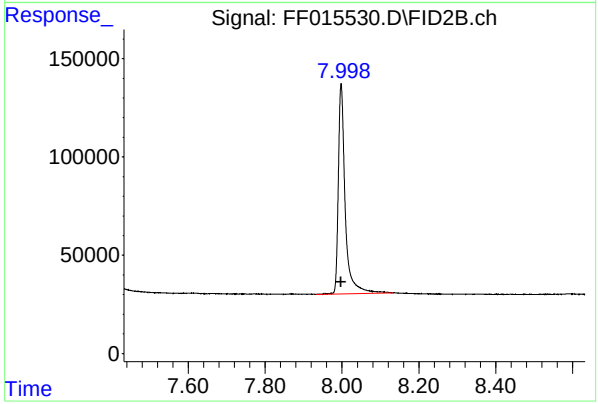
#2 Naphthalene (C11.7)

R.T.: 6.277 min
Delta R.T.: 0.000 min
Response: 1428112
Conc: 10.99 ug/ml



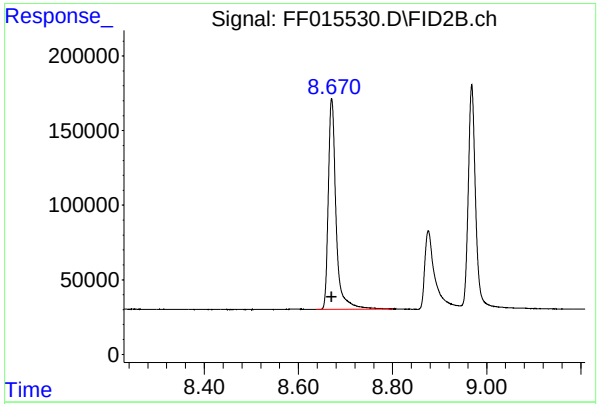
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.372 min
Delta R.T.: 0.000 min
Response: 1426121
Conc: 11.04 ug/ml



#4 2-Bromonaphthalene (SURR)

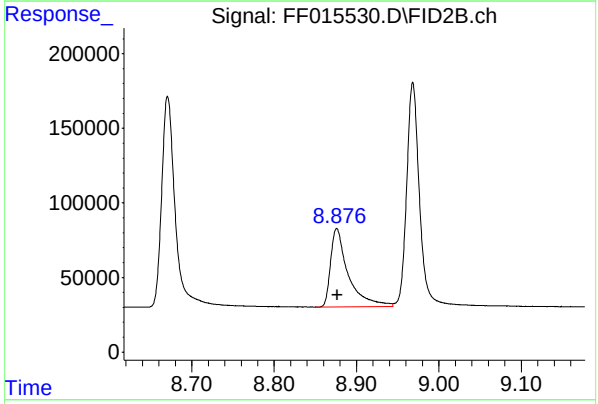
R.T.: 7.998 min
Delta R.T.: 0.000 min
Response: 1328026
Conc: 11.20 ug/ml



#5 Acenaphthylene (C15.06)

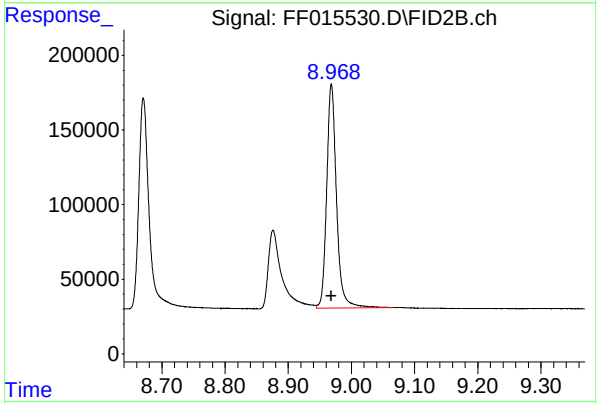
R.T.: 8.671 min
Delta R.T.: 0.000 min
Response: 1616916
Conc: 11.52 ug/ml

Instrument :
FID_F
ClientSampleId :
10 PPM AROMATIC HC STD4



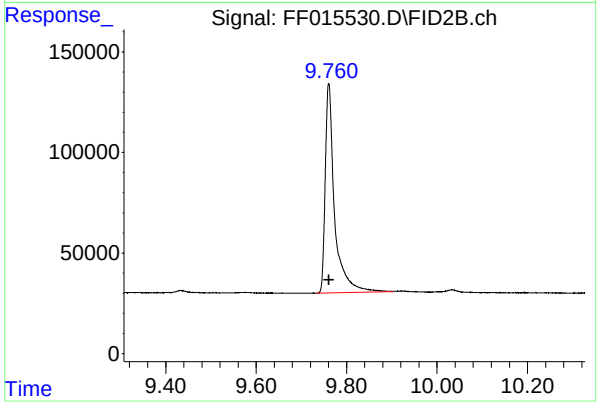
#6 2-Flurobiphenyl (SURR)

R.T.: 8.876 min
Delta R.T.: 0.000 min
Response: 783654
Conc: 10.30 ug/ml



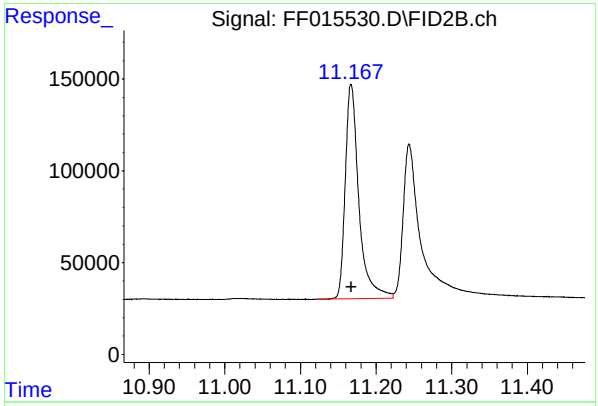
#7 Acenaphthene (C15.5)

R.T.: 8.968 min
Delta R.T.: 0.000 min
Response: 1621490
Conc: 11.60 ug/ml



#8 Flouorene (C16.55)

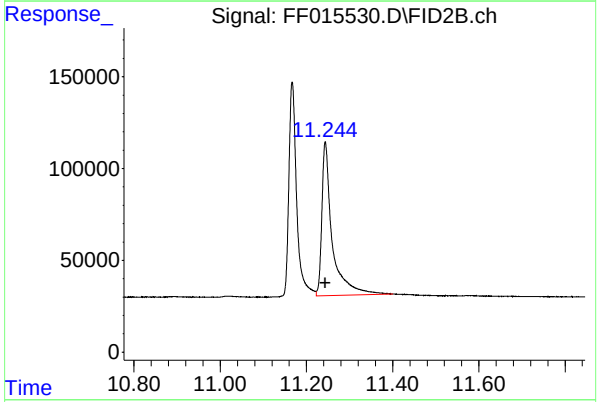
R.T.: 9.761 min
Delta R.T.: 0.000 min
Response: 1494683
Conc: 11.03 ug/ml



#9 Phenanthrene (C19.36)

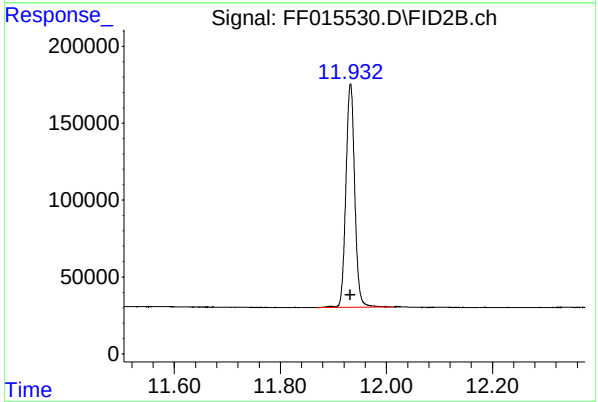
R.T.: 11.167 min
Delta R.T.: 0.000 min
Response: 1458311
Conc: 10.95 ug/ml

Instrument :
FID_F
ClientSampleId :
10 PPM AROMATIC HC STD4



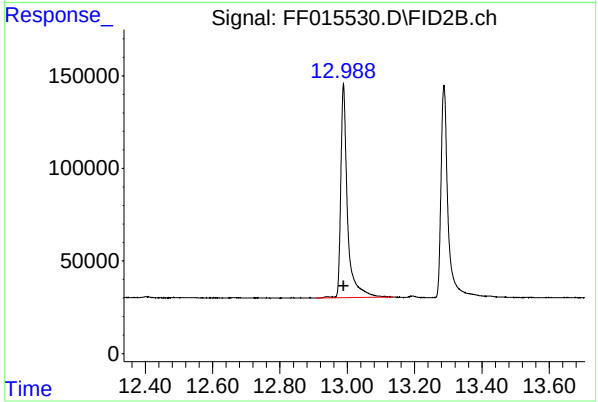
#10 Anthracene (C19.43)

R.T.: 11.244 min
Delta R.T.: 0.000 min
Response: 1405178
Conc: 10.88 ug/ml



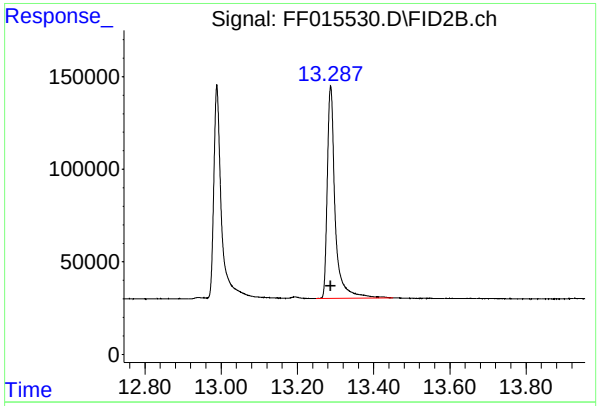
#11 ortho-Terphenyl (SURR)

R.T.: 11.932 min
Delta R.T.: 0.000 min
Response: 1681667
Conc: 11.59 ug/ml



#12 Fluoranthene (C21.85)

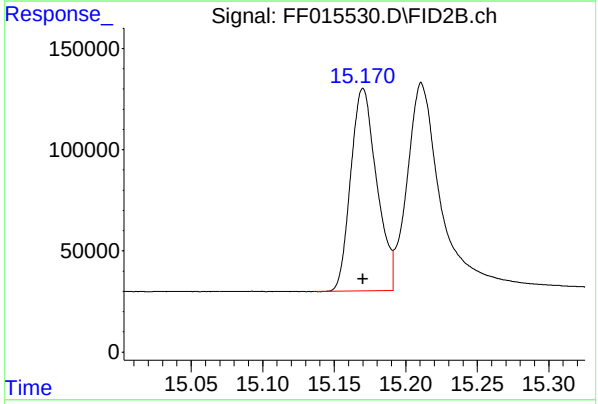
R.T.: 12.989 min
Delta R.T.: 0.000 min
Response: 1604701
Conc: 11.36 ug/ml



#13 Pyrene (C20.8)

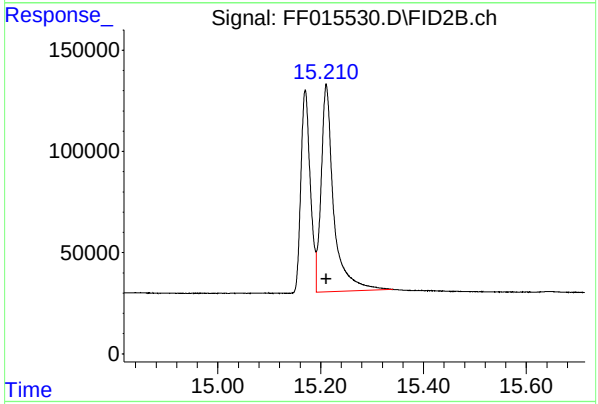
R.T.: 13.287 min
Delta R.T.: 0.000 min
Response: 1650019
Conc: 11.56 ug/ml

Instrument :
FID_F
ClientSampleId :
10 PPM AROMATIC HC STD4



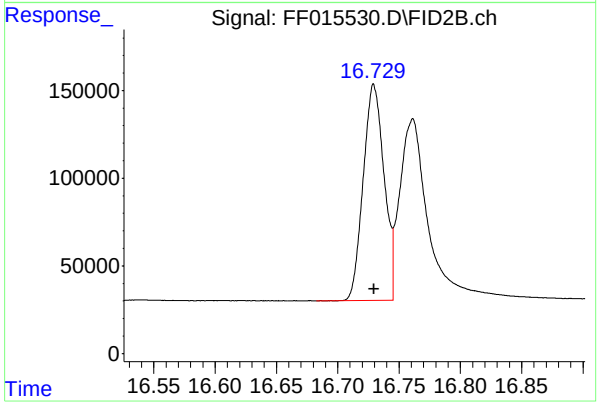
#14 Benzo[a]anthracene (C26.37)

R.T.: 15.170 min
Delta R.T.: 0.000 min
Response: 1262368
Conc: 10.00 ug/ml



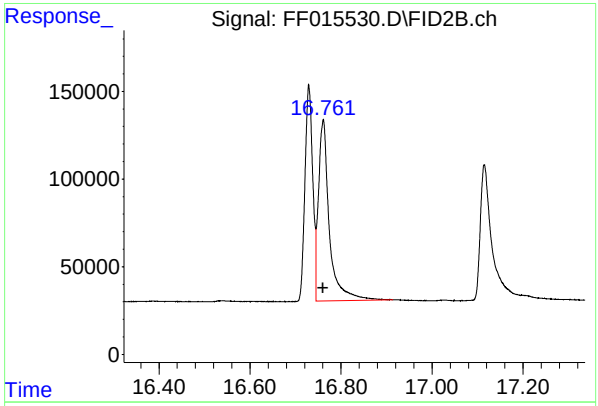
#15 Chrysene (C27.41)

R.T.: 15.211 min
Delta R.T.: 0.000 min
Response: 1748922
Conc: 11.99 ug/ml



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

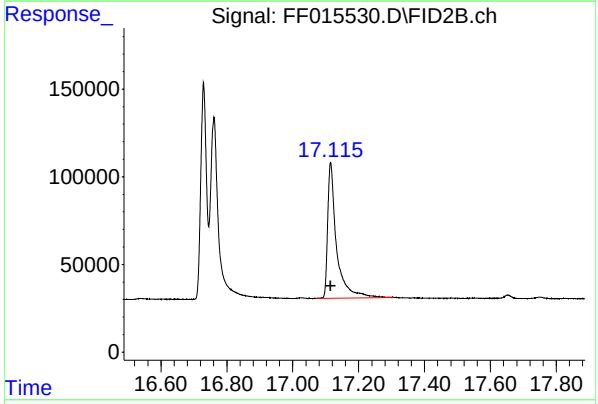
R.T.: 16.730 min
Delta R.T.: 0.000 min
Response: 1459147
Conc: 10.88 ug/ml



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

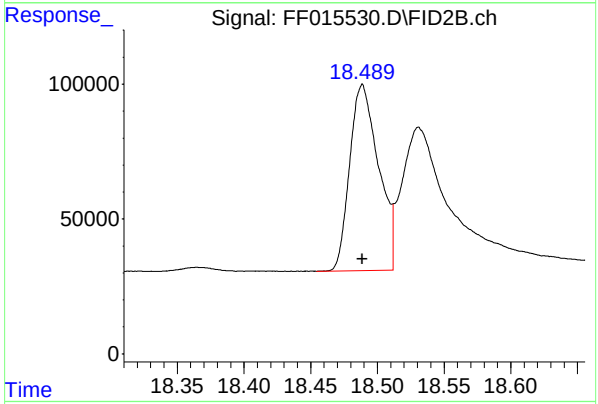
R.T.: 16.761 min
Delta R.T.: 0.000 min
Response: 1716828
Conc: 11.86 ug/ml

Instrument :
FID_F
ClientSampleId :
10 PPM AROMATIC HC STD4



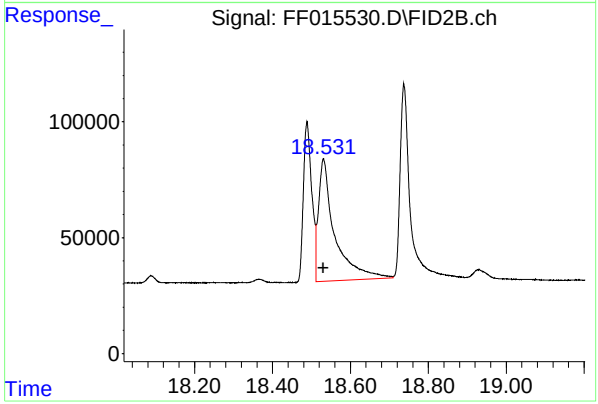
#18 Benzo[a]pyrene (C31.34)

R.T.: 17.115 min
Delta R.T.: 0.000 min
Response: 1455897
Conc: 11.35 ug/ml



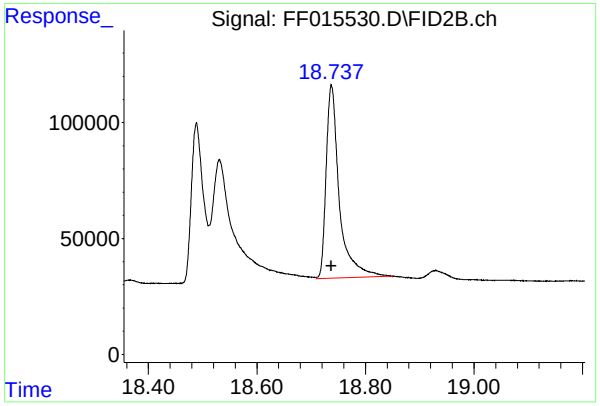
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.489 min
Delta R.T.: 0.000 min
Response: 1036997
Conc: 9.71 ug/ml



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

R.T.: 18.531 min
Delta R.T.: 0.000 min
Response: 1527081
Conc: 11.53 ug/ml



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

R.T.: 18.738 min
Delta R.T.: 0.000 mi
Response: 1411226
Conc: 11.19 ug/m

Instrument :
FID_F
ClientSampleId :
10 PPM AROMATIC HC STD4

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015530.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 10:28
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	4.606	4.574	4.684	BB	135570	1453713	83.12%	4.755%
2	6.277	6.251	6.401	BB	117203	1428112	81.66%	4.671%
3	7.372	7.342	7.512	BB	111457	1426121	81.54%	4.665%
4	7.998	7.932	8.132	BB	106660	1328026	75.93%	4.344%
5	8.671	8.637	8.801	BB	141051	1616916	92.45%	5.289%
6	8.876	8.851	8.944	BV	52447	783654	44.81%	2.563%
7	8.968	8.944	9.066	VB	149872	1621490	92.71%	5.304%
8	9.761	9.732	9.902	BB	104020	1494683	85.46%	4.889%
9	11.167	11.121	11.222	BV	116524	1458311	83.38%	4.770%
10	11.244	11.222	11.401	VBA	83582	1405178	80.35%	4.596%
11	11.932	11.867	12.012	BB	145556	1681667	96.15%	5.501%
12	12.989	12.907	13.136	BB	115242	1604701	91.75%	5.249%
13	13.287	13.249	13.451	BB	114790	1650019	94.34%	5.397%
14	15.170	15.137	15.191	BV	100083	1262368	72.18%	4.129%
15	15.211	15.191	15.341	VBA	102442	1748922	100.00%	5.721%
16	16.730	16.682	16.745	BV	123335	1459147	83.43%	4.773%
17	16.761	16.745	16.914	VB	103393	1716828	98.16%	5.616%
18	17.115	17.071	17.304	BB	77330	1455897	83.25%	4.762%
19	18.489	18.454	18.512	BV	69163	1036997	59.29%	3.392%
20	18.531	18.512	18.709	VV	52761	1527081	87.32%	4.995%
21	18.738	18.709	18.851	VBA	83306	1411226	80.69%	4.616%

Sum of corrected areas: 30571055

Aromatic EPH 022625.M Wed Feb 26 12:45:57 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015531.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 10:58
Operator : YP\AJ
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 75 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
5 PPM AROMATIC HC STD5

Integration File: autoint1.e
Quant Time: Feb 26 12:35:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:26:20 2025
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...	8.003	538529	4.626 ug/ml
Spiked Amount	50.000		Recovery =	9.25%
6) S	2-Flurobiphenyl (SURR)	8.892	259291	3.640 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	7.28%
11) S	ortho-Terphenyl (SURR)	11.934	776499	5.279 ug/ml
Spiked Amount	50.000		Recovery =	10.56%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.606	662305	5.130 ug/ml
2) T	Naphthalene (C11.7)	6.281	591957	4.638 ug/ml
3) T	2-Methylnaphthalene (...	7.378	581701	4.594 ug/ml
5) T	Acenaphthylene (C15.06)	8.674	727458	5.146 ug/ml
7) T	Acenaphthene (C15.5)	8.970	765465	5.374 ug/ml
8) T	Flouorene (C16.55)	9.769	616053	4.630 ug/ml
9) T	Phenanthrene (C19.36)	11.176	587822	4.519 ug/ml
10) T	Anthracene (C19.43)	11.258	548650	4.380 ug/ml
12) T	Fluoranthene (C21.85)	12.998	706215	5.001 ug/ml
13) T	Pyrene (C20.8)	13.294	739289	5.142 ug/ml
14) T	Benzo[a]anthracene (C...	15.181	411104	3.500 ug/ml
15) T	Chrysene (C27.41)	15.219	815728	5.461 ug/ml
16) T	benzo[b]fluoranthene ...	16.737	574628	4.412 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.770	836422	5.605 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.130	606525	4.779 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.510	423177	4.134 ug/ml
20) T	Dibenz[a,h]anthracene...	18.555	582595	4.439 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.747	589049	4.734 ug/ml

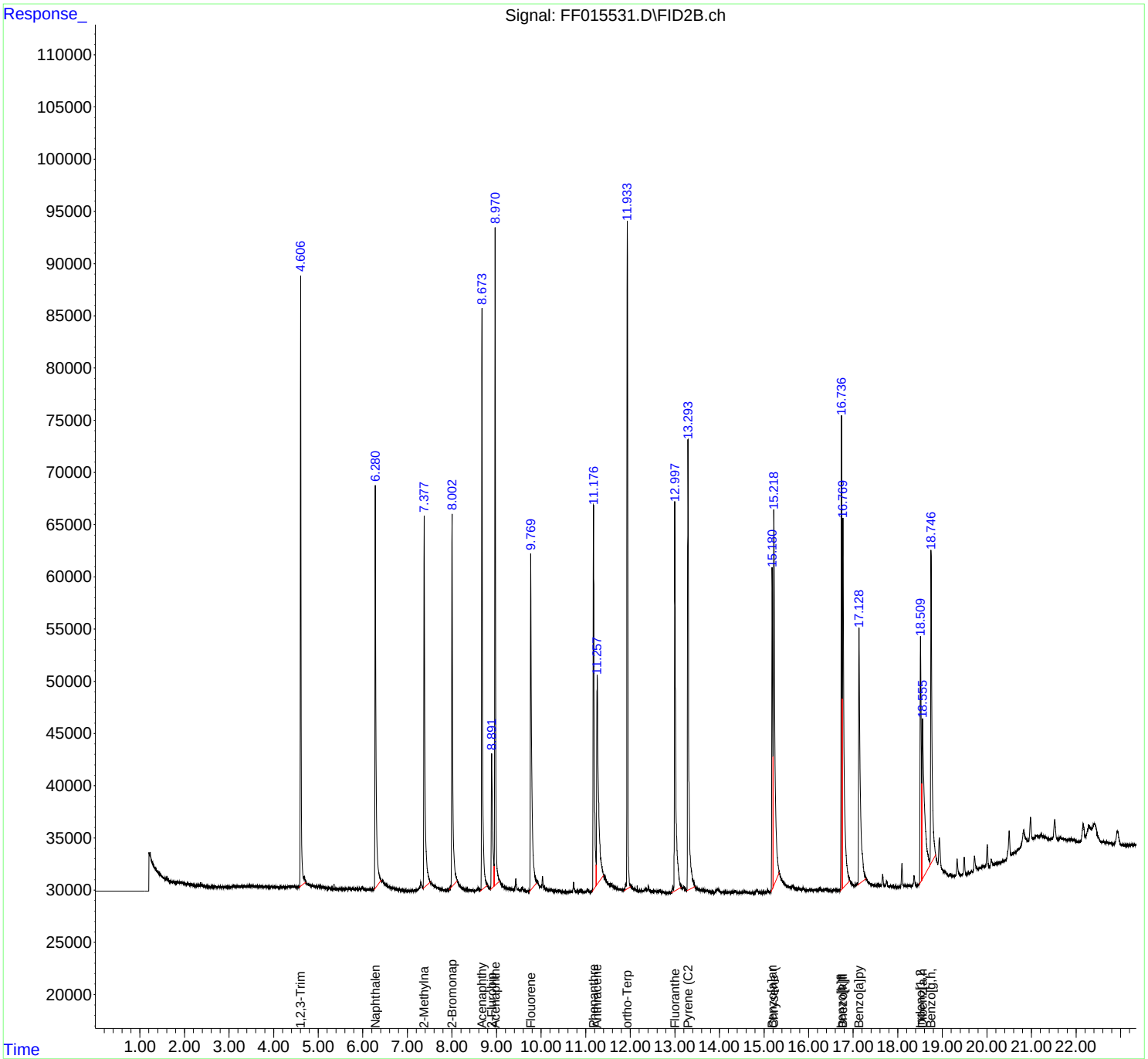
(f)=RT Delta > 1/2 Window (m)=manual int.

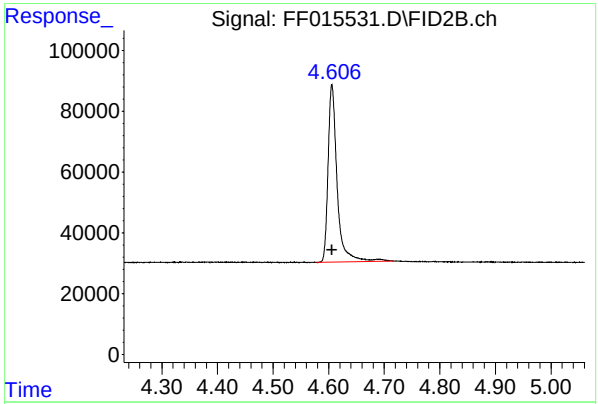
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015531.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 10:58
Operator : YP\AJ
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 75 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
5 PPM AROMATIC HC STD5

Integration File: autoint1.e
Quant Time: Feb 26 12:35:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:26:20 2025
Response via : Initial Calibration
Integrator: ChemStation

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

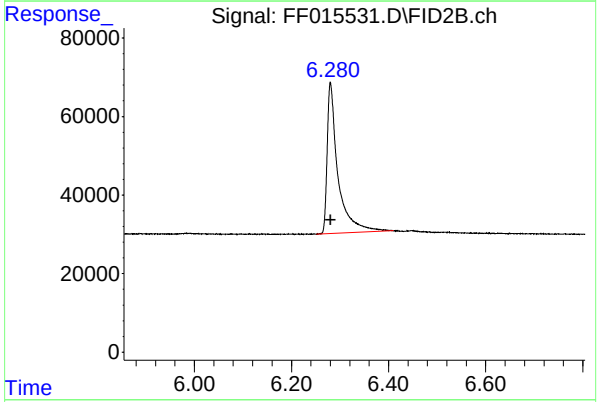




#1 1,2,3-Trimethylbenzene (C10.1)

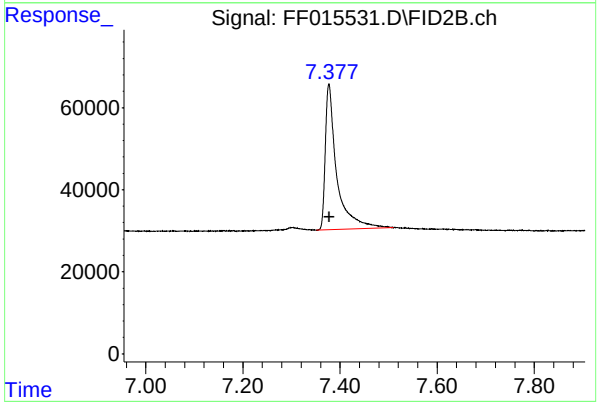
R.T.: 4.606 min
Delta R.T.: 0.000 min
Response: 662305
Conc: 5.13 ug/ml

Instrument :
FID_F
ClientSampleId :
5 PPM AROMATIC HC STD5



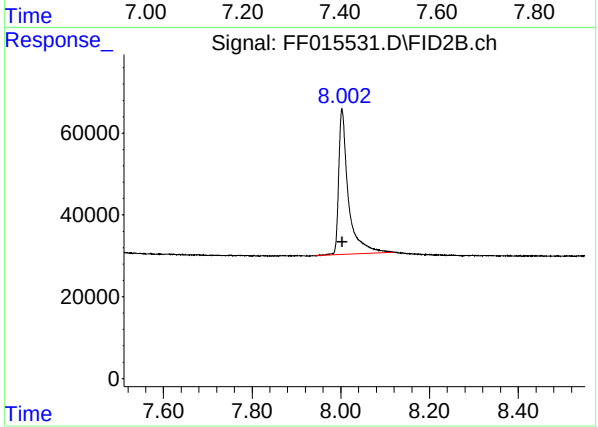
#2 Naphthalene (C11.7)

R.T.: 6.281 min
Delta R.T.: 0.000 min
Response: 591957
Conc: 4.64 ug/ml



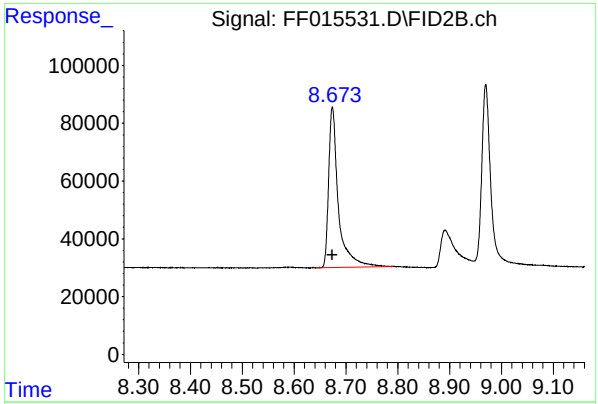
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.378 min
Delta R.T.: 0.000 min
Response: 581701
Conc: 4.59 ug/ml



#4 2-Bromonaphthalene (SURR)

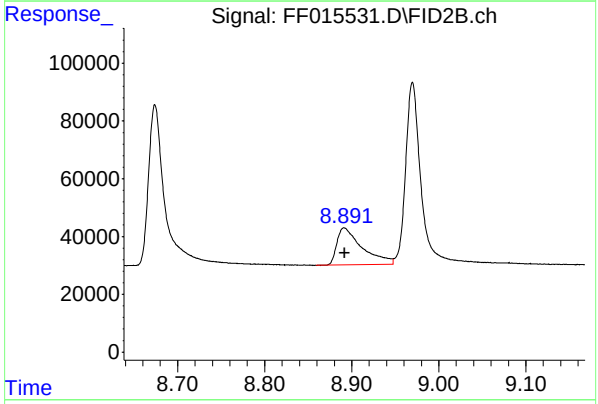
R.T.: 8.003 min
Delta R.T.: 0.000 min
Response: 538529
Conc: 4.63 ug/ml



#5 Acenaphthylene (C15.06)

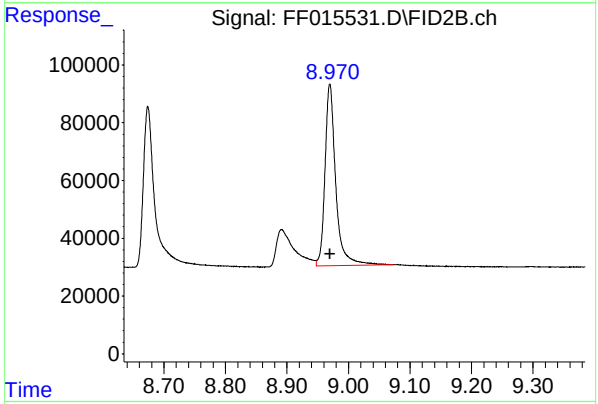
R.T.: 8.674 min
Delta R.T.: 0.000 min
Response: 727458
Conc: 5.15 ug/ml

Instrument :
FID_F
ClientSampleId :
5 PPM AROMATIC HC STD5



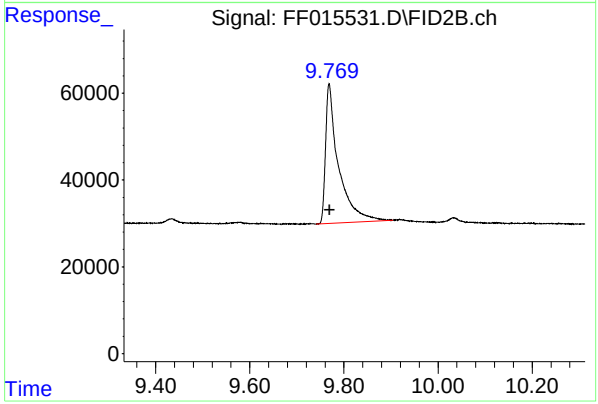
#6 2-Flurobiphenyl (SURR)

R.T.: 8.892 min
Delta R.T.: 0.000 min
Response: 259291
Conc: 3.64 ug/ml



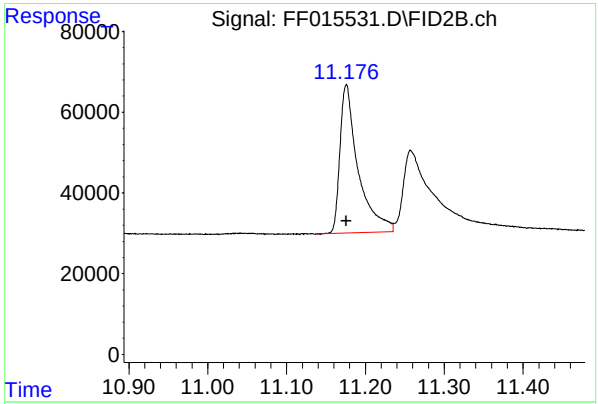
#7 Acenaphthene (C15.5)

R.T.: 8.970 min
Delta R.T.: 0.000 min
Response: 765465
Conc: 5.37 ug/ml



#8 Flouorene (C16.55)

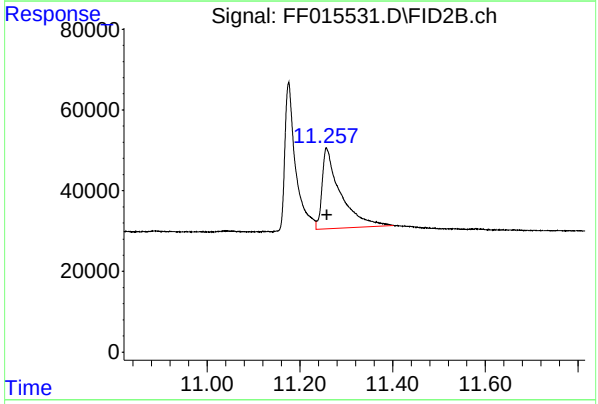
R.T.: 9.769 min
Delta R.T.: 0.000 min
Response: 616053
Conc: 4.63 ug/ml



#9 Phenanthrene (C19.36)

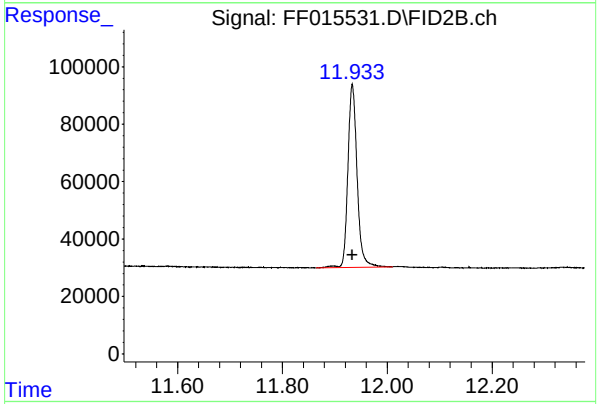
R.T.: 11.176 min
Delta R.T.: 0.000 min
Response: 587822
Conc: 4.52 ug/ml

Instrument :
FID_F
ClientSampleId :
5 PPM AROMATIC HC STD5



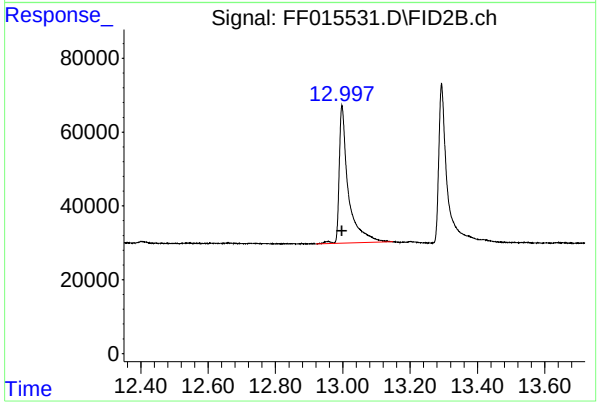
#10 Anthracene (C19.43)

R.T.: 11.258 min
Delta R.T.: 0.000 min
Response: 548650
Conc: 4.38 ug/ml



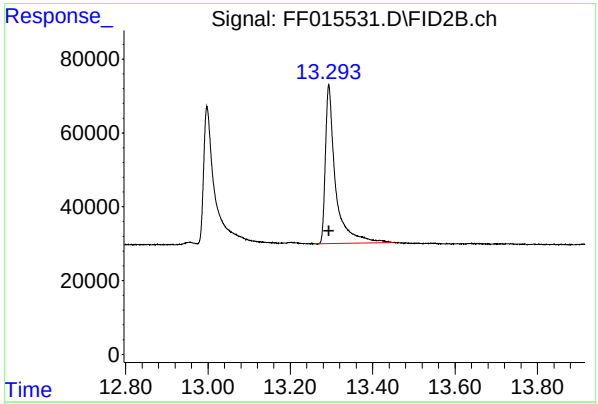
#11 ortho-Terphenyl (SURR)

R.T.: 11.934 min
Delta R.T.: 0.000 min
Response: 776499
Conc: 5.28 ug/ml



#12 Fluoranthene (C21.85)

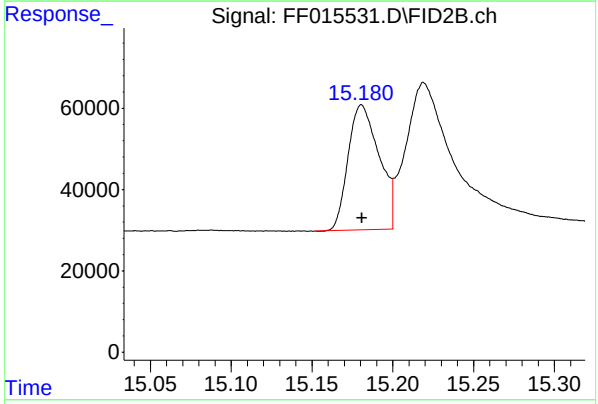
R.T.: 12.998 min
Delta R.T.: 0.000 min
Response: 706215
Conc: 5.00 ug/ml



#13 Pyrene (C20.8)

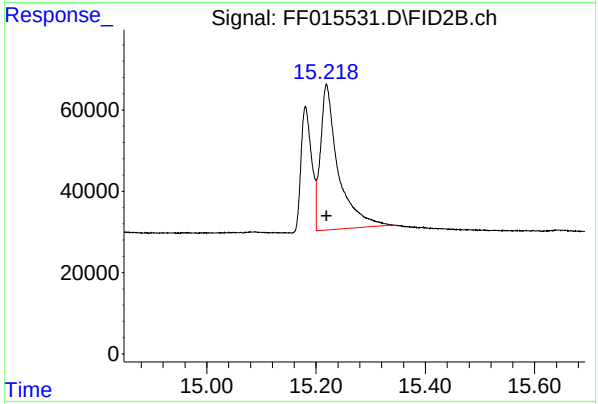
R.T.: 13.294 min
Delta R.T.: 0.000 min
Response: 739289
Conc: 5.14 ug/ml

Instrument :
FID_F
ClientSampleId :
5 PPM AROMATIC HC STD5



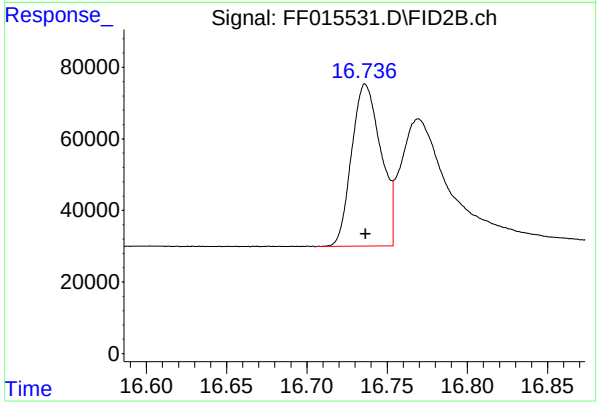
#14 Benzo[a]anthracene (C26.37)

R.T.: 15.181 min
Delta R.T.: 0.000 min
Response: 411104
Conc: 3.50 ug/ml



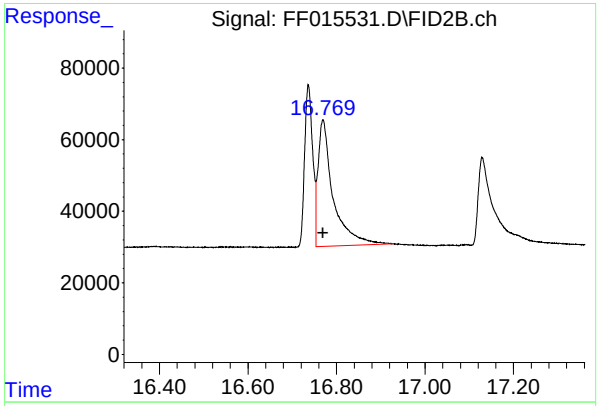
#15 Chrysene (C27.41)

R.T.: 15.219 min
Delta R.T.: 0.000 min
Response: 815728
Conc: 5.46 ug/ml



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

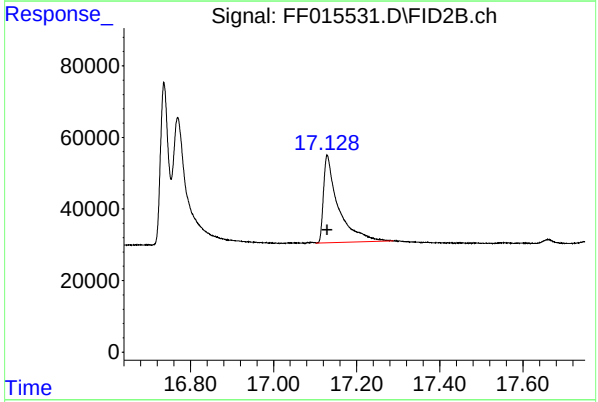
R.T.: 16.737 min
Delta R.T.: 0.000 min
Response: 574628
Conc: 4.41 ug/ml



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

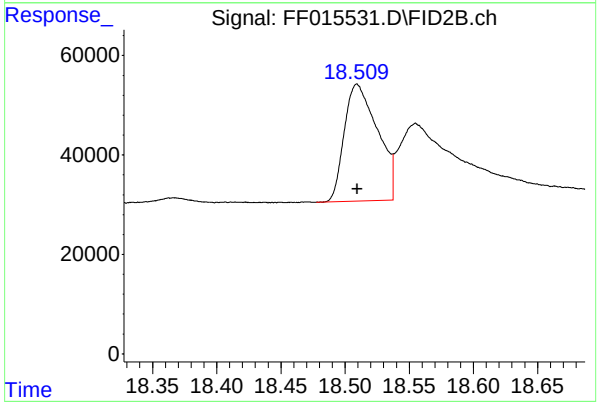
R.T.: 16.770 min
Delta R.T.: 0.000 min
Response: 836422
Conc: 5.61 ug/ml

Instrument :
FID_F
ClientSampleId :
5 PPM AROMATIC HC STD5



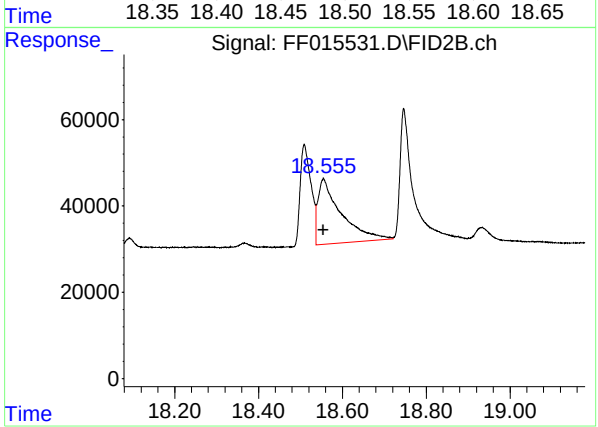
#18 Benzo[a]pyrene (C31.34)

R.T.: 17.130 min
Delta R.T.: 0.000 min
Response: 606525
Conc: 4.78 ug/ml



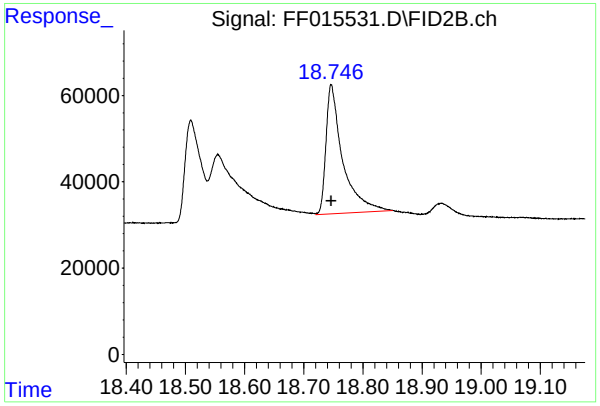
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.510 min
Delta R.T.: 0.000 min
Response: 423177
Conc: 4.13 ug/ml



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

R.T.: 18.555 min
Delta R.T.: 0.000 min
Response: 582595
Conc: 4.44 ug/ml



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

R.T.: 18.747 min
Delta R.T.: 0.000 mi
Response: 589049
Conc: 4.73 ug/m

Instrument :
FID_F
ClientSampleId :
5 PPM AROMATIC HC STD5

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015531.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 10:58
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 75 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	4.606	4.577	4.716	BB	58285	662305	79.18%	5.118%
2	6.281	6.251	6.409	BB	38261	591957	70.77%	4.574%
3	7.378	7.351	7.509	BB	35460	581701	69.55%	4.495%
4	8.003	7.944	8.117	BB	35575	538529	64.38%	4.162%
5	8.674	8.642	8.791	BB	55514	727458	86.97%	5.622%
6	8.892	8.859	8.947	BV	12790	259291	31.00%	2.004%
7	8.970	8.947	9.072	VB	62983	765465	91.52%	5.915%
8	9.769	9.741	9.904	BB	32061	616053	73.65%	4.761%
9	11.176	11.137	11.235	BV	36746	587822	70.28%	4.543%
10	11.258	11.235	11.401	VBA	19936	548650	65.59%	4.240%
11	11.934	11.864	12.011	BB	63598	776499	92.84%	6.001%
12	12.998	12.921	13.149	BB	37149	706215	84.43%	5.457%
13	13.294	13.262	13.449	BB	42977	739289	88.39%	5.713%
14	15.181	15.152	15.200	BV	30775	411104	49.15%	3.177%
15	15.219	15.200	15.341	VBA	35905	815728	97.53%	6.304%
16	16.737	16.706	16.754	BV	44969	574628	68.70%	4.441%
17	16.770	16.754	16.927	VB	35432	836422	100.00%	6.464%
18	17.130	17.102	17.287	BB	24418	606525	72.51%	4.687%
19	18.510	18.477	18.537	BV	23522	423177	50.59%	3.270%
20	18.555	18.537	18.721	VV	15257	582595	69.65%	4.502%
21	18.747	18.721	18.851	VBA	29878	589049	70.42%	4.552%
			Sum of corrected areas:			12940460		

Aromatic EPH 022625.M Wed Feb 26 12:45:40 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015532.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 11:27
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 76 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD ICV

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/26/2025
Supervised By :Ankita Jodhani 02/27/2025

Integration File: autoint1.e
Quant Time: Feb 26 12:37:01 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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...	7.997	2223183	19.097 ug/ml
	Spiked Amount 50.000		Recovery =	38.19%
6)	S 2-Flurobiphenyl (SURR)	8.873	1393028	19.556 ug/ml
	Spiked Amount 50.000 Range 0 - 131		Recovery =	39.11%
11)	S ortho-Terphenyl (SURR)	11.932	2758671	18.753 ug/ml
	Spiked Amount 50.000		Recovery =	37.51%
	Target Compounds			
1)	T 1,2,3-Trimethylbenzen...	4.604	2444721	18.937 ug/ml
2)	T Naphthalene (C11.7)	6.275	2428126	19.025 ug/ml
3)	T 2-Methylnaphthalene (...	7.370	2417949	19.096 ug/ml
5)	T Acenaphthylene (C15.06)	8.671	2656254	18.791 ug/ml
7)	T Acenaphthene (C15.5)	8.969	2656870	18.654 ug/ml
8)	T Flouorene (C16.55)	9.760	2532143	19.030 ug/ml
9)	T Phenanthrene (C19.36)	11.167	2491796	19.156 ug/ml
10)	T Anthracene (C19.43)	11.242	2419377	19.316 ug/ml
12)	T Fluoranthene (C21.85)	12.988	2674844	18.941 ug/ml
13)	T Pyrene (C20.8)	13.286	2753238	19.151 ug/ml
14)	T Benzo[a]anthracene (C...	15.169	2379295	20.255 ug/ml
15)	T Chrysene (C27.41)	15.211	2846808	19.060 ug/ml
16)	T benzo[b]fluoranthene ...	16.729	2598123	19.949 ug/ml
17)	T Bnezo[k]fluoranthene ...	16.761	2873167	19.255 ug/ml
18)	T Benzo[a]pyrene (C31.34)	17.111	2501469	19.711 ug/ml
19)	T Indeno[1,2,3-cd]pyren...	18.484	1945146	19.004 ug/mlm
20)	T Dibenz[a,h]anthracene...	18.524	2639296	20.413 ug/ml
21)	T Benzo[g,h,i]perylene ...	18.738	2475509	19.893 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF022625AR\
Data File : FF015532.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 11:27
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 76 Sample Multiplier: 1

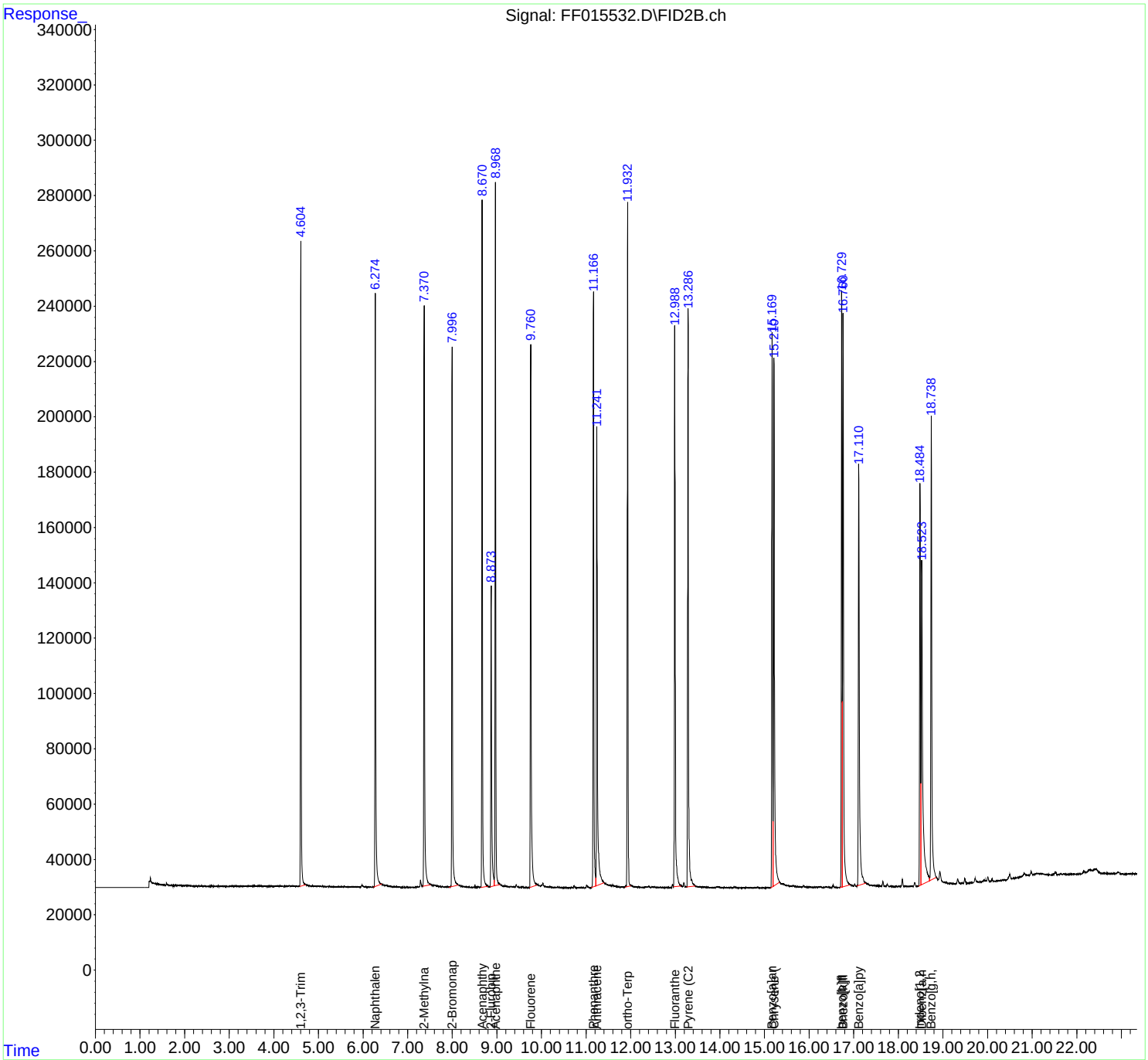
Integration File: autoint1.e
Quant Time: Feb 26 12:37:01 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
Response via : Initial Calibration
Integrator: ChemStation

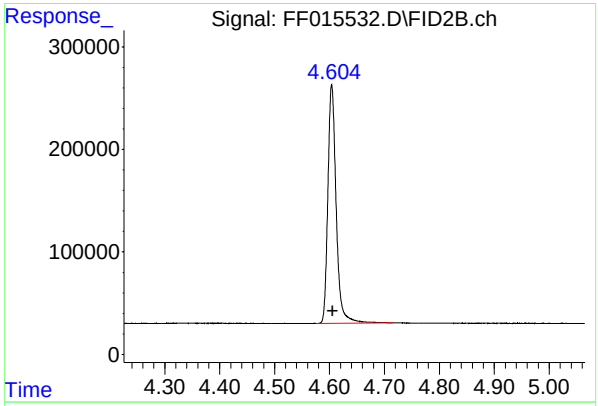
Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD ICV

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/26/2025
Supervised By :Ankita Jodhani 02/27/2025





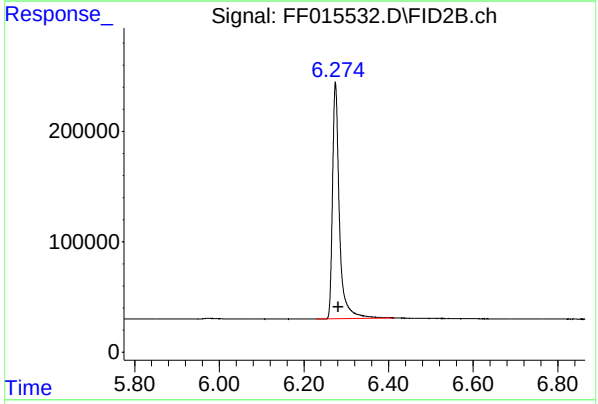
#1 1,2,3-Trimethylbenzene (C10.1)

R.T.: 4.604 min
Delta R.T.: -0.002 min
Response: 2444721
Conc: 18.94 ug/ml

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD ICV

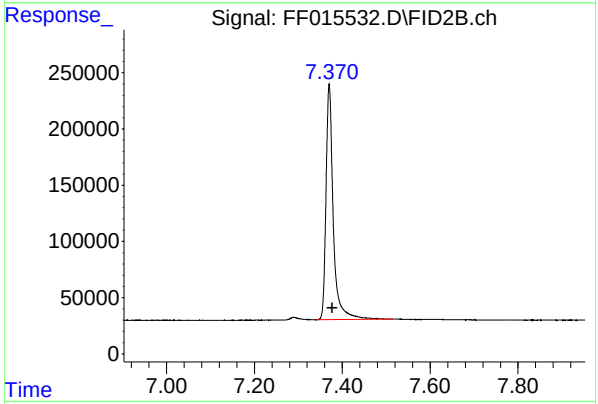
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/26/2025
Supervised By :Ankita Jodhani 02/27/2025



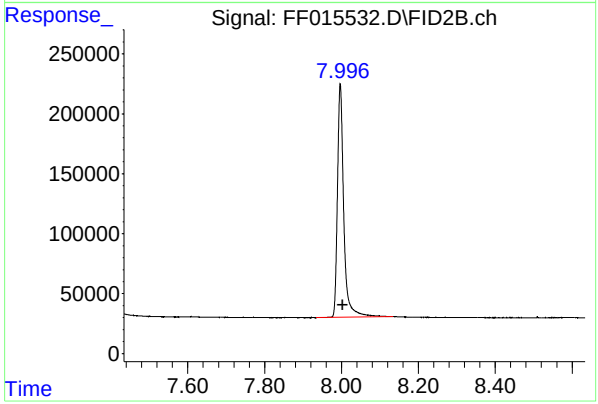
#2 Naphthalene (C11.7)

R.T.: 6.275 min
Delta R.T.: -0.006 min
Response: 2428126
Conc: 19.03 ug/ml



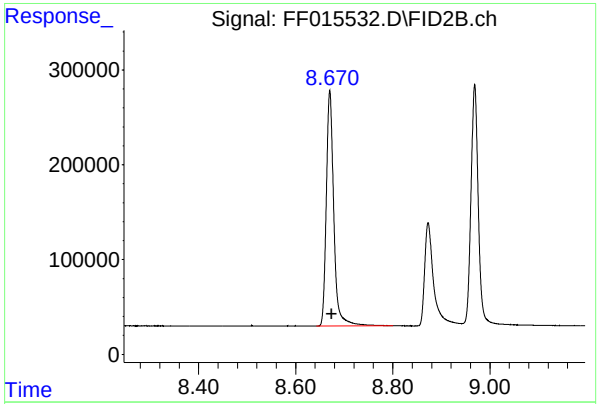
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.370 min
Delta R.T.: -0.007 min
Response: 2417949
Conc: 19.10 ug/ml



#4 2-Bromonaphthalene (SURR)

R.T.: 7.997 min
Delta R.T.: -0.006 min
Response: 2223183
Conc: 19.10 ug/ml



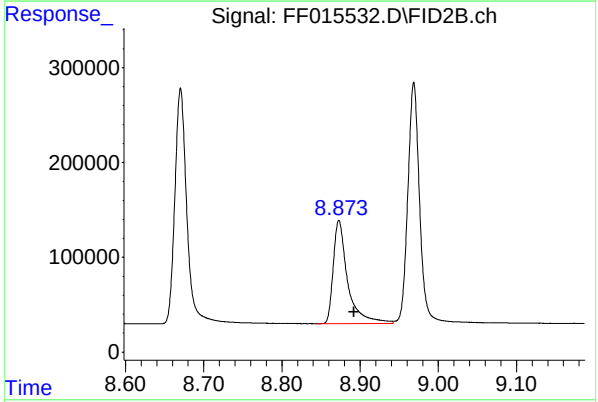
#5 Acenaphthylene (C15.06)

R.T.: 8.671 min
Delta R.T.: -0.004 min
Response: 2656254
Conc: 18.79 ug/ml

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD ICV

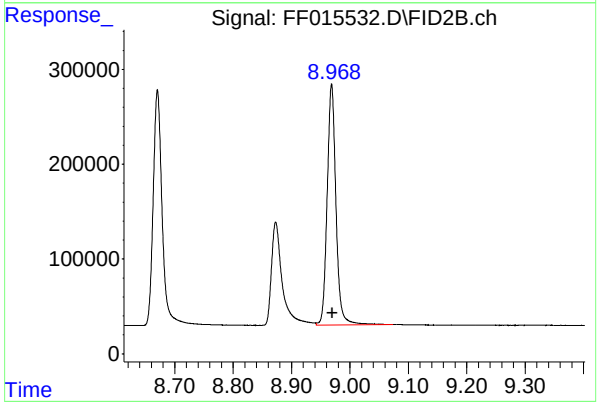
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/26/2025
Supervised By :Ankita Jodhani 02/27/2025



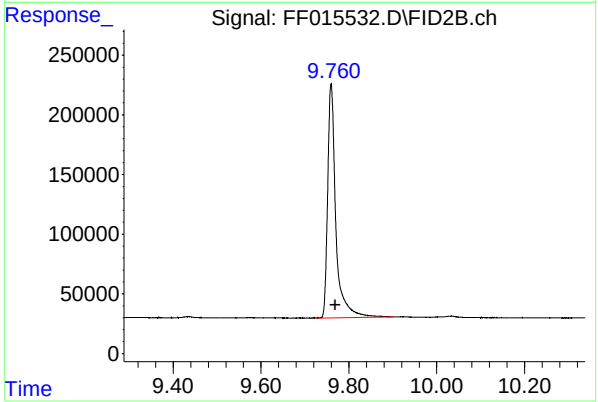
#6 2-Flurobiphenyl (SURR)

R.T.: 8.873 min
Delta R.T.: -0.019 min
Response: 1393028
Conc: 19.56 ug/ml



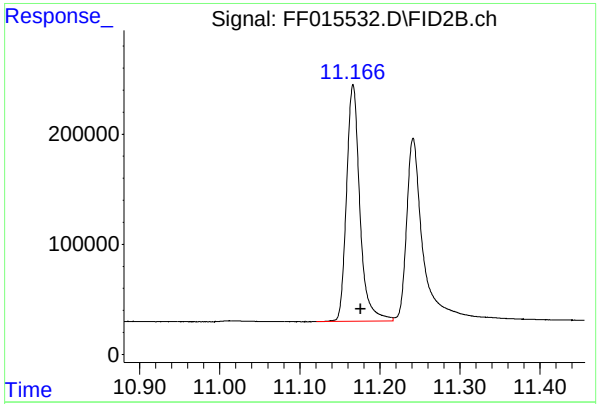
#7 Acenaphthene (C15.5)

R.T.: 8.969 min
Delta R.T.: -0.001 min
Response: 2656870
Conc: 18.65 ug/ml



#8 Flouorene (C16.55)

R.T.: 9.760 min
Delta R.T.: -0.009 min
Response: 2532143
Conc: 19.03 ug/ml



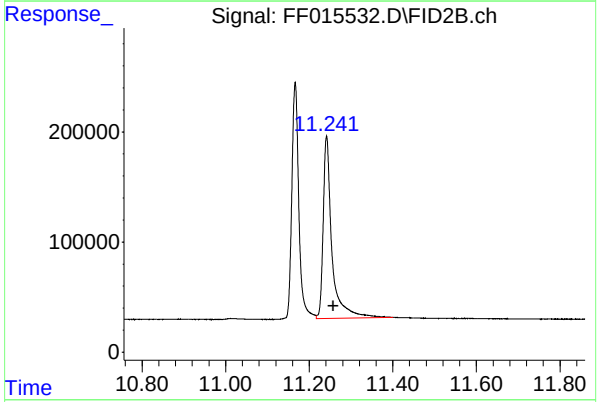
#9 Phenanthrene (C19.36)

R.T.: 11.167 min
Delta R.T.: -0.010 min
Response: 2491796
Conc: 19.16 ug/ml

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD ICV

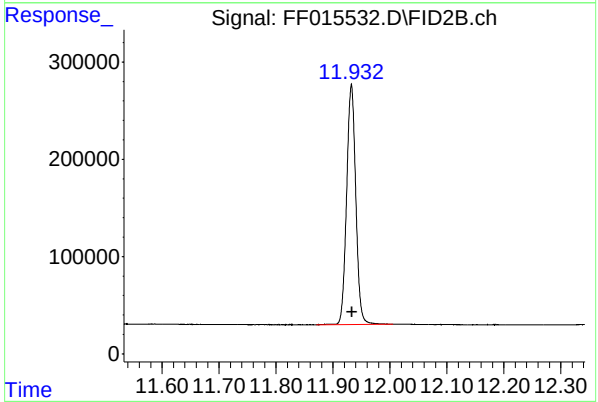
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/26/2025
Supervised By :Ankita Jodhani 02/27/2025



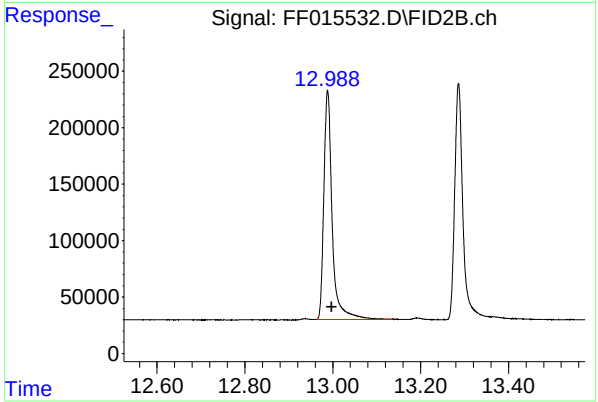
#10 Anthracene (C19.43)

R.T.: 11.242 min
Delta R.T.: -0.016 min
Response: 2419377
Conc: 19.32 ug/ml



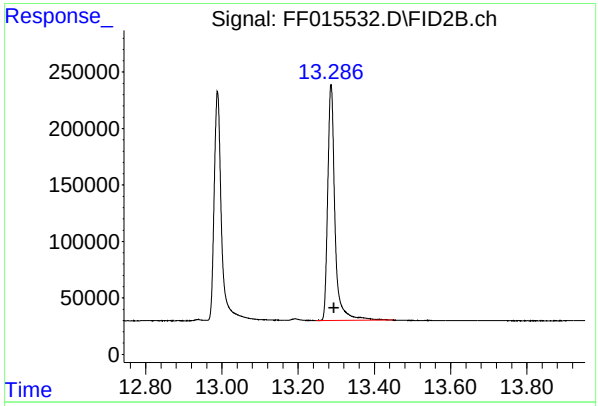
#11 ortho-Terphenyl (SURR)

R.T.: 11.932 min
Delta R.T.: -0.001 min
Response: 2758671
Conc: 18.75 ug/ml



#12 Fluoranthene (C21.85)

R.T.: 12.988 min
Delta R.T.: -0.010 min
Response: 2674844
Conc: 18.94 ug/ml



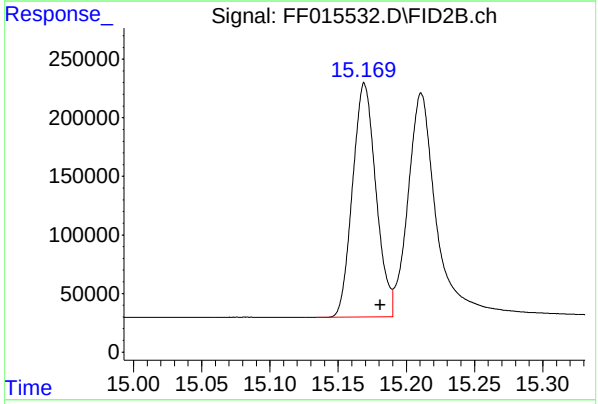
#13 Pyrene (C20.8)

R.T.: 13.286 min
Delta R.T.: -0.007 min
Response: 2753238
Conc: 19.15 ug/ml

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD ICV

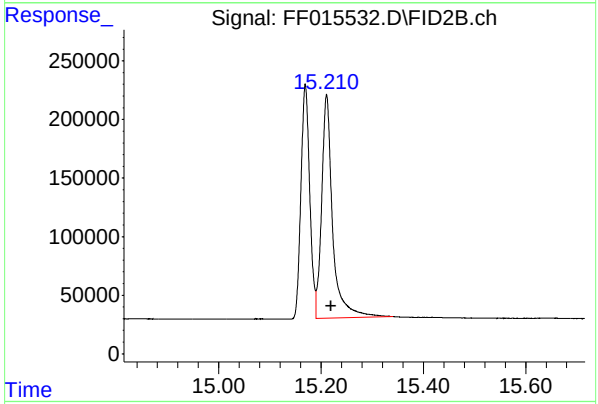
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/26/2025
Supervised By :Ankita Jodhani 02/27/2025



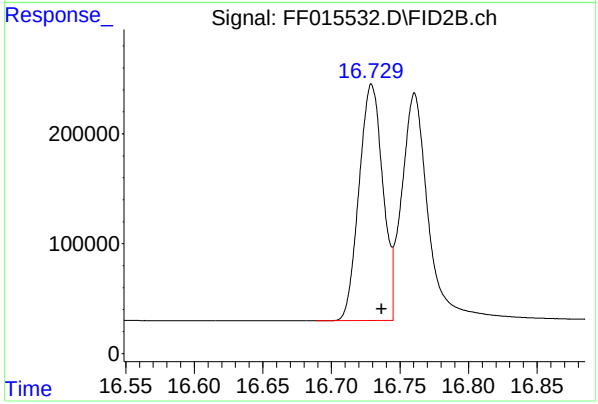
#14 Benzo[a]anthracene (C26.37)

R.T.: 15.169 min
Delta R.T.: -0.012 min
Response: 2379295
Conc: 20.26 ug/ml



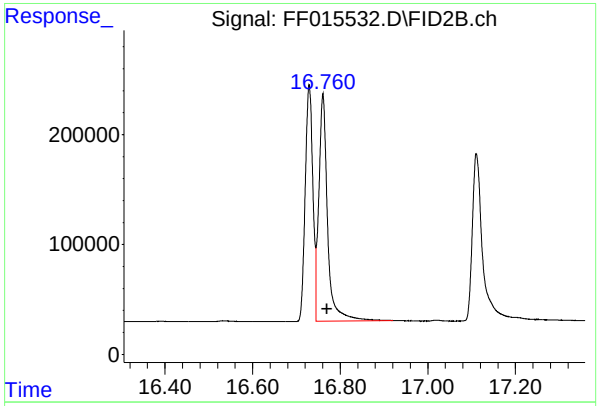
#15 Chrysene (C27.41)

R.T.: 15.211 min
Delta R.T.: -0.009 min
Response: 2846808
Conc: 19.06 ug/ml



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

R.T.: 16.729 min
Delta R.T.: -0.007 min
Response: 2598123
Conc: 19.95 ug/ml



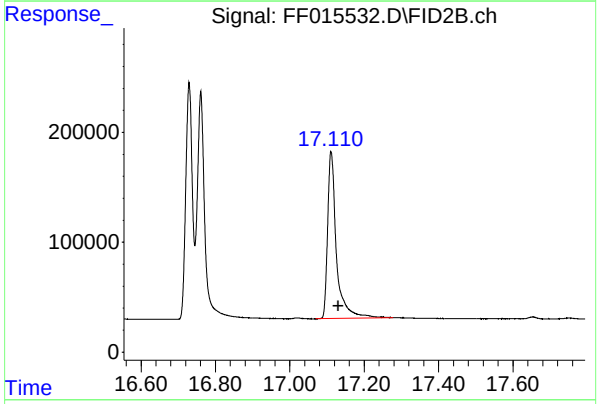
#17 Bnezo[k]fluoranthene (C30.14)

R.T.: 16.761 min
Delta R.T.: -0.009 min
Response: 2873167
Conc: 19.26 ug/ml

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD ICV

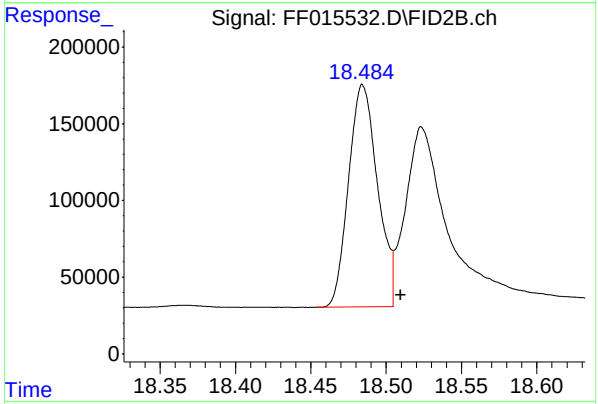
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/26/2025
Supervised By :Ankita Jodhani 02/27/2025



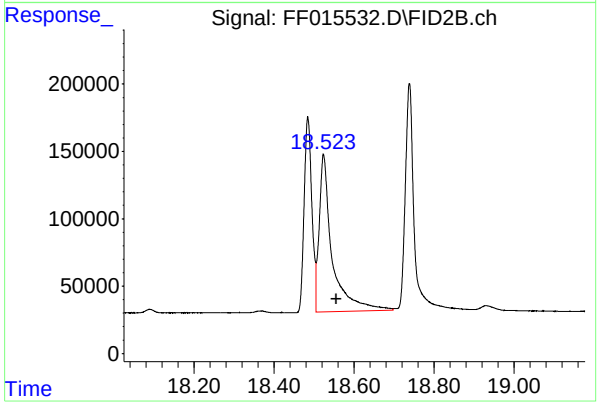
#18 Benzo[a]pyrene (C31.34)

R.T.: 17.111 min
Delta R.T.: -0.019 min
Response: 2501469
Conc: 19.71 ug/ml



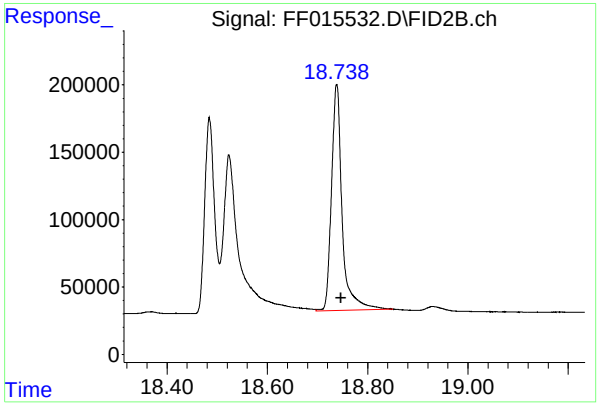
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.484 min
Delta R.T.: -0.026 min
Response: 1945146
Conc: 19.00 ug/ml m



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

R.T.: 18.524 min
Delta R.T.: -0.031 min
Response: 2639296
Conc: 20.41 ug/ml



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

R.T.: 18.738 min
Delta R.T.: -0.009 mir
Response: 2475509
Conc: 19.89 ug/m

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD ICV

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/26/2025
Supervised By :Ankita Jodhani 02/27/2025

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD ICV

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 02/26/2025
Supervised By :Ankita Jodhani 02/27/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF02262
Data File : FF015532.D
Signal(s) : FID2B.ch
Acq On : 25 Feb 2025 11:27
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 76 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	4.604	4.575	4.715	BB	232836	2444721	85.09%	4.692%
2	6.275	6.229	6.410	BB	212781	2428126	84.51%	4.660%
3	7.370	7.340	7.515	BB	209417	2417949	84.16%	4.640%
4	7.997	7.934	8.134	BB	194548	2223183	77.38%	4.266%
5	8.671	8.642	8.800	BB	248331	2656254	92.45%	5.097%
6	8.873	8.844	8.942	BV	108403	1393028	48.48%	2.673%
7	8.969	8.942	9.074	VB	254046	2656870	92.47%	5.099%
8	9.760	9.725	9.900	BB	196152	2532143	88.13%	4.859%
9	11.167	11.120	11.216	BV	215323	2491796	86.73%	4.782%
10	11.242	11.216	11.400	VBA	165686	2419377	84.21%	4.643%
11	11.932	11.870	12.005	BB	246436	2758671	96.01%	5.294%
12	12.988	12.962	13.137	BB	202419	2674844	93.10%	5.133%
13	13.286	13.247	13.449	BB	208846	2753238	95.83%	5.284%
14	15.169	15.134	15.190	BV	199821	2379295	82.81%	4.566%
15	15.211	15.190	15.340	VBA	190853	2846808	99.08%	5.463%
16	16.729	16.689	16.745	BV	215314	2598123	90.43%	4.986%
17	16.761	16.745	16.920	VB	207100	2873167	100.00%	5.514%
18	17.111	17.070	17.277	BB	151174	2501469	87.06%	4.800%
19	18.485	18.450	18.505	BV	145033	1945141	67.70%	3.733%
20	18.524	18.505	18.697	VV	116704	2639296	91.86%	5.065%
21	18.738	18.697	18.850	VBA	167898	2475509	86.16%	4.751%
			Sum of corrected areas:			52109006		

Aromatic EPH 022625.M Wed Feb 26 12:44:55 2025

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

Continuing Calibration Report for SequenceID : FC030525AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FC068368.D**						
Aliphatic EPH	40236785.000	360.000	3.102	21.556	111768.847	122175.127	8.518
Aliphatic C9-C12	7078387.000	60.000	3.102	6.366	117973.117	141035.502	16.352
Aliphatic C16-C21	6684413.000	60.000	9.750	13.103	111406.883	131630.895	15.364
Aliphatic C21-C28	9380589.000	80.000	13.104	16.755	117257.363	122691.322	4.429
Aliphatic C28-C40	12521412.000	120.000	16.756	21.556	104345.100	102846.462	-1.457
Aliphatic C12-C16	4571984.000	40.000	6.367	9.749	114299.600	136654.515	16.359

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:	05 Mar 2025 15:22
Client Sample ID:		Operator:	YP/AJ
Data file:	FC068368.D	Misc:	
Instrument:	FID_C	ALS Vial:	3
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.102	6.366	7078387.000	60.000	ug/ml
Aliphatic C12-C16	6.367	9.749	4571984.000	40.000	ug/ml
Aliphatic C16-C21	9.750	13.103	6684413.000	60.000	ug/ml
Aliphatic C21-C28	13.104	16.755	9380589.000	80.000	ug/ml
Aliphatic C28-C40	16.756	21.556	12521412.000	120.000	ug/ml
Aliphatic EPH	3.102	21.556	40236785.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068368.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 15:22
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 03/06/2025
Supervised By :mohammad ahmed 03/07/2025

Integration File: autoint1.e
Quant Time: Mar 05 22:31:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
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)	11.390	2547479	16.602 ug/ml
Spiked Amount	50.000		Recovery =	33.20%
12) S	1-chlorooctadecane (S...	12.833	1871173	16.636 ug/ml
Spiked Amount	50.000		Recovery =	33.27%
	Target Compounds			
1) T	n-Nonane (C9)	3.202	2330793	16.568 ug/ml
2) T	n-Decane (C10)	4.258	2383190	16.822 ug/ml
3) T	A~Naphthalene (C11.7)	5.824	2562795	16.747 ug/ml
4) T	n-Dodecane (C12)	6.266	2364404	16.798 ug/ml
5) T	A~2-methylnaphthalene...	6.876	2401894	16.584 ug/ml
6) T	n-Tetradecane (C14)	8.054	2271789	16.662 ug/ml
7) T	n-Hexadecane (C16)	9.649	2300195	16.794 ug/ml
8) T	n-Octadecane (C18)	11.087	2305132	16.855 ug/ml
10) T	n-Eicosane (C20)	12.392	2217769	17.022 ug/ml
11) T	n-Heneicosane (C21)	13.003	2161512	16.907 ug/ml
13) T	n-Docosane (C22)	13.588	2213242	17.562 ug/ml
14) T	n-Tetracosane (C24)	14.689	2327298	18.712 ug/mlm
15) T	n-Hexacosane (C26)	15.708	2383759	19.604 ug/ml
16) T	n-Octacosane (C28)	16.655	2456290	20.682 ug/ml
17) T	n-Tricontane (C30)	17.541	2650187	22.018 ug/ml
18) T	n-Dotriacontane (C32)	18.372	2609575	22.483 ug/ml
19) T	n-Tetratriacontane (C34)	19.155	2222005	20.563 ug/ml
20) T	n-Hexatriacontane (C36)	19.895	1834195	19.073 ug/ml
21) T	n-Octatriacontane (C38)	20.604	1656990	18.432 ug/ml
22) T	n-Tetracontane (C40)	21.456	1548460	17.897 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068368.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 15:22
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

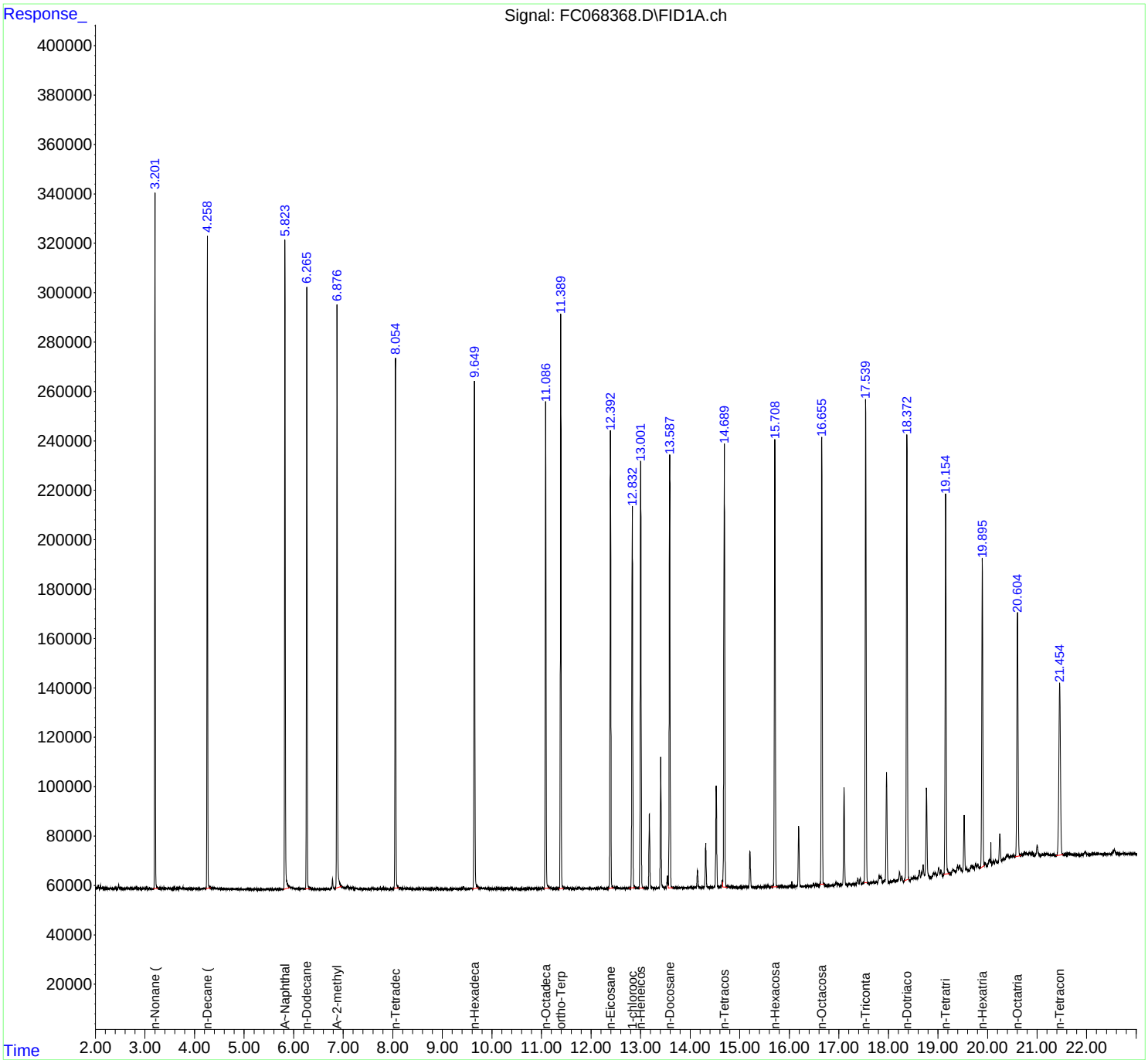
Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 03/06/2025
Supervised By :mohammad ahmed 03/07/2025

Integration File: autoint1.e
Quant Time: Mar 05 22:31:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

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



Instrument :
FID_C
LabSampleId :
20 PPM ALIPHATIC HC STD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 03/06/2025
Supervised By :mohammad ahmed 03/07/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC03052
Data File : FC068368.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 15:22
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.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	3.202	3.164	3.261	BB	280979	2330793	87.95%	4.695%
2	4.258	4.224	4.318	BB	262359	2383190	89.93%	4.801%
3	5.824	5.791	5.921	BB	261725	2562795	96.70%	5.162%
4	6.266	6.234	6.328	BB	241994	2364404	89.22%	4.763%
5	6.876	6.848	6.968	BB	232252	2401894	90.63%	4.838%
6	8.054	8.028	8.118	BB	214241	2271789	85.72%	4.576%
7	9.649	9.608	9.728	BB	202729	2300195	86.79%	4.633%
8	11.087	11.051	11.161	BB	199154	2305132	86.98%	4.643%
9	11.390	11.351	11.448	BB	231374	2547479	96.12%	5.132%
10	12.392	12.358	12.451	BB	185280	2217769	83.68%	4.467%
11	12.833	12.768	12.888	BB	153018	1871173	70.61%	3.769%
12	13.003	12.964	13.064	BB	173475	2161512	81.56%	4.354%
13	13.588	13.557	13.648	VB	173875	2213242	83.51%	4.458%
14	14.689	14.621	14.748	BB	175219	2350942	88.71%	4.736%
15	15.708	15.631	15.764	BB	181341	2383759	89.95%	4.802%
16	16.655	16.621	16.699	BBA	180785	2456290	92.68%	4.948%
17	17.541	17.508	17.576	BBA	194380	2650187	100.00%	5.338%
18	18.372	18.321	18.409	BBA	180051	2609575	98.47%	5.257%
19	19.155	19.121	19.228	BB	152329	2222005	83.84%	4.476%
20	19.895	19.851	19.933	BV	123626	1834195	69.21%	3.695%
21	20.604	20.551	20.671	BB	98130	1656990	62.52%	3.338%
22	21.456	21.391	21.528	BB	69509	1548460	58.43%	3.119%
			Sum of corrected areas:			49643768		

Aliphatic EPH 021125.M Wed Mar 05 23:05:40 2025

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

Continuing Calibration Report for SequenceID : FC030525AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FC068376.D**						
Aliphatic EPH	44765920.000	360.000	3.102	21.556	124349.778	122175.127	-1.780
Aliphatic C9-C12	8592043.000	60.000	3.102	6.366	143200.717	141035.502	-1.535
Aliphatic C16-C21	8029066.000	60.000	9.750	13.103	133817.767	131630.895	-1.661
Aliphatic C21-C28	10022524.000	80.000	13.104	16.755	125281.550	122691.322	-2.111
Aliphatic C28-C40	12601397.000	120.000	16.756	21.556	105011.642	102846.462	-2.105
Aliphatic C12-C16	5520890.000	40.000	6.367	9.749	138022.250	136654.515	-1.001

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:	05 Mar 2025 20:18
Client Sample ID:		Operator:	YP/AJ
Data file:	FC068376.D	Misc:	
Instrument:	FID_C	ALS Vial:	2
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.102	6.366	8592043.000	60.000	ug/ml
Aliphatic C12-C16	6.367	9.749	5520890.000	40.000	ug/ml
Aliphatic C16-C21	9.750	13.103	8029066.000	60.000	ug/ml
Aliphatic C21-C28	13.104	16.755	10022524.000	80.000	ug/ml
Aliphatic C28-C40	16.756	21.556	12601397.000	120.000	ug/ml
Aliphatic EPH	3.102	21.556	44765920.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068376.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 20:18
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: Mar 05 22:34:46 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
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)	11.393	3076097	20.047 ug/ml
	Spiked Amount 50.000		Recovery = 40.09%	
12)	S 1-chlorooctadecane (S...	12.834	2254534	20.045 ug/ml
	Spiked Amount 50.000		Recovery = 40.09%	
	Target Compounds			
1)	T n-Nonane (C9)	3.201	2857214	20.311 ug/ml
2)	T n-Decane (C10)	4.258	2879090	20.322 ug/ml
3)	T A~Naphthalene (C11.7)	5.824	3104046	20.283 ug/ml
4)	T n-Dodecane (C12)	6.266	2855739	20.288 ug/ml
5)	T A~2-methylnaphthalene...	6.876	2936407	20.275 ug/ml
6)	T n-Tetradecane (C14)	8.055	2739087	20.090 ug/ml
7)	T n-Hexadecane (C16)	9.650	2781803	20.310 ug/ml
8)	T n-Octadecane (C18)	11.088	2780455	20.331 ug/ml
10)	T n-Eicosane (C20)	12.394	2648981	20.332 ug/ml
11)	T n-Heneicosane (C21)	13.004	2599630	20.334 ug/ml
13)	T n-Docosane (C22)	13.590	2568338	20.379 ug/ml
14)	T n-Tetracosane (C24)	14.690	2538436	20.409 ug/ml
15)	T n-Hexacosane (C26)	15.709	2487254	20.456 ug/ml
16)	T n-Octacosane (C28)	16.658	2428496	20.448 ug/ml
17)	T n-Tricontane (C30)	17.543	2495035	20.729 ug/ml
18)	T n-Dotriacontane (C32)	18.375	2432983	20.962 ug/ml
19)	T n-Tetratriacontane (C34)	19.158	2182979	20.202 ug/ml
20)	T n-Hexatriacontane (C36)	19.897	1927847	20.046 ug/ml
21)	T n-Octatriacontane (C38)	20.608	1830105	20.358 ug/ml
22)	T n-Tetracontane (C40)	21.460	1732448	20.024 ug/ml

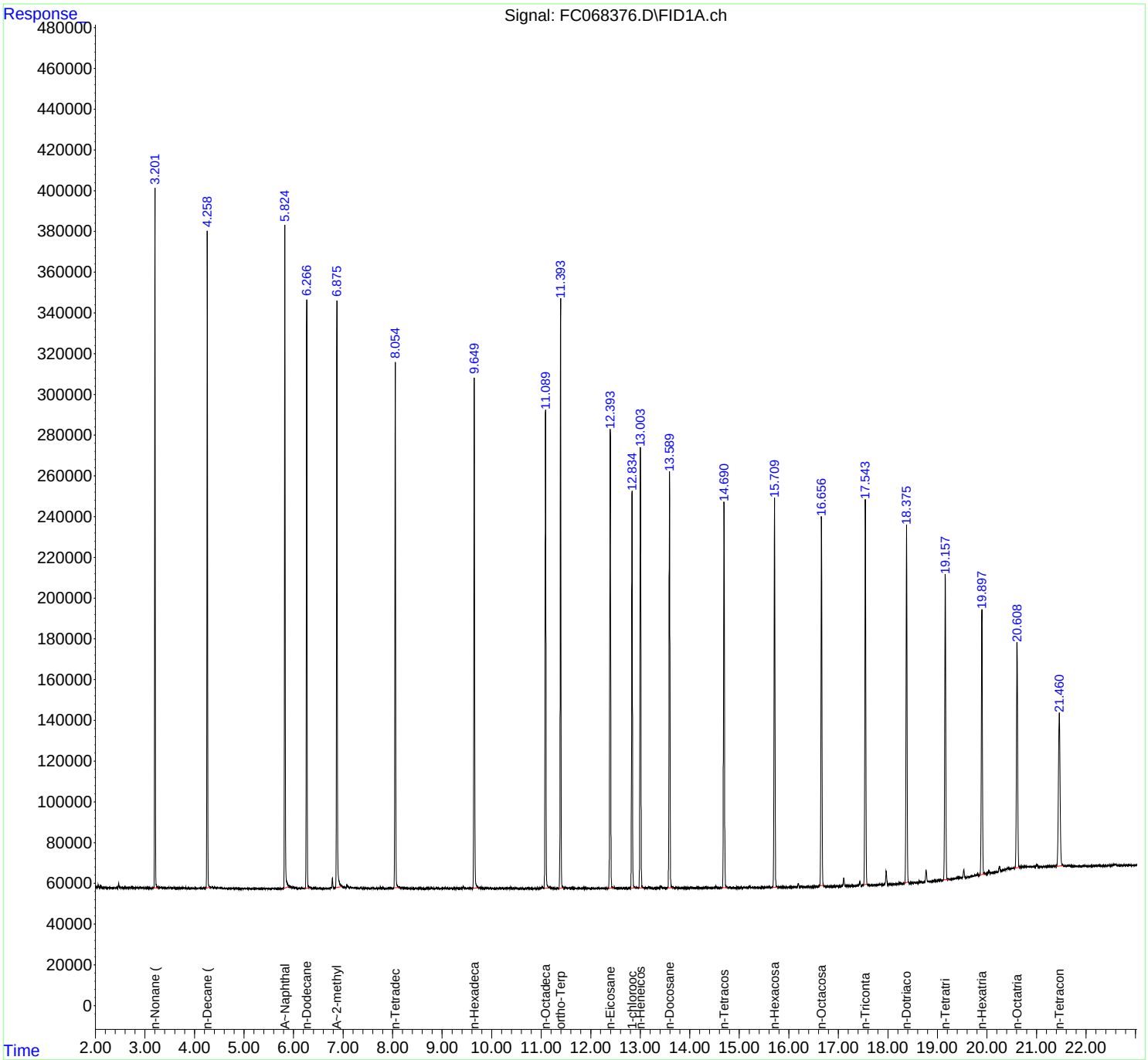
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068376.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 20:18
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: Mar 05 22:34:46 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
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\FC030525AL\
Data File : FC068376.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 20:18
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 021125.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	3.201	3.171	3.268	BB	340418	2857214	92.05%	5.090%
2	4.258	4.228	4.314	BB	319964	2879090	92.75%	5.129%
3	5.824	5.791	5.911	BB	324122	3104046	100.00%	5.529%
4	6.266	6.214	6.334	BB	289299	2855739	92.00%	5.087%
5	6.876	6.848	6.978	BB	284587	2936407	94.60%	5.231%
6	8.055	8.028	8.128	BB	256865	2739087	88.24%	4.879%
7	9.650	9.614	9.738	BB	250306	2781803	89.62%	4.955%
8	11.088	11.051	11.164	BB	235461	2780455	89.58%	4.953%
9	11.393	11.358	11.461	BB	288142	3076097	99.10%	5.480%
10	12.394	12.348	12.468	BB	223593	2648981	85.34%	4.719%
11	12.834	12.794	12.908	BB	193852	2254534	72.63%	4.016%
12	13.004	12.968	13.078	BB	214119	2599630	83.75%	4.631%
13	13.590	13.551	13.664	BB	203209	2568338	82.74%	4.575%
14	14.690	14.641	14.764	BB	189562	2538436	81.78%	4.522%
15	15.709	15.668	15.781	BB	187955	2487254	80.13%	4.431%
16	16.658	16.621	16.699	BBA	180622	2428496	78.24%	4.326%
17	17.543	17.508	17.576	BBA	186335	2495035	80.38%	4.445%
18	18.375	18.321	18.409	BBA	173005	2432983	78.38%	4.334%
19	19.158	19.121	19.231	BB	149502	2182979	70.33%	3.889%
20	19.897	19.851	19.969	BBA	128841	1927847	62.11%	3.434%
21	20.608	20.551	20.668	BB	109968	1830105	58.96%	3.260%
22	21.460	21.391	21.544	BB	75074	1732448	55.81%	3.086%
			Sum of corrected areas:			56137005		

Aliphatic EPH 021125.M Wed Mar 05 23:07:51 2025

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

Continuing Calibration Report for SequenceID : FD030525AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FD049158.D**						
Aromatic C10-C12	6556391.000	40.000	4.075	5.793	163909.775	159020.606	-3.075
Aromatic C12-C16	10059952.000	60.000	5.794	8.395	167665.867	160935.866	-4.182
Aromatic C16-C21	12177228.000	80.000	8.396	12.660	152215.350	153359.309	0.746
Aromatic C21-C36	25536741.000	180.000	12.661	18.072	141870.783	143114.753	0.869
Aromatic EPH	54330312.000	360.000	4.075	18.072	150917.533	150128.823	-0.525

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:	05 Mar 2025 15:22
Client Sample ID:		Operator:	YP/AJ
Data file:	FD049158.D	Misc:	
Instrument:	FID_D	ALS Vial:	53
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.075	5.793	6556391.000	40.000	ug/ml
Aromatic C12-C16	5.794	8.395	10059952.000	60.000	ug/ml
Aromatic C16-C21	8.396	12.660	12177228.000	80.000	ug/ml
Aromatic C21-C36	12.661	18.072	25536741.000	180.000	ug/ml
Aromatic EPH	4.075	18.072	54330312.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049158.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 15:22
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 23:28:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
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...	7.352	2962422	20.700 ug/ml
Spiked Amount	50.000		Recovery =	41.40%
6) S	2-Flurobiphenyl (SURR)	8.204	1711914	19.473 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	38.95%
11) S	ortho-Terphenyl (SURR)	11.233	3368553	20.823 ug/ml
Spiked Amount	50.000		Recovery =	41.65%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.175	3253355	20.429 ug/ml
2) T	Naphthalene (C11.7)	5.693	3303036	20.802 ug/ml
3) T	2-Methylnaphthalene (...	6.739	3237744	20.796 ug/ml
5) T	Acenaphthylene (C15.06)	8.003	3324170	20.443 ug/ml
7) T	Acenaphthene (C15.5)	8.295	3498038	21.264 ug/ml
8) T	Flouorene (C16.55)	9.077	3204395	20.326 ug/ml
9) T	Phenanthrene (C19.36)	10.464	3099383	20.566 ug/ml
10) T	Anthracene (C19.43)	10.542	2775363	18.376 ug/ml
12) T	Fluoranthene (C21.85)	12.269	3174723	20.573 ug/ml
13) T	Pyrene (C20.8)	12.560	3098087	20.110 ug/ml
14) T	Benzo[a]anthracene (C...	14.430	2601880	19.803 ug/ml
15) T	Chrysene (C27.41)	14.471	3354192	20.745 ug/ml
16) T	benzo[b]fluoranthene ...	15.978	2788979	20.270 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.010	3246186	20.553 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.361	2668621	19.660 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.729	1818040	16.637 ug/ml
20) T	Dibenz[a,h]anthracene...	17.771	3084866	19.884 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.972	2799254	19.312 ug/ml

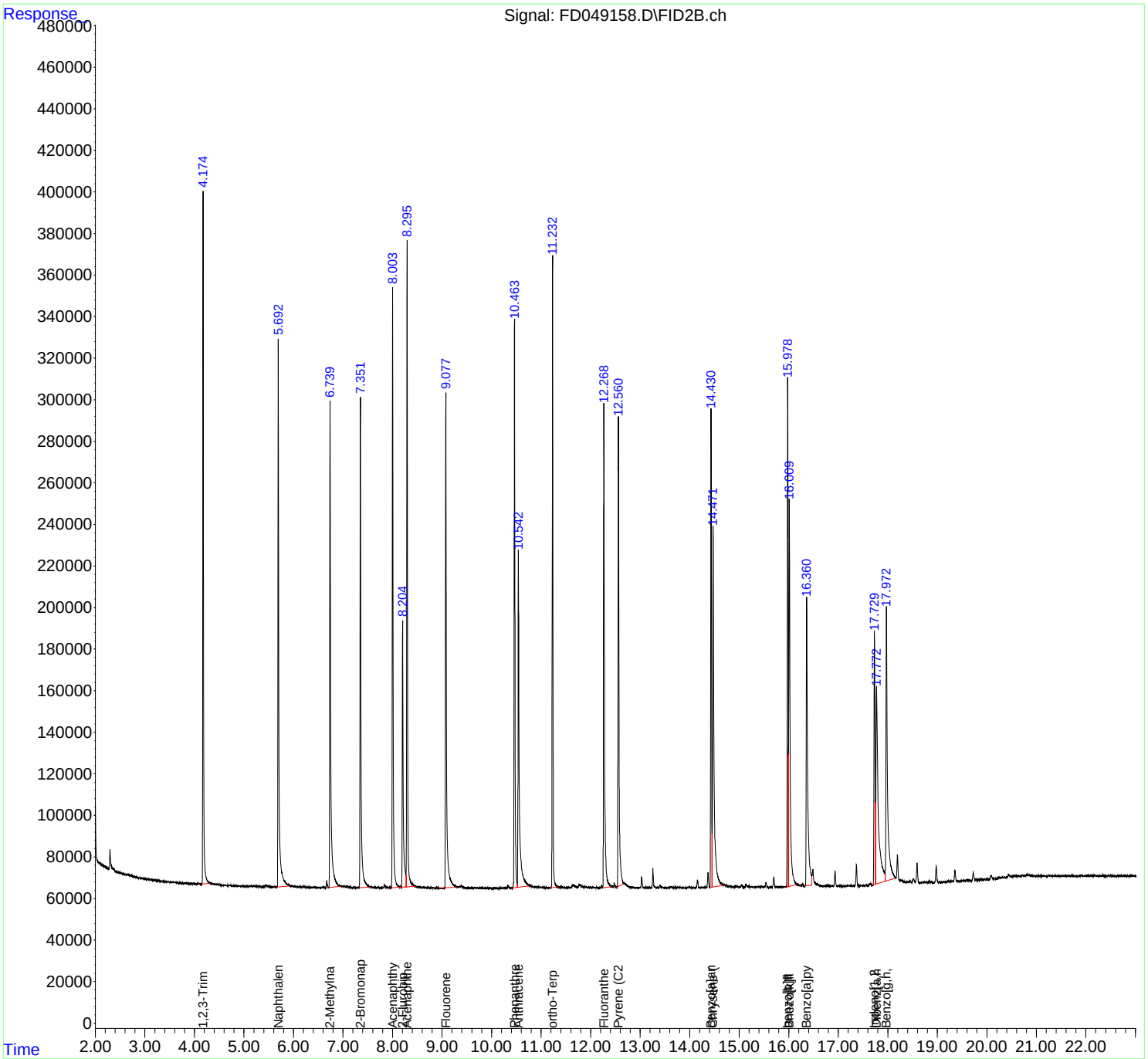
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049158.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 15:22
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 23:28:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
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\FD030525AR\
Data File : FD049158.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 15:22
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.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	4.175	4.130	4.317	BB	332495	3253355	93.01%	5.216%
2	5.693	5.645	5.932	BB	262930	3303036	94.43%	5.296%
3	6.739	6.715	6.954	PB	234084	3237744	92.56%	5.191%
4	7.352	7.332	7.557	BB	235743	2962422	84.69%	4.750%
5	8.003	7.960	8.159	BB	288706	3324170	95.03%	5.329%
6	8.204	8.162	8.274	BV	128127	1711914	48.94%	2.745%
7	8.295	8.274	8.462	VB	311076	3498038	100.00%	5.608%
8	9.077	8.942	9.295	BB	238003	3204395	91.61%	5.137%
9	10.464	10.394	10.520	BV	273736	3099383	88.60%	4.969%
10	10.542	10.520	10.765	VB	162479	2775363	79.34%	4.450%
11	11.233	11.184	11.339	BB	303976	3368553	96.30%	5.401%
12	12.269	12.239	12.427	PB	232709	3174723	90.76%	5.090%
13	12.560	12.519	12.667	BV	226228	3098087	88.57%	4.967%
14	14.430	14.407	14.452	PV	229918	2601880	74.38%	4.171%
15	14.471	14.452	14.694	VB	173687	3354192	95.89%	5.378%
16	15.978	15.930	15.994	BV	245130	2788979	79.73%	4.471%
17	16.010	15.994	16.164	VV	186160	3246186	92.80%	5.204%
18	16.361	16.314	16.466	BV	138768	2668621	76.29%	4.278%
19	17.729	17.690	17.753	BV	121812	1818040	51.97%	2.915%
20	17.771	17.753	17.947	VV	94967	3084866	88.19%	4.946%
21	17.972	17.947	18.160	VV	131908	2799254	80.02%	4.488%
			Sum of corrected areas:			62373200		

Aromatic EPH 021125.M Wed Mar 05 23:44:56 2025

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Continuing Calibration Report for SequenceID : FD030525AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FD049166.D**						
Aromatic C10-C12	6523459.000	40.000	4.075	5.793	163086.475	159020.606	-2.557
Aromatic C12-C16	10110953.000	60.000	5.794	8.395	168515.883	160935.866	-4.710
Aromatic C16-C21	12497804.000	80.000	8.396	12.660	156222.550	153359.309	-1.867
Aromatic C21-C36	25202288.000	180.000	12.661	18.072	140012.711	143114.753	2.168
Aromatic EPH	54334504.000	360.000	4.075	18.072	150929.178	150128.823	-0.533

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Fax : 908 789 8922

Lab Sample ID:	20 PPM AROMATIC HC S	Acq On:	05 Mar 2025 20:18
Client Sample ID:		Operator:	YP/AJ
Data file:	FD049166.D	Misc:	
Instrument:	FID_D	ALS Vial:	52
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.075	5.793	6523459.000	40.000	ug/ml
Aromatic C12-C16	5.794	8.395	10110953.000	60.000	ug/ml
Aromatic C16-C21	8.396	12.660	12497804.000	80.000	ug/ml
Aromatic C21-C36	12.661	18.072	25202288.000	180.000	ug/ml
Aromatic EPH	4.075	18.072	54334504.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049166.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 20:18
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: Mar 05 23:31:49 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
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...	7.353	2971940	20.767 ug/ml
Spiked Amount	50.000		Recovery =	41.53%
6) S	2-Flurobiphenyl (SURR)	8.206	1699653	19.334 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	38.67%
11) S	ortho-Terphenyl (SURR)	11.234	3381553	20.903 ug/ml
Spiked Amount	50.000		Recovery =	41.81%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.175	3238244	20.334 ug/ml
2) T	Naphthalene (C11.7)	5.694	3285215	20.689 ug/ml
3) T	2-Methylnaphthalene (...	6.741	3250961	20.881 ug/ml
5) T	Acenaphthylene (C15.06)	8.003	3355283	20.634 ug/ml
7) T	Acenaphthene (C15.5)	8.296	3504709	21.304 ug/ml
8) T	Flouorene (C16.55)	9.078	3238777	20.544 ug/ml
9) T	Phenanthrene (C19.36)	10.465	3068901	20.364 ug/ml
10) T	Anthracene (C19.43)	10.543	3086937	20.439 ug/ml
12) T	Fluoranthene (C21.85)	12.270	3159218	20.473 ug/ml
13) T	Pyrene (C20.8)	12.562	3103189	20.143 ug/ml
14) T	Benzo[a]anthracene (C...	14.433	2569868	19.559 ug/ml
15) T	Chrysene (C27.41)	14.474	3328013	20.583 ug/ml
16) T	benzo[b]fluoranthene ...	15.980	2726823	19.818 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.012	3278025	20.755 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.364	2775671	20.449 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.733	1762419	16.128 ug/ml
20) T	Dibenz[a,h]anthracene...	17.776	2830246	18.243 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.975	2772005	19.124 ug/ml

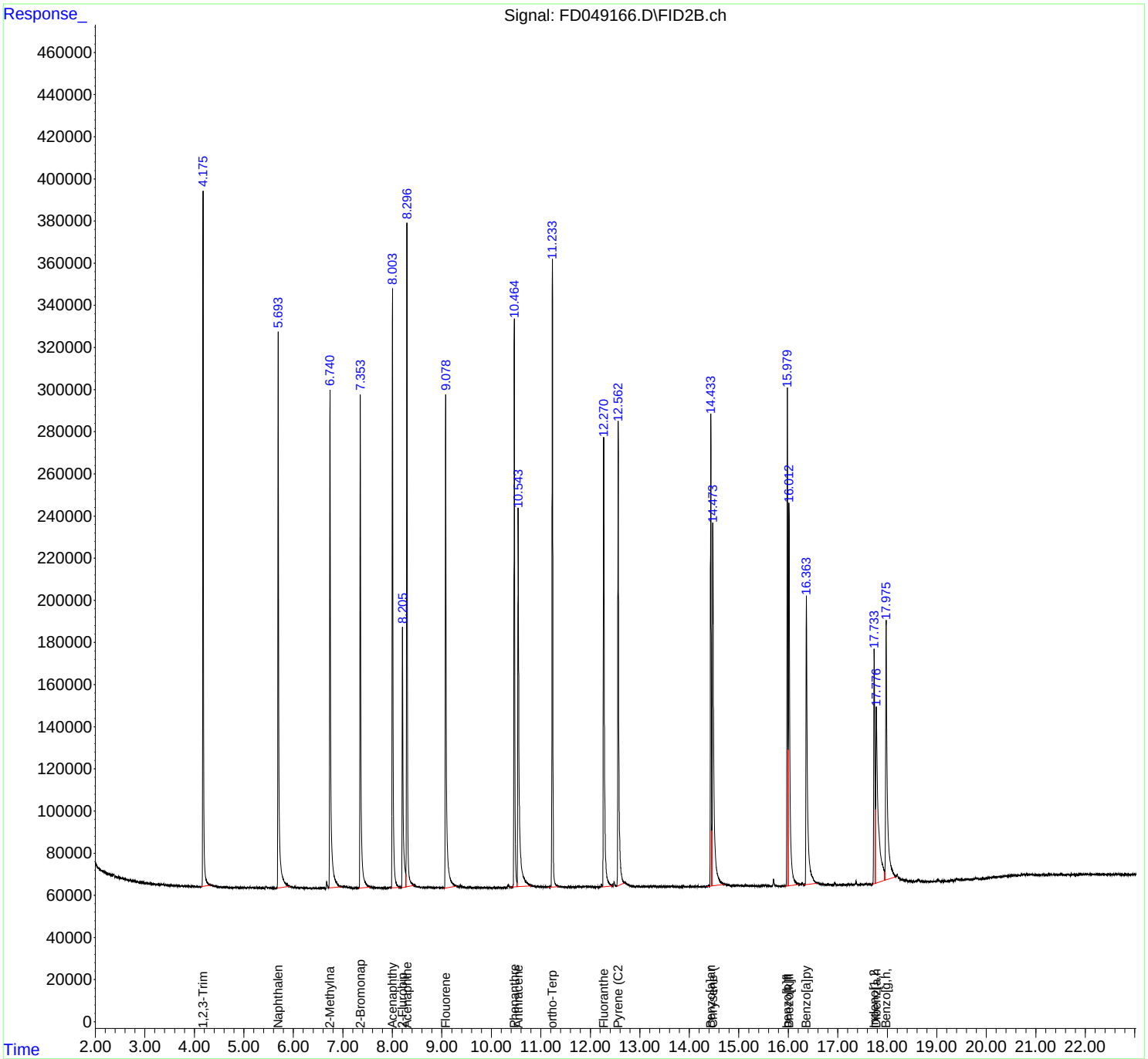
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049166.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 20:18
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: Mar 05 23:31:49 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
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\FD030525AR\
Data File : FD049166.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 20:18
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 021125.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	4.175	4.130	4.328	BB	329610	3238244	92.40%	5.191%
2	5.694	5.662	5.923	BB	263571	3285215	93.74%	5.266%
3	6.741	6.710	6.972	VV	235900	3250961	92.76%	5.211%
4	7.353	7.310	7.553	BB	234027	2971940	84.80%	4.764%
5	8.003	7.960	8.157	BV	284299	3355283	95.74%	5.378%
6	8.206	8.182	8.273	BV	123533	1699653	48.50%	2.724%
7	8.296	8.273	8.440	VB	314496	3504709	100.00%	5.618%
8	9.078	9.035	9.295	BB	234438	3238777	92.41%	5.191%
9	10.465	10.375	10.521	BV	268984	3068901	87.57%	4.919%
10	10.543	10.521	10.810	VV	179641	3086937	88.08%	4.948%
11	11.234	11.153	11.348	BB	296780	3381553	96.49%	5.420%
12	12.270	12.245	12.462	VB	213176	3159218	90.14%	5.064%
13	12.562	12.533	12.688	BV	220226	3103189	88.54%	4.974%
14	14.433	14.355	14.454	BV	223551	2569868	73.33%	4.119%
15	14.474	14.454	14.708	VB	172154	3328013	94.96%	5.334%
16	15.980	15.930	15.996	BV	236288	2726823	77.80%	4.371%
17	16.012	15.996	16.210	VV	181083	3278025	93.53%	5.254%
18	16.364	16.312	16.583	BB	136859	2775671	79.20%	4.449%
19	17.733	17.690	17.760	BV	111285	1762419	50.29%	2.825%
20	17.776	17.760	17.947	VV	83431	2830246	80.76%	4.537%
21	17.975	17.947	18.175	VV	122865	2772005	79.09%	4.443%
			Sum of corrected areas:			62387651		

Aromatic EPH 021125.M Wed Mar 05 23:52:46 2025

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

Continuing Calibration Report for SequenceID : FE031025AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FE052707.D**						
Aliphatic C9-C12	9658611.000	60.000	3.151	6.796	160976.850	155948.436	-3.224
Aliphatic C12-C16	6261558.000	40.000	6.797	10.250	156538.950	152098.489	-2.919
Aliphatic C16-C21	8993508.000	60.000	10.251	13.630	149891.800	146548.085	-2.282
Aliphatic C21-C28	11838283.000	80.000	13.631	17.305	147978.538	142451.851	-3.880
Aliphatic C28-C40	16154870.000	120.000	17.306	22.234	134623.917	127589.108	-5.514
Aliphatic EPH	52906830.000	360.000	3.151	22.234	146963.417	141501.588	-3.860

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:	10 Mar 2025 19:02
Client Sample ID:		Operator:	YP\AJ
Data file:	FE052707.D	Misc:	
Instrument:	FID_E	ALS Vial:	4
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.151	6.796	9658611.000	60.000	ug/ml
Aliphatic C12-C16	6.797	10.250	6261558.000	40.000	ug/ml
Aliphatic C16-C21	10.251	13.630	8993508.000	60.000	ug/ml
Aliphatic C21-C28	13.631	17.305	11838283.000	80.000	ug/ml
Aliphatic C28-C40	17.306	22.234	16154870.000	120.000	ug/ml
Aliphatic EPH	3.151	22.234	52906830.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052707.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 19:02
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 11 05:21:37 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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)	11.912	3350828	19.876 ug/ml
Spiked Amount	50.000		Recovery =	39.75%
12) S	1-chlorooctadecane (S...	13.357	2501200	20.599 ug/ml
Spiked Amount	50.000		Recovery =	41.20%
	Target Compounds			
1) T	n-Nonane (C9)	3.250	3174938	20.477 ug/ml
2) T	n-Decane (C10)	4.512	3262878	20.770 ug/ml
3) T	A~Naphthalene (C11.7)	6.225	3502253	20.651 ug/ml
4) T	n-Dodecane (C12)	6.693	3220795	20.686 ug/ml
5) T	A~2-methylnaphthalene...	7.328	3344702	20.639 ug/ml
6) T	n-Tetradecane (C14)	8.530	3112212	20.569 ug/ml
7) T	n-Hexadecane (C16)	10.146	3149346	20.599 ug/ml
8) T	n-Octadecane (C18)	11.596	3117983	20.494 ug/ml
10) T	n-Eicosane (C20)	12.911	2968827	20.450 ug/ml
11) T	n-Heneicosane (C21)	13.526	2906698	20.422 ug/ml
13) T	n-Docosane (C22)	14.114	2914638	20.481 ug/ml
14) T	n-Tetracosane (C24)	15.221	2969824	20.752 ug/ml
15) T	n-Hexacosane (C26)	16.246	2952252	20.762 ug/ml
16) T	n-Octacosane (C28)	17.198	3001569	21.109 ug/ml
17) T	n-Tricontane (C30)	18.088	3139348	21.255 ug/ml
18) T	n-Dotriacontane (C32)	18.923	3126155	21.533 ug/ml
19) T	n-Tetratriacontane (C34)	19.709	2784529	20.660 ug/ml
20) T	n-Hexatriacontane (C36)	20.451	2462016	20.720 ug/ml
21) T	n-Octatriacontane (C38)	21.194	2338978	21.084 ug/ml
22) T	n-Tetracontane (C40)	22.117	2303844	21.309 ug/ml

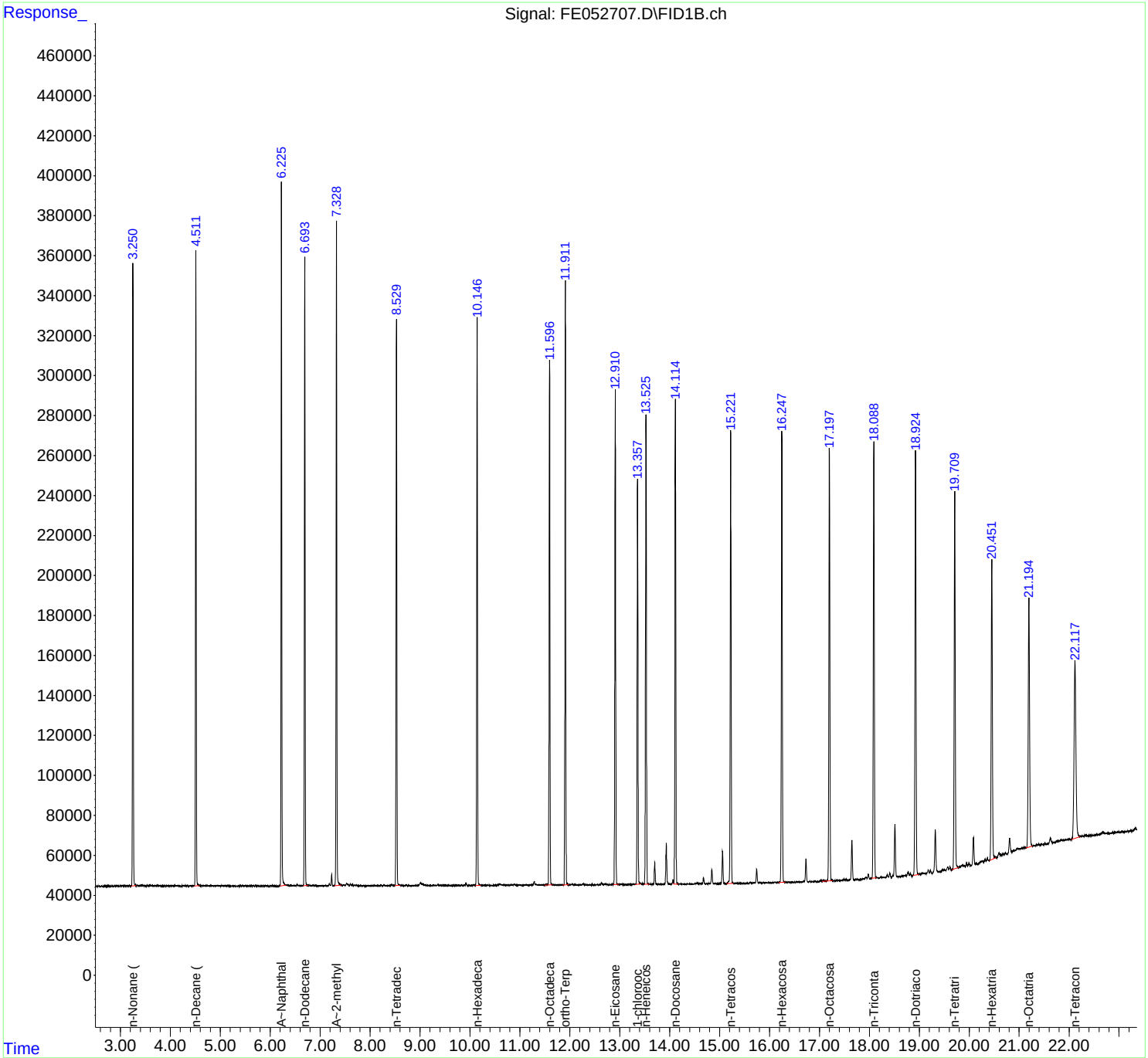
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052707.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 19:02
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 11 05:21:37 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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\FE031025AL\
Data File : FE052707.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 19:02
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.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	3.250	3.211	3.318	BB	311783	3174938	90.65%	4.839%
2	4.512	4.478	4.578	BB	317790	3262878	93.17%	4.973%
3	6.225	6.194	6.321	BB	350991	3502253	100.00%	5.338%
4	6.693	6.658	6.758	BB	313341	3220795	91.96%	4.909%
5	7.328	7.281	7.428	BB	332321	3344702	95.50%	5.098%
6	8.530	8.494	8.598	BB	281742	3112212	88.86%	4.744%
7	10.146	10.111	10.221	BB	284099	3149346	89.92%	4.800%
8	11.596	11.501	11.654	BB	260271	3117983	89.03%	4.753%
9	11.912	11.864	11.974	BB	301771	3350828	95.68%	5.108%
10	12.911	12.874	12.978	BB	247787	2968827	84.77%	4.525%
11	13.357	13.304	13.424	BB	202826	2501200	71.42%	3.812%
12	13.526	13.488	13.594	BB	234777	2906698	83.00%	4.431%
13	14.114	14.081	14.174	VB	242439	2914638	83.22%	4.443%
14	15.221	15.138	15.278	BB	226657	2969824	84.80%	4.527%
15	16.246	16.184	16.311	BB	225772	2952252	84.30%	4.500%
16	17.198	17.054	17.264	VB	216194	3001569	85.70%	4.575%
17	18.088	18.041	18.144	BB	218973	3139348	89.64%	4.785%
18	18.923	18.871	18.998	BB	213178	3126155	89.26%	4.765%
19	19.709	19.651	19.784	BB	188441	2784529	79.51%	4.244%
20	20.451	20.401	20.538	BB	150163	2462016	70.30%	3.753%
21	21.194	21.131	21.268	BB	124762	2338978	66.78%	3.565%
22	22.117	22.041	22.218	BB	88855	2303844	65.78%	3.512%
			Sum of corrected areas:			65605812		

Aliphatic EPH 030325.M Tue Mar 11 06:17:56 2025

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

Continuing Calibration Report for SequenceID : FE031025AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FE052724.D**						
Aliphatic C9-C12	9237193.000	60.000	3.151	6.796	153953.217	155948.436	1.279
Aliphatic C12-C16	6047186.000	40.000	6.797	10.250	151179.650	152098.489	0.604
Aliphatic C16-C21	8666452.000	60.000	10.251	13.630	144440.867	146548.085	1.438
Aliphatic C21-C28	11193884.000	80.000	13.631	17.305	139923.550	142451.851	1.775
Aliphatic C28-C40	16605991.000	120.000	17.306	22.234	138383.258	127589.108	-8.460
Aliphatic EPH	51750706.000	360.000	3.151	22.234	143751.961	141501.588	-1.590

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:	11 Mar 2025 04:34
Client Sample ID:		Operator:	YP\AJ
Data file:	FE052724.D	Misc:	
Instrument:	FID_E	ALS Vial:	3
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.151	6.796	9237193.000	60.000	ug/ml
Aliphatic C12-C16	6.797	10.250	6047186.000	40.000	ug/ml
Aliphatic C16-C21	10.251	13.630	8666452.000	60.000	ug/ml
Aliphatic C21-C28	13.631	17.305	11193884.000	80.000	ug/ml
Aliphatic C28-C40	17.306	22.234	16605991.000	120.000	ug/ml
Aliphatic EPH	3.151	22.234	51750706.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052724.D
Signal(s) : FID1B.ch
Acq On : 11 Mar 2025 04:34
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 11 05:28:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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)	11.910	3233413	19.180 ug/ml
Spiked Amount	50.000		Recovery =	38.36%
12) S	1-chlorooctadecane (S...	13.355	2372147	19.536 ug/ml
Spiked Amount	50.000		Recovery =	39.07%
	Target Compounds			
1) T	n-Nonane (C9)	3.249	2991326	19.293 ug/ml
2) T	n-Decane (C10)	4.511	3137720	19.973 ug/ml
3) T	A~Naphthalene (C11.7)	6.224	3350812	19.758 ug/ml
4) T	n-Dodecane (C12)	6.691	3108147	19.962 ug/ml
5) T	A~2-methylnaphthalene...	7.326	3207154	19.790 ug/ml
6) T	n-Tetradecane (C14)	8.528	3007485	19.876 ug/ml
7) T	n-Hexadecane (C16)	10.144	3039701	19.882 ug/ml
8) T	n-Octadecane (C18)	11.594	3010257	19.786 ug/ml
10) T	n-Eicosane (C20)	12.909	2857536	19.683 ug/ml
11) T	n-Heneicosane (C21)	13.524	2798659	19.663 ug/ml
13) T	n-Docosane (C22)	14.112	2791078	19.613 ug/ml
14) T	n-Tetracosane (C24)	15.219	2786788	19.473 ug/ml
15) T	n-Hexacosane (C26)	16.243	2773181	19.503 ug/ml
16) T	n-Octacosane (C28)	17.196	2842837	19.992 ug/ml
17) T	n-Tricontane (C30)	18.085	3086043	20.894 ug/ml
18) T	n-Dotriacontane (C32)	18.920	3202412	22.058 ug/ml
19) T	n-Tetratriacontane (C34)	19.707	2917103	21.644 ug/ml
20) T	n-Hexatriacontane (C36)	20.447	2604447	21.919 ug/ml
21) T	n-Octatriacontane (C38)	21.189	2451947	22.102 ug/ml
22) T	n-Tetracontane (C40)	22.111	2344039	21.681 ug/ml

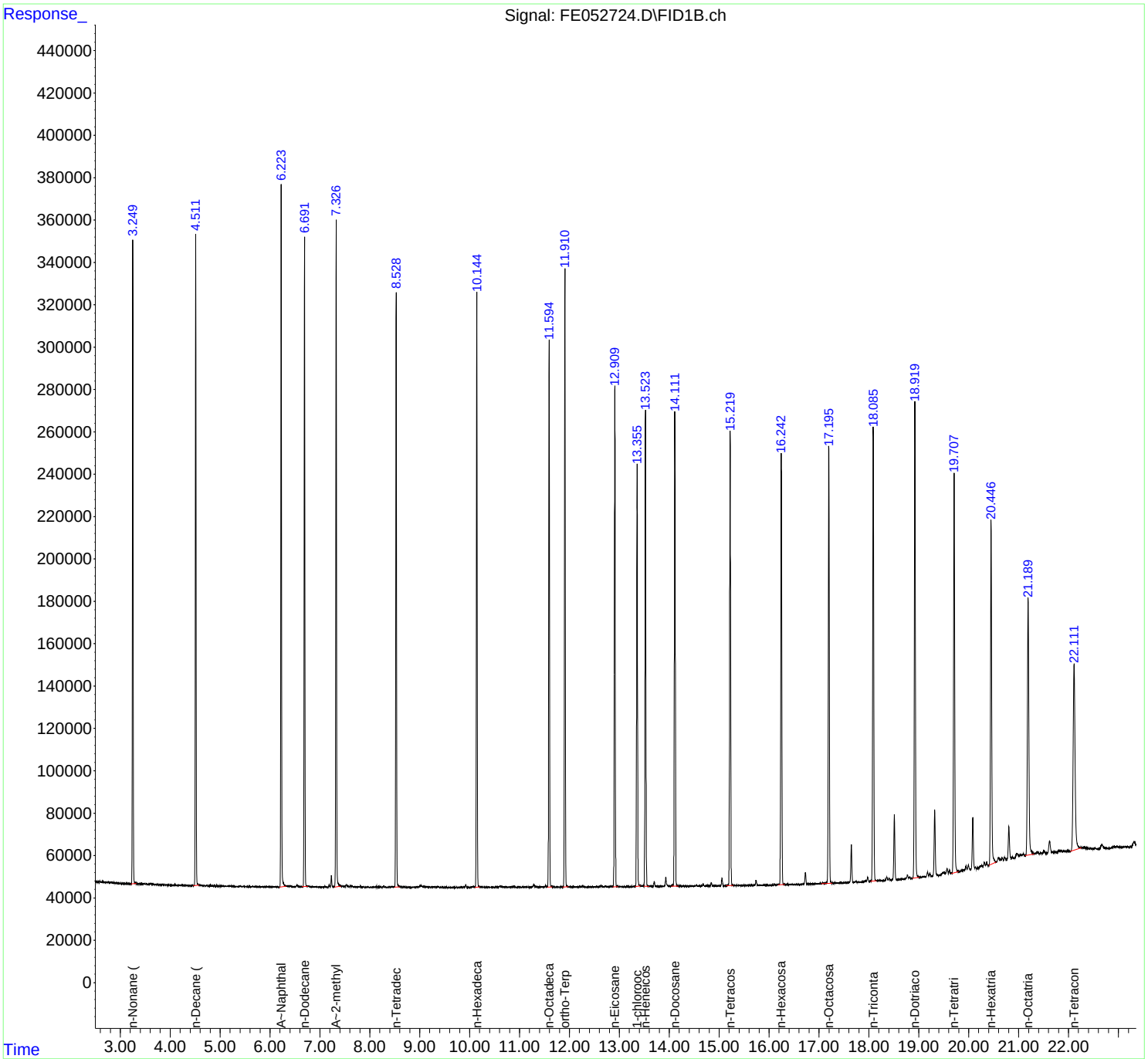
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052724.D
Signal(s) : FID1B.ch
Acq On : 11 Mar 2025 04:34
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 11 05:28:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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\FE031025AL\
Data File : FE052724.D
Signal(s) : FID1B.ch
Acq On : 11 Mar 2025 04:34
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.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	3.249	3.215	3.318	BB	301586	2991326	89.27%	4.680%
2	4.511	4.468	4.585	BB	307427	3137720	93.64%	4.909%
3	6.224	6.191	6.325	BB	329619	3350812	100.00%	5.243%
4	6.692	6.638	6.751	BB	305056	3108147	92.76%	4.863%
5	7.326	7.288	7.421	BB	311696	3207154	95.71%	5.018%
6	8.528	8.491	8.601	BB	280452	3007485	89.75%	4.706%
7	10.144	10.108	10.198	BB	280853	3039701	90.72%	4.756%
8	11.594	11.555	11.658	BB	257583	3010257	89.84%	4.710%
9	11.910	11.861	11.981	BB	293848	3233413	96.50%	5.059%
10	12.909	12.871	12.975	BB	236184	2857536	85.28%	4.471%
11	13.355	13.311	13.425	BB	197654	2372147	70.79%	3.711%
12	13.524	13.485	13.588	BB	223931	2798659	83.52%	4.379%
13	14.112	14.041	14.178	BB	224517	2791078	83.30%	4.367%
14	15.219	15.145	15.281	BB	214569	2786788	83.17%	4.360%
15	16.243	16.178	16.308	BB	204516	2773181	82.76%	4.339%
16	17.196	17.045	17.268	BB	206995	2842837	84.84%	4.448%
17	18.085	18.038	18.151	BB	214734	3086043	92.10%	4.828%
18	18.920	18.871	19.008	BB	223549	3202412	95.57%	5.010%
19	19.707	19.651	19.798	BB	188783	2917103	87.06%	4.564%
20	20.447	20.401	20.555	BV	162083	2604447	77.73%	4.075%
21	21.189	21.131	21.311	BB	121398	2451947	73.17%	3.836%
22	22.111	22.041	22.251	BB	88065	2344039	69.95%	3.667%
			Sum of corrected areas:			63914232		

Aliphatic EPH 030325.M Tue Mar 11 06:30:33 2025

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

Continuing Calibration Report for SequenceID : FF031025AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FF015628.D**						
Aromatic C10-C12	5303513.000	40.000	4.505	6.377	132587.825	128361.211	-3.293
Aromatic C12-C16	8424119.000	60.000	6.378	9.069	140401.983	136800.309	-2.633
Aromatic C16-C21	10513836.000	80.000	9.070	13.390	131422.950	133038.999	1.215
Aromatic C21-C36	21153413.000	180.000	13.391	18.845	117518.961	130055.838	9.640
Aromatic EPH	45394881.000	360.000	4.505	18.845	126096.892	131654.549	4.221

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:	10 Mar 2025 13:29
Client Sample ID:		Operator:	YP\AJ
Data file:	FF015628.D	Misc:	
Instrument:	FID_F	ALS Vial:	61
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.505	6.377	5303513.000	40.000	ug/ml
Aromatic C12-C16	6.378	9.069	8424119.000	60.000	ug/ml
Aromatic C16-C21	9.070	13.390	10513836.000	80.000	ug/ml
Aromatic C21-C36	13.391	18.845	21153413.000	180.000	ug/ml
Aromatic EPH	4.505	18.845	45394881.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015628.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 13:29
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 11 03:21:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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...	7.998	2426913	20.847 ug/ml
	Spiked Amount 50.000		Recovery =	41.69%
6)	S 2-Flurobiphenyl (SURR)	8.878	1415882	19.877 ug/ml
	Spiked Amount 50.000 Range 0 - 131		Recovery =	39.75%
11)	S ortho-Terphenyl (SURR)	11.932	2934033	19.945 ug/ml
	Spiked Amount 50.000		Recovery =	39.89%
	Target Compounds			
1)	T 1,2,3-Trimethylbenzen...	4.605	2691847	20.851 ug/ml
2)	T Naphthalene (C11.7)	6.277	2611666	20.463 ug/ml
3)	T 2-Methylnaphthalene (...	7.372	2619326	20.687 ug/ml
5)	T Acenaphthylene (C15.06)	8.672	2842823	20.111 ug/ml
7)	T Acenaphthene (C15.5)	8.969	2961970	20.796 ug/ml
8)	T Flouorene (C16.55)	9.762	2744349	20.625 ug/ml
9)	T Phenanthrene (C19.36)	11.169	2594085	19.943 ug/ml
10)	T Anthracene (C19.43)	11.246	2387008	19.058 ug/ml
12)	T Fluoranthene (C21.85)	12.992	2742366	19.419 ug/ml
13)	T Pyrene (C20.8)	13.290	2788394	19.395 ug/ml
14)	T Benzo[a]anthracene (C...	15.174	2037992	17.350 ug/ml
15)	T Chrysene (C27.41)	15.215	2725037	18.244 ug/ml
16)	T benzo[b]fluoranthene ...	16.735	2327996	17.875 ug/ml
17)	T Bnezo[k]fluoranthene ...	16.765	2717637	18.213 ug/ml
18)	T Benzo[a]pyrene (C31.34)	17.120	2295488	18.088 ug/ml
19)	T Indeno[1,2,3-cd]pyren...	18.496	1676114	16.375 ug/ml
20)	T Dibenz[a,h]anthracene...	18.536	2376385	18.379 ug/ml
21)	T Benzo[g,h,i]perylene ...	18.745	2254398	18.116 ug/ml

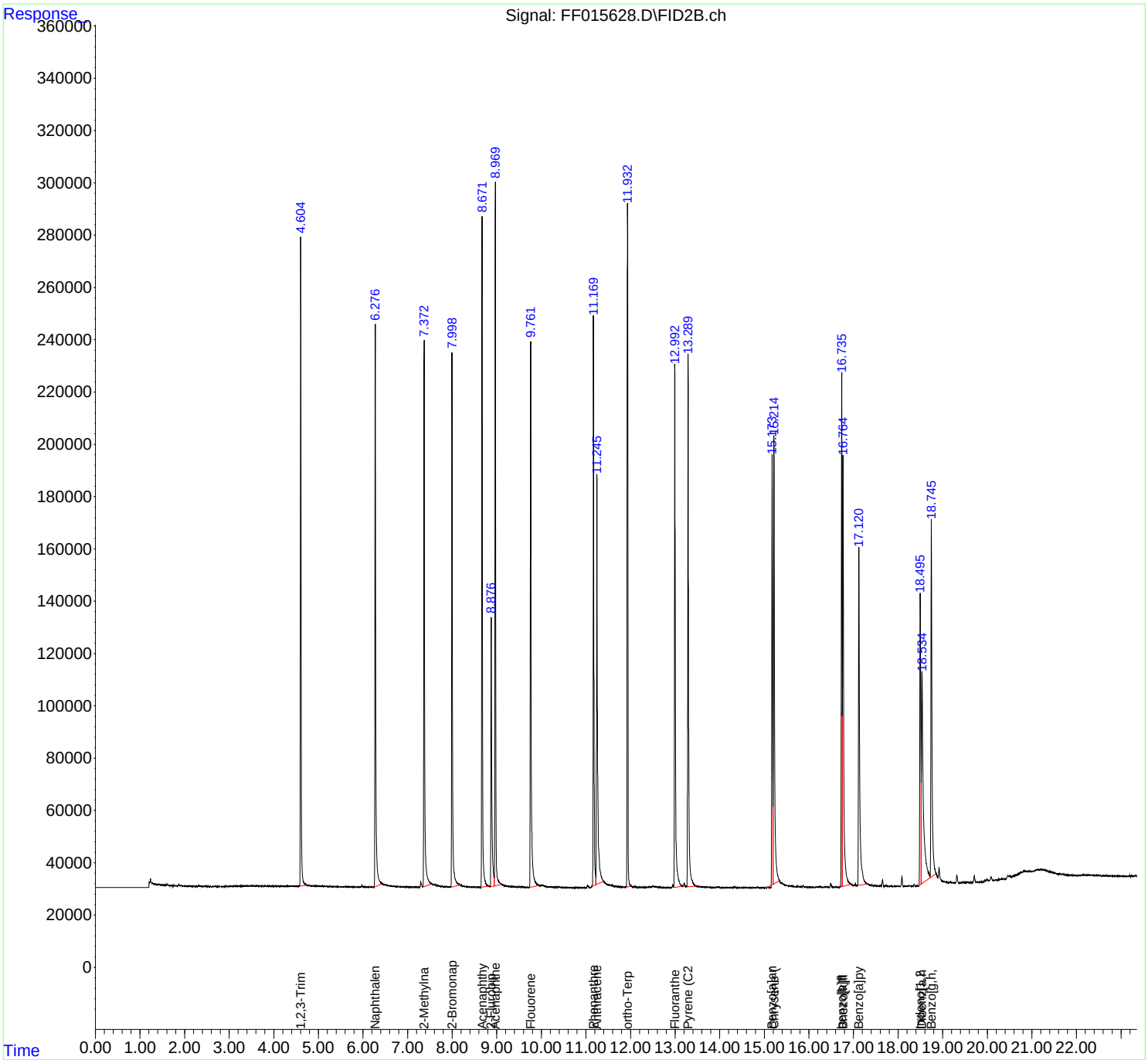
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015628.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 13:29
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 11 03:21:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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_F\Data\FF031025AR\
Data File : FF015628.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 13:29
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	4.605	4.574	4.739	BB	248127	2691847	90.88%	5.160%
2	6.277	6.247	6.434	BB	214434	2611666	88.17%	5.006%
3	7.372	7.342	7.544	PB	208711	2619326	88.43%	5.021%
4	7.998	7.972	8.172	BB	203793	2426913	81.94%	4.652%
5	8.672	8.644	8.815	BB	254988	2842823	95.98%	5.449%
6	8.878	8.847	8.943	BV	102676	1415882	47.80%	2.714%
7	8.969	8.943	9.105	VB	269509	2961970	100.00%	5.677%
8	9.762	9.734	9.942	BB	207980	2744349	92.65%	5.260%
9	11.169	11.135	11.224	BV	218093	2594085	87.58%	4.972%
10	11.246	11.224	11.400	VBA	156286	2387008	80.59%	4.575%
11	11.932	11.899	12.015	BB	261336	2934033	99.06%	5.624%
12	12.992	12.962	13.169	VB	199807	2742366	92.59%	5.256%
13	13.290	13.260	13.474	BB	203634	2788394	94.14%	5.345%
14	15.174	15.054	15.195	BV	164496	2037992	68.81%	3.906%
15	15.215	15.195	15.340	VBA	170788	2725037	92.00%	5.223%
16	16.735	16.697	16.750	BV	196961	2327996	78.60%	4.462%
17	16.765	16.750	16.950	VB	162851	2717637	91.75%	5.209%
18	17.120	17.090	17.310	BB	129404	2295488	77.50%	4.400%
19	18.496	18.452	18.518	BV	111260	1676114	56.59%	3.213%
20	18.536	18.518	18.717	VV	81103	2376385	80.23%	4.555%
21	18.745	18.717	18.850	VBA	136373	2254398	76.11%	4.321%
			Sum of corrected areas:			52171710		

Aromatic EPH 022625.M Tue Mar 11 03:57:14 2025

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

Continuing Calibration Report for SequenceID : FF031025AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FF015645.D**						
Aromatic C10-C12	5366584.000	40.000	4.505	6.377	134164.600	128361.211	-4.521
Aromatic C12-C16	8486524.000	60.000	6.378	9.069	141442.067	136800.309	-3.393
Aromatic C16-C21	10783294.000	80.000	9.070	13.390	134791.175	133038.999	-1.317
Aromatic C21-C36	22388226.000	180.000	13.391	18.845	124379.033	130055.838	4.365
Aromatic EPH	47024628.000	360.000	4.505	18.845	130623.967	131654.549	0.783

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:	11 Mar 2025 01:05
Client Sample ID:		Operator:	YP\AJ
Data file:	FF015645.D	Misc:	
Instrument:	FID_F	ALS Vial:	61
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.505	6.377	5366584.000	40.000	ug/ml
Aromatic C12-C16	6.378	9.069	8486524.000	60.000	ug/ml
Aromatic C16-C21	9.070	13.390	10783294.000	80.000	ug/ml
Aromatic C21-C36	13.391	18.845	22388226.000	180.000	ug/ml
Aromatic EPH	4.505	18.845	47024628.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015645.D
Signal(s) : FID2B.ch
Acq On : 11 Mar 2025 01:05
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 11 03:28:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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...	7.997	2441843	20.975 ug/ml
Spiked Amount	50.000		Recovery =	41.95%
6) S	2-Flurobiphenyl (SURR)	8.876	1474667	20.702 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	41.40%
11) S	ortho-Terphenyl (SURR)	11.932	2951270	20.063 ug/ml
Spiked Amount	50.000		Recovery =	40.13%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.604	2704187	20.947 ug/ml
2) T	Naphthalene (C11.7)	6.276	2662397	20.861 ug/ml
3) T	2-Methylnaphthalene (...	7.371	2677262	21.144 ug/ml
5) T	Acenaphthylene (C15.06)	8.671	2870955	20.310 ug/ml
7) T	Acenaphthene (C15.5)	8.969	2938307	20.630 ug/ml
8) T	Flouorene (C16.55)	9.761	2790886	20.974 ug/ml
9) T	Phenanthrene (C19.36)	11.168	2656559	20.423 ug/ml
10) T	Anthracene (C19.43)	11.244	2501033	19.968 ug/ml
12) T	Fluoranthene (C21.85)	12.991	2796751	19.804 ug/ml
13) T	Pyrene (C20.8)	13.289	2834816	19.718 ug/ml
14) T	Benzo[a]anthracene (C...	15.173	2298012	19.563 ug/ml
15) T	Chrysene (C27.41)	15.215	2839491	19.011 ug/ml
16) T	benzo[b]fluoranthene ...	16.735	2467646	18.947 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.765	2723817	18.254 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.119	2401305	18.922 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.494	1879463	18.362 ug/ml
20) T	Dibenz[a,h]anthracene...	18.533	2619985	20.263 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.746	2361756	18.979 ug/ml

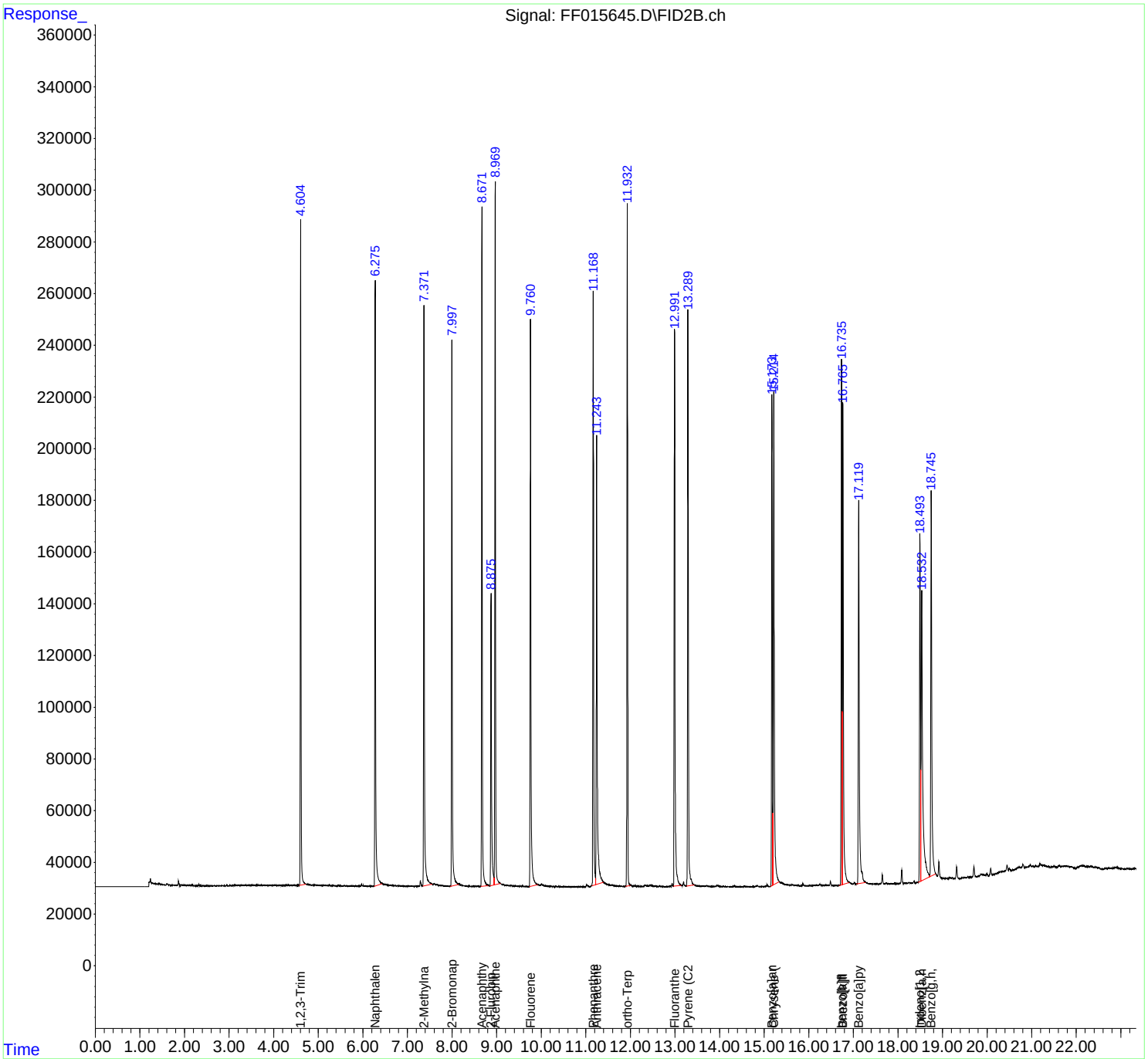
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015645.D
Signal(s) : FID2B.ch
Acq On : 11 Mar 2025 01:05
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 11 03:28:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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_F\Data\FF031025AR\
Data File : FF015645.D
Signal(s) : FID2B.ch
Acq On : 11 Mar 2025 01:05
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	4.604	4.569	4.724	BB	257153	2704187	91.63%	5.018%
2	6.276	6.249	6.434	BB	233992	2662397	90.21%	4.940%
3	7.371	7.340	7.547	BB	224905	2677262	90.72%	4.968%
4	7.997	7.964	8.152	BB	211570	2441843	82.74%	4.531%
5	8.671	8.642	8.810	BB	262511	2870955	97.28%	5.327%
6	8.876	8.847	8.941	BV	112666	1474667	49.97%	2.736%
7	8.969	8.941	9.085	VB	272091	2938307	99.56%	5.452%
8	9.761	9.729	9.922	BB	219066	2790886	94.57%	5.179%
9	11.168	11.132	11.220	BV	229320	2656559	90.01%	4.929%
10	11.244	11.220	11.400	VBA	173512	2501033	84.74%	4.641%
11	11.932	11.894	12.002	BB	263469	2951270	100.00%	5.476%
12	12.991	12.965	13.145	BB	214925	2796751	94.76%	5.190%
13	13.289	13.255	13.427	BB	222734	2834816	96.05%	5.260%
14	15.173	15.140	15.194	BV	188781	2298012	77.87%	4.264%
15	15.215	15.194	15.340	VBA	190746	2839491	96.21%	5.269%
16	16.735	16.679	16.750	BV	203964	2467646	83.61%	4.579%
17	16.765	16.750	16.912	VB	186326	2723817	92.29%	5.054%
18	17.119	17.070	17.279	BB	148257	2401305	81.37%	4.456%
19	18.494	18.450	18.514	BV	133795	1879463	63.68%	3.487%
20	18.533	18.514	18.713	VV	111610	2619985	88.77%	4.862%
21	18.746	18.713	18.850	VBA	148448	2361756	80.03%	4.382%
			Sum of corrected areas:			53892409		

Aromatic EPH 022625.M Tue Mar 11 04:01:33 2025

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 2025	Date Received:	
Client Sample ID:	PB166976BL	SDG No.:	Q1488
Lab Sample ID:	PB166976BL	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
03/05/25 08:25	03/05/25 15:58	PB166976

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	FC068369.D
Aliphatic C12-C16	Aliphatic C12-C16	3.61	U	1	3.61	20.0	ug/l	FC068369.D
Aliphatic C16-C21	Aliphatic C16-C21	5.14	U	1	5.14	30.0	ug/l	FC068369.D
Aliphatic C21-C28	Aliphatic C21-C28	8.97	U	1	8.97	40.0	ug/l	FC068369.D
Aliphatic C28-C40	Aliphatic C28-C40	17.0	U	1	17.0	60.0	ug/l	FC068369.D
Aromatic C10-C12	Aromatic C10-C12	3.32	U	1	3.32	20.0	ug/l	FD049159.D
Aromatic C12-C16	Aromatic C12-C16	3.69	U	1	3.69	30.0	ug/l	FD049159.D
Aromatic C16-C21	Aromatic C16-C21	12.7	U	1	12.7	50.0	ug/l	FD049159.D
Aromatic C21-C36	Aromatic C21-C36	25.2	U	1	25.2	80.0	ug/l	FD049159.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

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 2025		Date Received:		
Client Sample ID:	PB166976BL		SDG No.:	Q1488	
Lab Sample ID:	PB166976BL		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
FC068369.D	1	03/05/25	03/05/25	PB166976

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)	40.0		40 - 140	80%	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:	PB166976BL	Acq On:	05 Mar 2025 15:58
Client Sample ID:	PB166976BL	Operator:	YP/AJ
Data file:	FC068369.D	Misc:	
Instrument:	FID_C	ALS Vial:	11
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.102	6.366	0	0	300	ug/ml
Aliphatic C12-C16	6.367	9.749	0	0	200	ug/ml
Aliphatic C16-C21	9.750	13.103	0	0	300	ug/ml
Aliphatic C21-C28	13.104	16.755	0	0	400	ug/ml
Aliphatic C28-C40	16.756	21.556	0	0	600	ug/ml
Aliphatic EPH	3.102	21.556	0	0		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.835	12.835	4498831	40		ug/ml
Aliphatic C9-C28	3.102	16.755	0	0	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068369.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 15:58
Operator : YP/AJ
Sample : PB166976BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB166976BL

Integration File: autoint1.e
Quant Time: Mar 05 22:32:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
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...	12.835	4498831	39.999 ug/ml
Spiked Amount 50.000		Recovery = 80.00%	
Target Compounds			

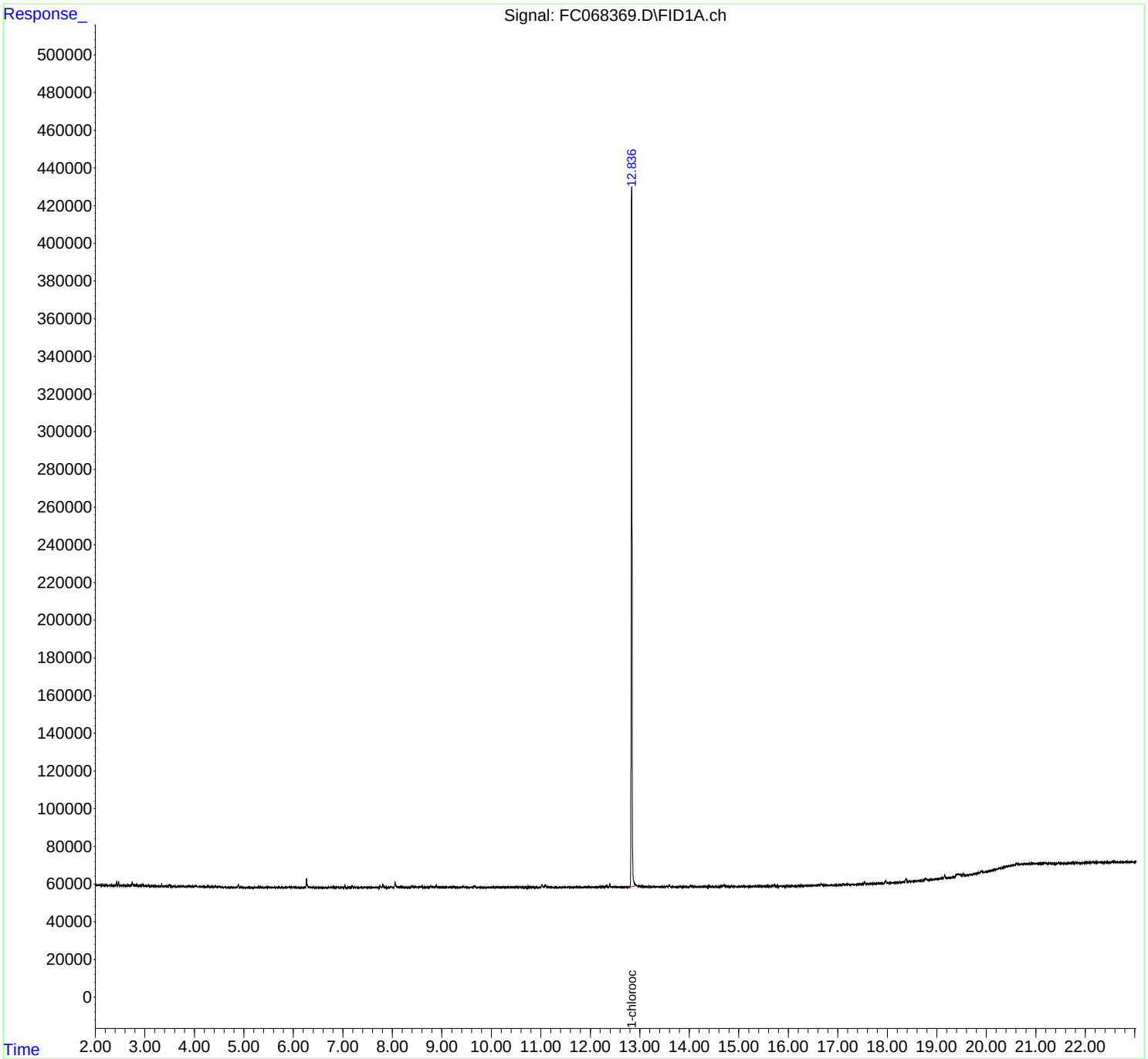
(f)=RT Delta > 1/2 Window (m)=manual int.

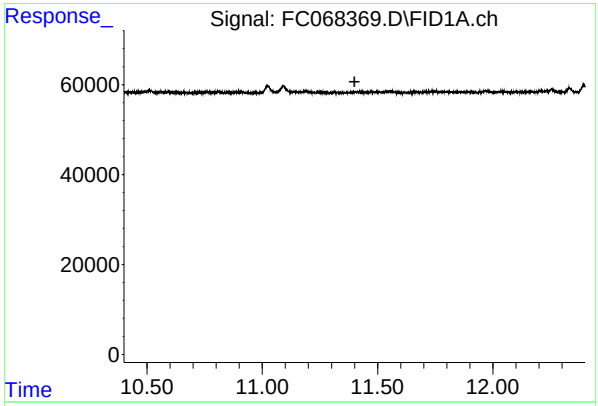
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068369.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 15:58
Operator : YP/AJ
Sample : PB166976BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB166976BL

Integration File: autoint1.e
Quant Time: Mar 05 22:32:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

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

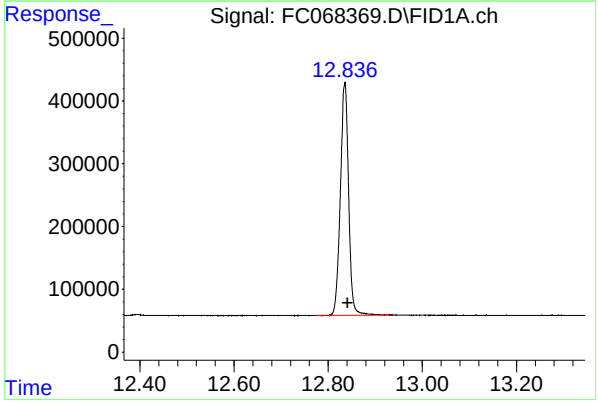




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
PB166976BL



#12 1-chlorooctadecane (SURR)

R.T.: 12.835 min
Delta R.T.: -0.006 min
Response: 4498831
Conc: 40.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068369.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 15:58
Sample : PB166976BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.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	12.835	12.774	12.938	BB	370023	4498831	100.00%	100.000%

Sum of corrected areas: 4498831

Aliphatic EPH 021125.M Wed Mar 05 23:05:58 2025

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 2025		Date Received:		
Client Sample ID:	PB166976BL		SDG No.:	Q1488	
Lab Sample ID:	PB166976BL		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
FD049159.D	1	03/05/25	03/05/25	PB166976

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)	57.0		40 - 140	114%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	58.3		40 - 140	117%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	49.6		40 - 140	99%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB166976BL	Acq On:	05 Mar 2025 15:58
Client Sample ID:	PB166976BL	Operator:	YP/AJ
Data file:	FD049159.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	4.075	5.793	0	0	200	ug/ml
Aromatic C12-C16	5.794	8.395	0	0	300	ug/ml
Aromatic C16-C21	8.396	12.660	0	0	500	ug/ml
Aromatic C21-C36	12.661	18.072	0	0	800	ug/ml
Aromatic EPH	4.075	18.072	0	0		ug/ml
2-Bromonaphthalene (SURR)	7.351	7.351	8157579	57		ug/ml
2-Flurobiphenyl (SURR)	8.202	8.202	5123276	58.28		ug/ml
ortho-Terphenyl (SURR)	11.235	11.235	8019786	49.57		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049159.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 15:58
Operator : YP/AJ
Sample : PB166976BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB166976BL

Integration File: autoint1.e
Quant Time: Mar 05 23:29:13 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
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...	7.351	8157579	57.003 ug/ml
Spiked Amount 50.000		Recovery = 114.01%	
6) S 2-Flurobiphenyl (SURR)	8.202	5123276	58.277 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery = 116.55%	
11) S ortho-Terphenyl (SURR)	11.235	8019786	49.574 ug/ml
Spiked Amount 50.000		Recovery = 99.15%	
Target Compounds			

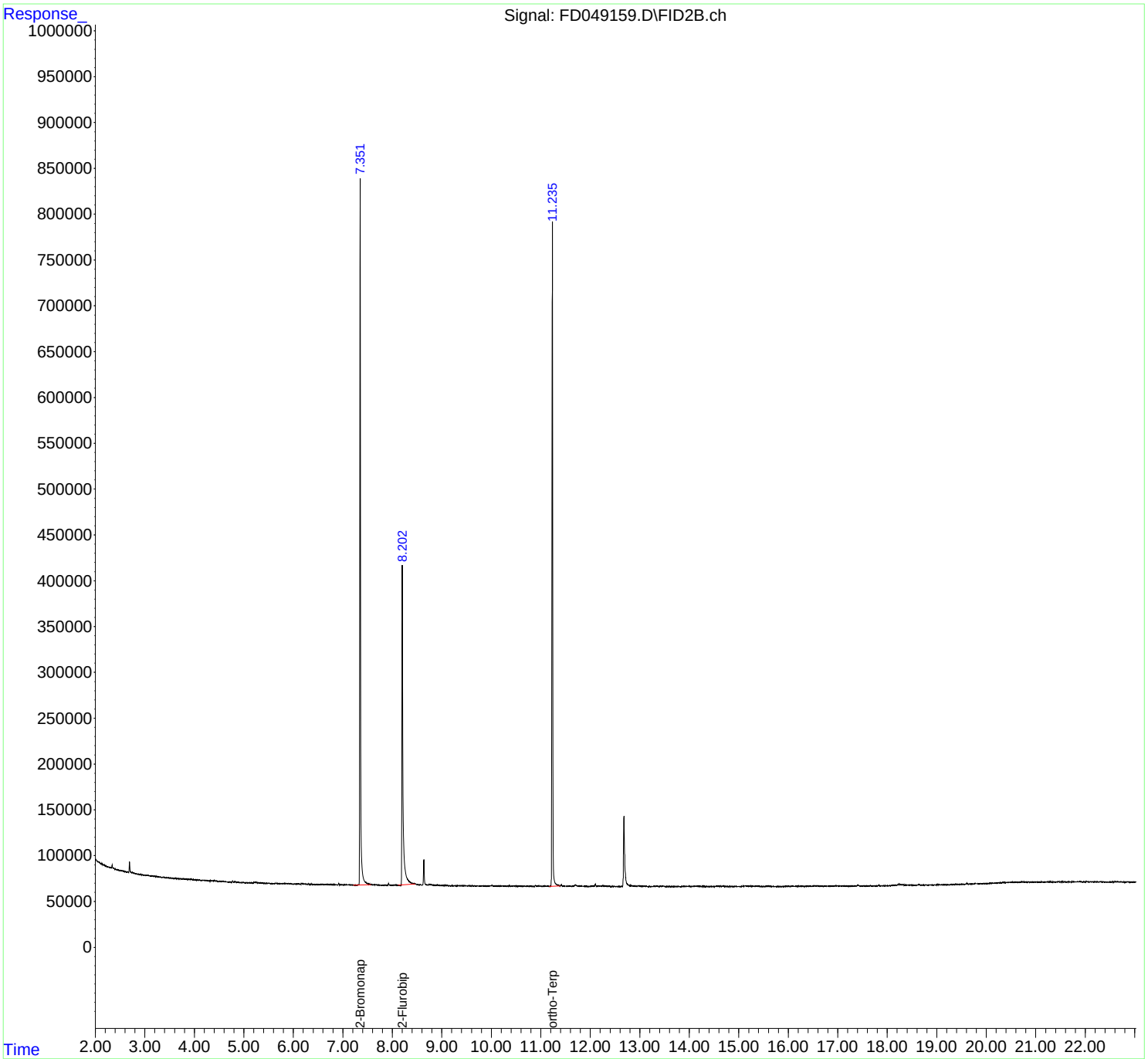
(f)=RT Delta > 1/2 Window (m)=manual int.

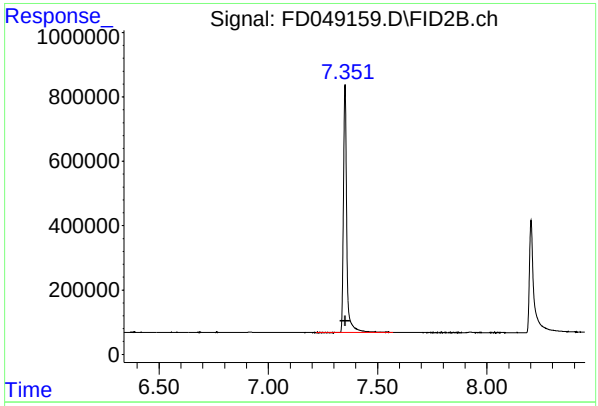
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049159.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 15:58
Operator : YP/AJ
Sample : PB166976BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB166976BL

Integration File: autoint1.e
Quant Time: Mar 05 23:29:13 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

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

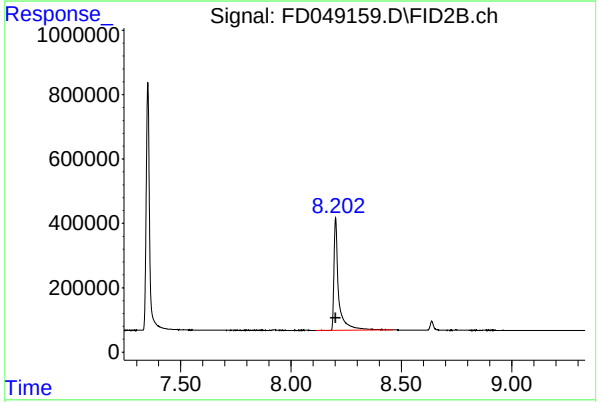




#4 2-Bromonaphthalene (SURR)

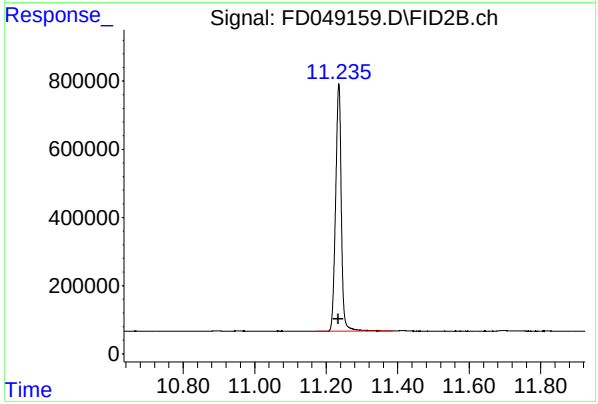
R.T.: 7.351 min
Delta R.T.: 0.000 min
Response: 8157579
Conc: 57.00 ug/ml

Instrument :
FID_D
ClientSampleId :
PB166976BL



#6 2-Flurobiphenyl (SURR)

R.T.: 8.202 min
Delta R.T.: 0.000 min
Response: 5123276
Conc: 58.28 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.235 min
Delta R.T.: 0.002 min
Response: 8019786
Conc: 49.57 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049159.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 15:58
Sample : PB166976BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.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	7.351	7.218	7.570	BB	768953	8157579	100.00%	38.297%
2	8.202	8.113	8.462	BB	348909	5123276	62.80%	24.052%
3	11.235	11.172	11.387	BV	725284	8019786	98.31%	37.650%

Sum of corrected areas: 21300641

Aromatic EPH 021125.M Wed Mar 05 23:45:21 2025

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 2025	Date Received:	
Client Sample ID:	PB167058BL	SDG No.:	Q1488
Lab Sample ID:	PB167058BL	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
FF015629.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.30	U	0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.34	U	0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	0.96	U	0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	2.00	U	2.00	2.67	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	52.4		40 - 140	105%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	55.7		40 - 140	111%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	42.7		40 - 140	85%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB167058BL	Acq On:	10 Mar 2025 16:47
Client Sample ID:	PB167058BL	Operator:	YP\AJ
Data file:	FF015629.D	Misc:	
Instrument:	FID_F	ALS Vial:	71
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.505	6.377	0	0	200	ug/ml
Aromatic C12-C16	6.378	9.069	0	0	300	ug/ml
Aromatic C16-C21	9.070	13.390	0	0	500	ug/ml
Aromatic C21-C36	13.391	18.845	0	0	800	ug/ml
Aromatic EPH	4.505	18.845	0	0		ug/ml
ortho-Terphenyl (SURR)	11.928	11.928	6277057	42.67		ug/ml
2-Bromonaphthalene (SURR)	7.986	7.986	6103809	52.43		ug/ml
2-Flurobiphenyl (SURR)	8.864	8.864	3965538	55.67		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015629.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 16:47
Operator : YP\AJ
Sample : PB167058BL
Misc :
ALS Vial : 71 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB167058BL

Integration File: autoint1.e
Quant Time: Mar 11 03:21:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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...	7.986	6103809	52.432 ug/ml
Spiked Amount 50.000		Recovery = 104.86%	
6) S 2-Flurobiphenyl (SURR)	8.864	3965538	55.671 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery = 111.34%	
11) S ortho-Terphenyl (SURR)	11.928	6277057	42.671 ug/ml
Spiked Amount 50.000		Recovery = 85.34%	
Target Compounds			

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

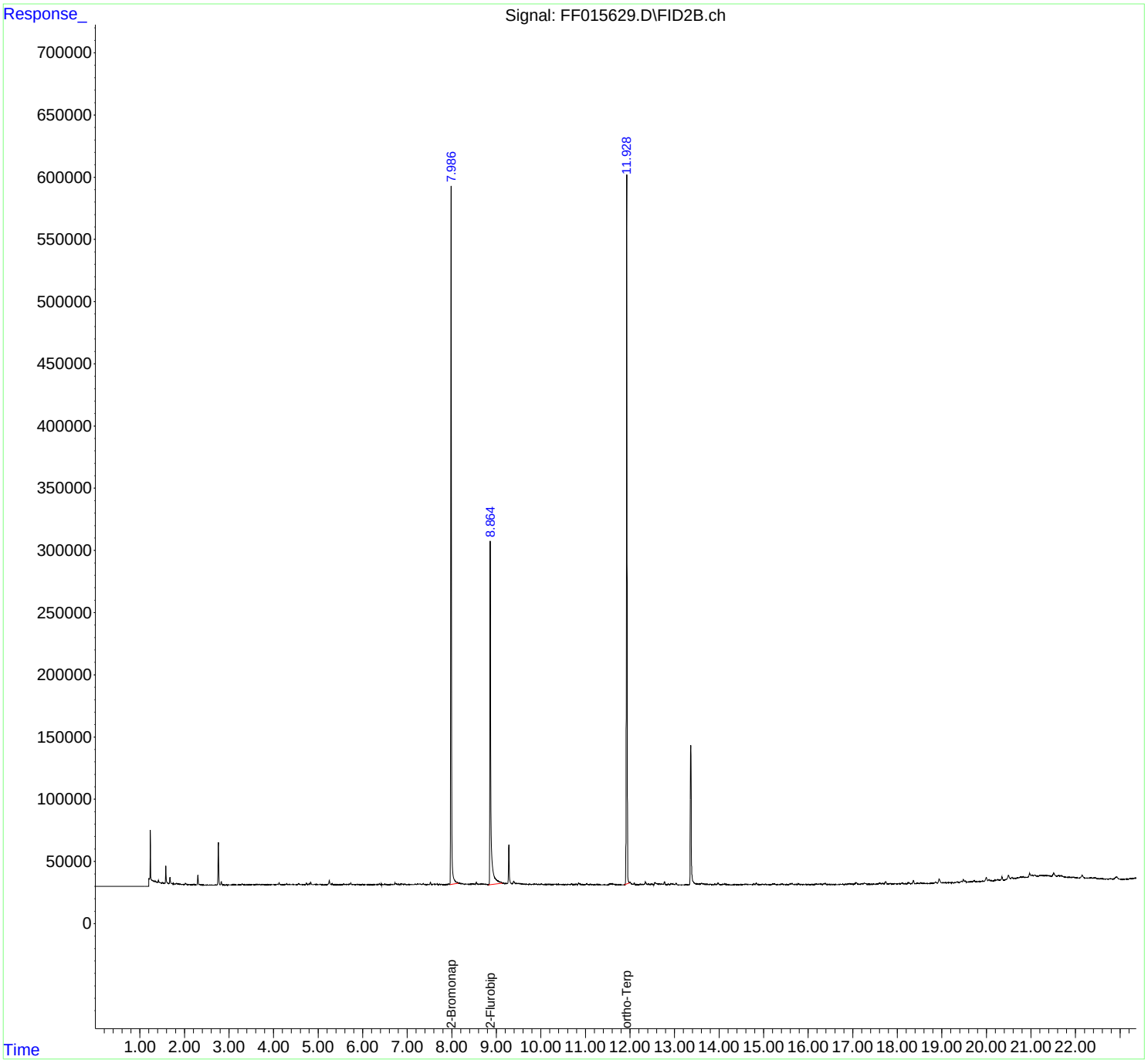
Quantitation Report (QT Reviewed)

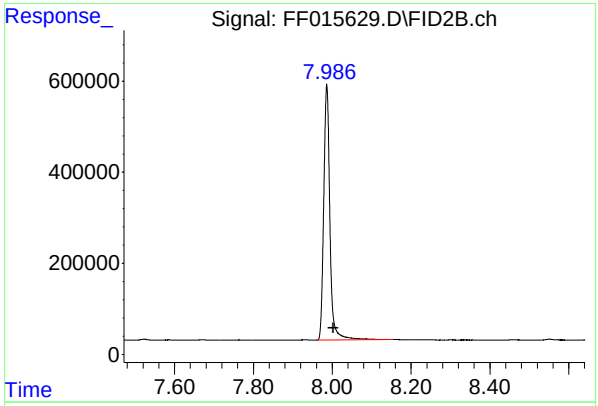
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015629.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 16:47
Operator : YP\AJ
Sample : PB167058BL
Misc :
ALS Vial : 71 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB167058BL

Integration File: autoint1.e
Quant Time: Mar 11 03:21:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
Response via : Initial Calibration
Integrator: ChemStation

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

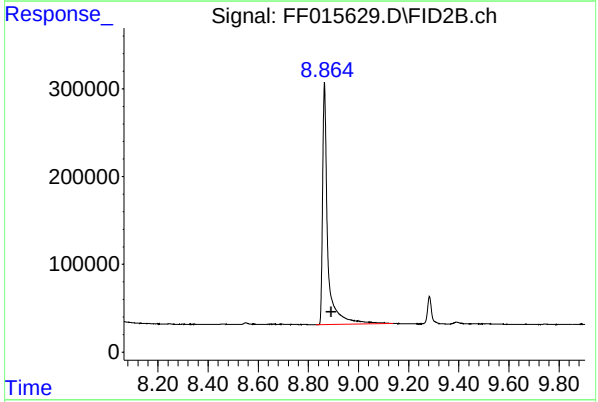




#4 2-Bromonaphthalene (SURR)

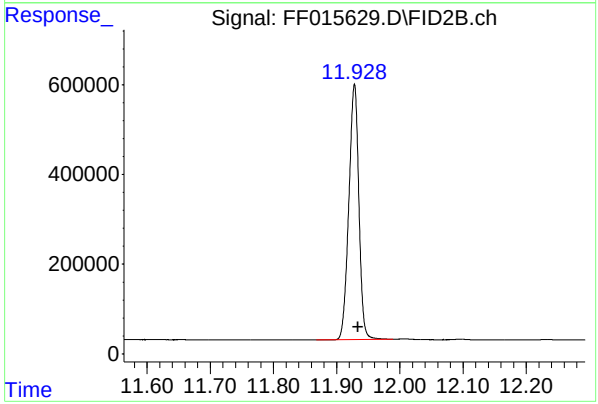
R.T.: 7.986 min
Delta R.T.: -0.017 min
Response: 6103809
Conc: 52.43 ug/ml

Instrument :
FID_F
ClientSampleId :
PB167058BL



#6 2-Flurobiphenyl (SURR)

R.T.: 8.864 min
Delta R.T.: -0.027 min
Response: 3965538
Conc: 55.67 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.928 min
Delta R.T.: -0.005 min
Response: 6277057
Conc: 42.67 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015629.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 16:47
Sample : PB167058BL
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	7.986	7.959	8.154	BB	561935	6103809	97.24%	37.340%
2	8.864	8.831	9.137	BB	275614	3965538	63.18%	24.259%
3	11.928	11.867	11.989	BV	569136	6277057	100.00%	38.400%

Sum of corrected areas: 16346404

Aromatic EPH 022625.M Tue Mar 11 03:57:44 2025

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167058BL	SDG No.:	Q1488
Lab Sample ID:	PB167058BL	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
03/10/25 09:20	03/10/25 20:02	PB167058

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	FE052708.D
Aliphatic C12-C16	Aliphatic C12-C16	0.24	U	1	0.24	0.67	mg/kg	FE052708.D
Aliphatic C16-C21	Aliphatic C16-C21	0.30	U	1	0.30	1.00	mg/kg	FE052708.D
Aliphatic C21-C28	Aliphatic C21-C28	0.80	U	1	0.80	1.33	mg/kg	FE052708.D
Aliphatic C28-C40	Aliphatic C28-C40	1.80	U	1	1.80	2.00	mg/kg	FE052708.D
Aromatic C10-C12	Aromatic C10-C12	0.30	U	1	0.30	0.67	mg/kg	FF015629.D
Aromatic C12-C16	Aromatic C12-C16	0.34	U	1	0.34	1.00	mg/kg	FF015629.D
Aromatic C16-C21	Aromatic C16-C21	0.96	U	1	0.96	1.67	mg/kg	FF015629.D
Aromatic C21-C36	Aromatic C21-C36	2.00	U	1	2.00	2.67	mg/kg	FF015629.D
Total AliphaticEPH	Total AliphaticEPH	3.52	U		3.52	6.00	mg/kg	
Total AromaticEPH	Total AromaticEPH	3.60	U		3.60	6.01	mg/kg	
Total EPH	Total EPH	7.12	U		7.12	12.0	mg/kg	

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

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

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167058BL	SDG No.:	Q1488
Lab Sample ID:	PB167058BL	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
FE052708.D	1	03/10/25	03/10/25	PB167058

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)		37.1		40 - 140	74%	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:	PB167058BL	Acq On:	10 Mar 2025 20:02
Client Sample ID:	PB167058BL	Operator:	YP\AJ
Data file:	FE052708.D	Misc:	
Instrument:	FID_E	ALS Vial:	19
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.151	6.796	0	0	300	ug/ml
Aliphatic C12-C16	6.797	10.250	0	0	200	ug/ml
Aliphatic C16-C21	10.251	13.630	0	0	300	ug/ml
Aliphatic C21-C28	13.631	17.305	0	0	400	ug/ml
Aliphatic C28-C40	17.306	22.234	0	0	600	ug/ml
Aliphatic EPH	3.151	22.234	0	0		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.358	13.358	4505970	37.11		ug/ml
Aliphatic C9-C28	3.151	17.305	0	0	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052708.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 20:02
Operator : YP\AJ
Sample : PB167058BL
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB167058BL

Integration File: autoint1.e
Quant Time: Mar 11 05:22:08 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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...	13.358	4505970	37.109 ug/ml
Spiked Amount 50.000		Recovery = 74.22%	
Target Compounds			

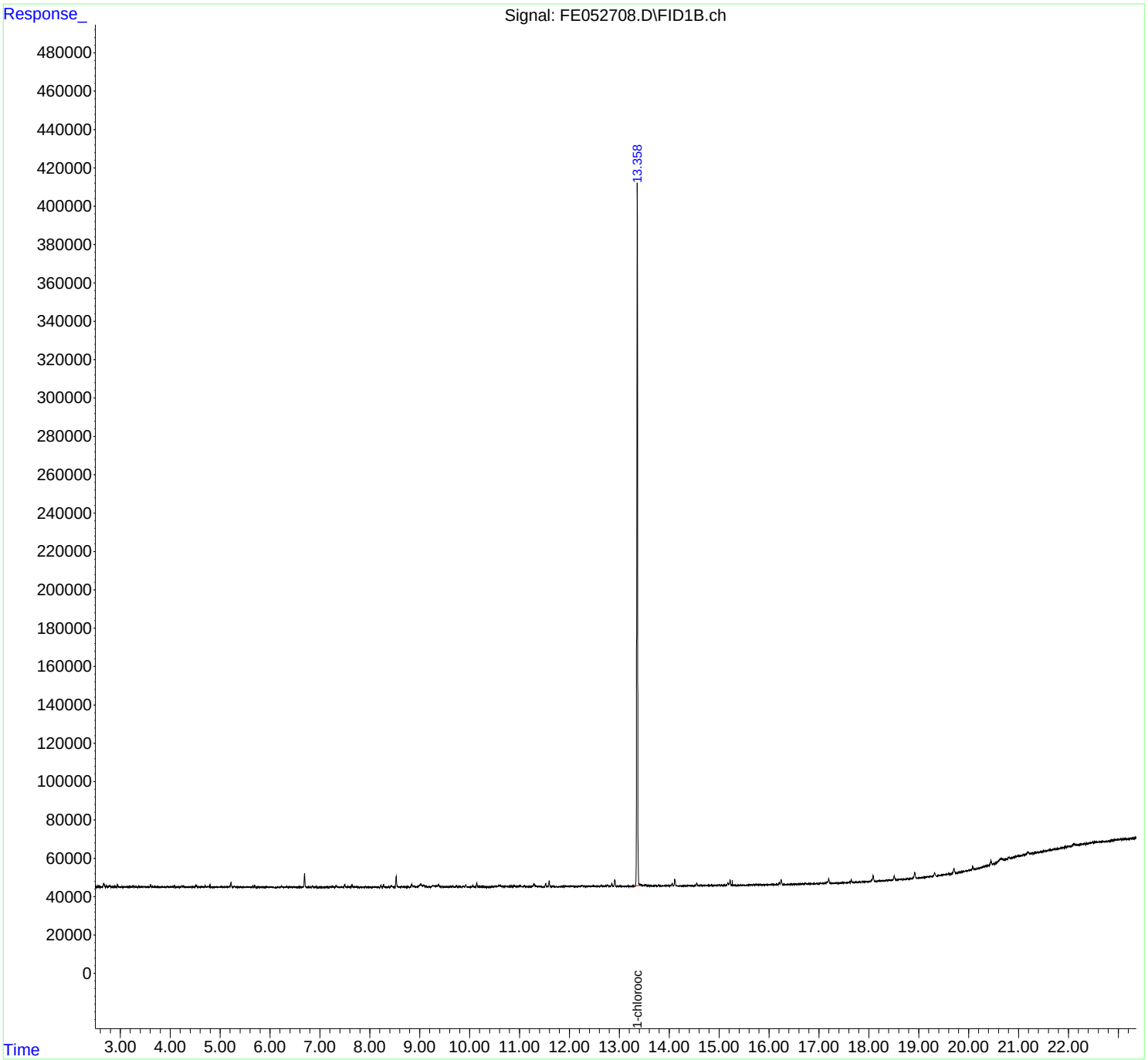
(f)=RT Delta > 1/2 Window (m)=manual int.

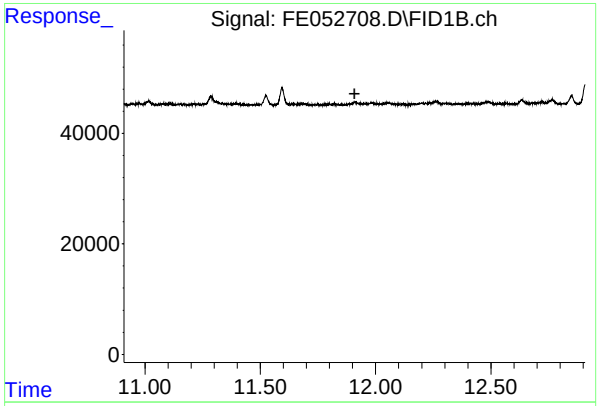
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052708.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 20:02
Operator : YP\AJ
Sample : PB167058BL
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB167058BL

Integration File: autoint1.e
Quant Time: Mar 11 05:22:08 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

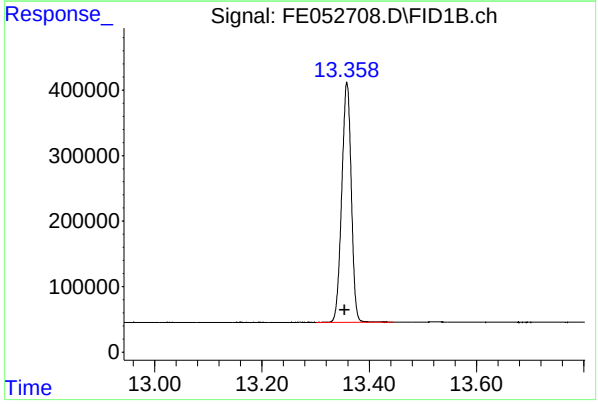




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.909 min
Response: 0
Conc: N.D.

Instrument :
FID_E
ClientSampleId :
PB167058BL



#12 1-chlorooctadecane (SURR)

R.T.: 13.358 min
Delta R.T.: 0.004 min
Response: 4505970
Conc: 37.11 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052708.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 20:02
Sample : PB167058BL
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.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	13.358	13.301	13.444	BB	366698	4505970	100.00%	100.000%

Sum of corrected areas: 4505970

Aliphatic EPH 030325.M Tue Mar 11 06:18:58 2025

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB166976BS	SDG No.:	Q1488
Lab Sample ID:	PB166976BS	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
03/05/25 08:25	03/05/25 16:35	PB166976

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	152		1	5.76	30.0	ug/l	FC068370.D
Aliphatic C12-C16	Aliphatic C12-C16	152		1	3.61	20.0	ug/l	FC068370.D
Aliphatic C16-C21	Aliphatic C16-C21	262		1	5.14	30.0	ug/l	FC068370.D
Aliphatic C21-C28	Aliphatic C21-C28	362		1	8.97	40.0	ug/l	FC068370.D
Aliphatic C28-C40	Aliphatic C28-C40	596		1	17.0	60.0	ug/l	FC068370.D
Aromatic C10-C12	Aromatic C10-C12	149		1	3.32	20.0	ug/l	FD049160.D
Aromatic C12-C16	Aromatic C12-C16	274		1	3.69	30.0	ug/l	FD049160.D
Aromatic C16-C21	Aromatic C16-C21	525		1	12.7	50.0	ug/l	FD049160.D
Aromatic C21-C36	Aromatic C21-C36	822		1	25.2	80.0	ug/l	FD049160.D
Total AliphaticEPH	Total AliphaticEPH	1520			40.5	180	ug/l	
Total AromaticEPH	Total AromaticEPH	1770			44.9	180	ug/l	
Total EPH	Total EPH	3290			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 2025		Date Received:		
Client Sample ID:	PB166976BS		SDG No.:	Q1488	
Lab Sample ID:	PB166976BS		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
FC068370.D	1	03/05/25	03/05/25	PB166976

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	152		5.76	30.0	ug/l
Aliphatic C12-C16	Aliphatic C12-C16	152		3.61	20.0	ug/l
Aliphatic C16-C21	Aliphatic C16-C21	262		5.14	30.0	ug/l
Aliphatic C21-C28	Aliphatic C21-C28	362		8.97	40.0	ug/l
Aliphatic C28-C40	Aliphatic C28-C40	596		17.0	60.0	ug/l
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	43.4		40 - 140	87%	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:	PB166976BS	Acq On:	05 Mar 2025 16:35
Client Sample ID:	PB166976BS	Operator:	YP/AJ
Data file:	FC068370.D	Misc:	
Instrument:	FID_C	ALS Vial:	12
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.102	6.366	10726225	76.053	300	ug/ml
Aliphatic C12-C16	6.367	9.749	10409797	76.176	200	ug/ml
Aliphatic C16-C21	9.750	13.103	17289732	131.35	300	ug/ml
Aliphatic C21-C28	13.104	16.755	22226859	181.161	400	ug/ml
Aliphatic C28-C40	16.756	21.556	30680533	298.314	600	ug/ml
Aliphatic EPH	3.102	21.556	91333146	763.054		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.835	12.835	4883798	43.42		ug/ml
Aliphatic C9-C28	3.102	16.755	60652613	464.74	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068370.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 16:35
Operator : YP/AJ
Sample : PB166976BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB166976BS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 03/06/2025
Supervised By :mohammad ahmed 03/07/2025

Integration File: autoint1.e
Quant Time: Mar 05 22:32:43 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
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...	12.835	4883798	43.421 ug/ml
Spiked Amount	50.000		Recovery =	86.84%
	Target Compounds			
1) T	n-Nonane (C9)	3.203	2827544	20.100 ug/mlm
2) T	n-Decane (C10)	4.259	3559909	25.128 ug/ml
4) T	n-Dodecane (C12)	6.267	4529774	32.181 ug/ml
6) T	n-Tetradecane (C14)	8.055	5054909	37.075 ug/ml
7) T	n-Hexadecane (C16)	9.651	5354888	39.097 ug/ml
8) T	n-Octadecane (C18)	11.088	5591448	40.886 ug/ml
10) T	n-Eicosane (C20)	12.395	5948137	45.654 ug/ml
11) T	n-Heneicosane (C21)	13.005	5750147	44.977 ug/ml
13) T	n-Docosane (C22)	13.591	5722955	45.410 ug/ml
14) T	n-Tetracosane (C24)	14.692	5629723	45.263 ug/ml
15) T	n-Hexacosane (C26)	15.709	5518200	45.383 ug/ml
16) T	n-Octacosane (C28)	16.659	5355981	45.096 ug/ml
17) T	n-Tricontane (C30)	17.544	5374125	44.648 ug/ml
18) T	n-Dotriacontane (C32)	18.375	5335525	45.969 ug/ml
19) T	n-Tetratriacontane (C34)	19.159	5236268	48.458 ug/ml
20) T	n-Hexatriacontane (C36)	19.897	5035566	52.362 ug/ml
21) T	n-Octatriacontane (C38)	20.609	4926005	54.796 ug/ml
22) T	n-Tetracontane (C40)	21.459	4773044	55.167 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068370.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 16:35
Operator : YP/AJ
Sample : PB166976BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

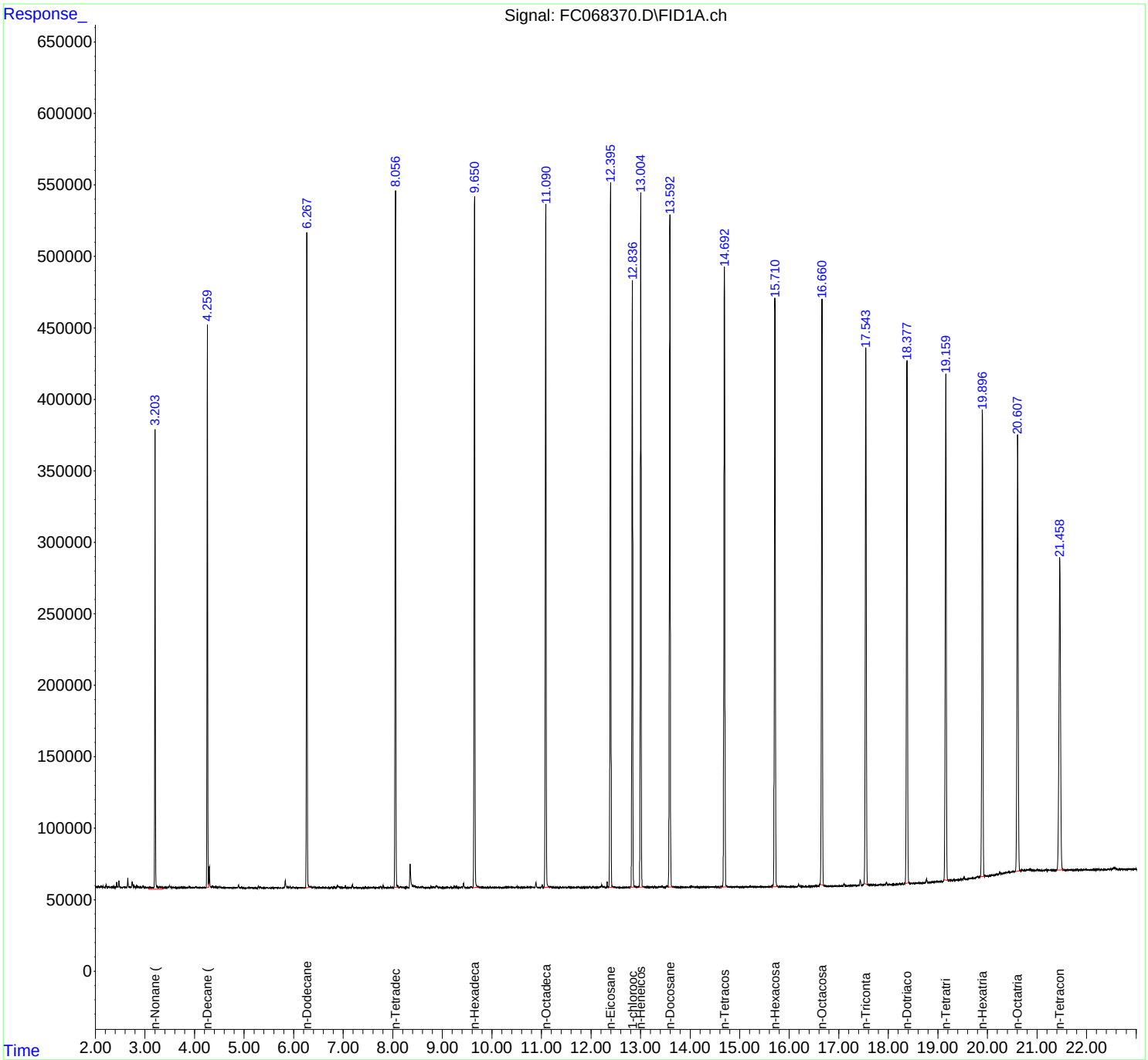
Instrument :
FID_C
ClientSampleId :
PB166976BS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 03/06/2025
Supervised By :mohammad ahmed 03/07/2025

Integration File: autoint1.e
Quant Time: Mar 05 22:32:43 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

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



Instrument :
FID_C
ClientSampleId :
PB166976BS

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 03/06/2025
Supervised By :mohammad ahmed 03/07/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC03052
Data File : FC068370.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 16:35
Sample : PB166976BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.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	3.203	3.171	3.264	BB	314530	2636542	44.33%	2.740%
2	4.259	4.228	4.283	BV	391552	3559909	59.85%	3.700%
3	6.267	6.228	6.331	BB	459065	4529774	76.15%	4.708%
4	8.055	8.028	8.124	BB	484233	5054909	84.98%	5.254%
5	9.651	9.611	9.728	BB	484057	5354888	90.03%	5.565%
6	11.088	11.051	11.164	BB	478566	5591448	94.00%	5.811%
7	12.395	12.354	12.458	BB	490147	5948137	100.00%	6.182%
8	12.835	12.771	12.898	BB	419014	4883798	82.11%	5.076%
9	13.005	12.961	13.068	BB	483011	5750147	96.67%	5.976%
10	13.591	13.551	13.654	BB	466071	5722955	96.21%	5.948%
11	14.692	14.611	14.754	BB	433349	5629723	94.65%	5.851%
12	15.709	15.631	15.774	BB	412568	5518200	92.77%	5.735%
13	16.659	16.621	16.699	BBA	401245	5355981	90.04%	5.567%
14	17.544	17.508	17.576	BBA	374770	5374125	90.35%	5.585%
15	18.375	18.321	18.409	BBA	362149	5335525	89.70%	5.545%
16	19.159	19.121	19.221	BB	349323	5236268	88.03%	5.442%
17	19.897	19.851	19.948	BB	324621	5035566	84.66%	5.234%
18	20.609	20.551	20.671	BB	302419	4926005	82.82%	5.120%
19	21.459	21.391	21.548	BB	217673	4773044	80.24%	4.961%
			Sum of corrected areas:			96216942		

Aliphatic EPH 021125.M Wed Mar 05 23:06:20 2025

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 2025		Date Received:		
Client Sample ID:	PB166976BS		SDG No.:	Q1488	
Lab Sample ID:	PB166976BS		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
FD049160.D	1	03/05/25	03/05/25	PB166976

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	149		3.32	20.0	ug/l
Aromatic C12-C16	Aromatic C12-C16	274		3.69	30.0	ug/l
Aromatic C16-C21	Aromatic C16-C21	525		12.7	50.0	ug/l
Aromatic C21-C36	Aromatic C21-C36	822		25.2	80.0	ug/l
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	59.1		40 - 140	118%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	57.5		40 - 140	115%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	52.0		40 - 140	104%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB166976BS	Acq On:	05 Mar 2025 16:35
Client Sample ID:	PB166976BS	Operator:	YP/AJ
Data file:	FD049160.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	4.075	5.793	11902233	74.847	200	ug/ml
Aromatic C12-C16	5.794	8.395	22111113	137.391	300	ug/ml
Aromatic C16-C21	8.396	12.660	40328564	262.968	500	ug/ml
Aromatic C21-C36	12.661	18.072	58861958	411.292	800	ug/ml
Aromatic EPH	4.075	18.072	133203868	886.498		ug/ml
2-Bromonaphthalene (SURR)	7.351	7.351	8453892	59.07		ug/ml
2-Flurobiphenyl (SURR)	8.202	8.202	5054241	57.49		ug/ml
ortho-Terphenyl (SURR)	11.236	11.236	8417347	52.03		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049160.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 16:35
Operator : YP/AJ
Sample : PB166976BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB166976BS

Integration File: autoint1.e
Quant Time: Mar 05 23:29:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
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...	7.351	8453892	59.073 ug/ml
Spiked Amount	50.000		Recovery =	118.15%
6) S	2-Flurobiphenyl (SURR)	8.202	5054241	57.492 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	114.98%
11) S	ortho-Terphenyl (SURR)	11.236	8417347	52.031 ug/ml
Spiked Amount	50.000		Recovery =	104.06%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.175	5552142	34.864 ug/ml
2) T	Naphthalene (C11.7)	5.691	6350091	39.991 ug/ml
3) T	2-Methylnaphthalene (...	6.738	6465727	41.529 ug/ml
5) T	Acenaphthylene (C15.06)	8.004	7500307	46.126 ug/ml
7) T	Acenaphthene (C15.5)	8.299	8145079	49.512 ug/ml
8) T	Flouorene (C16.55)	9.077	7912127	50.188 ug/ml
9) T	Phenanthrene (C19.36)	10.465	7970215	52.888 ug/ml
10) T	Anthracene (C19.43)	10.541	8037215	53.217 ug/ml
12) T	Fluoranthene (C21.85)	12.270	8243131	53.418 ug/ml
13) T	Pyrene (C20.8)	12.563	8165876	53.005 ug/ml
14) T	Benzo[a]anthracene (C...	14.435	7533013	57.333 ug/ml
15) T	Chrysene (C27.41)	14.476	7422754	45.908 ug/ml
16) T	benzo[b]fluoranthene ...	15.984	7569764	55.015 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.018	7928873	50.201 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.359	7273189	53.583 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.728	6578388	60.199 ug/ml
20) T	Dibenz[a,h]anthracene...	17.762	7368166	47.494 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.979	7187811	49.588 ug/ml

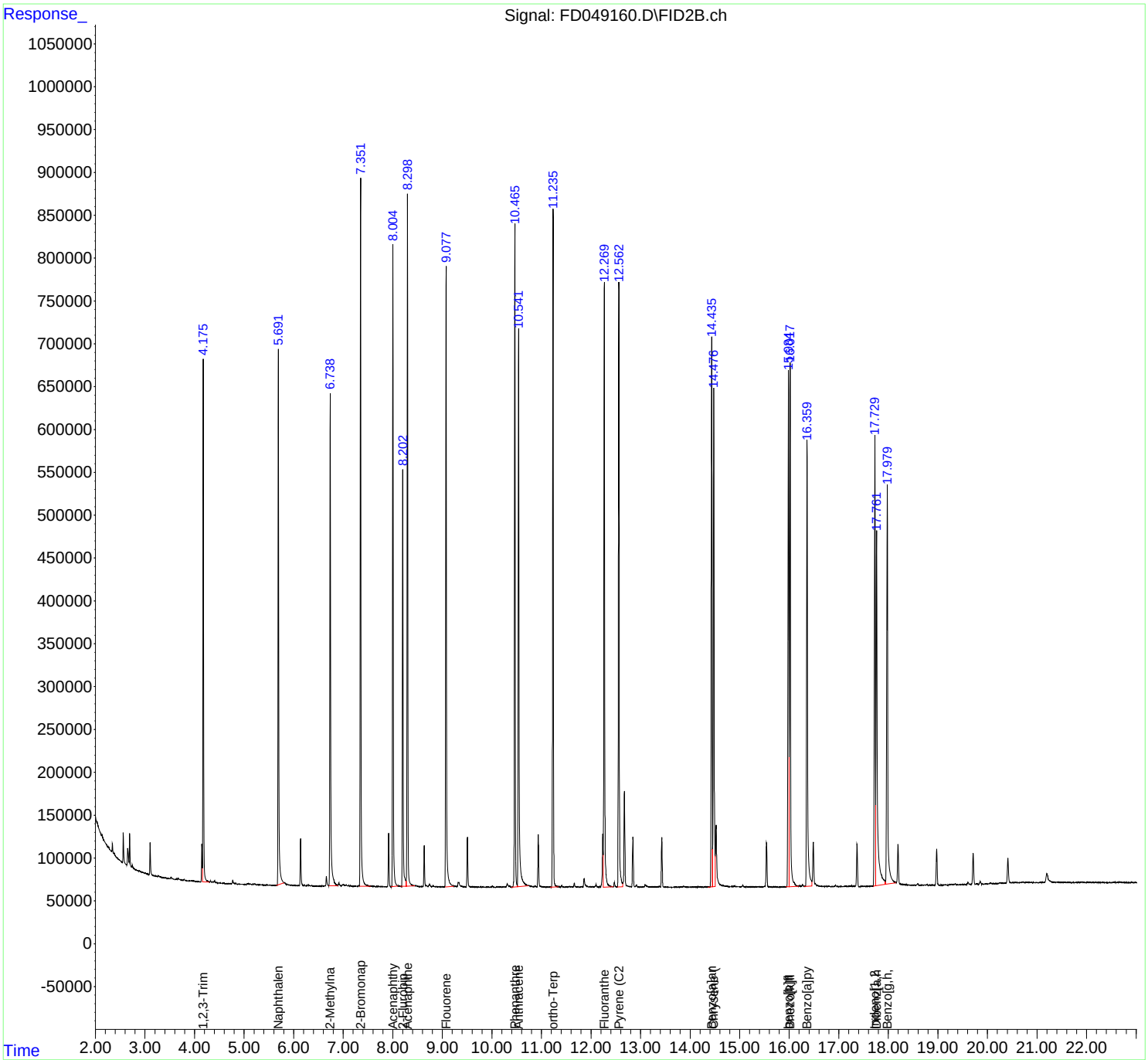
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049160.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 16:35
Operator : YP/AJ
Sample : PB166976BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB166976BS

Integration File: autoint1.e
Quant Time: Mar 05 23:29:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
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\FD030525AR\
Data File : FD049160.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 16:35
Sample : PB166976BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.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	4.175	4.159	4.299	VV	609832	5552142	65.68%	3.579%
2	5.691	5.645	5.806	BV	625008	6350091	75.11%	4.093%
3	6.738	6.709	6.890	BV	574734	6465727	76.48%	4.168%
4	7.351	7.327	7.554	VB	826973	8453892	100.00%	5.450%
5	8.004	7.960	8.105	BV	747937	7500307	88.72%	4.835%
6	8.202	8.149	8.270	BV	485727	5054241	59.79%	3.258%
7	8.299	8.270	8.444	VV	808027	8145079	96.35%	5.251%
8	9.077	9.052	9.232	PV	723637	7912127	93.59%	5.100%
9	10.465	10.390	10.513	BV	774039	7970215	94.28%	5.138%
10	10.541	10.513	10.739	VV	650563	8037215	95.07%	5.181%
11	11.236	11.172	11.345	BB	790904	8417347	99.57%	5.426%
12	12.270	12.247	12.444	VB	706154	8243131	97.51%	5.314%
13	12.563	12.525	12.639	BV	705656	8165876	96.59%	5.264%
14	14.435	14.359	14.453	BV	642640	7533013	89.11%	4.856%
15	14.476	14.453	14.507	VV	579499	7422754	87.80%	4.785%
16	15.984	15.930	15.998	BV	598874	7569764	89.54%	4.880%
17	16.018	15.998	16.197	VV	612039	7928873	93.79%	5.111%
18	16.359	16.295	16.457	PV	520603	7273189	86.03%	4.688%
19	17.728	17.690	17.743	BV	525918	6578388	77.81%	4.241%
20	17.762	17.743	17.940	VV	413708	7368166	87.16%	4.750%
21	17.979	17.940	18.160	VV	465448	7187811	85.02%	4.633%

Sum of corrected areas: 155129349

Aromatic EPH 021125.M Wed Mar 05 23:50:07 2025

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 2025	Date Received:	
Client Sample ID:	PB167058BS	SDG No.:	Q1488
Lab Sample ID:	PB167058BS	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
03/10/25 09:20	03/10/25 20:32	PB167058

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	5.47		1	0.38	1.00	mg/kg	FE052709.D
Aliphatic C12-C16	Aliphatic C12-C16	5.36		1	0.24	0.67	mg/kg	FE052709.D
Aliphatic C16-C21	Aliphatic C16-C21	9.08		1	0.30	1.00	mg/kg	FE052709.D
Aliphatic C21-C28	Aliphatic C21-C28	12.1		1	0.80	1.33	mg/kg	FE052709.D
Aliphatic C28-C40	Aliphatic C28-C40	20.4		1	1.80	2.00	mg/kg	FE052709.D
Aromatic C10-C12	Aromatic C10-C12	5.59		1	0.30	0.67	mg/kg	FF015630.D
Aromatic C12-C16	Aromatic C12-C16	9.97		1	0.34	1.00	mg/kg	FF015630.D
Aromatic C16-C21	Aromatic C16-C21	19.4		1	0.96	1.67	mg/kg	FF015630.D
Aromatic C21-C36	Aromatic C21-C36	29.9		1	2.00	2.66	mg/kg	FF015630.D
Total AliphaticEPH	Total AliphaticEPH	52.4			3.52	5.99	mg/kg	
Total AromaticEPH	Total AromaticEPH	64.9			3.60	6.00	mg/kg	
Total EPH	Total EPH	117			7.12	12.0	mg/kg	

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

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

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167058BS	SDG No.:	Q1488
Lab Sample ID:	PB167058BS	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
FE052709.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	5.47		0.38	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	5.36		0.24	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	9.08		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	20.4		1.80	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	42.3		40 - 140	85%	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:	PB167058BS	Acq On:	10 Mar 2025 20:32
Client Sample ID:	PB167058BS	Operator:	YP\AJ
Data file:	FE052709.D	Misc:	
Instrument:	FID_E	ALS Vial:	20
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.151	6.796	12795551	82.05	300	ug/ml
Aliphatic C12-C16	6.797	10.250	12235580	80.445	200	ug/ml
Aliphatic C16-C21	10.251	13.630	19964697	136.233	300	ug/ml
Aliphatic C21-C28	13.631	17.305	25917745	181.94	400	ug/ml
Aliphatic C28-C40	17.306	22.234	39077191	306.274	600	ug/ml
Aliphatic EPH	3.151	22.234	109990764	786.942		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.359	13.359	5139492	42.33		ug/ml
Aliphatic C9-C28	3.151	17.305	70913573	480.668	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052709.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 20:32
Operator : YP\AJ
Sample : PB167058BS
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB167058BS

Integration File: autoint1.e
Quant Time: Mar 11 05:22:28 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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...	13.359	5139492	42.326 ug/ml
Spiked Amount	50.000		Recovery =	84.65%
	Target Compounds			
1) T	n-Nonane (C9)	3.251	3149781	20.315 ug/ml
2) T	n-Decane (C10)	4.513	4262023	27.130 ug/ml
4) T	n-Dodecane (C12)	6.694	5383747	34.578 ug/ml
6) T	n-Tetradecane (C14)	8.532	5974264	39.484 ug/ml
7) T	n-Hexadecane (C16)	10.148	6261316	40.954 ug/ml
8) T	n-Octadecane (C18)	11.598	6613379	43.469 ug/ml
10) T	n-Eicosane (C20)	12.913	6807737	46.894 ug/ml
11) T	n-Heneicosane (C21)	13.527	6543581	45.975 ug/ml
13) T	n-Docosane (C22)	14.116	6550624	46.031 ug/ml
14) T	n-Tetracosane (C24)	15.223	6506786	45.467 ug/ml
15) T	n-Hexacosane (C26)	16.248	6455544	45.400 ug/ml
16) T	n-Octacosane (C28)	17.200	6404791	45.042 ug/ml
17) T	n-Tricontane (C30)	18.091	6509204	44.070 ug/ml
18) T	n-Dotriacontane (C32)	18.926	6546250	45.091 ug/ml
19) T	n-Tetratriacontane (C34)	19.712	6565176	48.711 ug/ml
20) T	n-Hexatriacontane (C36)	20.454	6469074	54.443 ug/ml
21) T	n-Octatriacontane (C38)	21.199	6501240	58.603 ug/ml
22) T	n-Tetracontane (C40)	22.123	6486247	59.993 ug/ml

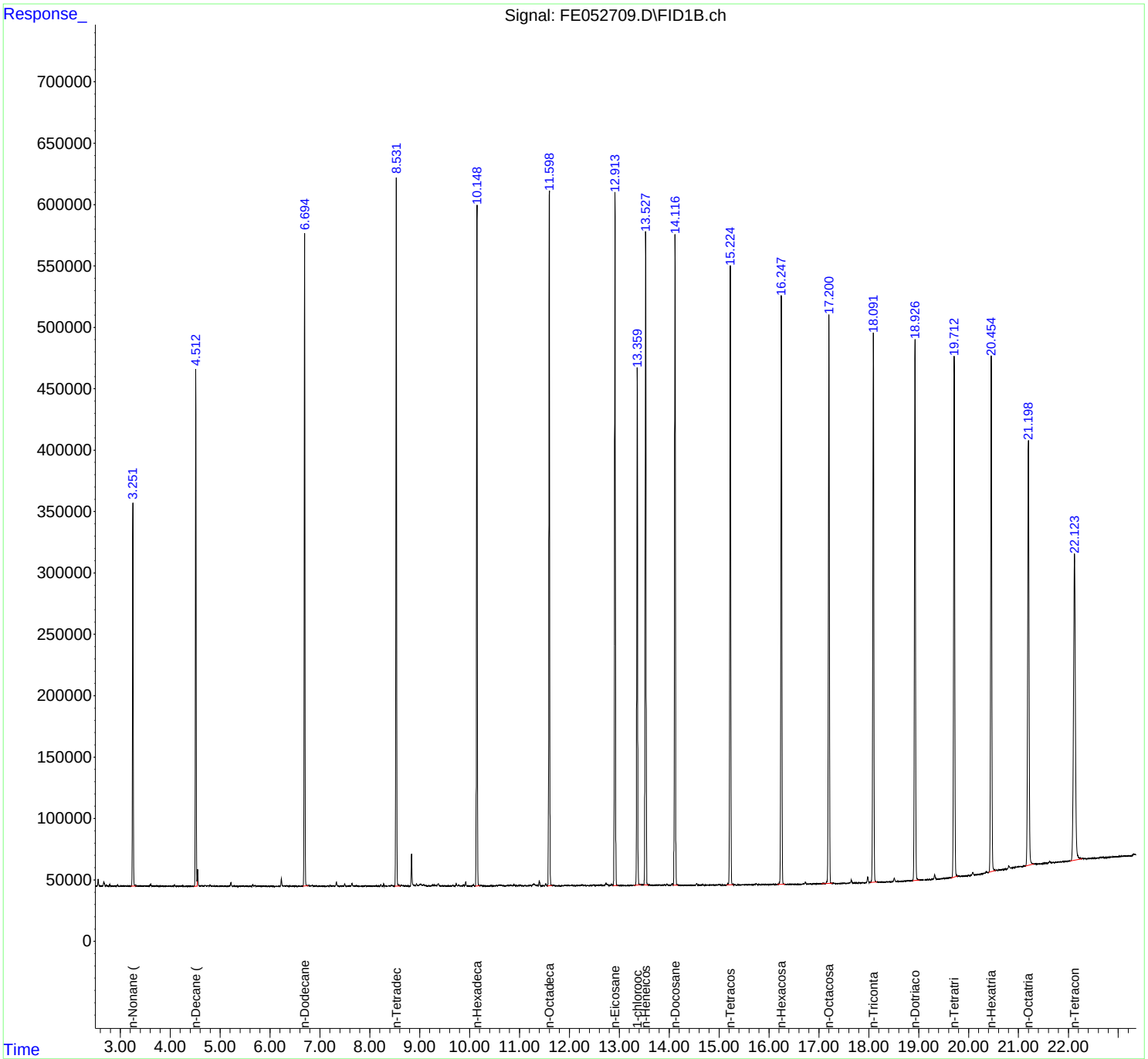
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052709.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 20:32
Operator : YP\AJ
Sample : PB167058BS
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB167058BS

Integration File: autoint1.e
Quant Time: Mar 11 05:22:28 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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\FE031025AL\
Data File : FE052709.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 20:32
Sample : PB167058BS
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.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	3.251	3.215	3.318	BB	312332	3149781	46.27%	2.736%
2	4.513	4.475	4.537	BV	419371	4262023	62.61%	3.702%
3	6.694	6.658	6.758	BB	531950	5383747	79.08%	4.676%
4	8.532	8.495	8.605	BB	574343	5974264	87.76%	5.189%
5	10.148	10.108	10.205	BB	554166	6261316	91.97%	5.438%
6	11.598	11.555	11.658	PB	566127	6613379	97.15%	5.744%
7	12.913	12.873	12.975	PB	566176	6807737	100.00%	5.913%
8	13.359	13.295	13.431	BB	420903	5139492	75.49%	4.464%
9	13.527	13.488	13.588	BB	534779	6543581	96.12%	5.684%
10	14.116	14.077	14.175	VB	526836	6550624	96.22%	5.690%
11	15.223	15.145	15.285	BB	506210	6506786	95.58%	5.652%
12	16.248	16.168	16.325	BB	480474	6455544	94.83%	5.607%
13	17.200	17.051	17.268	BB	456860	6404791	94.08%	5.563%
14	18.091	18.025	18.165	BB	448088	6509204	95.61%	5.654%
15	18.926	18.871	19.021	BB	440846	6546250	96.16%	5.686%
16	19.712	19.651	19.778	BB	422178	6565176	96.44%	5.702%
17	20.454	20.401	20.548	BB	420660	6469074	95.03%	5.619%
18	21.199	21.131	21.311	BB	345771	6501240	95.50%	5.647%
19	22.123	22.041	22.275	BB	249504	6486247	95.28%	5.634%

Sum of corrected areas: 115130255

Aliphatic EPH 030325.M Tue Mar 11 06:18:41 2025

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 2025		Date Received:		
Client Sample ID:	PB167058BS		SDG No.:	Q1488	
Lab Sample ID:	PB167058BS		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
FF015630.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	5.59		0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	9.97		0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	19.4		0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	29.9		2.00	2.66	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	66.2		40 - 140	132%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	67.6		40 - 140	135%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	55.5		40 - 140	111%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB167058BS	Acq On:	10 Mar 2025 17:17
Client Sample ID:	PB167058BS	Operator:	YP\AJ
Data file:	FF015630.D	Misc:	
Instrument:	FID_F	ALS Vial:	72
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.505	6.377	10770670	83.909	200	ug/ml
Aromatic C12-C16	6.378	9.069	20479452	149.703	300	ug/ml
Aromatic C16-C21	9.070	13.390	38746853	291.244	500	ug/ml
Aromatic C21-C36	13.391	18.845	58466361	449.548	800	ug/ml
Aromatic EPH	4.505	18.845	128463336	974.405		ug/ml
ortho-Terphenyl (SURR)	11.934	11.934	8163013	55.49		ug/ml
2-Bromonaphthalene (SURR)	7.996	7.996	7701341	66.15		ug/ml
2-Flurobiphenyl (SURR)	8.873	8.873	4814742	67.59		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015630.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 17:17
Operator : YP\AJ
Sample : PB167058BS
Misc :
ALS Vial : 72 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB167058BS

Integration File: autoint1.e
Quant Time: Mar 11 03:22:19 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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...	7.996	7701341	66.154 ug/ml
Spiked Amount	50.000		Recovery =	132.31%
6) S	2-Flurobiphenyl (SURR)	8.873	4814742	67.593 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	135.19%#
11) S	ortho-Terphenyl (SURR)	11.934	8163013	55.492 ug/ml
Spiked Amount	50.000		Recovery =	110.98%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.602	5019387	38.881 ug/ml
2) T	Naphthalene (C11.7)	6.273	5751283	45.064 ug/ml
3) T	2-Methylnaphthalene (...	7.369	5893791	46.547 ug/ml
5) T	Acenaphthylene (C15.06)	8.671	7008327	49.580 ug/ml
7) T	Acenaphthene (C15.5)	8.970	7577334	53.201 ug/ml
8) T	Flouorene (C16.55)	9.761	7521898	56.529 ug/ml
9) T	Phenanthrene (C19.36)	11.169	7647213	58.790 ug/ml
10) T	Anthracene (C19.43)	11.245	7699079	61.469 ug/ml
12) T	Fluoranthene (C21.85)	12.994	7965097	56.402 ug/ml
13) T	Pyrene (C20.8)	13.292	7913566	55.045 ug/ml
14) T	Benzo[a]anthracene (C...	15.177	7357313	62.634 ug/ml
15) T	Chrysene (C27.41)	15.220	8751942	58.595 ug/ml
16) T	benzo[b]fluoranthene ...	16.741	7278110	55.883 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.774	7689052	51.530 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.121	6782739	53.447 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.500	6800974	66.444 ug/ml
20) T	Dibenz[a,h]anthracene...	18.532	6920863	53.527 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.755	6885368	55.330 ug/ml

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

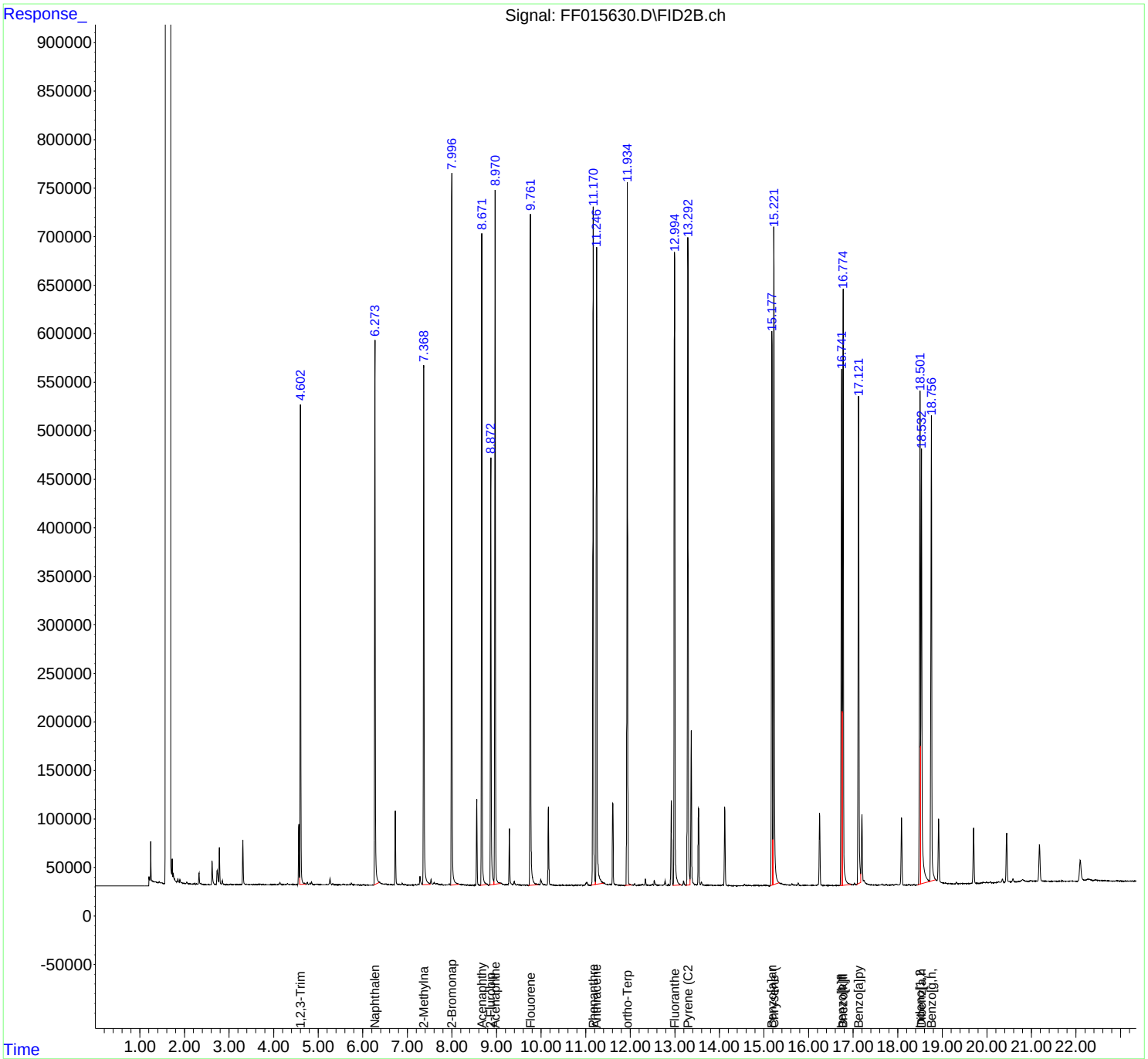
Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015630.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 17:17
Operator : YP\AJ
Sample : PB167058BS
Misc :
ALS Vial : 72 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB167058BS

Integration File: autoint1.e
Quant Time: Mar 11 03:22:19 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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_F\Data\FF031025AR\
Data File : FF015630.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 17:17
Sample : PB167058BS
Misc :
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	4.602	4.582	4.722	VB	495164	5019387	57.35%	3.365%
2	6.273	6.239	6.369	BV	560029	5751283	65.71%	3.856%
3	7.369	7.336	7.512	PV	535731	5893791	67.34%	3.952%
4	7.996	7.969	8.161	PB	732224	7701341	88.00%	5.164%
5	8.671	8.631	8.777	BV	671112	7008327	80.08%	4.699%
6	8.873	8.831	8.942	BV	439329	4814742	55.01%	3.228%
7	8.970	8.942	9.084	VV	716832	7577334	86.58%	5.081%
8	9.761	9.722	9.929	BV	691623	7521898	85.95%	5.043%
9	11.169	11.121	11.219	BV	696492	7647213	87.38%	5.127%
10	11.245	11.219	11.401	VBA	657664	7699079	87.97%	5.162%
11	11.934	11.879	12.034	BB	725105	8163013	93.27%	5.473%
12	12.994	12.960	13.154	VB	654399	7965097	91.01%	5.341%
13	13.292	13.241	13.338	BV	669022	7913566	90.42%	5.306%
14	15.177	15.139	15.197	BV	570426	7357313	84.06%	4.933%
15	15.220	15.197	15.341	VBA	678322	8751942	100.00%	5.868%
16	16.741	16.697	16.756	BV	530938	7278110	83.16%	4.880%
17	16.774	16.756	16.957	VB	610130	7689052	87.86%	5.156%
18	17.121	17.071	17.169	BV	501657	6782739	77.50%	4.548%
19	18.500	18.451	18.514	BV	506273	6800974	77.71%	4.560%
20	18.532	18.514	18.714	VV	447432	6920863	79.08%	4.640%
21	18.755	18.714	18.851	VBA	480926	6885368	78.67%	4.617%

Sum of corrected areas: 149142433

Aromatic EPH 022625.M Tue Mar 11 03:58:51 2025

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 2025	Date Received:	
Client Sample ID:	PB166976BSD	SDG No.:	Q1488
Lab Sample ID:	PB166976BSD	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
03/05/25 08:25	03/05/25 17:12	PB166976

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	152		1	5.76	30.0	ug/l	FC068371.D
Aliphatic C12-C16	Aliphatic C12-C16	152		1	3.61	20.0	ug/l	FC068371.D
Aliphatic C16-C21	Aliphatic C16-C21	263		1	5.14	30.0	ug/l	FC068371.D
Aliphatic C21-C28	Aliphatic C21-C28	362		1	8.97	40.0	ug/l	FC068371.D
Aliphatic C28-C40	Aliphatic C28-C40	597		1	17.0	60.0	ug/l	FC068371.D
Aromatic C10-C12	Aromatic C10-C12	151		1	3.32	20.0	ug/l	FD049161.D
Aromatic C12-C16	Aromatic C12-C16	280		1	3.69	30.0	ug/l	FD049161.D
Aromatic C16-C21	Aromatic C16-C21	534		1	12.7	50.0	ug/l	FD049161.D
Aromatic C21-C36	Aromatic C21-C36	835		1	25.2	80.0	ug/l	FD049161.D
Total AliphaticEPH	Total AliphaticEPH	1530			40.5	180	ug/l	
Total AromaticEPH	Total AromaticEPH	1800			44.9	180	ug/l	
Total EPH	Total EPH	3330			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:		
Project:	Amtrak Sawtooth Bridges 2025		Date Received:		
Client Sample ID:	PB166976BSD		SDG No.:	Q1488	
Lab Sample ID:	PB166976BSD		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
FC068371.D	1	03/05/25	03/05/25	PB166976

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	152		5.76	30.0	ug/l
Aliphatic C12-C16	Aliphatic C12-C16	152		3.61	20.0	ug/l
Aliphatic C16-C21	Aliphatic C16-C21	263		5.14	30.0	ug/l
Aliphatic C21-C28	Aliphatic C21-C28	362		8.97	40.0	ug/l
Aliphatic C28-C40	Aliphatic C28-C40	597		17.0	60.0	ug/l
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	44.4		40 - 140	89%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB166976BSD	Acq On:	05 Mar 2025 17:12
Client Sample ID:	PB166976BSD	Operator:	YP/AJ
Data file:	FC068371.D	Misc:	
Instrument:	FID_C	ALS Vial:	13
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.102	6.366	10720443	76.012	300	ug/ml
Aliphatic C12-C16	6.367	9.749	10433639	76.35	200	ug/ml
Aliphatic C16-C21	9.750	13.103	17366096	131.93	300	ug/ml
Aliphatic C21-C28	13.104	16.755	22265671	181.477	400	ug/ml
Aliphatic C28-C40	16.756	21.556	30721365	298.711	600	ug/ml
Aliphatic EPH	3.102	21.556	91507214	764.481		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.835	12.835	4989985	44.37		ug/ml
Aliphatic C9-C28	3.102	16.755	60785849	465.769	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068371.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 17:12
Operator : YP/AJ
Sample : PB166976BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB166976BSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 03/06/2025
Supervised By :mohammad ahmed 03/07/2025

Integration File: autoint1.e
Quant Time: Mar 05 22:33:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
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...	12.835	4989985	44.366 ug/ml
Spiked Amount	50.000		Recovery =	88.73%
	Target Compounds			
1) T	n-Nonane (C9)	3.202	2915968	20.728 ug/mlm
2) T	n-Decane (C10)	4.259	3555925	25.100 ug/ml
4) T	n-Dodecane (C12)	6.267	4530569	32.187 ug/ml
6) T	n-Tetradecane (C14)	8.055	5057084	37.091 ug/ml
7) T	n-Hexadecane (C16)	9.651	5376555	39.255 ug/ml
8) T	n-Octadecane (C18)	11.089	5618922	41.086 ug/ml
10) T	n-Eicosane (C20)	12.395	5974676	45.858 ug/ml
11) T	n-Heneicosane (C21)	13.005	5772498	45.151 ug/ml
13) T	n-Docosane (C22)	13.591	5744572	45.582 ug/ml
14) T	n-Tetracosane (C24)	14.691	5641632	45.359 ug/ml
15) T	n-Hexacosane (C26)	15.710	5522630	45.419 ug/ml
16) T	n-Octacosane (C28)	16.658	5356837	45.104 ug/ml
17) T	n-Tricontane (C30)	17.544	5380902	44.704 ug/ml
18) T	n-Dotriacontane (C32)	18.375	5335339	45.968 ug/ml
19) T	n-Tetratriacontane (C34)	19.157	5245337	48.542 ug/ml
20) T	n-Hexatriacontane (C36)	19.898	5039804	52.406 ug/ml
21) T	n-Octatriacontane (C38)	20.609	4927229	54.809 ug/ml
22) T	n-Tetracontane (C40)	21.461	4792754	55.394 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC030525AL\
Data File : FC068371.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 17:12
Operator : YP/AJ
Sample : PB166976BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

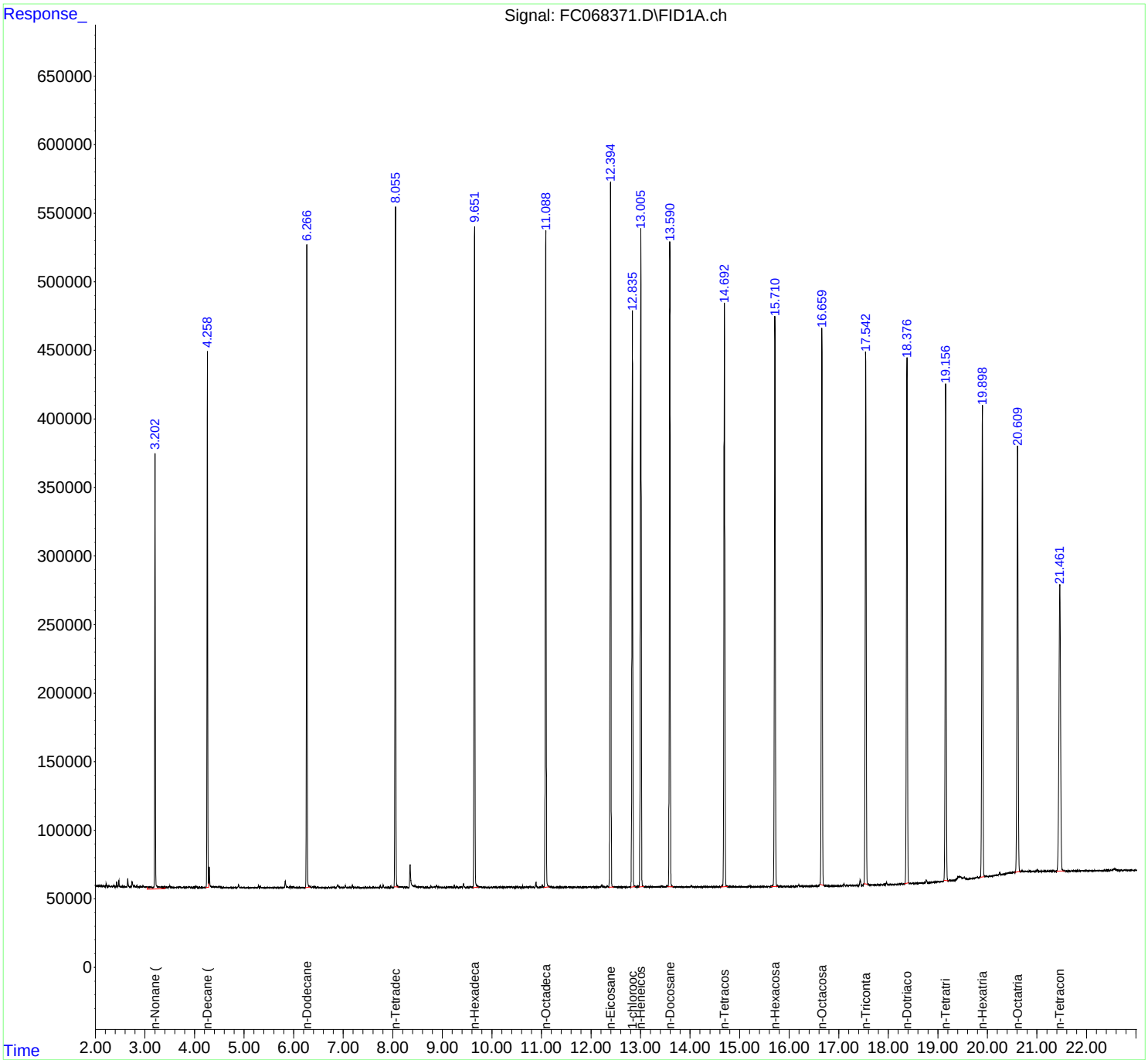
Instrument :
FID_C
ClientSampleId :
PB166976BSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 03/06/2025
Supervised By :mohammad ahmed 03/07/2025

Integration File: autoint1.e
Quant Time: Mar 05 22:33:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

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



Instrument :
FID_C
ClientSampleId :
PB166976BSD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 03/06/2025
Supervised By :mohammad ahmed 03/07/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC03052
Data File : FC068371.D
Signal(s) : FID1A.ch
Acq On : 05 Mar 2025 17:12
Sample : PB166976BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.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	3.202	3.158	3.264	BB	313739	2633949	44.09%	2.730%
2	4.259	4.221	4.283	BV	388220	3555925	59.52%	3.685%
3	6.267	6.231	6.334	BB	469532	4530569	75.83%	4.695%
4	8.055	8.028	8.118	BB	492662	5057084	84.64%	5.241%
5	9.651	9.611	9.728	BB	482972	5376555	89.99%	5.572%
6	11.089	11.051	11.164	BB	477952	5618922	94.05%	5.823%
7	12.395	12.354	12.458	BB	512548	5974676	100.00%	6.192%
8	12.835	12.794	12.898	BB	413822	4989985	83.52%	5.171%
9	13.005	12.964	13.068	BB	470117	5772498	96.62%	5.982%
10	13.591	13.551	13.654	BB	470036	5744572	96.15%	5.953%
11	14.691	14.611	14.754	BB	423710	5641632	94.43%	5.846%
12	15.710	15.631	15.774	BB	417975	5522630	92.43%	5.723%
13	16.658	16.621	16.699	BBA	404529	5356837	89.66%	5.551%
14	17.544	17.508	17.576	BBA	383025	5380902	90.06%	5.576%
15	18.375	18.321	18.409	BBA	382661	5335339	89.30%	5.529%
16	19.158	19.121	19.218	BB	359177	5245337	87.79%	5.436%
17	19.898	19.851	19.941	BB	342461	5039804	84.35%	5.223%
18	20.609	20.551	20.664	BB	305335	4927229	82.47%	5.106%
19	21.461	21.391	21.554	BB	207538	4792754	80.22%	4.967%
			Sum of corrected areas:			96497197		

Aliphatic EPH 021125.M Wed Mar 05 23:07:07 2025

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 2025		Date Received:		
Client Sample ID:	PB166976BSD		SDG No.:	Q1488	
Lab Sample ID:	PB166976BSD		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
FD049161.D	1	03/05/25	03/05/25	PB166976

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	151		3.32	20.0	ug/l
Aromatic C12-C16	Aromatic C12-C16	280		3.69	30.0	ug/l
Aromatic C16-C21	Aromatic C16-C21	534		12.7	50.0	ug/l
Aromatic C21-C36	Aromatic C21-C36	835		25.2	80.0	ug/l
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	60.2		40 - 140	120%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	58.8		40 - 140	118%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	53.2		40 - 140	106%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB166976BSD	Acq On:	05 Mar 2025 17:12
Client Sample ID:	PB166976BSD	Operator:	YP/AJ
Data file:	FD049161.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	4.075	5.793	12072040	75.915	200	ug/ml
Aromatic C12-C16	5.794	8.395	22584908	140.335	300	ug/ml
Aromatic C16-C21	8.396	12.660	41014616	267.441	500	ug/ml
Aromatic C21-C36	12.661	18.072	59763645	417.592	800	ug/ml
Aromatic EPH	4.075	18.072	135435209	901.284		ug/ml
2-Bromonaphthalene (SURR)	7.351	7.351	8619183	60.23		ug/ml
2-Flurobiphenyl (SURR)	8.201	8.201	5168475	58.79		ug/ml
ortho-Terphenyl (SURR)	11.236	11.236	8602132	53.17		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049161.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 17:12
Operator : YP/AJ
Sample : PB166976BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB166976BSD

Integration File: autoint1.e
Quant Time: Mar 05 23:30:03 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
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...	7.351	8619183	60.228 ug/ml
	Spiked Amount 50.000		Recovery = 120.46%	
6)	S 2-Flurobiphenyl (SURR)	8.201	5168475	58.792 ug/ml
	Spiked Amount 50.000 Range 0 - 131		Recovery = 117.58%	
11)	S ortho-Terphenyl (SURR)	11.236	8602132	53.174 ug/ml
	Spiked Amount 50.000		Recovery = 106.35%	
	Target Compounds			
1)	T 1,2,3-Trimethylbenzen...	4.175	5624480	35.318 ug/ml
2)	T Naphthalene (C11.7)	5.692	6447560	40.605 ug/ml
3)	T 2-Methylnaphthalene (...	6.738	6620553	42.523 ug/ml
5)	T Acenaphthylene (C15.06)	8.003	7668529	47.160 ug/ml
7)	T Acenaphthene (C15.5)	8.298	8295826	50.428 ug/ml
8)	T Flouorene (C16.55)	9.077	8069862	51.189 ug/ml
9)	T Phenanthrene (C19.36)	10.465	8131454	53.957 ug/ml
10)	T Anthracene (C19.43)	10.540	8198495	54.284 ug/ml
12)	T Fluoranthene (C21.85)	12.270	8348434	54.100 ug/ml
13)	T Pyrene (C20.8)	12.562	8266371	53.657 ug/ml
14)	T Benzo[a]anthracene (C...	14.434	7642958	58.170 ug/ml
15)	T Chrysene (C27.41)	14.476	7520161	46.511 ug/ml
16)	T benzo[b]fluoranthene ...	15.985	7675923	55.787 ug/ml
17)	T Bnezo[k]fluoranthene ...	16.017	7993047	50.607 ug/ml
18)	T Benzo[a]pyrene (C31.34)	16.359	7376396	54.343 ug/ml
19)	T Indeno[1,2,3-cd]pyren...	17.729	6733767	61.621 ug/ml
20)	T Dibenz[a,h]anthracene...	17.763	7529723	48.535 ug/ml
21)	T Benzo[g,h,i]perylene ...	17.980	7291670	50.304 ug/ml

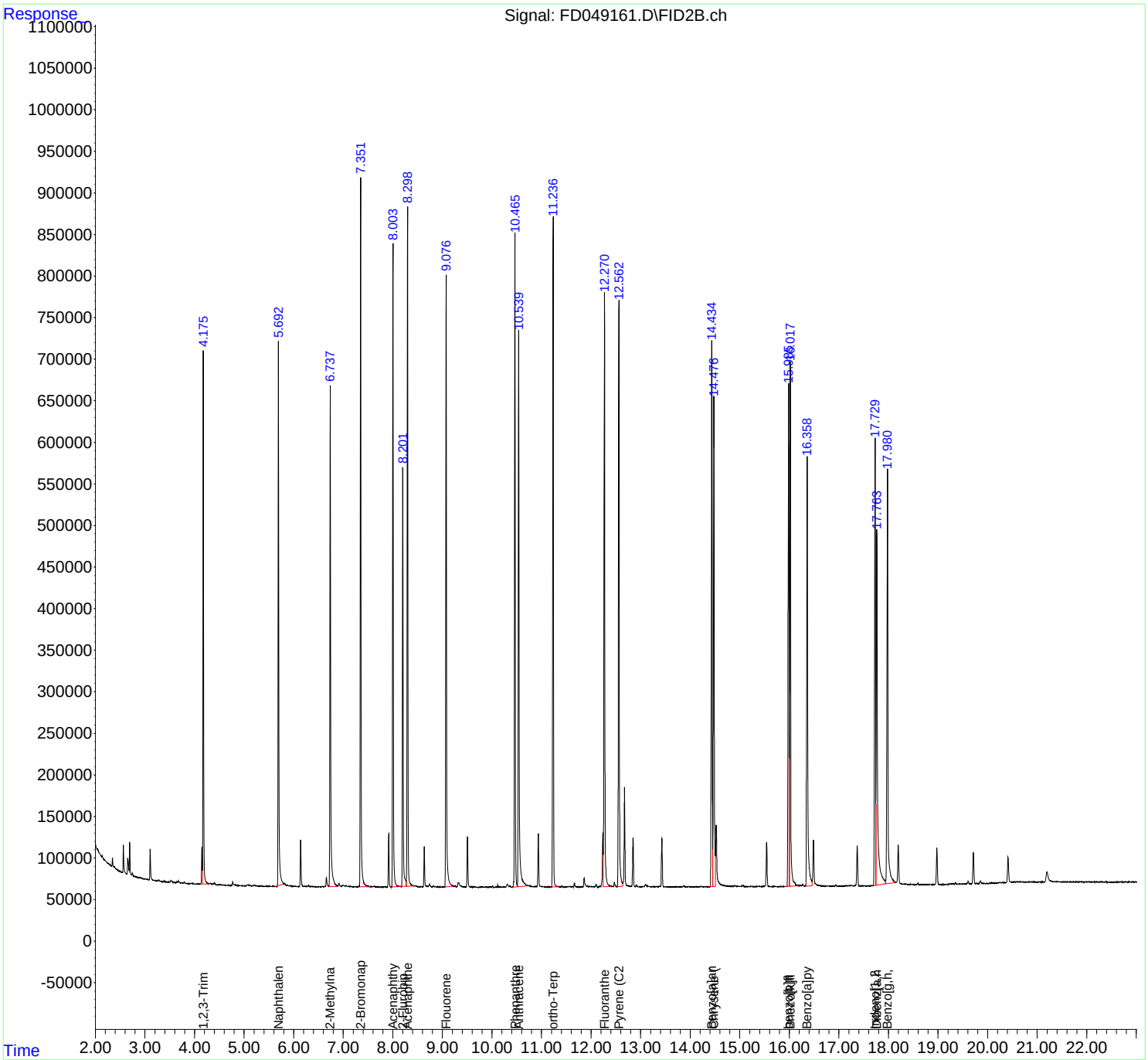
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD030525AR\
Data File : FD049161.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 17:12
Operator : YP/AJ
Sample : PB166976BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB166976BSD

Integration File: autoint1.e
Quant Time: Mar 05 23:30:03 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
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\FD030525AR\
Data File : FD049161.D
Signal(s) : FID2B.ch
Acq On : 05 Mar 2025 17:12
Sample : PB166976BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.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	4.175	4.159	4.297	VV	640771	5624480	65.26%	3.564%
2	5.692	5.618	5.807	PV	653844	6447560	74.80%	4.085%
3	6.738	6.702	6.882	VV	601549	6620553	76.81%	4.195%
4	7.351	7.326	7.542	VB	852911	8619183	100.00%	5.461%
5	8.003	7.960	8.133	BB	773719	7668529	88.97%	4.859%
6	8.201	8.145	8.271	BV	504187	5168475	59.96%	3.275%
7	8.298	8.271	8.432	VV	817291	8295826	96.25%	5.256%
8	9.077	9.043	9.228	BV	736277	8069862	93.63%	5.113%
9	10.465	10.398	10.513	BV	786847	8131454	94.34%	5.152%
10	10.540	10.513	10.740	VV	667558	8198495	95.12%	5.195%
11	11.236	11.173	11.348	BB	808109	8602132	99.80%	5.450%
12	12.270	12.247	12.415	VB	715005	8348434	96.86%	5.290%
13	12.562	12.517	12.637	BV	702607	8266371	95.91%	5.238%
14	14.434	14.375	14.453	BV	655650	7642958	88.67%	4.843%
15	14.476	14.453	14.507	VV	591816	7520161	87.25%	4.765%
16	15.985	15.930	15.998	BV	606361	7675923	89.06%	4.864%
17	16.017	15.998	16.177	VV	630458	7993047	92.74%	5.065%
18	16.359	16.318	16.458	BV	516813	7376396	85.58%	4.674%
19	17.729	17.690	17.743	BV	539084	6733767	78.13%	4.267%
20	17.763	17.743	17.938	VV	428028	7529723	87.36%	4.771%
21	17.980	17.938	18.150	VV	499171	7291670	84.60%	4.620%

Sum of corrected areas: 157824999

Aromatic EPH 021125.M Wed Mar 05 23:52:04 2025

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167058BSD	SDG No.:	Q1488
Lab Sample ID:	PB167058BSD	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
03/10/25 09:20	03/10/25 21:02	PB167058

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	5.52		1	0.38	1.00	mg/kg	FE052710.D
Aliphatic C12-C16	Aliphatic C12-C16	5.40		1	0.24	0.67	mg/kg	FE052710.D
Aliphatic C16-C21	Aliphatic C16-C21	9.11		1	0.30	1.00	mg/kg	FE052710.D
Aliphatic C21-C28	Aliphatic C21-C28	12.2		1	0.80	1.33	mg/kg	FE052710.D
Aliphatic C28-C40	Aliphatic C28-C40	20.5		1	1.80	2.00	mg/kg	FE052710.D
Aromatic C10-C12	Aromatic C10-C12	5.04		1	0.30	0.67	mg/kg	FF015631.D
Aromatic C12-C16	Aromatic C12-C16	8.92		1	0.34	1.00	mg/kg	FF015631.D
Aromatic C16-C21	Aromatic C16-C21	17.2		1	0.96	1.67	mg/kg	FF015631.D
Aromatic C21-C36	Aromatic C21-C36	26.7		1	2.00	2.66	mg/kg	FF015631.D
Total AliphaticEPH	Total AliphaticEPH	52.7			3.52	5.99	mg/kg	
Total AromaticEPH	Total AromaticEPH	57.9			3.60	6.00	mg/kg	
Total EPH	Total EPH	111			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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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167058BSD	SDG No.:	Q1488
Lab Sample ID:	PB167058BSD	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
FE052710.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	5.52		0.38	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	5.40		0.24	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	9.11		0.30	1.00	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	12.2		0.80	1.33	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	20.5		1.80	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	43.6		40 - 140	87%	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:	PB167058BSD	Acq On:	10 Mar 2025 21:02
Client Sample ID:	PB167058BSD	Operator:	YP\AJ
Data file:	FE052710.D	Misc:	
Instrument:	FID_E	ALS Vial:	21
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.151	6.796	12921375	82.857	300	ug/ml
Aliphatic C12-C16	6.797	10.250	12321945	81.013	200	ug/ml
Aliphatic C16-C21	10.251	13.630	20040339	136.749	300	ug/ml
Aliphatic C21-C28	13.631	17.305	26003921	182.545	400	ug/ml
Aliphatic C28-C40	17.306	22.234	39350470	308.416	600	ug/ml
Aliphatic EPH	3.151	22.234	110638050	791.58		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.359	13.359	5296371	43.62		ug/ml
Aliphatic C9-C28	3.151	17.305	71287580	483.164	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052710.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 21:02
Operator : YP\AJ
Sample : PB167058BSD
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB167058BSD

Integration File: autoint1.e
Quant Time: Mar 11 05:23:00 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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...	13.359	5296371	43.618 ug/ml
Spiked Amount	50.000		Recovery =	87.24%
	Target Compounds			
1) T	n-Nonane (C9)	3.252	3184968	20.542 ug/ml
2) T	n-Decane (C10)	4.513	4302223	27.386 ug/ml
4) T	n-Dodecane (C12)	6.694	5434184	34.902 ug/ml
6) T	n-Tetradecane (C14)	8.533	6022996	39.806 ug/ml
7) T	n-Hexadecane (C16)	10.147	6298949	41.200 ug/ml
8) T	n-Octadecane (C18)	11.597	6644892	43.676 ug/ml
10) T	n-Eicosane (C20)	12.913	6831700	47.059 ug/ml
11) T	n-Heneicosane (C21)	13.528	6563747	46.117 ug/ml
13) T	n-Docosane (C22)	14.116	6576156	46.210 ug/ml
14) T	n-Tetracosane (C24)	15.223	6518581	45.550 ug/ml
15) T	n-Hexacosane (C26)	16.247	6478447	45.561 ug/ml
16) T	n-Octacosane (C28)	17.200	6430737	45.225 ug/ml
17) T	n-Tricontane (C30)	18.090	6567154	44.463 ug/ml
18) T	n-Dotriacontane (C32)	18.925	6615939	45.571 ug/ml
19) T	n-Tetratriacontane (C34)	19.710	6628461	49.180 ug/ml
20) T	n-Hexatriacontane (C36)	20.453	6495807	54.668 ug/ml
21) T	n-Octatriacontane (C38)	21.196	6520037	58.773 ug/ml
22) T	n-Tetracontane (C40)	22.121	6523072	60.334 ug/ml

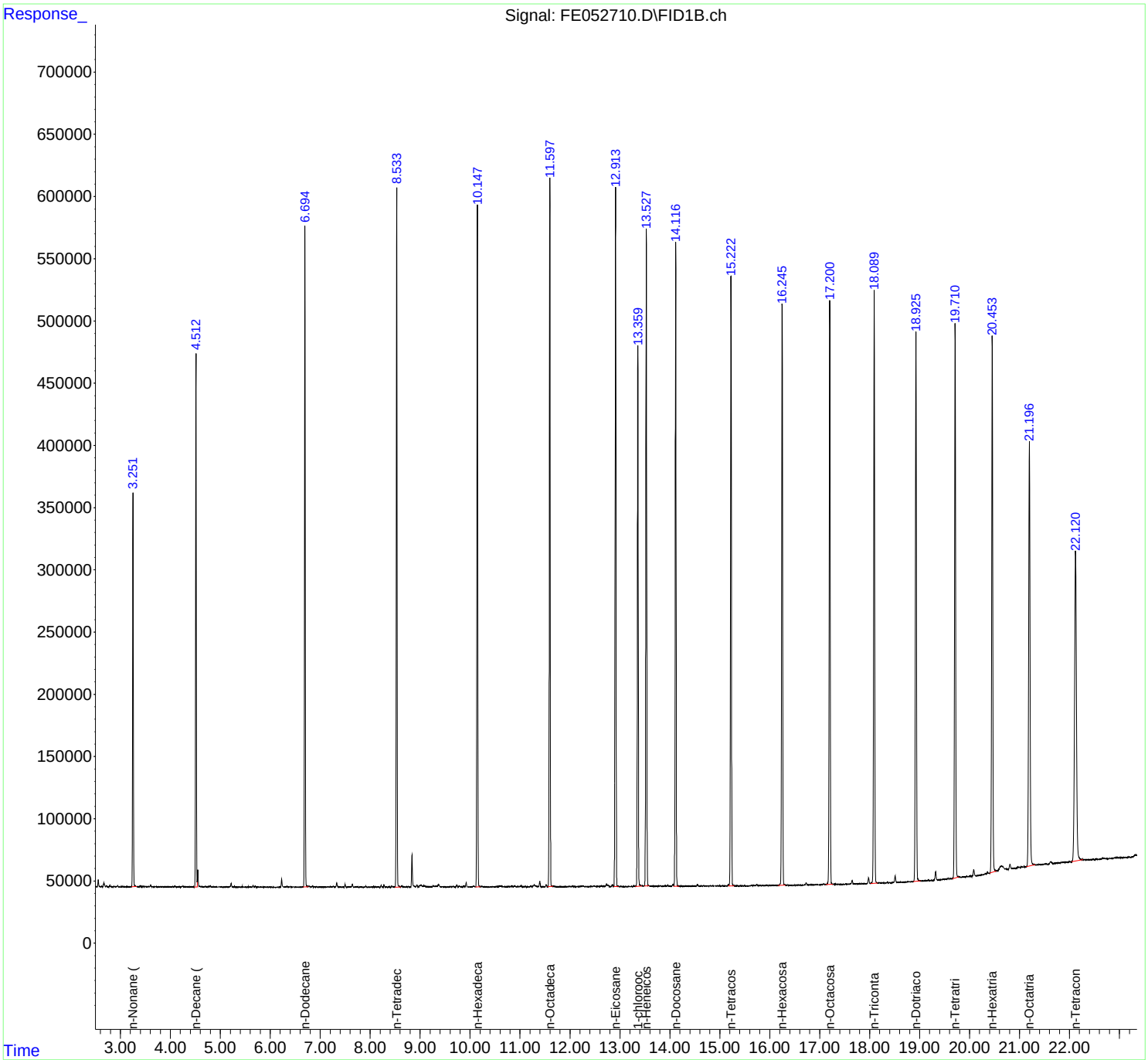
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052710.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 21:02
Operator : YP\AJ
Sample : PB167058BSD
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB167058BSD

Integration File: autoint1.e
Quant Time: Mar 11 05:23:00 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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\FE031025AL\
Data File : FE052710.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 21:02
Sample : PB167058BSD
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.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	3.325	BB	315967	3184968	46.62%	2.747%
2	4.513	4.475	4.537	BV	426301	4302223	62.97%	3.711%
3	6.694	6.658	6.765	BB	531530	5434184	79.54%	4.687%
4	8.533	8.495	8.608	BV	556162	6022996	88.16%	5.195%
5	10.147	10.105	10.205	BB	549322	6298949	92.20%	5.433%
6	11.597	11.558	11.658	PB	566739	6644892	97.27%	5.732%
7	12.913	12.873	12.975	PB	564884	6831700	100.00%	5.893%
8	13.359	13.301	13.441	BB	433916	5296371	77.53%	4.568%
9	13.528	13.485	13.588	BB	528155	6563747	96.08%	5.662%
10	14.116	14.077	14.185	VB	519851	6576156	96.26%	5.672%
11	15.223	15.184	15.288	VB	491283	6518581	95.42%	5.623%
12	16.247	16.161	16.315	BB	464966	6478447	94.83%	5.588%
13	17.200	17.121	17.265	BB	472858	6430737	94.13%	5.547%
14	18.090	18.025	18.161	BB	469286	6567154	96.13%	5.665%
15	18.925	18.871	19.018	BB	439295	6615939	96.84%	5.707%
16	19.710	19.651	19.785	BB	444154	6628461	97.03%	5.717%
17	20.453	20.401	20.535	BB	431882	6495807	95.08%	5.603%
18	21.196	21.131	21.308	BB	340013	6520037	95.44%	5.624%
19	22.121	22.041	22.271	BB	248353	6523072	95.48%	5.627%

Sum of corrected areas: 115934419

Aliphatic EPH 030325.M Tue Mar 11 06:19:24 2025

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 2025	Date Received:	
Client Sample ID:	PB167058BSD	SDG No.:	Q1488
Lab Sample ID:	PB167058BSD	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
FF015631.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	5.04		0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	8.92		0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	17.2		0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	26.7		2.00	2.66	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	58.9		40 - 140	118%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	59.7		40 - 140	119%	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:	PB167058BSD	Acq On:	10 Mar 2025 17:46
Client Sample ID:	PB167058BSD	Operator:	YP\AJ
Data file:	FF015631.D	Misc:	
Instrument:	FID_F	ALS Vial:	73
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.505	6.377	9716976	75.7	200	ug/ml
Aromatic C12-C16	6.378	9.069	18310299	133.847	300	ug/ml
Aromatic C16-C21	9.070	13.390	34377265	258.4	500	ug/ml
Aromatic C21-C36	13.391	18.845	52124145	400.783	800	ug/ml
Aromatic EPH	4.505	18.845	114528685	868.73		ug/ml
2-Bromonaphthalene (SURR)	7.997	7.997	6861975	58.94		ug/ml
2-Flurobiphenyl (SURR)	8.874	8.874	4252404	59.7		ug/ml
ortho-Terphenyl (SURR)	11.935	11.935	7259660	49.35		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015631.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 17:46
Operator : YP\AJ
Sample : PB167058BSD
Misc :
ALS Vial : 73 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB167058BSD

Integration File: autoint1.e
Quant Time: Mar 11 03:22:52 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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...	7.997	6861975	58.944 ug/ml
Spiked Amount	50.000		Recovery =	117.89%
6) S	2-Flurobiphenyl (SURR)	8.874	4252404	59.698 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	119.40%
11) S	ortho-Terphenyl (SURR)	11.935	7259660	49.351 ug/ml
Spiked Amount	50.000		Recovery =	98.70%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.603	4491192	34.789 ug/ml
2) T	Naphthalene (C11.7)	6.274	5225784	40.946 ug/ml
3) T	2-Methylnaphthalene (...	7.370	5253176	41.488 ug/ml
5) T	Acenaphthylene (C15.06)	8.673	6294057	44.527 ug/ml
7) T	Acenaphthene (C15.5)	8.972	6763066	47.484 ug/ml
8) T	Flouorene (C16.55)	9.762	6670028	50.127 ug/ml
9) T	Phenanthrene (C19.36)	11.171	6781201	52.132 ug/ml
10) T	Anthracene (C19.43)	11.246	6827746	54.512 ug/ml
12) T	Fluoranthene (C21.85)	12.993	7078040	50.121 ug/ml
13) T	Pyrene (C20.8)	13.292	7020250	48.831 ug/ml
14) T	Benzo[a]anthracene (C...	15.178	6514139	55.456 ug/ml
15) T	Chrysene (C27.41)	15.221	7816361	52.331 ug/ml
16) T	benzo[b]fluoranthene ...	16.740	6492778	49.853 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.773	6889705	46.173 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.122	6032279	47.533 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.500	5980933	58.433 ug/ml
20) T	Dibenz[a,h]anthracene...	18.534	6283187	48.595 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.756	6114763	49.138 ug/ml

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

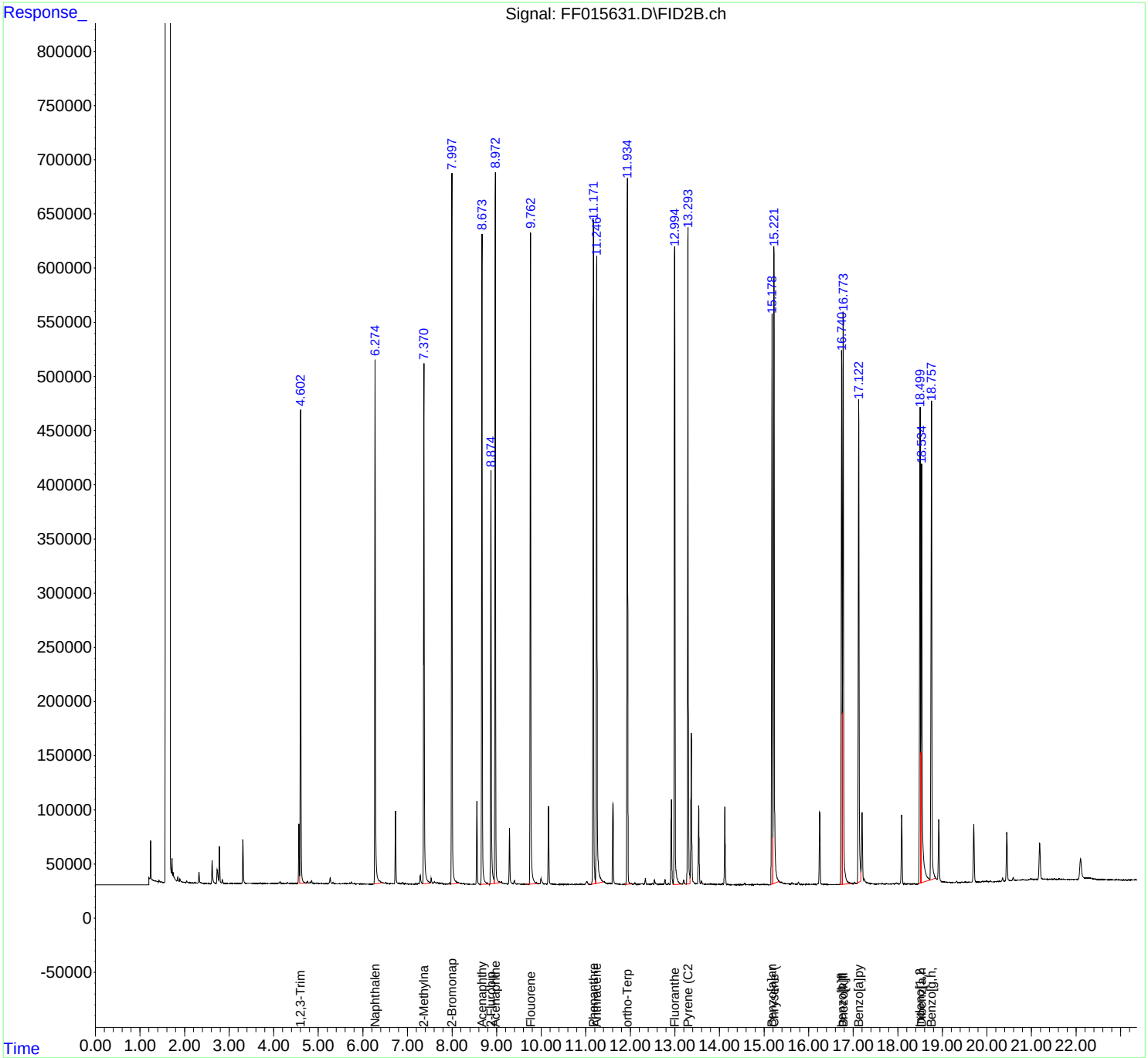
Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015631.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 17:46
Operator : YP\AJ
Sample : PB167058BSD
Misc :
ALS Vial : 73 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB167058BSD

Integration File: autoint1.e
Quant Time: Mar 11 03:22:52 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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_F\Data\FF031025AR\
Data File : FF015631.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 17:46
Sample : PB167058BSD
Misc :
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	4.603	4.584	4.727	VB	437069	4491192	57.46%	3.379%
2	6.274	6.245	6.437	BB	483497	5225784	66.86%	3.932%
3	7.370	7.339	7.512	PV	478895	5253176	67.21%	3.953%
4	7.997	7.969	8.160	PB	656019	6861975	87.79%	5.163%
5	8.673	8.632	8.830	BBA	596827	6294057	80.52%	4.736%
6	8.874	8.830	8.944	BV	381002	4252404	54.40%	3.200%
7	8.972	8.944	9.087	VV	657903	6763066	86.52%	5.089%
8	9.762	9.654	9.934	BB	602375	6670028	85.33%	5.019%
9	11.171	11.120	11.218	BV	611709	6781201	86.76%	5.102%
10	11.246	11.218	11.400	VBA	580008	6827746	87.35%	5.137%
11	11.935	11.867	12.022	BB	651600	7259660	92.88%	5.462%
12	12.993	12.964	13.162	VB	589805	7078040	90.55%	5.326%
13	13.292	13.240	13.340	BV	600210	7020250	89.81%	5.282%
14	15.178	15.140	15.198	BV	526661	6514139	83.34%	4.901%
15	15.221	15.198	15.340	VBA	584008	7816361	100.00%	5.881%
16	16.740	16.699	16.755	BV	492671	6492778	83.07%	4.885%
17	16.773	16.755	16.967	VB	530972	6889705	88.14%	5.184%
18	17.122	17.070	17.171	BV	445416	6032279	77.18%	4.539%
19	18.500	18.450	18.515	BV	439986	5980933	76.52%	4.500%
20	18.534	18.515	18.719	VV	386081	6283187	80.39%	4.728%
21	18.756	18.719	18.850	VBA	437363	6114763	78.23%	4.601%

Sum of corrected areas: 132902723

Aromatic EPH 022625.M Tue Mar 11 03:59:58 2025

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	ENV-101-SB01MS	SDG No.:	Q1488
Lab Sample ID:	Q1488-01MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	88.5
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
FF015634.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	5.65		0.34	0.75	mg/kg
Aromatic C12-C16	Aromatic C12-C16	9.65		0.38	1.13	mg/kg
Aromatic C16-C21	Aromatic C16-C21	20.2		1.08	1.88	mg/kg
Aromatic C21-C36	Aromatic C21-C36	28.9		2.26	3.01	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	54.8		40 - 140	110%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	54.0		40 - 140	108%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	32.3		40 - 140	65%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	Q1488-01MS	Acq On:	10 Mar 2025 19:14
Client Sample ID:	ENV-101-SB01MS	Operator:	YP\AJ
Data file:	FF015634.D	Misc:	
Instrument:	FID_F	ALS Vial:	76
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.505	6.377	9632518	75.042	200	ug/ml
Aromatic C12-C16	6.378	9.069	17543252	128.24	300	ug/ml
Aromatic C16-C21	9.070	13.390	35645327	267.931	500	ug/ml
Aromatic C21-C36	13.391	18.845	49991384	384.384	800	ug/ml
Aromatic EPH	4.505	18.845	112812481	855.598		ug/ml
2-Bromonaphthalene (SURR)	7.997	7.997	6376280	54.77		ug/ml
2-Flurobiphenyl (SURR)	8.875	8.875	3847204	54.01		ug/ml
ortho-Terphenyl (SURR)	11.934	11.934	4755517	32.33		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015634.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 19:14
Operator : YP\AJ
Sample : Q1488-01MS
Misc :
ALS Vial : 76 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 11 03:24:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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_F
ClientSampleId :
ENV-101-SB01MS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 03/11/2025
Supervised By :Ankita Jodhani 03/11/2025

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	2-Bromonaphthalene (S...	7.997	6376280	54.772 ug/ml
Spiked Amount	50.000		Recovery =	109.54%
6) S	2-Flurobiphenyl (SURR)	8.875	3847204	54.010 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	108.02%
11) S	ortho-Terphenyl (SURR)	11.934	4755517	32.328 ug/ml
Spiked Amount	50.000		Recovery =	64.66%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.603	4287013	33.208 ug/ml
2) T	Naphthalene (C11.7)	6.275	4728989	37.054 ug/ml
3) T	2-Methylnaphthalene (...	7.370	4613932	36.440 ug/ml
5) T	Acenaphthylene (C15.06)	8.673	5488943	38.831 ug/ml
7) T	Acenaphthene (C15.5)	8.971	5941626	41.717 ug/ml
8) T	Flouorene (C16.55)	9.762	5982248	44.958 ug/ml
9) T	Phenanthrene (C19.36)	11.170	6154497	47.314 ug/ml
10) T	Anthracene (C19.43)	11.245	6129272	48.936 ug/ml
12) T	Fluoranthene (C21.85)	12.994	6454604	45.706 ug/ml
13) T	Pyrene (C20.8)	13.292	6386504	44.423 ug/ml
14) T	Benzo[a]anthracene (C...	15.177	5803370	49.405 ug/ml
15) T	Chrysene (C27.41)	15.219	6980582	46.736 ug/ml
16) T	benzo[b]fluoranthene ...	16.740	5812993	44.633 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.772	6180819	41.422 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.120	5381621	42.406 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.499	5193699	50.742 ug/mlm
20) T	Dibenz[a,h]anthracene...	18.531	5339576	41.297 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.753	5437974	43.699 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015634.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 19:14
Operator : YP\AJ
Sample : Q1488-01MS
Misc :
ALS Vial : 76 Sample Multiplier: 1

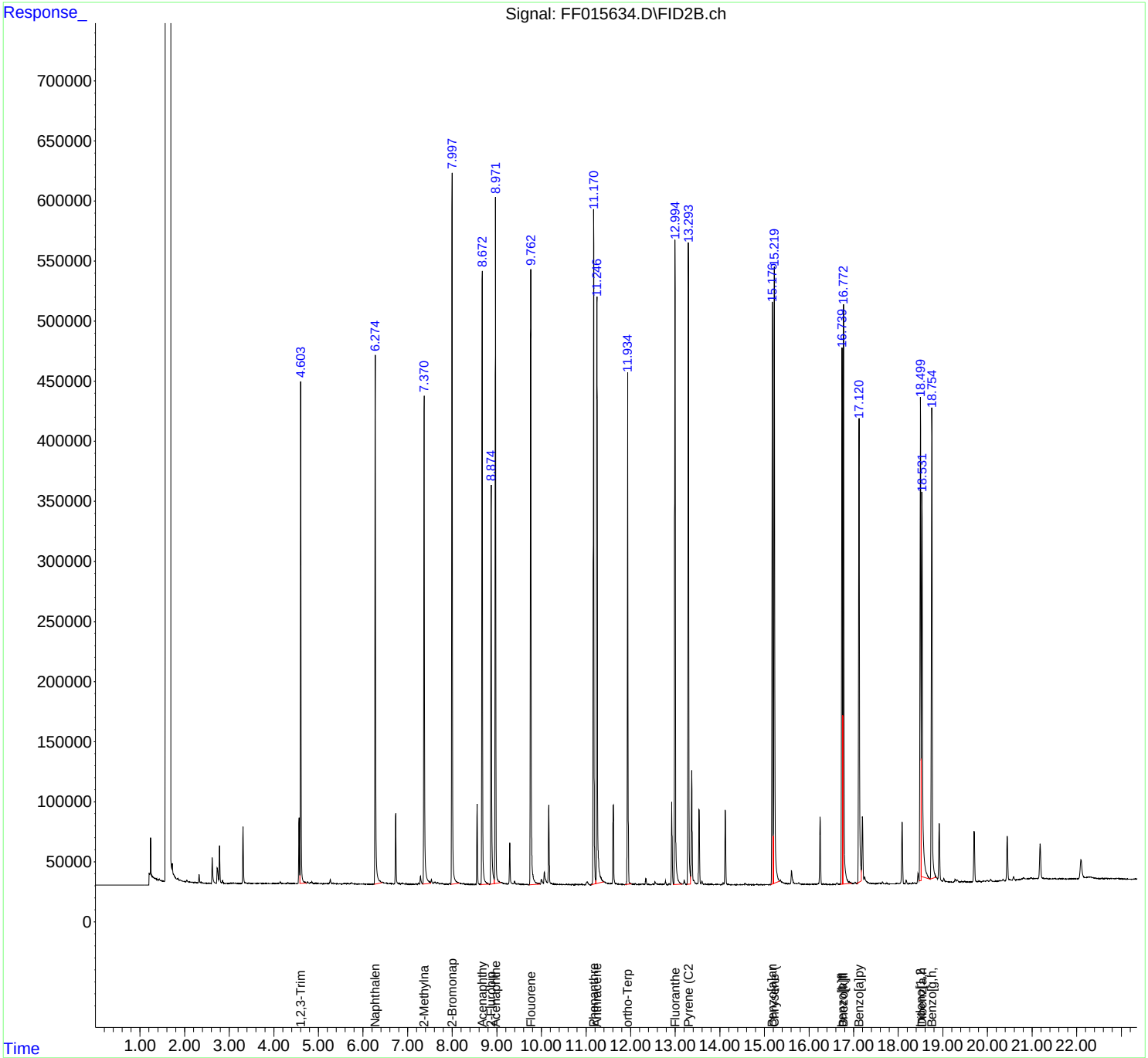
Instrument :
FID_F
ClientSampleId :
ENV-101-SB01MS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 03/11/2025
Supervised By :Ankita Jodhani 03/11/2025

Integration File: autoint1.e
Quant Time: Mar 11 03:24:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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_F
ClientSampleId :
ENV-101-SB01MS

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 03/11/2025
Supervised By :Ankita Jodhani 03/11/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF03102
Data File : FF015634.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 19:14
Sample : Q1488-01MS
Misc :
ALS Vial : 76 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	4.566	4.507	4.584	BV	54787	566878	8.12%	0.444%
2	4.603	4.584	4.732	VB	419253	4287013	61.41%	3.355%
3	5.267	5.204	5.314	BV	3609	49638	0.71%	0.039%
4	6.275	6.247	6.429	BV	439443	4728989	67.74%	3.701%
5	6.733	6.684	6.792	BV	58192	632538	9.06%	0.495%
6	7.289	7.216	7.341	BV	6706	106406	1.52%	0.083%
7	7.371	7.341	7.514	VV	405738	4613932	66.10%	3.611%
8	7.535	7.514	7.572	VV	3295	43826	0.63%	0.034%
9	7.997	7.969	8.166	BB	592318	6376280	91.34%	4.990%
10	8.560	8.521	8.626	BB	66691	715981	10.26%	0.560%
11	8.673	8.631	8.830	BBA	510392	5488943	78.63%	4.295%
12	8.875	8.846	8.944	BV	332469	3847204	55.11%	3.011%
13	8.971	8.944	9.091	VV	571018	5941626	85.12%	4.649%
14	9.293	9.231	9.369	BB	34266	386854	5.54%	0.303%
15	9.762	9.729	9.974	BB	514364	5982248	85.70%	4.681%
16	9.999	9.976	10.047	BV	3892	79854	1.14%	0.062%
17	10.066	10.047	10.138	VV	9828	205939	2.95%	0.161%
18	10.167	10.138	10.234	VB	65719	768957	11.02%	0.602%
19	11.170	11.121	11.221	BV	562005	6154497	88.17%	4.816%
20	11.245	11.221	11.401	VBA	489151	6129272	87.80%	4.796%
21	11.610	11.571	11.679	BB	65557	802529	11.50%	0.628%
22	11.934	11.871	12.011	BB	426938	4755517	68.12%	3.721%
23	12.340	12.291	12.384	BB	4871	58217	0.83%	0.046%
24	12.922	12.889	12.962	PV	68602	860427	12.33%	0.673%
25	12.994	12.962	13.157	VB	539336	6454604	92.47%	5.051%
26	13.199	13.172	13.240	BBA	3322	43658	0.63%	0.034%
27	13.292	13.259	13.342	BV	534177	6386504	91.49%	4.998%
28	13.368	13.342	13.472	VB	94152	1331767	19.08%	1.042%
29	13.534	13.474	13.572	BV	61743	760942	10.90%	0.595%
30	14.121	14.092	14.174	VB	61975	770259	11.03%	0.603%
31	15.177	15.137	15.196	BV	483521	5803370	83.14%	4.541%
32	15.219	15.196	15.341	VBA	514065	6980582	100.00%	5.462%
33	15.607	15.547	15.694	BB	10636	191846	2.75%	0.150%
34	16.247	16.184	16.282	BB	56085	754934	10.81%	0.591%
35	16.740	16.702	16.755	BV	446867	5812993	83.27%	4.549%
36	16.772	16.755	16.961	VB	484127	6180819	88.54%	4.837%

Instrument :
FID_F
ClientSampleId :
ENV-101-SB01MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 03/11/2025
Supervised By :Ankita Jodhani 03/11/2025

rteres

37	17.120	17.071	17.172	BV	387572	5381621	77.09%	4.211%
38	17.197	17.172	17.229	VV	53020	776583	1	
39	18.087	18.011	18.141	BB	51274	730166	1	
40	18.444	18.397	18.450	BBA	2594	-4776	-	
41	18.499	18.451	18.514	BV	399805	5074495	7	
42	18.531	18.514	18.712	VV	318781	5339576	7	
43	18.753	18.712	18.851	PBA	393838	5437974	77.90%	4.255%

Sum of corrected areas: 127791480

Aromatic EPH 022625.M Tue Mar 11 04:31:26 2025

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 2025	Date Received:	
Client Sample ID:	ENV-101-SB01MS	SDG No.:	Q1488
Lab Sample ID:	Q1488-01MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	88.5
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
03/10/25 09:20	03/10/25 22:32	PB167058

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	6.85		1	0.43	1.13	mg/kg	FE052713.D
Aliphatic C12-C16	Aliphatic C12-C16	6.01		1	0.27	0.75	mg/kg	FE052713.D
Aliphatic C16-C21	Aliphatic C16-C21	9.92		1	0.34	1.13	mg/kg	FE052713.D
Aliphatic C21-C28	Aliphatic C21-C28	13.1		1	0.90	1.51	mg/kg	FE052713.D
Aliphatic C28-C40	Aliphatic C28-C40	22.1		1	2.03	2.26	mg/kg	FE052713.D
Aromatic C10-C12	Aromatic C10-C12	5.65		1	0.34	0.75	mg/kg	FF015634.D
Aromatic C12-C16	Aromatic C12-C16	9.65		1	0.38	1.13	mg/kg	FF015634.D
Aromatic C16-C21	Aromatic C16-C21	20.2		1	1.08	1.88	mg/kg	FF015634.D
Aromatic C21-C36	Aromatic C21-C36	28.9		1	2.26	3.01	mg/kg	FF015634.D
Total AliphaticEPH	Total AliphaticEPH	58.0			3.97	6.78	mg/kg	
Total AromaticEPH	Total AromaticEPH	64.4			4.06	6.77	mg/kg	
Total EPH	Total EPH	122			8.04	13.6	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

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	ENV-101-SB01MS	SDG No.:	Q1488
Lab Sample ID:	Q1488-01MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	88.5
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
FE052713.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	6.85		0.43	1.13	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	6.01		0.27	0.75	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	9.92		0.34	1.13	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	13.1		0.90	1.51	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	22.1		2.03	2.26	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	37.2		40 - 140	74%	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:	Q1488-01MS	Acq On:	10 Mar 2025 22:32
Client Sample ID:	ENV-101-SB01MS	Operator:	YP\AJ
Data file:	FE052713.D	Misc:	
Instrument:	FID_E	ALS Vial:	24
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.151	6.796	14189685	90.99	300	ug/ml
Aliphatic C12-C16	6.797	10.250	12145715	79.854	200	ug/ml
Aliphatic C16-C21	10.251	13.630	19314595	131.797	300	ug/ml
Aliphatic C21-C28	13.631	17.305	24800139	174.095	400	ug/ml
Aliphatic C28-C40	17.306	22.234	37529294	294.142	600	ug/ml
Aliphatic EPH	3.151	22.234	107979428	770.878		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.358	13.358	4515939	37.19		ug/ml
Aliphatic C9-C28	3.151	17.305	70450134	476.736	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052713.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 22:32
Operator : YP\AJ
Sample : Q1488-01MS
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-101-SB01MS

Integration File: autoint1.e
Quant Time: Mar 11 05:24:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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...	13.358	4515939	37.191 ug/ml
Spiked Amount	50.000		Recovery =	74.38%
	Target Compounds			
1) T	n-Nonane (C9)	3.251	3926499	25.324 ug/ml
2) T	n-Decane (C10)	4.512	4725334	30.079 ug/ml
4) T	n-Dodecane (C12)	6.694	5189852	33.333 ug/ml
6) T	n-Tetradecane (C14)	8.532	5619054	37.136 ug/ml
7) T	n-Hexadecane (C16)	10.148	6134619	40.125 ug/ml
8) T	n-Octadecane (C18)	11.598	6467491	42.510 ug/ml
10) T	n-Eicosane (C20)	12.913	6560393	45.190 ug/ml
11) T	n-Heneicosane (C21)	13.527	6286711	44.170 ug/ml
13) T	n-Docosane (C22)	14.115	6285602	44.169 ug/ml
14) T	n-Tetracosane (C24)	15.222	6226039	43.506 ug/ml
15) T	n-Hexacosane (C26)	16.246	6171430	43.401 ug/ml
16) T	n-Octacosane (C28)	17.198	6117068	43.019 ug/ml
17) T	n-Tricontane (C30)	18.088	6214716	42.076 ug/ml
18) T	n-Dotriacontane (C32)	18.924	6240074	42.982 ug/ml
19) T	n-Tetratriacontane (C34)	19.710	6279158	46.588 ug/ml
20) T	n-Hexatriacontane (C36)	20.453	6191104	52.103 ug/ml
21) T	n-Octatriacontane (C38)	21.196	6275071	56.565 ug/ml
22) T	n-Tetracontane (C40)	22.122	6329171	58.541 ug/ml

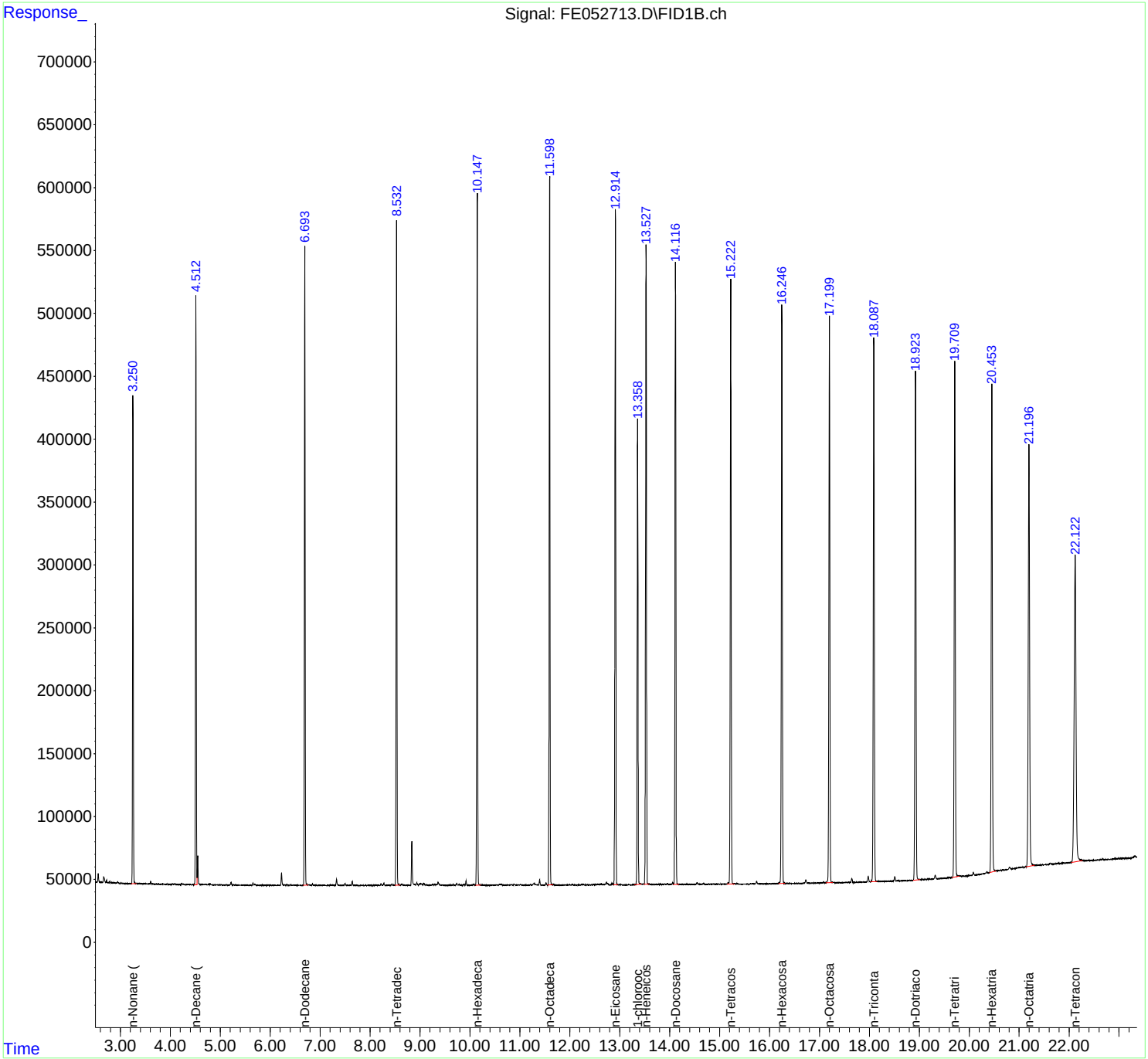
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052713.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 22:32
Operator : YP\AJ
Sample : Q1488-01MS
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-101-SB01MS

Integration File: autoint1.e
Quant Time: Mar 11 05:24:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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\FE031025AL\
Data File : FE052713.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 22:32
Sample : Q1488-01MS
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.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	2.555	2.531	2.614	BB	6999	69975	1.07%	0.062%
2	3.251	3.211	3.321	BB	388027	3926499	59.85%	3.488%
3	4.512	4.471	4.536	BV	465144	4725334	72.03%	4.198%
4	4.549	4.536	4.608	VB	22925	238289	3.63%	0.212%
5	6.228	6.201	6.274	BB	9945	109711	1.67%	0.097%
6	6.694	6.658	6.761	BB	507152	5189852	79.11%	4.611%
7	8.532	8.494	8.604	BB	526459	5619054	85.65%	4.992%
8	8.838	8.798	8.914	BB	35016	392042	5.98%	0.348%
9	10.148	10.111	10.218	BB	549665	6134619	93.51%	5.450%
10	11.598	11.554	11.661	PB	563375	6467491	98.58%	5.746%
11	12.913	12.872	12.964	PB	538710	6560393	100.00%	5.828%
12	13.358	13.298	13.434	BB	369939	4515939	68.84%	4.012%
13	13.527	13.484	13.591	BB	510532	6286711	95.83%	5.585%
14	14.115	14.077	14.188	VB	489887	6285602	95.81%	5.584%
15	15.222	15.144	15.294	BB	477358	6226039	94.90%	5.531%
16	16.246	16.178	16.314	BB	455802	6171430	94.07%	5.483%
17	17.198	17.128	17.271	BB	447635	6117068	93.24%	5.434%
18	18.088	18.021	18.154	BB	433849	6214716	94.73%	5.521%
19	18.924	18.871	19.014	BB	403051	6240074	95.12%	5.544%
20	19.710	19.651	19.804	BB	408851	6279158	95.71%	5.578%
21	20.453	20.401	20.534	BB	386412	6191104	94.37%	5.500%
22	21.196	21.131	21.311	BB	333367	6275071	95.65%	5.575%
23	22.122	22.041	22.271	BB	243759	6329171	96.48%	5.623%

Sum of corrected areas: 112565338

Aliphatic EPH 030325.M Tue Mar 11 06:21:04 2025

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	ENV-101-SB01MSD	SDG No.:	Q1488
Lab Sample ID:	Q1488-01MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	88.5
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
FF015635.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	5.41		0.34	0.75	mg/kg
Aromatic C12-C16	Aromatic C12-C16	9.32		0.38	1.13	mg/kg
Aromatic C16-C21	Aromatic C16-C21	19.4		1.08	1.88	mg/kg
Aromatic C21-C36	Aromatic C21-C36	28.0		2.26	3.01	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	52.6		40 - 140	105%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	52.1		40 - 140	104%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	31.2		40 - 140	62%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	Q1488-01MSD	Acq On:	10 Mar 2025 19:43
Client Sample ID:	ENV-101-SB01MSD	Operator:	YP\AJ
Data file:	FF015635.D	Misc:	
Instrument:	FID_F	ALS Vial:	77
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.505	6.377	9225495	71.871	200	ug/ml
Aromatic C12-C16	6.378	9.069	16936549	123.805	300	ug/ml
Aromatic C16-C21	9.070	13.390	34308114	257.88	500	ug/ml
Aromatic C21-C36	13.391	18.845	48358182	371.826	800	ug/ml
Aromatic EPH	4.505	18.845	108828340	825.383		ug/ml
ortho-Terphenyl (SURR)	11.934	11.934	4585479	31.17		ug/ml
2-Bromonaphthalene (SURR)	7.997	7.997	6125678	52.62		ug/ml
2-Flurobiphenyl (SURR)	8.875	8.875	3708178	52.06		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015635.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 19:43
Operator : YP\AJ
Sample : Q1488-01MSD
Misc :
ALS Vial : 77 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 11 03:24:37 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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_F
ClientSampleId :
ENV-101-SB01MSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 03/11/2025
Supervised By :Ankita Jodhani 03/11/2025

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	2-Bromonaphthalene (S...	7.997	6125678	52.619 ug/ml
Spiked Amount	50.000		Recovery =	105.24%
6) S	2-Flurobiphenyl (SURR)	8.875	3708178	52.058 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	104.12%
11) S	ortho-Terphenyl (SURR)	11.934	4585479	31.172 ug/ml
Spiked Amount	50.000		Recovery =	62.34%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.603	4111239	31.846 ug/ml
2) T	Naphthalene (C11.7)	6.275	4526606	35.468 ug/ml
3) T	2-Methylnaphthalene (...	7.371	4432188	35.004 ug/ml
5) T	Acenaphthylene (C15.06)	8.673	5277450	37.335 ug/ml
7) T	Acenaphthene (C15.5)	8.971	5794370	40.683 ug/ml
8) T	Flouorene (C16.55)	9.762	5723946	43.017 ug/ml
9) T	Phenanthrene (C19.36)	11.170	5935463	45.631 ug/ml
10) T	Anthracene (C19.43)	11.245	5909263	47.179 ug/ml
12) T	Fluoranthene (C21.85)	12.993	6241118	44.194 ug/ml
13) T	Pyrene (C20.8)	13.292	6164085	42.876 ug/ml
14) T	Benzo[a]anthracene (C...	15.177	5614385	47.796 ug/ml
15) T	Chrysene (C27.41)	15.220	6749937	45.192 ug/ml
16) T	benzo[b]fluoranthene ...	16.739	5614781	43.111 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.772	5987374	40.126 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.120	5198895	40.966 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.498	4934634	48.211 ug/mlm
20) T	Dibenz[a,h]anthracene...	18.531	5179421	40.058 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.753	5263590	42.298 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF031025AR\
Data File : FF015635.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 19:43
Operator : YP\AJ
Sample : Q1488-01MSD
Misc :
ALS Vial : 77 Sample Multiplier: 1

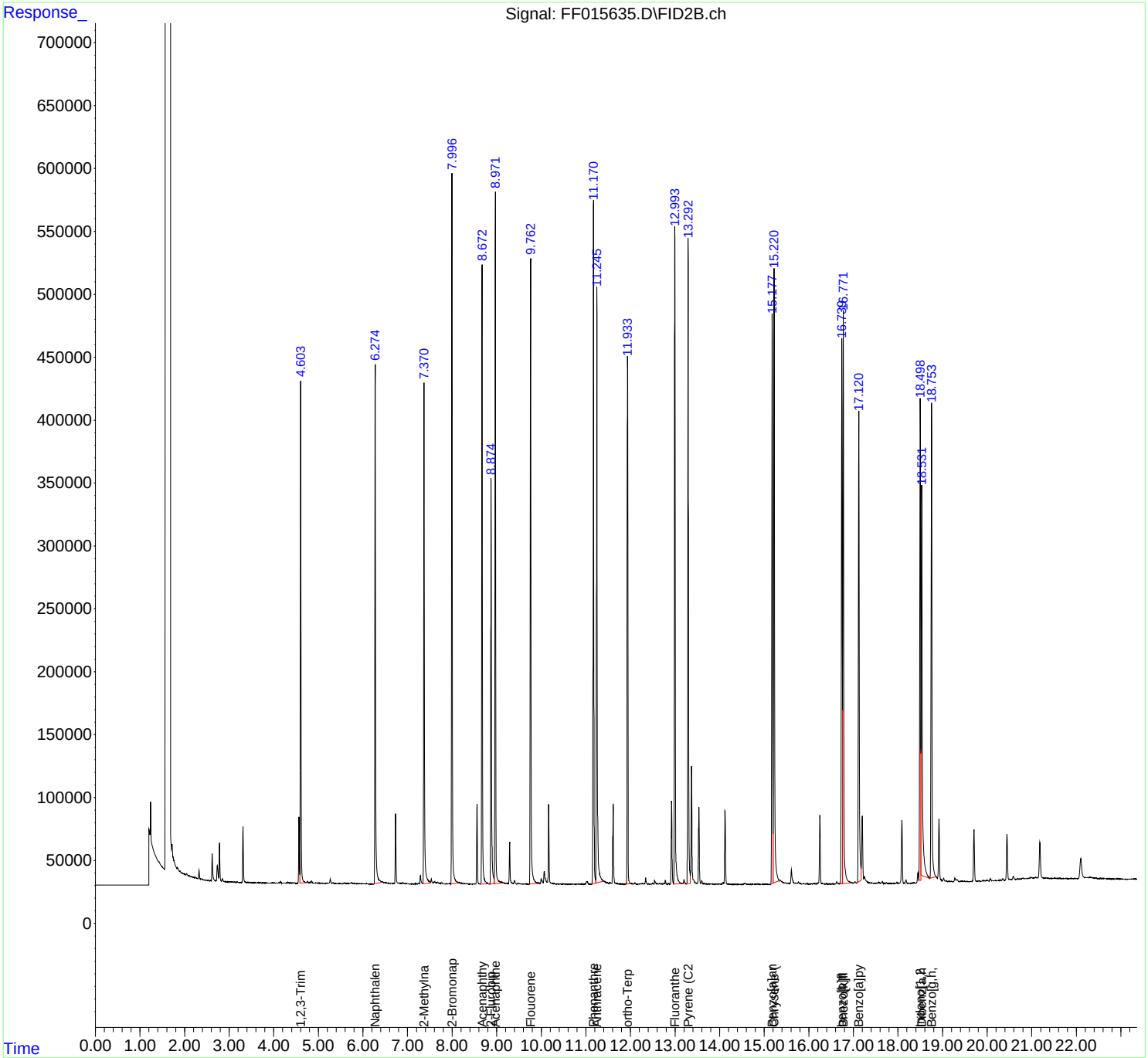
Instrument :
FID_F
ClientSampleId :
ENV-101-SB01MSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 03/11/2025
Supervised By :Ankita Jodhani 03/11/2025

Integration File: autoint1.e
Quant Time: Mar 11 03:24:37 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.M
Quant Title : GC Extractables
QLast Update : Wed Feb 26 12:36:06 2025
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_F
ClientSampleId :
ENV-101-SB01MSD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 03/11/2025
Supervised By :Ankita Jodhani 03/11/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF03102
Data File : FF015635.D
Signal(s) : FID2B.ch
Acq On : 10 Mar 2025 19:43
Sample : Q1488-01MSD
Misc :
ALS Vial : 77 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\Aromatic EPH 022625.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	4.567	4.507	4.583	BV	52516	538731	7.98%	0.437%
2	4.603	4.583	4.724	VB	399109	4111239	60.91%	3.336%
3	5.268	5.207	5.312	BV	3476	48919	0.72%	0.040%
4	6.275	6.220	6.430	BV	411716	4526606	67.06%	3.673%
5	6.734	6.674	6.794	BV	55217	607055	8.99%	0.493%
6	7.289	7.212	7.340	BV	6505	99683	1.48%	0.081%
7	7.371	7.340	7.515	VV	397676	4432188	65.66%	3.596%
8	7.535	7.515	7.570	VV	3209	43167	0.64%	0.035%
9	7.997	7.972	8.159	BB	563426	6125678	90.75%	4.970%
10	8.560	8.505	8.620	BB	63166	682636	10.11%	0.554%
11	8.673	8.620	8.830	BBA	492496	5277450	78.19%	4.282%
12	8.875	8.830	8.945	BV	321617	3708178	54.94%	3.009%
13	8.971	8.945	9.149	VB	549044	5794370	85.84%	4.701%
14	9.293	9.182	9.364	BB	33051	368400	5.46%	0.299%
15	9.762	9.709	9.937	BV	498503	5723946	84.80%	4.644%
16	9.999	9.974	10.046	BV	3916	75734	1.12%	0.061%
17	10.067	10.046	10.142	VV	9529	200549	2.97%	0.163%
18	10.167	10.142	10.224	VB	62903	737667	10.93%	0.599%
19	11.170	11.120	11.220	BV	543593	5935463	87.93%	4.816%
20	11.245	11.220	11.400	VBA	473680	5909263	87.55%	4.795%
21	11.611	11.570	11.684	BB	63100	774829	11.48%	0.629%
22	11.934	11.877	12.007	BB	419933	4585479	67.93%	3.721%
23	12.339	12.294	12.385	BB	4753	58599	0.87%	0.048%
24	12.921	12.885	12.964	PV	66089	830248	12.30%	0.674%
25	12.993	12.964	13.174	VB	522106	6241118	92.46%	5.064%
26	13.292	13.240	13.342	BV	513200	6164085	91.32%	5.001%
27	13.368	13.342	13.475	VB	93058	1288213	19.08%	1.045%
28	13.533	13.479	13.574	BV	60062	735531	10.90%	0.597%
29	14.120	14.091	14.179	VB	58064	743446	11.01%	0.603%
30	15.177	15.130	15.197	BV	453476	5614385	83.18%	4.555%
31	15.220	15.197	15.340	VBA	489065	6749937	100.00%	5.477%
32	15.607	15.550	15.700	BB	10920	193123	2.86%	0.157%
33	16.247	16.160	16.287	BB	54344	731513	10.84%	0.594%
34	16.739	16.677	16.754	BV	432186	5614781	83.18%	4.556%
35	16.772	16.754	16.964	VB	457278	5987374	88.70%	4.858%
36	17.120	17.070	17.172	BV	374120	5198895	77.02%	4.218%

Instrument :
FID_F
ClientSampleId :
ENV-101-SB01MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 03/11/2025
Supervised By :Ankita Jodhani 03/11/2025

rteres

37	17.197	17.172	17.230	VV	50697	755287	11.19%	0.613%
38	18.086	18.012	18.144	BB	50337	704846	10	
39	18.498	18.450	18.514	BV	380560	4886053	72	
40	18.531	18.514	18.715	VV	310140	5179421	76	
41	18.753	18.715	18.850	PBA	374708	5263590	77	

Sum of corrected areas: 123

Aromatic EPH 022625.M Tue Mar 11 04:31:48 2025

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 2025	Date Received:	
Client Sample ID:	ENV-101-SB01MSD	SDG No.:	Q1488
Lab Sample ID:	Q1488-01MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	88.5
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
03/10/25 09:20	03/10/25 23:03	PB167058

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	6.97		1	0.43	1.13	mg/kg	FE052714.D
Aliphatic C12-C16	Aliphatic C12-C16	6.12		1	0.27	0.75	mg/kg	FE052714.D
Aliphatic C16-C21	Aliphatic C16-C21	10.1		1	0.34	1.13	mg/kg	FE052714.D
Aliphatic C21-C28	Aliphatic C21-C28	13.3		1	0.90	1.51	mg/kg	FE052714.D
Aliphatic C28-C40	Aliphatic C28-C40	22.5		1	2.03	2.26	mg/kg	FE052714.D
Aromatic C10-C12	Aromatic C10-C12	5.41		1	0.34	0.75	mg/kg	FF015635.D
Aromatic C12-C16	Aromatic C12-C16	9.32		1	0.38	1.13	mg/kg	FF015635.D
Aromatic C16-C21	Aromatic C16-C21	19.4		1	1.08	1.88	mg/kg	FF015635.D
Aromatic C21-C36	Aromatic C21-C36	28.0		1	2.26	3.01	mg/kg	FF015635.D
Total AliphaticEPH	Total AliphaticEPH	59.0			3.97	6.78	mg/kg	
Total AromaticEPH	Total AromaticEPH	62.1			4.06	6.77	mg/kg	
Total EPH	Total EPH	121			8.04	13.6	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

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	ENV-101-SB01MSD	SDG No.:	Q1488
Lab Sample ID:	Q1488-01MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	88.5
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
FE052714.D	1	03/10/25	03/10/25	PB167058

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	6.97		0.43	1.13	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	6.12		0.27	0.75	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	10.1		0.34	1.13	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	13.3		0.90	1.51	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	22.5		2.03	2.26	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	38.6		40 - 140	77%	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:	Q1488-01MSD	Acq On:	10 Mar 2025 23:03
Client Sample ID:	ENV-101-SB01MSD	Operator:	YP\AJ
Data file:	FE052714.D	Misc:	
Instrument:	FID_E	ALS Vial:	25
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.151	6.796	14451806	92.67	300	ug/ml
Aliphatic C12-C16	6.797	10.250	12376069	81.369	200	ug/ml
Aliphatic C16-C21	10.251	13.630	19637423	134	300	ug/ml
Aliphatic C21-C28	13.631	17.305	25253768	177.279	400	ug/ml
Aliphatic C28-C40	17.306	22.234	38123703	298.801	600	ug/ml
Aliphatic EPH	3.151	22.234	109842769	784.119		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.358	13.358	4685264	38.59		ug/ml
Aliphatic C9-C28	3.151	17.305	71719066	485.318	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052714.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 23:03
Operator : YP\AJ
Sample : Q1488-01MSD
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-101-SB01MSD

Integration File: autoint1.e
Quant Time: Mar 11 05:24:39 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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...	13.358	4685264	38.585 ug/ml
Spiked Amount	50.000		Recovery =	77.17%
	Target Compounds			
1) T	n-Nonane (C9)	3.251	3992647	25.751 ug/ml
2) T	n-Decane (C10)	4.512	4811237	30.626 ug/ml
4) T	n-Dodecane (C12)	6.694	5292645	33.993 ug/ml
6) T	n-Tetradecane (C14)	8.532	5735650	37.907 ug/ml
7) T	n-Hexadecane (C16)	10.147	6252593	40.897 ug/ml
8) T	n-Octadecane (C18)	11.597	6578667	43.241 ug/ml
10) T	n-Eicosane (C20)	12.912	6668442	45.934 ug/ml
11) T	n-Heneicosane (C21)	13.526	6390314	44.898 ug/ml
13) T	n-Docosane (C22)	14.115	6386541	44.878 ug/ml
14) T	n-Tetracosane (C24)	15.222	6323730	44.188 ug/ml
15) T	n-Hexacosane (C26)	16.247	6293313	44.259 ug/ml
16) T	n-Octacosane (C28)	17.198	6250184	43.955 ug/ml
17) T	n-Tricontane (C30)	18.089	6337909	42.911 ug/ml
18) T	n-Dotriacontane (C32)	18.924	6355288	43.775 ug/ml
19) T	n-Tetratriacontane (C34)	19.710	6368875	47.254 ug/ml
20) T	n-Hexatriacontane (C36)	20.452	6272863	52.791 ug/ml
21) T	n-Octatriacontane (C38)	21.195	6365465	57.380 ug/ml
22) T	n-Tetracontane (C40)	22.118	6423303	59.411 ug/ml

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

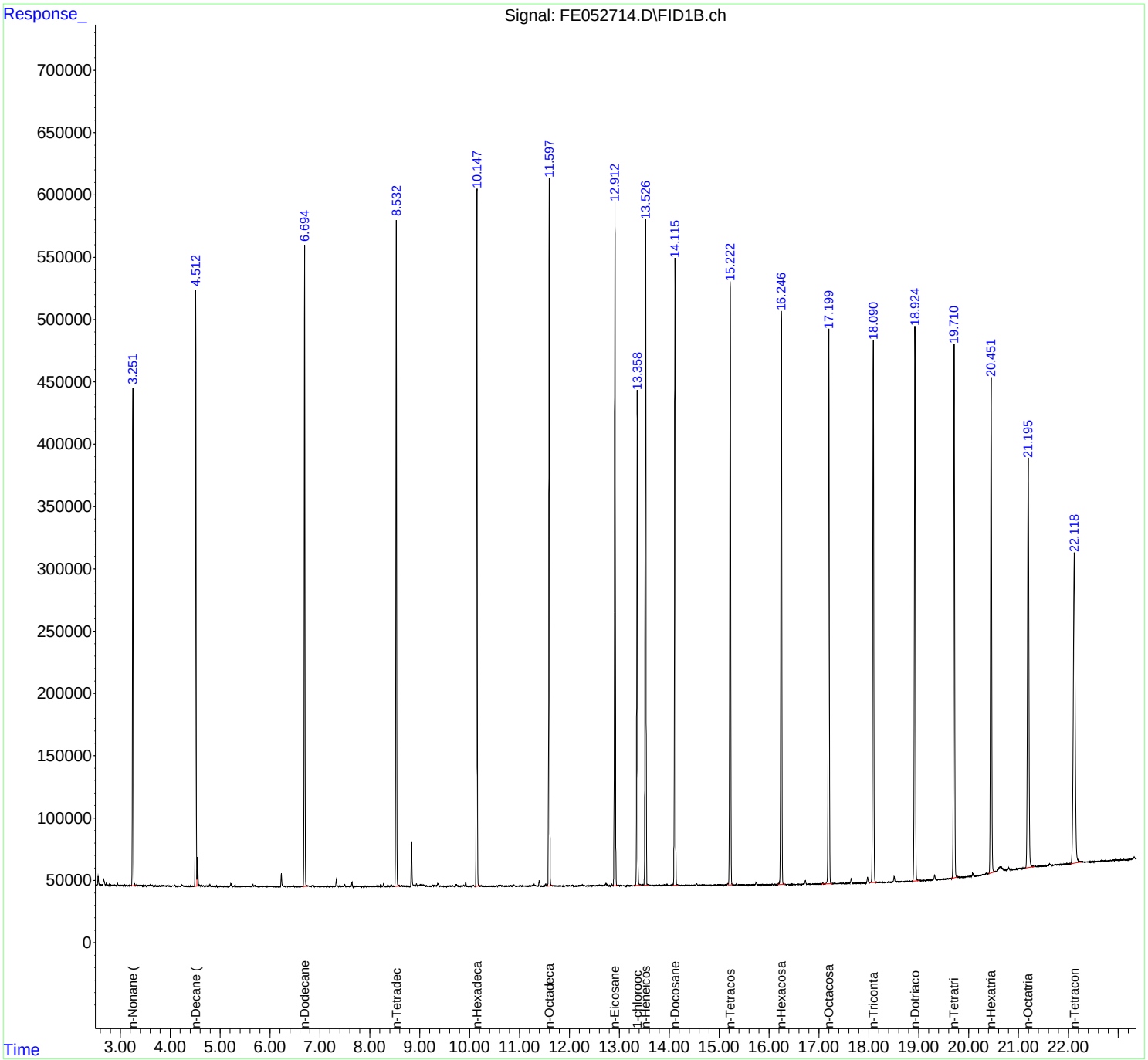
Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE031025AL\
Data File : FE052714.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 23:03
Operator : YP\AJ
Sample : Q1488-01MSD
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
ENV-101-SB01MSD

Integration File: autoint1.e
Quant Time: Mar 11 05:24:39 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.M
Quant Title : GC Extractables
QLast Update : Mon Mar 03 13:39:39 2025
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\FE031025AL\
Data File : FE052714.D
Signal(s) : FID1B.ch
Acq On : 10 Mar 2025 23:03
Sample : Q1488-01MSD
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 030325.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	2.555	2.531	2.618	BB	7137	73710	1.11%	0.064%
2	3.251	3.218	3.321	BB	398705	3992647	59.87%	3.484%
3	4.512	4.474	4.536	BV	475837	4811237	72.15%	4.198%
4	4.549	4.536	4.611	VB	23212	242270	3.63%	0.211%
5	6.228	6.198	6.278	BB	10297	113007	1.69%	0.099%
6	6.694	6.651	6.754	BB	515731	5292645	79.37%	4.618%
7	8.532	8.494	8.601	BV	531369	5735650	86.01%	5.005%
8	8.837	8.701	8.901	BB	35549	387826	5.82%	0.338%
9	10.147	10.104	10.204	BB	561197	6252593	93.76%	5.456%
10	11.597	11.554	11.658	PB	572601	6578667	98.65%	5.740%
11	12.912	12.872	12.964	PB	546952	6668442	100.00%	5.819%
12	13.358	13.298	13.438	BB	396329	4685264	70.26%	4.088%
13	13.526	13.484	13.588	BB	535640	6390314	95.83%	5.576%
14	14.115	14.077	14.178	VB	503417	6386541	95.77%	5.573%
15	15.222	15.183	15.281	VB	479277	6323730	94.83%	5.518%
16	16.247	16.171	16.321	BB	457285	6293313	94.37%	5.491%
17	17.198	17.058	17.268	BB	445231	6250184	93.73%	5.454%
18	18.089	18.018	18.158	BB	435734	6337909	95.04%	5.530%
19	18.924	18.871	19.011	BB	447217	6355288	95.30%	5.546%
20	19.710	19.651	19.774	BB	428119	6368875	95.51%	5.557%
21	20.452	20.401	20.528	BB	397138	6272863	94.07%	5.474%
22	21.195	21.131	21.321	BB	328488	6365465	95.46%	5.554%
23	22.118	22.041	22.264	BB	249109	6423303	96.32%	5.605%

Sum of corrected areas: 114601739

Aliphatic EPH 030325.M Tue Mar 11 06:21:23 2025

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Manual Integration Report

Sequence:	FC021125AL	Instrument	FID_c

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

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Manual Integration Report

Sequence:	FC030525AL	Instrument	FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM ALIPHATIC HC	FC068368.D	n-Tetracosane (C24)	yogesh	3/6/2025 7:46:57 AM	mohammad	3/7/2025 1:37:01	Peak Integrated by Software
PB166976BS	FC068370.D	n-Nonane (C9)	yogesh	3/6/2025 7:46:59 AM	mohammad	3/7/2025 1:37:05	Peak Integrated by Software
PB166976BSD	FC068371.D	n-Nonane (C9)	yogesh	3/6/2025 7:47:00 AM	mohammad	3/7/2025 1:37:08	Peak Integrated by Software

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Manual Integration Report

Sequence:	FD021125AR	Instrument	FID_d

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM AROMATIC HC	FD049077.D	Indeno[1,2,3-cd]pyrene (C35.01)	yogesh	2/11/2025 7:39:10 AM	Ankita	2/11/2025 9:13:40	Peak Integrated by Software
20 PPM AROMATIC HC	FD049079.D	Indeno[1,2,3-cd]pyrene (C35.01)	yogesh	2/11/2025 7:39:12 AM	Ankita	2/11/2025 9:13:41	Peak Integrated by Software

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Manual Integration Report

Sequence:	FD030525AR	Instrument	FID_d

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

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Manual Integration Report

Sequence:	FE030325AL	Instrument	FID_e

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

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Manual Integration Report

Sequence:	FE031025AL	Instrument	FID_e

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1508-01DL	FE052693.D	1-chlorooctadecane (SURR)	yogesh	3/11/2025 8:09:43 AM	Ankita	3/11/2025 9:25:02	Peak Integrated by Software
Q1508-01DL	FE052693.D	ortho-Terphenyl (SURR)	yogesh	3/11/2025 8:09:43 AM	Ankita	3/11/2025 9:25:02	Peak Integrated by Software
Q1508-02DL	FE052694.D	ortho-Terphenyl (SURR)	yogesh	3/11/2025 8:09:45 AM	Ankita	3/11/2025 9:25:03	Peak Integrated by Software

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Manual Integration Report

Sequence:	FF022625AR	Instrument	FID_f

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM AROMATIC HC	FF015532.D	Indeno[1,2,3-cd]pyrene (C35.01)	yogesh	2/26/2025 3:00:00 PM	Ankita	2/27/2025 8:55:09	Peak Integrated by Software
20 PPM AROMATIC HC	FF015534.D	Indeno[1,2,3-cd]pyrene (C35.01)	yogesh	2/26/2025 2:59:58 PM	Ankita	2/27/2025 8:55:10	Peak Integrated by Software

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Manual Integration Report

Sequence:	FF031025AR	Instrument	FID_f

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1488-01MS	FF015634.D	Indeno[1,2,3-cd]pyrene (C35.01)	yogesh	3/11/2025 7:58:21 AM	Ankita	3/11/2025 9:25:32	Peak Integrated by Software
Q1488-01MSD	FF015635.D	Indeno[1,2,3-cd]pyrene (C35.01)	yogesh	3/11/2025 7:58:22 AM	Ankita	3/11/2025 9:25:34	Peak Integrated by Software

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Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC021125AL

Review By	yogesh	Review On	2/10/2025 4:11:01 PM		
Supervise By	Ankita	Supervise On	2/11/2025 9:13:33 AM		
SubDirectory	FC021125AL	HP Acquire Method		HP Processing Method	FC021125AL

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178
CCC	PP24176
Internal Standard/PEM	
ICV/I.BLK	PP24174,PP24179
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FC068250.D	10 Feb 2025 15:12	YP/AJ	Ok
2	I.BLK	FC068251.D	10 Feb 2025 15:48	YP/AJ	Ok
3	100 PPM ALIPHATIC HC STD1	FC068252.D	10 Feb 2025 16:24	YP/AJ	Ok
4	50 PPM ALIPHATIC HC STD2	FC068253.D	10 Feb 2025 17:01	YP/AJ	Ok
5	20 PPM ALIPHATIC HC STD3	FC068254.D	10 Feb 2025 17:38	YP/AJ	Ok
6	10 PPM ALIPHATIC HC STD4	FC068255.D	10 Feb 2025 18:14	YP/AJ	Ok
7	5 PPM ALIPHATIC HC STD5	FC068256.D	10 Feb 2025 18:50	YP/AJ	Ok
8	20 PPM ALIPHATIC HC STD ICV	FC068257.D	10 Feb 2025 19:26	YP/AJ	Ok
9	I.BLK	FC068258.D	10 Feb 2025 20:39	YP/AJ	Ok
10	20 PPM ALIPHATIC HC STD	FC068259.D	10 Feb 2025 21:16	YP/AJ	Ok

M : Manual Integration

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Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC030525AL

Review By	yogesh	Review On	3/5/2025 3:16:09 PM		
Supervise By	mohammad	Supervise On	3/8/2025 4:27:39 AM		
SubDirectory	FC030525AL	HP Acquire Method		HP Processing Method	FC021125AL

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178
CCC	PP24176
Internal Standard/PEM	
ICV/I.BLK	PP24174,PP24179
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FC068366.D	05 Mar 2025 10:12	YP/AJ	Ok
2	I.BLK	FC068367.D	05 Mar 2025 13:31	YP/AJ	Ok
3	20 PPM ALIPHATIC HC STD	FC068368.D	05 Mar 2025 15:22	YP/AJ	Ok,M
4	PB166976BL	FC068369.D	05 Mar 2025 15:58	YP/AJ	Ok
5	PB166976BS	FC068370.D	05 Mar 2025 16:35	YP/AJ	Ok,M
6	PB166976BSD	FC068371.D	05 Mar 2025 17:12	YP/AJ	Ok,M
7	Q1480-33	FC068372.D	05 Mar 2025 17:50	YP/AJ	Ok
8	Q1488-13	FC068373.D	05 Mar 2025 18:27	YP/AJ	Ok
9	Q1488-14	FC068374.D	05 Mar 2025 19:04	YP/AJ	Ok
10	I.BLK	FC068375.D	05 Mar 2025 19:41	YP/AJ	Ok
11	20 PPM ALIPHATIC HC STD	FC068376.D	05 Mar 2025 20:18	YP/AJ	Ok

M : Manual Integration

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Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QCBatch ID # FD021125AR

Review By	yogesh	Review On	2/10/2025 4:12:05 PM		
Supervise By	Ankita	Supervise On	2/11/2025 9:13:44 AM		
SubDirectory	FD021125AR	HP Acquire Method		HP Processing Method	FD021125AR

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23968,PP23970,PP23971,PP23972,PP23973
CCC	PP23971
Internal Standard/PEM	
ICV/I.BLK	PP23969,PP23974
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FD049070.D	10 Feb 2025 12:09	YP/AJ	Ok
2	I.BLK	FD049071.D	10 Feb 2025 12:45	YP/AJ	Ok
3	100 PPM AROMATIC HC STD1	FD049072.D	10 Feb 2025 13:22	YP/AJ	Ok
4	50 PPM AROMATIC HC STD2	FD049073.D	10 Feb 2025 13:58	YP/AJ	Ok
5	20 PPM AROMATIC HC STD3	FD049074.D	10 Feb 2025 14:35	YP/AJ	Ok
6	10 PPM AROMATIC HC STD4	FD049075.D	10 Feb 2025 15:12	YP/AJ	Ok
7	5 PPM AROMATIC HC STD5	FD049076.D	10 Feb 2025 15:48	YP/AJ	Ok
8	20 PPM AROMATIC HC STD ICV	FD049077.D	10 Feb 2025 16:24	YP/AJ	Ok,M
9	I.BLK	FD049078.D	10 Feb 2025 17:01	YP/AJ	Ok
10	20 PPM AROMATIC HC STD	FD049079.D	10 Feb 2025 17:38	YP/AJ	Ok,M

M : Manual Integration

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Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QCBatch ID # FD030525AR

Review By	yogesh	Review On	3/5/2025 3:17:07 PM		
Supervise By	mohammad	Supervise On	3/8/2025 4:35:54 AM		
SubDirectory	FD030525AR	HP Acquire Method		HP Processing Method	FD021125AR

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23968,PP23970,PP23971,PP23972,PP23973
CCC	PP23971
Internal Standard/PEM	
ICV/I.BLK	PP23969,PP24199
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FD049156.D	05 Mar 2025 10:12	YP/AJ	Ok
2	I.BLK	FD049157.D	05 Mar 2025 13:31	YP/AJ	Ok
3	20 PPM AROMATIC HC STD	FD049158.D	05 Mar 2025 15:22	YP/AJ	Ok
4	PB166976BL	FD049159.D	05 Mar 2025 15:58	YP/AJ	Ok
5	PB166976BS	FD049160.D	05 Mar 2025 16:35	YP/AJ	Ok
6	PB166976BSD	FD049161.D	05 Mar 2025 17:12	YP/AJ	Ok
7	Q1480-33	FD049162.D	05 Mar 2025 17:50	YP/AJ	Ok
8	Q1488-13	FD049163.D	05 Mar 2025 18:27	YP/AJ	Ok
9	Q1488-14	FD049164.D	05 Mar 2025 19:04	YP/AJ	Ok
10	I.BLK	FD049165.D	05 Mar 2025 19:41	YP/AJ	Ok
11	20 PPM AROMATIC HC STD	FD049166.D	05 Mar 2025 20:18	YP/AJ	Ok

M : Manual Integration

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 # FE030325AL

Review By	yogesh	Review On	3/3/2025 1:02:44 PM		
Supervise By	mohammad	Supervise On	3/7/2025 1:35:41 AM		
SubDirectory	FE030325AL	HP Acquire Method		HP Processing Method	FE030325AL

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178
CCC	PP24176
Internal Standard/PEM	
ICV/I.BLK	PP24174,PP24179
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FE052572.D	03 Mar 2025 08:32	YP\AJ	Ok
2	I.BLK	FE052573.D	03 Mar 2025 09:02	YP\AJ	Ok
3	100 PPM ALIPHATIC HC STD1	FE052574.D	03 Mar 2025 11:03	YP\AJ	Ok
4	50 PPM ALIPHATIC HC STD2	FE052575.D	03 Mar 2025 11:34	YP\AJ	Ok
5	20 PPM ALIPHATIC HC STD3	FE052576.D	03 Mar 2025 12:04	YP\AJ	Ok
6	10 PPM ALIPHATIC HC STD4	FE052577.D	03 Mar 2025 12:34	YP\AJ	Ok
7	5 PPM ALIPHATIC HC STD5	FE052578.D	03 Mar 2025 13:04	YP\AJ	Ok
8	20 PPM ALIPHATIC HC STD ICV	FE052579.D	03 Mar 2025 13:35	YP\AJ	Ok
9	I.BLK	FE052580.D	03 Mar 2025 14:05	YP\AJ	Ok
10	20 PPM ALIPHATIC HC STD	FE052581.D	03 Mar 2025 14:35	YP\AJ	Ok

M : Manual Integration

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Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE031025AL

Review By	yogesh	Review On	3/10/2025 11:00:03 AM		
Supervise By	Ankita	Supervise On	3/11/2025 9:25:11 AM		
SubDirectory	FE031025AL	HP Acquire Method		HP Processing Method	FE030325AL

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178
CCC	PP24176
Internal Standard/PEM	
ICV/I.BLK	PP24174,PP24179
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FE052690.D	10 Mar 2025 08:38	YP\AJ	Ok
2	I.BLK	FE052691.D	10 Mar 2025 09:09	YP\AJ	Ok
3	20 PPM ALIPHATIC HC STD	FE052692.D	10 Mar 2025 10:09	YP\AJ	Ok
4	Q1508-01DL	FE052693.D	10 Mar 2025 11:00	YP\AJ	Ok,M
5	Q1508-02DL	FE052694.D	10 Mar 2025 11:30	YP\AJ	Ok,M
6	Q1518-01DL	FE052695.D	10 Mar 2025 12:00	YP\AJ	Ok
7	I.BLK	FE052696.D	10 Mar 2025 13:00	YP\AJ	Ok
8	20 PPM ALIPHATIC HC STD	FE052697.D	10 Mar 2025 13:31	YP\AJ	Ok
9	PB167046BL	FE052698.D	10 Mar 2025 14:01	YP\AJ	Ok
10	PB167046BS	FE052699.D	10 Mar 2025 14:31	YP\AJ	Ok
11	PB167046BSD	FE052700.D	10 Mar 2025 15:01	YP\AJ	Ok
12	Q1524-01	FE052701.D	10 Mar 2025 15:32	YP\AJ	Ok
13	Q1524-01D	FE052702.D	10 Mar 2025 16:01	YP\AJ	Ok
14	Q1524-01MS	FE052703.D	10 Mar 2025 16:31	YP\AJ	Ok
15	Q1524-01MSD	FE052704.D	10 Mar 2025 17:01	YP\AJ	Ok
16	Q1524-02	FE052705.D	10 Mar 2025 17:31	YP\AJ	Ok
17	I.BLK	FE052706.D	10 Mar 2025 18:32	YP\AJ	Ok
18	20 PPM ALIPHATIC HC STD	FE052707.D	10 Mar 2025 19:02	YP\AJ	Ok
19	PB167058BL	FE052708.D	10 Mar 2025 20:02	YP\AJ	Ok
20	PB167058BS	FE052709.D	10 Mar 2025 20:32	YP\AJ	Ok
21	PB167058BSD	FE052710.D	10 Mar 2025 21:02	YP\AJ	Ok

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Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE031025AL

Review By	yogesh	Review On	3/10/2025 11:00:03 AM		
Supervise By	Ankita	Supervise On	3/11/2025 9:25:11 AM		
SubDirectory	FE031025AL	HP Acquire Method		HP Processing Method	FE030325AL

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178
CCC	PP24176
Internal Standard/PEM	
ICV/I.BLK	PP24174,PP24179
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q1488-01	FE052711.D	10 Mar 2025 21:32	YP\AJ	Ok
23	Q1488-01D	FE052712.D	10 Mar 2025 22:02	YP\AJ	Ok
24	Q1488-01MS	FE052713.D	10 Mar 2025 22:32	YP\AJ	Ok
25	Q1488-01MSD	FE052714.D	10 Mar 2025 23:03	YP\AJ	Ok
26	Q1488-03	FE052715.D	10 Mar 2025 23:32	YP\AJ	Ok
27	Q1488-05	FE052716.D	11 Mar 2025 00:03	YP\AJ	Ok
28	Q1488-07	FE052717.D	11 Mar 2025 00:33	YP\AJ	Ok
29	Q1488-09	FE052718.D	11 Mar 2025 01:03	YP\AJ	Ok
30	Q1488-11	FE052719.D	11 Mar 2025 01:34	YP\AJ	Ok
31	Q1514-01	FE052720.D	11 Mar 2025 02:04	YP\AJ	Dilution
32	Q1514-03	FE052721.D	11 Mar 2025 02:34	YP\AJ	Ok
33	Q1514-05	FE052722.D	11 Mar 2025 03:04	YP\AJ	Ok
34	I.BLK	FE052723.D	11 Mar 2025 04:04	YP\AJ	Ok
35	20 PPM ALIPHATIC HC STD	FE052724.D	11 Mar 2025 04:34	YP\AJ	Ok

M : Manual Integration

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Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QCBatch ID # FF022625AR

Review By	yogesh	Review On	2/26/2025 1:35:57 PM		
Supervise By	Ankita	Supervise On	2/27/2025 8:55:13 AM		
SubDirectory	FF022625AR	HP Acquire Method		HP Processing Method	FF022625AR

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23968,PP24202,PP24203,PP24204,PP24205
CCC	PP24203
Internal Standard/PEM	
ICV/I.BLK	PP23969,PP24206
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FF015525.D	25 Feb 2025 06:50	YP\AJ	Ok
2	I.BLK	FF015526.D	25 Feb 2025 07:19	YP\AJ	Ok
3	100 PPM AROMATIC HC STD1	FF015527.D	25 Feb 2025 09:00	YP\AJ	Ok
4	50 PPM AROMATIC HC STD2	FF015528.D	25 Feb 2025 09:30	YP\AJ	Ok
5	20 PPM AROMATIC HC STD3	FF015529.D	25 Feb 2025 09:59	YP\AJ	Ok
6	10 PPM AROMATIC HC STD4	FF015530.D	25 Feb 2025 10:28	YP\AJ	Ok
7	5 PPM AROMATIC HC STD5	FF015531.D	25 Feb 2025 10:58	YP\AJ	Ok
8	20 PPM AROMATIC HC STD ICV	FF015532.D	25 Feb 2025 11:27	YP\AJ	Ok,M
9	I.BLK	FF015533.D	25 Feb 2025 11:56	YP\AJ	Ok
10	20 PPM AROMATIC HC STD	FF015534.D	25 Feb 2025 12:26	YP\AJ	Ok,M

M : Manual Integration

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Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QCBatch ID # FF031025AR

Review By	yogesh	Review On	3/10/2025 1:31:15 PM		
Supervise By	Ankita	Supervise On	3/11/2025 9:25:39 AM		
SubDirectory	FF031025AR	HP Acquire Method		HP Processing Method	FF022525AR

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23968,PP24202,PP24203,PP24204,PP24205
CCC	PP24203
Internal Standard/PEM	
ICV/I.BLK	PP23969,PP24206
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FF015626.D	10 Mar 2025 08:35	YP\AJ	Ok
2	I.BLK	FF015627.D	10 Mar 2025 13:00	YP\AJ	Ok
3	20 PPM AROMATIC HC STD	FF015628.D	10 Mar 2025 13:29	YP\AJ	Ok
4	PB167058BL	FF015629.D	10 Mar 2025 16:47	YP\AJ	Ok
5	PB167058BS	FF015630.D	10 Mar 2025 17:17	YP\AJ	Ok
6	PB167058BSD	FF015631.D	10 Mar 2025 17:46	YP\AJ	Ok
7	Q1488-01	FF015632.D	10 Mar 2025 18:15	YP\AJ	Ok
8	Q1488-01D	FF015633.D	10 Mar 2025 18:45	YP\AJ	Ok
9	Q1488-01MS	FF015634.D	10 Mar 2025 19:14	YP\AJ	Ok,M
10	Q1488-01MSD	FF015635.D	10 Mar 2025 19:43	YP\AJ	Ok,M
11	Q1488-03	FF015636.D	10 Mar 2025 20:13	YP\AJ	Ok
12	Q1488-05	FF015637.D	10 Mar 2025 20:42	YP\AJ	Ok
13	Q1488-07	FF015638.D	10 Mar 2025 21:11	YP\AJ	Ok
14	Q1488-09	FF015639.D	10 Mar 2025 21:41	YP\AJ	Ok
15	Q1488-11	FF015640.D	10 Mar 2025 22:10	YP\AJ	Ok
16	Q1514-01	FF015641.D	10 Mar 2025 22:39	YP\AJ	Dilution
17	Q1514-03	FF015642.D	10 Mar 2025 23:08	YP\AJ	Ok
18	Q1514-05	FF015643.D	10 Mar 2025 23:38	YP\AJ	Ok
19	I.BLK	FF015644.D	11 Mar 2025 00:36	YP\AJ	Ok
20	20 PPM AROMATIC HC STD	FF015645.D	11 Mar 2025 01:05	YP\AJ	Ok

M : Manual Integration

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Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC021125AL

Review By	yogesh	Review On	2/10/2025 4:11:01 PM		
Supervise By	Ankita	Supervise On	2/11/2025 9:13:33 AM		
SubDirectory	FC021125AL	HP Acquire Method		HP Processing Method	FC021125AL

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178
CCC	PP24176
Internal Standard/PEM	
ICV/I.BLK	PP24174,PP24179
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FC068250.D	10 Feb 2025 15:12		YP/AJ	Ok
2	I.BLK	I.BLK	FC068251.D	10 Feb 2025 15:48		YP/AJ	Ok
3	100 PPM ALIPHATIC H	100 PPM ALIPHATIC H	FC068252.D	10 Feb 2025 16:24		YP/AJ	Ok
4	50 PPM ALIPHATIC HC	50 PPM ALIPHATIC HC	FC068253.D	10 Feb 2025 17:01		YP/AJ	Ok
5	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068254.D	10 Feb 2025 17:38		YP/AJ	Ok
6	10 PPM ALIPHATIC HC	10 PPM ALIPHATIC HC	FC068255.D	10 Feb 2025 18:14		YP/AJ	Ok
7	5 PPM ALIPHATIC HC	5 PPM ALIPHATIC HC	FC068256.D	10 Feb 2025 18:50		YP/AJ	Ok
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068257.D	10 Feb 2025 19:26		YP/AJ	Ok
9	I.BLK	I.BLK	FC068258.D	10 Feb 2025 20:39		YP/AJ	Ok
10	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068259.D	10 Feb 2025 21:16		YP/AJ	Ok

M : Manual Integration

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Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC030525AL

Review By	yogesh	Review On	3/5/2025 3:16:09 PM		
Supervise By	mohammad	Supervise On	3/8/2025 4:27:39 AM		
SubDirectory	FC030525AL	HP Acquire Method		HP Processing Method	FC021125AL

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178
CCC	PP24176
Internal Standard/PEM	
ICV/I.BLK	PP24174,PP24179
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FC068366.D	05 Mar 2025 10:12		YP/AJ	Ok
2	I.BLK	I.BLK	FC068367.D	05 Mar 2025 13:31		YP/AJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068368.D	05 Mar 2025 15:22		YP/AJ	Ok,M
4	PB166976BL	PB166976BL	FC068369.D	05 Mar 2025 15:58		YP/AJ	Ok
5	PB166976BS	PB166976BS	FC068370.D	05 Mar 2025 16:35		YP/AJ	Ok,M
6	PB166976BSD	PB166976BSD	FC068371.D	05 Mar 2025 17:12		YP/AJ	Ok,M
7	Q1480-33	TP-3-WATER-SAMPLE	FC068372.D	05 Mar 2025 17:50		YP/AJ	Ok
8	Q1488-13	ENV-102-GW01	FC068373.D	05 Mar 2025 18:27		YP/AJ	Ok
9	Q1488-14	ENV-104-GW01	FC068374.D	05 Mar 2025 19:04		YP/AJ	Ok
10	I.BLK	I.BLK	FC068375.D	05 Mar 2025 19:41		YP/AJ	Ok
11	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068376.D	05 Mar 2025 20:18		YP/AJ	Ok

M : Manual Integration

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Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QCBatch ID # FD021125AR

Review By	yogesh	Review On	2/10/2025 4:12:05 PM		
Supervise By	Ankita	Supervise On	2/11/2025 9:13:44 AM		
SubDirectory	FD021125AR	HP Acquire Method		HP Processing Method	FD021125AR

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23968,PP23970,PP23971,PP23972,PP23973
CCC	PP23971
Internal Standard/PEM	
ICV/I.BLK	PP23969,PP23974
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FD049070.D	10 Feb 2025 12:09		YP/AJ	Ok
2	I.BLK	I.BLK	FD049071.D	10 Feb 2025 12:45		YP/AJ	Ok
3	100 PPM AROMATIC H	100 PPM AROMATIC H	FD049072.D	10 Feb 2025 13:22		YP/AJ	Ok
4	50 PPM AROMATIC HC	50 PPM AROMATIC HC	FD049073.D	10 Feb 2025 13:58		YP/AJ	Ok
5	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD049074.D	10 Feb 2025 14:35		YP/AJ	Ok
6	10 PPM AROMATIC HC	10 PPM AROMATIC HC	FD049075.D	10 Feb 2025 15:12		YP/AJ	Ok
7	5 PPM AROMATIC HC	5 PPM AROMATIC HC	FD049076.D	10 Feb 2025 15:48		YP/AJ	Ok
8	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD049077.D	10 Feb 2025 16:24		YP/AJ	Ok,M
9	I.BLK	I.BLK	FD049078.D	10 Feb 2025 17:01		YP/AJ	Ok
10	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD049079.D	10 Feb 2025 17:38		YP/AJ	Ok,M

M : Manual Integration

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Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QCBatch ID # FD030525AR

Review By	yogesh	Review On	3/5/2025 3:17:07 PM		
Supervise By	mohammad	Supervise On	3/8/2025 4:35:54 AM		
SubDirectory	FD030525AR	HP Acquire Method		HP Processing Method	FD021125AR

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23968,PP23970,PP23971,PP23972,PP23973
CCC	PP23971
Internal Standard/PEM	
ICV/I.BLK	PP23969,PP24199
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FD049156.D	05 Mar 2025 10:12		YP/AJ	Ok
2	I.BLK	I.BLK	FD049157.D	05 Mar 2025 13:31		YP/AJ	Ok
3	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD049158.D	05 Mar 2025 15:22		YP/AJ	Ok
4	PB166976BL	PB166976BL	FD049159.D	05 Mar 2025 15:58		YP/AJ	Ok
5	PB166976BS	PB166976BS	FD049160.D	05 Mar 2025 16:35		YP/AJ	Ok
6	PB166976BSD	PB166976BSD	FD049161.D	05 Mar 2025 17:12		YP/AJ	Ok
7	Q1480-33	TP-3-WATER-SAMPLE	FD049162.D	05 Mar 2025 17:50		YP/AJ	Ok
8	Q1488-13	ENV-102-GW01	FD049163.D	05 Mar 2025 18:27		YP/AJ	Ok
9	Q1488-14	ENV-104-GW01	FD049164.D	05 Mar 2025 19:04		YP/AJ	Ok
10	I.BLK	I.BLK	FD049165.D	05 Mar 2025 19:41		YP/AJ	Ok
11	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD049166.D	05 Mar 2025 20:18		YP/AJ	Ok

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Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE030325AL

Review By	yogesh	Review On	3/3/2025 1:02:44 PM		
Supervise By	mohammad	Supervise On	3/7/2025 1:35:41 AM		
SubDirectory	FE030325AL	HP Acquire Method		HP Processing Method	FE030325AL

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178
CCC	PP24176
Internal Standard/PEM	
ICV/I.BLK	PP24174,PP24179
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FE052572.D	03 Mar 2025 08:32		YP\AJ	Ok
2	I.BLK	I.BLK	FE052573.D	03 Mar 2025 09:02		YP\AJ	Ok
3	100 PPM ALIPHATIC H	100 PPM ALIPHATIC H	FE052574.D	03 Mar 2025 11:03		YP\AJ	Ok
4	50 PPM ALIPHATIC HC	50 PPM ALIPHATIC HC	FE052575.D	03 Mar 2025 11:34		YP\AJ	Ok
5	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE052576.D	03 Mar 2025 12:04		YP\AJ	Ok
6	10 PPM ALIPHATIC HC	10 PPM ALIPHATIC HC	FE052577.D	03 Mar 2025 12:34		YP\AJ	Ok
7	5 PPM ALIPHATIC HC	5 PPM ALIPHATIC HC	FE052578.D	03 Mar 2025 13:04		YP\AJ	Ok
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE052579.D	03 Mar 2025 13:35		YP\AJ	Ok
9	I.BLK	I.BLK	FE052580.D	03 Mar 2025 14:05		YP\AJ	Ok
10	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE052581.D	03 Mar 2025 14:35		YP\AJ	Ok

M : Manual Integration

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Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE031025AL

Review By	yogesh	Review On	3/10/2025 11:00:03 AM		
Supervise By	Ankita	Supervise On	3/11/2025 9:25:11 AM		
SubDirectory	FE031025AL	HP Acquire Method		HP Processing Method	FE030325AL

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178
CCC	PP24176
Internal Standard/PEM	
ICV/I.BLK	PP24174,PP24179
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FE052690.D	10 Mar 2025 08:38		YP\AJ	Ok
2	I.BLK	I.BLK	FE052691.D	10 Mar 2025 09:09		YP\AJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE052692.D	10 Mar 2025 10:09		YP\AJ	Ok
4	Q1508-01DL	RBR251372DL	FE052693.D	10 Mar 2025 11:00		YP\AJ	Ok,M
5	Q1508-02DL	RBR251372-E2DL	FE052694.D	10 Mar 2025 11:30		YP\AJ	Ok,M
6	Q1518-01DL	OILY-DEBRIS-COMPD	FE052695.D	10 Mar 2025 12:00		YP\AJ	Ok
7	I.BLK	I.BLK	FE052696.D	10 Mar 2025 13:00		YP\AJ	Ok
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE052697.D	10 Mar 2025 13:31		YP\AJ	Ok
9	PB167046BL	PB167046BL	FE052698.D	10 Mar 2025 14:01		YP\AJ	Ok
10	PB167046BS	PB167046BS	FE052699.D	10 Mar 2025 14:31		YP\AJ	Ok
11	PB167046BSD	PB167046BSD	FE052700.D	10 Mar 2025 15:01		YP\AJ	Ok
12	Q1524-01	72-11930-343-COMP	FE052701.D	10 Mar 2025 15:32		YP\AJ	Ok
13	Q1524-01D	Q1524-01D	FE052702.D	10 Mar 2025 16:01		YP\AJ	Ok
14	Q1524-01MS	72-11930-343-COMPM	FE052703.D	10 Mar 2025 16:31	FE052701.D	YP\AJ	Ok
15	Q1524-01MSD	72-11930-343-COMPM	FE052704.D	10 Mar 2025 17:01	FE052701.D!FE052703.D	YP\AJ	Ok
16	Q1524-02	VNJ-241	FE052705.D	10 Mar 2025 17:31		YP\AJ	Ok
17	I.BLK	I.BLK	FE052706.D	10 Mar 2025 18:32		YP\AJ	Ok
18	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE052707.D	10 Mar 2025 19:02		YP\AJ	Ok

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Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE031025AL

Review By	yogesh	Review On	3/10/2025 11:00:03 AM		
Supervise By	Ankita	Supervise On	3/11/2025 9:25:11 AM		
SubDirectory	FE031025AL	HP Acquire Method		HP Processing Method	FE030325AL

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178
CCC	PP24176
Internal Standard/PEM	
ICV/I.BLK	PP24174,PP24179
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	PB167058BL	PB167058BL	FE052708.D	10 Mar 2025 20:02		YP\AJ	Ok
20	PB167058BS	PB167058BS	FE052709.D	10 Mar 2025 20:32	naphthalene break down - 1.10, 2 methylnephthalene break down - 0.64	YP\AJ	Ok
21	PB167058BSD	PB167058BSD	FE052710.D	10 Mar 2025 21:02	naphthalene break down - 0.84, 2 methylnephthalene break down - 0.63	YP\AJ	Ok
22	Q1488-01	ENV-101-SB01	FE052711.D	10 Mar 2025 21:32		YP\AJ	Ok
23	Q1488-01D	Q1488-01D	FE052712.D	10 Mar 2025 22:02		YP\AJ	Ok
24	Q1488-01MS	ENV-101-SB01MS	FE052713.D	10 Mar 2025 22:32	FE052711.D	YP\AJ	Ok
25	Q1488-01MSD	ENV-101-SB01MSD	FE052714.D	10 Mar 2025 23:03	FE052711.D!FE052713.D	YP\AJ	Ok
26	Q1488-03	ENV-101-SB02	FE052715.D	10 Mar 2025 23:32		YP\AJ	Ok
27	Q1488-05	ENV-102-SB01	FE052716.D	11 Mar 2025 00:03		YP\AJ	Ok
28	Q1488-07	ENV-102-SB02	FE052717.D	11 Mar 2025 00:33		YP\AJ	Ok
29	Q1488-09	ENV-104-SB01	FE052718.D	11 Mar 2025 01:03		YP\AJ	Ok
30	Q1488-11	ENV-104-SB02	FE052719.D	11 Mar 2025 01:34		YP\AJ	Ok
31	Q1514-01	ENV-105-SB01	FE052720.D	11 Mar 2025 02:04	need 2x dilution	YP\AJ	Dilution
32	Q1514-03	ENV-105-SB02	FE052721.D	11 Mar 2025 02:34		YP\AJ	Ok
33	Q1514-05	ENV-103-SB01	FE052722.D	11 Mar 2025 03:04		YP\AJ	Ok
34	I.BLK	I.BLK	FE052723.D	11 Mar 2025 04:04		YP\AJ	Ok
35	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE052724.D	11 Mar 2025 04:34		YP\AJ	Ok

M : Manual Integration

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

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QCBatch ID # FF022625AR

Review By	yogesh	Review On	2/26/2025 1:35:57 PM		
Supervise By	Ankita	Supervise On	2/27/2025 8:55:13 AM		
SubDirectory	FF022625AR	HP Acquire Method		HP Processing Method	FF022625AR

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23968,PP24202,PP24203,PP24204,PP24205
CCC	PP24203
Internal Standard/PEM	
ICV/I.BLK	PP23969,PP24206
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FF015525.D	25 Feb 2025 06:50		YP\AJ	Ok
2	I.BLK	I.BLK	FF015526.D	25 Feb 2025 07:19		YP\AJ	Ok
3	100 PPM AROMATIC H	100 PPM AROMATIC H	FF015527.D	25 Feb 2025 09:00		YP\AJ	Ok
4	50 PPM AROMATIC HC	50 PPM AROMATIC HC	FF015528.D	25 Feb 2025 09:30		YP\AJ	Ok
5	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FF015529.D	25 Feb 2025 09:59		YP\AJ	Ok
6	10 PPM AROMATIC HC	10 PPM AROMATIC HC	FF015530.D	25 Feb 2025 10:28		YP\AJ	Ok
7	5 PPM AROMATIC HC	5 PPM AROMATIC HC	FF015531.D	25 Feb 2025 10:58		YP\AJ	Ok
8	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FF015532.D	25 Feb 2025 11:27		YP\AJ	Ok,M
9	I.BLK	I.BLK	FF015533.D	25 Feb 2025 11:56		YP\AJ	Ok
10	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FF015534.D	25 Feb 2025 12:26		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_F

Daily Analysis Runlog For Sequence/QCBatch ID # FF031025AR

Review By	yogesh	Review On	3/10/2025 1:31:15 PM		
Supervise By	Ankita	Supervise On	3/11/2025 9:25:39 AM		
SubDirectory	FF031025AR	HP Acquire Method		HP Processing Method	FF022525AR

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23968,PP24202,PP24203,PP24204,PP24205
CCC	PP24203
Internal Standard/PEM	
ICV/I.BLK	PP23969,PP24206
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FF015626.D	10 Mar 2025 08:35		YP\AJ	Ok
2	I.BLK	I.BLK	FF015627.D	10 Mar 2025 13:00		YP\AJ	Ok
3	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FF015628.D	10 Mar 2025 13:29		YP\AJ	Ok
4	PB167058BL	PB167058BL	FF015629.D	10 Mar 2025 16:47		YP\AJ	Ok
5	PB167058BS	PB167058BS	FF015630.D	10 Mar 2025 17:17	naphthalene break down - 1.10, 2 methylnephthalene break down - 0.64	YP\AJ	Ok
6	PB167058BSD	PB167058BSD	FF015631.D	10 Mar 2025 17:46	naphthalene break down - 0.84, 2 methylnephthalene break down - 0.63	YP\AJ	Ok
7	Q1488-01	ENV-101-SB01	FF015632.D	10 Mar 2025 18:15		YP\AJ	Ok
8	Q1488-01D	Q1488-01D	FF015633.D	10 Mar 2025 18:45		YP\AJ	Ok
9	Q1488-01MS	ENV-101-SB01MS	FF015634.D	10 Mar 2025 19:14	FF015632.D	YP\AJ	Ok,M
10	Q1488-01MSD	ENV-101-SB01MSD	FF015635.D	10 Mar 2025 19:43	FF015632.D!FF015634.D	YP\AJ	Ok,M
11	Q1488-03	ENV-101-SB02	FF015636.D	10 Mar 2025 20:13		YP\AJ	Ok
12	Q1488-05	ENV-102-SB01	FF015637.D	10 Mar 2025 20:42		YP\AJ	Ok
13	Q1488-07	ENV-102-SB02	FF015638.D	10 Mar 2025 21:11		YP\AJ	Ok
14	Q1488-09	ENV-104-SB01	FF015639.D	10 Mar 2025 21:41		YP\AJ	Ok
15	Q1488-11	ENV-104-SB02	FF015640.D	10 Mar 2025 22:10		YP\AJ	Ok
16	Q1514-01	ENV-105-SB01	FF015641.D	10 Mar 2025 22:39	need 2x dilution	YP\AJ	Dilution

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

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QCBatch ID # FF031025AR

Review By	yogesh	Review On	3/10/2025 1:31:15 PM		
Supervise By	Ankita	Supervise On	3/11/2025 9:25:39 AM		
SubDirectory	FF031025AR	HP Acquire Method		HP Processing Method	FF022525AR

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23968,PP24202,PP24203,PP24204,PP24205
CCC	PP24203
Internal Standard/PEM	
ICV/I.BLK	PP23969,PP24206
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

17	Q1514-03	ENV-105-SB02	FF015642.D	10 Mar 2025 23:08		YP\AJ	Ok
18	Q1514-05	ENV-103-SB01	FF015643.D	10 Mar 2025 23:38		YP\AJ	Ok
19	I.BLK	I.BLK	FF015644.D	11 Mar 2025 00:36		YP\AJ	Ok
20	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FF015645.D	11 Mar 2025 01:05		YP\AJ	Ok

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 3/5/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:40
In Date: 03/04/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:35
Out Date: 03/05/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB134889

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
Q1480-01	TP-1	1	1.13	8.86	9.99	8.95	88.3	
Q1480-02	TP-1-E2	2	1.12	8.86	9.98	9.14	90.5	
Q1480-03	TP-1-E3	3	1.15	8.76	9.91	8.11	79.5	
Q1480-04	TP-1-E4	4	1.15	8.48	9.63	8.73	89.4	
Q1480-05	TP-1-E5	5	1.15	8.82	9.97	8.71	85.7	
Q1480-06	TP-1-E6	6	1.15	8.81	9.96	8.93	88.3	
Q1480-07	TP-1-E7	7	1.14	8.71	9.85	8.61	85.8	
Q1480-09	TP-2	8	1.12	8.74	9.86	8.56	85.1	
Q1480-10	TP-2-E2	9	1.14	8.82	9.96	8.53	83.8	
Q1480-11	TP-2-E3	10	1.15	8.50	9.65	8.62	87.9	
Q1480-12	TP-2-E4	11	1.14	8.76	9.9	8.8	87.4	
Q1480-13	TP-2-E5	12	1.15	8.82	9.97	8.92	88.1	
Q1480-14	TP-2-E6	13	1.16	8.82	9.98	8.95	88.3	
Q1480-15	TP-2-E7	14	1.12	8.73	9.85	8.88	88.9	
Q1480-17	TP-3	15	1.15	8.83	9.98	9.11	90.1	
Q1480-18	TP-3-E2	16	1.15	8.83	9.98	8.89	87.7	
Q1480-19	TP-3-E3	17	1.13	8.58	9.71	8.67	87.9	
Q1480-20	TP-3-E4	18	1.15	8.61	9.76	8.51	85.5	
Q1480-21	TP-3-E5	19	1.15	8.80	9.95	8.8	86.9	
Q1480-22	TP-3-E6	20	1.15	8.84	9.99	8.92	87.9	
Q1480-23	TP-3-E7	21	1.19	8.63	9.82	8.75	87.6	
Q1480-25	TP-4	22	1.14	8.83	9.97	9.07	89.8	
Q1480-26	TP-4-E2	23	1.17	8.80	9.97	9.32	92.6	
Q1480-27	TP-4-E3	24	1.13	8.76	9.89	8.95	89.3	
Q1480-28	TP-4-E4	25	1.16	8.81	9.97	9.13	90.5	
Q1480-29	TP-4-E5	26	1.12	8.67	9.79	8.97	90.5	
Q1480-30	TP-4-E6	27	1.15	8.83	9.98	9.34	92.8	
Q1480-31	TP-4-E7	28	1.11	8.62	9.73	8.88	90.1	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 3/5/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:40
In Date: 03/04/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:35
Out Date: 03/05/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB134889

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
Q1481-01	WC-K1311	29	1.15	8.70	9.85	9.00	90.2	
Q1482-01	OR-03-030425	30	1.15	8.48	9.63	8.85	90.8	
Q1482-02	OR-03-030425-E2	31	1.15	8.83	9.98	9.17	90.8	
Q1484-01	TR-OTR-COMP-01	35	1.15	8.83	9.98	9.14	90.5	
Q1484-02	TR-OTR-VOC-01	36	1.15	8.81	9.96	9.22	91.6	
Q1484-03	TR-OTR-01	37	1.12	8.63	9.75	8.83	89.3	
Q1484-04	TR-OTR-02	38	1.15	8.78	9.93	8.99	89.3	
Q1484-05	TR-OTR-03	39	1.14	8.63	9.77	8.6	86.4	
Q1485-01	DN-B-41	32	1.16	8.53	9.69	8.25	83.1	
Q1486-01	DN-B-40	33	1.16	8.40	9.56	9.02	93.6	
Q1487-01	DN-B-42	34	1.13	8.84	9.97	8.92	88.1	
Q1488-01	ENV-101-SB01	40	1.13	8.45	9.58	8.61	88.5	
Q1488-03	ENV-101-SB02	41	1.15	8.82	9.97	9.14	90.6	
Q1488-05	ENV-102-SB01	42	1.16	8.82	9.98	8.72	85.7	
Q1488-07	ENV-102-SB02	43	1.13	8.55	9.68	7.98	80.1	
Q1488-09	ENV-104-SB01	44	1.12	8.50	9.62	8.14	82.6	
Q1488-11	ENV-104-SB02	45	1.14	8.85	9.99	8.32	81.1	
Q1489-01	TP-1	46	1.13	8.86	9.99	8.18	79.6	
Q1489-02	TP-1-E2	47	1.15	8.83	9.98	8.17	79.5	
Q1489-03	TP-1-E3	48	1.13	8.70	9.83	7.68	75.3	
Q1489-05	TP-2	49	1.11	8.76	9.87	6.93	66.4	
Q1489-06	TP-2-E2	50	1.16	8.63	9.79	7.38	72.1	
Q1489-07	TP-2-E3	51	1.15	8.83	9.98	7.53	72.3	
Q1489-09	TP-3	52	1.19	8.58	9.77	7.71	76.0	
Q1489-10	TP-3-E2	53	1.15	8.84	9.99	8.7	85.4	
Q1489-11	TP-3-E3	54	1.15	8.38	9.53	7.9	80.5	
Q1489-13	TP-4	55	1.16	8.81	9.97	8.57	84.1	
Q1489-14	TP-4-E2	56	1.16	8.82	9.98	8.46	82.8	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 3/5/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:40
In Date: 03/04/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:35
Out Date: 03/05/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB134889

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
Q1489-15	TP-4-E3	57	1.16	8.50	9.66	8.02	80.7	

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

WORKLIST(Hardcopy Internal Chain)

UB134889

WorkList Name : %1-030425 **WorkList ID :** 187994 **Department :** Wet-Chemistry **Date :** 03-04-2025 07:58:37

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1480-01	TP-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-02	TP-1-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-03	TP-1-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-04	TP-1-E4	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-05	TP-1-E5	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-06	TP-1-E6	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-07	TP-1-E7	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-09	TP-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-10	TP-2-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-11	TP-2-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-12	TP-2-E4	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-13	TP-2-E5	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-14	TP-2-E6	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-15	TP-2-E7	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-17	TP-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-18	TP-3-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-19	TP-3-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-20	TP-3-E4	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-21	TP-3-E5	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-22	TP-3-E6	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-23	TP-3-E7	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO

Date/Time 03/04/25 16:15

Raw Sample Received by: JD (WC)

Raw Sample Relinquished by: CP SM

Date/Time 03/04/25 18:00

Raw Sample Received by: CP SM

Raw Sample Relinquished by: JD (WC)

WORKLIST(Hardcopy Internal Chain)

VB134889

WorkList Name : %1-030425 **WorkList ID :** 187994 **Department :** Wet-Chemistry **Date :** 03-04-2025 07:58:37

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1480-25	TP-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-26	TP-4-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-27	TP-4-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-28	TP-4-E4	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-29	TP-4-E5	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-30	TP-4-E6	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-31	TP-4-E7	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1481-01	WC-K1311	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1482-01	OR-03-030425	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	03/04/2025	Chemtech -SO
Q1482-02	OR-03-030425-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	H31	03/04/2025	Chemtech -SO
Q1484-01	TR-OTR-COMP-01	Solid	Percent Solids	Cool 4 deg C	PSEG05	H31	03/04/2025	Chemtech -SO
Q1484-02	TR-OTR-VOC-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	03/04/2025	Chemtech -SO
Q1484-03	TR-OTR-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	03/04/2025	Chemtech -SO
Q1484-04	TR-OTR-02	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	03/04/2025	Chemtech -SO
Q1484-05	TR-OTR-03	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	03/04/2025	Chemtech -SO
Q1485-01	DN-B-41	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	03/04/2025	Chemtech -SO
Q1486-01	DN-B-40	Solid	Percent Solids	Cool 4 deg C	JPCL01	I11	03/04/2025	Chemtech -SO
Q1487-01	DN-B-42	Solid	Percent Solids	Cool 4 deg C	JPCL01	I11	03/04/2025	Chemtech -SO
Q1488-01	ENV-101-SB01	Solid	Percent Solids	Cool 4 deg C	JPCL01	I11	03/04/2025	Chemtech -SO
Q1488-03	ENV-101-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	H31	03/04/2025	Chemtech -SO
Q1488-05	ENV-102-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	H31	03/04/2025	Chemtech -SO

Date/Time 03/04/25 16:15

Raw Sample Received by: SB (WCJ)

Raw Sample Relinquished by: CP SM

Date/Time 03/04/25 18:00

Raw Sample Received by: CP SM

Raw Sample Relinquished by: SB (WCJ)

WORKLIST(Hardcopy Internal Chain)

1B134889

WorkList Name : %1-030425 **WorkList ID :** 187994 **Department :** Wet-Chemistry **Date :** 03-04-2025 07:58:37

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1488-07	ENV-102-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	H31	03/04/2025	Chemtech -SO
Q1488-09	ENV-104-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	H31	03/04/2025	Chemtech -SO
Q1488-11	ENV-104-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	H31	03/04/2025	Chemtech -SO
Q1489-01	TP-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-02	TP-1-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-03	TP-1-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-05	TP-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-06	TP-2-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-07	TP-2-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-09	TP-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-10	TP-3-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-11	TP-3-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-13	TP-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-14	TP-4-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-15	TP-4-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO

Date/Time 03/04/25 16:15

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature]

Date/Time 03/04/25 1840

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature]

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB166976

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#: E3880

Extraction By: RS

Filter By: RS

pH Meter ID: N/A

Hood ID: 4,6,7

Extraction Start Date : 03/05/2025

Extraction Start Time : 08:25

Extraction End Date : 03/05/2025

Extraction End Time : 15:45

Concentration By: EH

Supervisor By : RUPESH

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	PP24207
Surrogate	1.0ML	100 PPM	PP24210
Fractionation Surrogate	1.0ML	100 PPM	PP24108
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	E3878
Baked Na2SO4	N/A	EP2589
Hexane	N/A	E3877
6N HCL	N/A	EP2569
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

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
3/5/25	RS (Ext lab)	Y.P.Pat IPMB.
15:50	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB166976

Analytical Method: MNJDEP-EPH-7 **Concentration Date:** 03/05/2025

Sample ID	Client Sample ID	Test	g /(mL)	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB166976BL	PB166976BL	EPH	1000	<2	RUPESH	ritesh	2			SEP-1
PB166976BS	PB166976BS	EPH	1000	<2	RUPESH	ritesh	2			2
PB166976BSD	PB166976BSD	EPH	1000	<2	RUPESH	ritesh	2			3
Q1480-33	TP-3-WATER-SAMPLE	EPH	990	<2	RUPESH	ritesh	2	T		4
Q1488-13	ENV-102-GW01	EPH	810	<2	RUPESH	ritesh	2	H		5
Q1488-14	ENV-104-GW01	EPH	970	<2	RUPESH	ritesh	2	H		6

3/5

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

166976
8:25

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1480EPH **WorkList ID :** 188012 **Department :** Extraction **Date :** 03-05-2025 08:18:29

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1480-33	TP-3-WATER-SAMPLE	Water	EPH	1:1 HCl to pH < 2	PSEG03	I11	03/03/2025	NJEPH
Q1488-13	ENV-102-GW01	Water	EPH	1:1 HCl to pH < 2	PORT06	H31	03/04/2025	NJEPH
Q1488-14	ENV-104-GW01	Water	EPH	1:1 HCl to pH < 2	PORT06	H31	03/04/2025	NJEPH

Date/Time 3/5/25 8:20
Raw Sample Received by: RS (Ext Lab)
Raw Sample Relinquished by: CR SM

Date/Time 3/5/25
Raw Sample Received by: CR SM
Raw Sample Relinquished by: RS (Ext Lab)

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB167058

SOP ID:	MNJDEP-EPH-7				
Clean Up SOP #:	N/A			**Extraction Start Date :**	03/10/2025
Matrix :	Solid			**Extraction Start Time :**	09:20
Weigh By:	EH	**Extraction By:**	RJ	**Extraction End Date :**	03/10/2025
Balance check:	RJ	**Filter By:**	RJ	**Extraction End Time :**	16:40
Balance ID:	EX-SC-2	**pH Meter ID:**	N/A	**Concentration By:**	EH
pH Strip Lot#:	N/A	**Hood ID:**	3,7	**Supervisor By :**	RUPESH

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	PP24207
Surrogate	1.0ML	100 PPM	PP24210
Fractionation Surrogate	1.0ML	100 PPM	PP24216
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	EP2591
Baked Na2SO4	N/A	EP2593
Sand	N/A	E2865
Hexane	N/A	E3877
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5ML Vial Lot # 2210673.

KD Bath ID:	N/A	**Envap ID:**	NEVAP-02
KD Bath Temperature:	N/A	**Envap Temperature:**	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
3/10/25	RS (Ext-Lab)	Y-P-Pest1PCB
16:45	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB167058

Analytical Method: MNJDEP-EPH-7

Concentration Date: 03/10/2025

Sample ID	Client Sample ID	Test	g/ mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB167058BL	PB167058BL	EPH	30.01	N/A	ritesh	Evelyn	2			U6-1
PB167058BS	PB167058BS	EPH	30.02	N/A	ritesh	Evelyn	2			2
PB167058BSD	PB167058BSD	EPH	30.02	N/A	ritesh	Evelyn	2			3
Q1488-01	ENV-101-SB01	EPH	30.06	N/A	ritesh	Evelyn	2	E		4
Q1488-01DUP	ENV-101-SB01DUP	EPH	30.05	N/A	ritesh	Evelyn	2	E		5
Q1488-01MS	ENV-101-SB01MS	EPH	30.02	N/A	ritesh	Evelyn	2	E		6
Q1488-01MSD	ENV-101-SB01MSD	EPH	30.03	N/A	ritesh	Evelyn	2	E		U2-1
Q1488-03	ENV-101-SB02	EPH	30.08	N/A	ritesh	Evelyn	2	E		2
Q1488-05	ENV-102-SB01	EPH	30.02	N/A	ritesh	Evelyn	2	E		3
Q1488-07	ENV-102-SB02	EPH	30.07	N/A	ritesh	Evelyn	2	E		4
Q1488-09	ENV-104-SB01	EPH	30.04	N/A	ritesh	Evelyn	2	E		5
Q1488-11	ENV-104-SB02	EPH	30.06	N/A	ritesh	Evelyn	2	E		6
Q1514-01	ENV-105-SB01	EPH	30.03	N/A	ritesh	Evelyn	2	E		U3-1
Q1514-03	ENV-105-SB02	EPH	30.05	N/A	ritesh	Evelyn	2	E		2
Q1514-05	ENV-103-SB01	EPH	30.04	N/A	ritesh	Evelyn	2	E		3

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

1670358
9:20

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1488EPH **WorkList ID :** 188160 **Department :** Extraction **Date :** 03-10-2025 08:28:08

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1488-01	ENV-101-SB01	Solid	EPH	Cool 4 deg C	PORT06	H31	03/04/2025	NJEPH
Q1488-03	ENV-101-SB02	Solid	EPH	Cool 4 deg C	PORT06	H31	03/04/2025	NJEPH
Q1488-05	ENV-102-SB01	Solid	EPH	Cool 4 deg C	PORT06	H31	03/04/2025	NJEPH
Q1488-07	ENV-102-SB02	Solid	EPH	Cool 4 deg C	PORT06	H31	03/04/2025	NJEPH
Q1488-09	ENV-104-SB01	Solid	EPH	Cool 4 deg C	PORT06	H31	03/04/2025	NJEPH
Q1488-11	ENV-104-SB02	Solid	EPH	Cool 4 deg C	PORT06	H31	03/04/2025	NJEPH
Q1514-01	ENV-105-SB01	Solid	EPH	Cool 4 deg C	PORT06	I31	03/05/2025	NJEPH
Q1514-03	ENV-105-SB02	Solid	EPH	Cool 4 deg C	PORT06	I31	03/05/2025	NJEPH
Q1514-05	ENV-103-SB01	Solid	EPH	Cool 4 deg C	PORT06	I31	03/05/2025	NJEPH

Date/Time 3/10/25 9:15
Raw Sample Received by: RJ (EXA-lab)
Raw Sample Relinquished by: JD (SM)

Date/Time 3/10/25 9:50
Raw Sample Received by: JD (SM)
Raw Sample Relinquished by: RJ (EXA-lab)

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Prep Standard - Chemical Standard Summary

Order ID : Q1488

Test : EPH

Prepbatch ID : PB166976,PB167058,

Sequence ID/Qc Batch ID: FC030525AL,FD030525AR,FE031025AL,FF031025AR,

Standard ID :

EP2569,EP2589,EP2591,EP2593,PP23968,PP23969,PP23970,PP23971,PP23972,PP23973,PP24108,PP24170,PP24174,PP24175,PP24176,PP24177,PP24178,PP24179,PP24199,PP24202,PP24203,PP24204,PP24205,PP24206,PP24207,PP24210,PP24216,

Chemical ID :

E2865,E3551,E3757,E3828,E3876,E3877,E3878,M6121,P10260,P11139,P12363,P12981,P12983,P12984,P13279,P13465,P13472,P13602,P13614,P13615,P13638,P13639,P13640,P13641,P13642,P13644,P13646,P13647,P13650,P13651,P13663,P13671,P13680,P13685,P13715,P13717,P13743,P13744,P13745,P13748,P13750,P13751,P13766,P13769,P13802,P13803,P13809,P13828,P13836,P13840,P13842,P13846,P13855,P13858,P13859,P13860,W3112,W3153,W3177,

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Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3319	6N HCL	EP2569	12/02/2024	05/13/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 12/02/2024

FROM 219.00000ml of M6121 + 781.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2589	02/14/2025	07/01/2025	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 02/14/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

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Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2017	1:1 ACETONE/METHYLENE CHLORIDE	EP2591	02/26/2025	08/14/2025	RUPESHKUMAR SHAH	None	None	Riteshkumar Patel 02/26/2025

FROM 8000.00000ml of E3876 + 8000.00000ml of E3878 = Final Quantity: 16000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2593	03/07/2025	07/01/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 03/07/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
782	100 PPM Aromatic HC Working STD	PP23968	11/14/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/21/2024

FROM 0.25000ml of P13646 + 0.62500ml of P13465 + 1.25000ml of P10260 + 22.87500ml of E3828 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2945	100 PPM Aromatic HC Working STD (Absolute)	PP23969	11/14/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/21/2024

FROM 0.25000ml of P13647 + 0.62500ml of P13472 + 1.25000ml of P11139 + 22.87500ml of E3828 = Final Quantity: 25.000 ml

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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	PP23970	11/14/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/21/2024

FROM 0.50000ml of E3828 + 0.50000ml of PP23968 = Final Quantity: 1.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
788	20 PPM Aromatic HC STD	PP23971	11/14/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/21/2024

FROM 0.80000ml of E3828 + 0.20000ml of PP23968 = Final Quantity: 1.000 ml

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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	PP23972	11/14/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/21/2024

FROM 0.90000ml of E3828 + 0.10000ml of PP23968 = Final Quantity: 1.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
790	5 PPM Aromatic HC STD	PP23973	11/14/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/21/2024

FROM 0.90000ml of E3828 + 0.10000ml of PP23970 = Final Quantity: 1.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1331	100 PPM NJEPH Fractionating Surrogate	PP24108	01/14/2025	07/14/2025	Yogesh Patel	None	None	Ankita Jodhani 01/15/2025

FROM 1.25000ml of P13744 + 1.25000ml of P13748 + 1.25000ml of P13766 + 1.25000ml of P13769 + 195.00000ml of W3153 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
781	100 PPM Aliphatic HC Working STD (Restek)	PP24170	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani 02/03/2025

FROM 0.25000ml of P12981 + 0.25000ml of P13671 + 1.25000ml of P12363 + 23.25000ml of W3177 = 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)	PP24174	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani 02/03/2025

FROM 0.25000ml of P12983 + 0.25000ml of P13650 + 2.50000ml of P13279 + 22.00000ml of W3177 = 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	PP24175	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani 02/03/2025

FROM 0.50000ml of W3177 + 0.50000ml of PP24170 = 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	PP24176	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani 02/03/2025

FROM 0.80000ml of W3177 + 0.20000ml of PP24170 = 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	PP24177	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani 02/03/2025

FROM 0.90000ml of W3177 + 0.10000ml of PP24170 = 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	PP24178	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani 02/03/2025

FROM 0.90000ml of W3177 + 0.10000ml of PP24175 = 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)	PP24179	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani 02/03/2025

FROM 0.80000ml of W3177 + 0.20000ml of PP24174 = 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
2946	20 PPM Aromatic HC STD ICV (Absolute)	PP24199	11/14/2024	05/09/2025	Yogesh Patel	None	None	Abdul Mirza 03/06/2025

FROM 0.80000ml of E3878 + 0.20000ml of PP23969 = Final Quantity: 1.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
787	50 PPM Aromatic HC STD	PP24202	02/25/2025	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 02/27/2025

FROM 0.50000ml of E3878 + 0.50000ml of PP23968 = Final Quantity: 1.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
788	20 PPM Aromatic HC STD	PP24203	02/25/2025	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 02/27/2025

FROM 0.80000ml of E3878 + 0.20000ml of PP23968 = Final Quantity: 1.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
789	10 PPM Aromatic HC STD	PP24204	02/25/2025	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 02/27/2025

FROM 0.90000ml of E3878 + 0.10000ml of PP23968 = Final Quantity: 1.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
790	5 PPM Aromatic HC STD	PP24205	02/25/2025	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 02/27/2025

FROM 0.90000ml of E3878 + 0.10000ml of PP24202 = Final Quantity: 1.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2946	20 PPM Aromatic HC STD ICV (Absolute)	PP24206	02/25/2025	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 02/27/2025

FROM 0.80000ml of E3878 + 0.20000ml of PP23969 = 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
1330	100 PPM NJEPH Spike Solution	PP24207	02/26/2025	08/26/2025	Yogesh Patel	None	None	Ankita Jodhani 02/27/2025

FROM 5.00000ml of P13638 + 5.00000ml of P13639 + 5.00000ml of P13640 + 5.00000ml of P13641 + 5.00000ml of P13642 + 5.00000ml of P13644 + 5.00000ml of P13715 + 5.00000ml of P13717 + 5.00000ml of P13802 + 5.00000ml of P13803 + 5.00000ml of P13809 + 5.00000ml of P13828 + 5.00000ml of P13836 + 5.00000ml of P13840 + 5.00000ml of P13842 + 5.00000ml of P13846 + 5.00000ml of P13855 + 5.00000ml of P13858 + 5.00000ml of P13859 + 5.00000ml of P13860 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1339	100 PPM NJEPH Surrogate Spike	PP24210	02/27/2025	08/27/2025	Yogesh Patel	None	None	Abdul Mirza 03/06/2025

FROM 1.25000ml of P12984 + 1.25000ml of P13602 + 1.25000ml of P13614 + 1.25000ml of P13615 + 1.25000ml of P13651 + 1.25000ml of P13663 + 1.25000ml of P13680 + 1.25000ml of P13685 + 490.00000ml of E3876 = Final Quantity: 500.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1331	100 PPM NJEPH Fractionating Surrogate	PP24216	03/04/2025	08/12/2025	Abdul Mirza	None	None	Yogesh Patel 03/06/2025

FROM 1.25000ml of P13743 + 1.25000ml of P13745 + 1.25000ml of P13750 + 1.25000ml of P13751 + 195.00000ml of E3877 = Final Quantity: 200.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3382-05 / Sand, Purified (cs/4x2.5kg)	0000243821	06/30/2025	04/30/2020 / RAJESH	04/28/2020 / RAJESH	E2865

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	07/01/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
phenomenex	SI500025-30 / Cleanert SPE Silica, 5000 mg/25 ml	Z0513CK1	09/04/2025	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)	24G0862003	05/09/2025	11/09/2024 / Rajesh	11/04/2024 / Rajesh	E3828

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	08/25/2025	02/25/2025 /	02/12/2025 / Rajesh	E3876

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)	243570	08/12/2025	02/12/2025 / Rajesh	02/12/2025 / Rajesh	E3877

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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-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24K1762005	08/14/2025	02/14/2025 / Rajesh	12/27/2024 / Rajesh	E3878

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)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30541 / Custom NJEPH Aromatics Calibration Standard	A0165529	05/14/2025	11/14/2024 / yogesh	01/26/2021 / dhaval	P10260

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95709 / NJ EPH Aromatic Hydrocarbons, 2000 PPM	060420	05/14/2025	11/14/2024 / yogesh	10/29/2021 / Abdul	P11139

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30540 / Custom NJEPH Aliphatics Calibration Standard	A0190424	08/03/2025	02/03/2025 / yogesh	03/16/2023 / Yogesh	P12363

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0204989	08/03/2025	02/03/2025 / yogesh	12/20/2023 / Yogesh	P12981

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0204989	08/03/2025	02/03/2025 / yogesh	12/20/2023 / Yogesh	P12983

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0204989	08/27/2025	02/27/2025 / yogesh	12/20/2023 / Yogesh	P12984

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	08/03/2025	02/03/2025 / yogesh	04/11/2024 / yogesh	P13279

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0210831	05/14/2025	11/14/2024 / yogesh	07/23/2024 / yogesh	P13465

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0210831	05/14/2025	11/14/2024 / yogesh	07/23/2024 / yogesh	P13472

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0213283	08/27/2025	02/27/2025 / yogesh	10/16/2024 / yogesh	P13602

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0213283	08/27/2025	02/27/2025 / yogesh	10/16/2024 / yogesh	P13614

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0213283	08/27/2025	02/27/2025 / yogesh	10/16/2024 / yogesh	P13615

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	08/26/2025	02/26/2025 / yogesh	10/16/2024 / yogesh	P13638

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	08/26/2025	02/26/2025 / yogesh	10/16/2024 / yogesh	P13639

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	08/26/2025	02/26/2025 / yogesh	10/16/2024 / yogesh	P13640

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	08/26/2025	02/26/2025 / yogesh	10/16/2024 / yogesh	P13641

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0211112	08/26/2025	02/26/2025 / yogesh	10/16/2024 / yogesh	P13642

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	08/26/2025	02/26/2025 / yogesh	10/16/2024 / yogesh	P13644

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	05/14/2025	11/14/2024 / yogesh	10/16/2024 / yogesh	P13646

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	05/14/2025	11/14/2024 / yogesh	10/16/2024 / yogesh	P13647

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	08/03/2025	02/03/2025 / yogesh	10/16/2024 / yogesh	P13650

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	08/27/2025	02/27/2025 / yogesh	10/16/2024 / yogesh	P13651

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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	A0216631	08/27/2025	02/27/2025 / yogesh	10/16/2024 / yogesh	P13663

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	08/03/2025	02/03/2025 / yogesh	10/16/2024 / yogesh	P13671

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	08/27/2025	02/27/2025 / yogesh	10/16/2024 / yogesh	P13680

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	01/16/2026	01/16/2025 / yogesh	10/16/2024 / yogesh	P13685

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	08/26/2025	02/26/2025 / yogesh	10/24/2024 / yogesh	P13715

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	08/26/2025	02/26/2025 / yogesh	10/24/2024 / yogesh	P13717

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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	A0214879	09/04/2025	03/04/2025 / Abdul	11/01/2024 / yogesh	P13743

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	07/14/2025	01/14/2025 / yogesh	11/01/2024 / yogesh	P13744

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	09/04/2025	03/04/2025 / Abdul	11/01/2024 / yogesh	P13745

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	07/14/2025	01/14/2025 / yogesh	11/01/2024 / yogesh	P13748

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	09/04/2025	03/04/2025 / Abdul	11/01/2024 / yogesh	P13750

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	09/04/2025	03/04/2025 / Abdul	11/01/2024 / yogesh	P13751

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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	A0214879	07/14/2025	01/14/2025 / yogesh	11/01/2024 / yogesh	P13766

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	07/14/2025	01/14/2025 / yogesh	11/01/2024 / yogesh	P13769

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13802

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13803

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13809

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13828

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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	A0217838	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13836

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	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13840

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	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13842

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	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13846

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	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13855

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	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13858

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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	A0217838	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13859

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	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13860

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

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	08/22/2025	11/25/2024 / jignesh	11/21/2024 / jignesh	W3153

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	08/22/2025	02/03/2025 / jignesh	01/31/2025 / jignesh	W3177

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

DD
06/17/2021

Catalog No. : 30541 **Lot No.:** A0172403

Description : NJEPH Aromatics Calibration Standard

NJEPH Aromatics Calibration Standard 2,000µg/mL, Methylene Chloride, 1mL/ampul

P10758 to P10762 -(5)

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

Expiration Date : April 30, 2027 **Storage:** 10°C or colder

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,2,3-Trimethylbenzene **CAS #** 526-73-8 (Lot 8776.10-36) **Purity** 98%	2,010.0 µg/mL	+/- 11.7957 µg/mL +/- 90.5449 µg/mL +/- 100.4678 µg/mL	Gravimetric Unstressed Stressed
2	Naphthalene **CAS #** 91-20-3 (Lot MKBZ8680V) **Purity** 99%	2,006.0 µg/mL	+/- 11.7723 µg/mL +/- 90.3656 µg/mL +/- 100.2689 µg/mL	Gravimetric Unstressed Stressed
3	2-Methylnaphthalene **CAS #** 91-57-6 (Lot STBG8884) **Purity** 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 90.4557 µg/mL +/- 100.3688 µg/mL	Gravimetric Unstressed Stressed
4	Acenaphthylene **CAS #** 208-96-8 (Lot N19U) **Purity** 95%	2,002.6 µg/mL	+/- 11.7524 µg/mL +/- 90.2125 µg/mL +/- 100.0989 µg/mL	Gravimetric Unstressed Stressed
5	Acenaphthene **CAS #** 83-32-9 (Lot MKCN0610) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 90.0953 µg/mL +/- 99.9689 µg/mL	Gravimetric Unstressed Stressed
6	Fluorene **CAS #** 86-73-7 (Lot 10217947) **Purity** 99%	2,016.0 µg/mL	+/- 11.8310 µg/mL +/- 90.8161 µg/mL +/- 100.7687 µg/mL	Gravimetric Unstressed Stressed
7	Phenanthrene **CAS #** 85-01-8 (Lot MKCL7390) **Purity** 99%	2,012.0 µg/mL	+/- 11.8075 µg/mL +/- 90.6359 µg/mL +/- 100.5688 µg/mL	Gravimetric Unstressed Stressed

8	Anthracene		2,002.0	µg/mL	+/-	11.7489	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKCM0015)			+/-	90.1854	µg/mL	Unstressed
	Purity 99%				+/-	100.0689	µg/mL	Stressed
9	Fluoranthene		2,003.0	µg/mL	+/-	11.7547	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKCF7378)			+/-	90.2305	µg/mL	Unstressed
	Purity 99%				+/-	100.1189	µg/mL	Stressed
10	Pyrene		2,011.0	µg/mL	+/-	11.8017	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCCB9880)			+/-	90.5909	µg/mL	Unstressed
	Purity 99%				+/-	100.5188	µg/mL	Stressed
11	Benz(a)anthracene		2,011.0	µg/mL	+/-	11.8014	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot P0022018-0505)			+/-	90.5890	µg/mL	Unstressed
	Purity 98%				+/-	100.5168	µg/mL	Stressed
12	Chrysene		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot STBJ8094)			+/-	90.0953	µg/mL	Unstressed
	Purity 99%				+/-	99.9689	µg/mL	Stressed
13	Benzo(b)fluoranthene		2,006.0	µg/mL	+/-	11.7721	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot 012012B)			+/-	90.3638	µg/mL	Unstressed
	Purity 97%				+/-	100.2669	µg/mL	Stressed
14	Benzo(k)fluoranthene		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot 012019K)			+/-	90.5458	µg/mL	Unstressed
	Purity 99%				+/-	100.4688	µg/mL	Stressed
15	Benzo(a)pyrene		2,004.0	µg/mL	+/-	11.7606	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot RP210113)			+/-	90.2755	µg/mL	Unstressed
	Purity 99%				+/-	100.1689	µg/mL	Stressed
16	Indeno(1,2,3-cd)pyrene		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot 1-RAK-33-4)			+/-	90.5458	µg/mL	Unstressed
	Purity 99%				+/-	100.4688	µg/mL	Stressed
17	Dibenz(a,h)anthracene		2,017.0	µg/mL	+/-	11.8369	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	90.8611	µg/mL	Unstressed
	Purity 99%				+/-	100.8187	µg/mL	Stressed
18	Benzo(g,h,i)perylene		2,003.0	µg/mL	+/-	11.7547	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot 8GFYJ)			+/-	90.2305	µg/mL	Unstressed
	Purity 99%				+/-	100.1189	µg/mL	Stressed

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

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

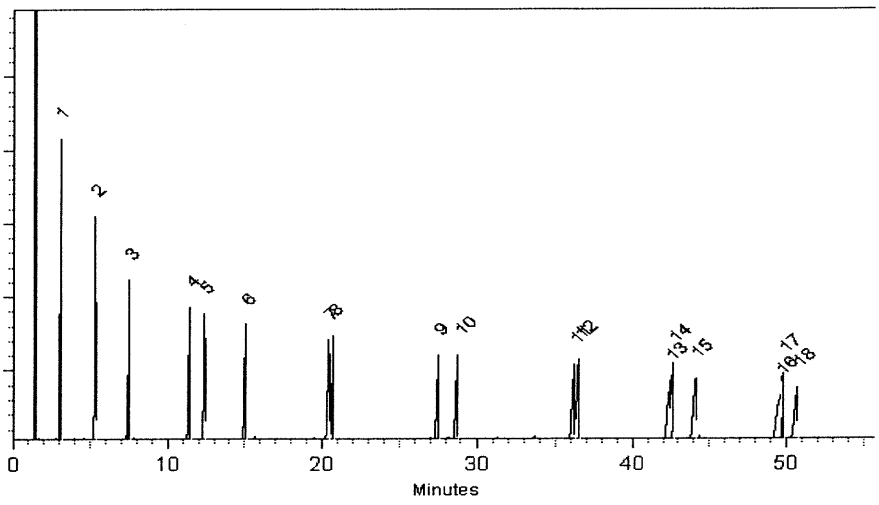
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician **Date Mixed:** 14-May-2021 **Balance:** B345965662

Alexis Shelow - Operations Tech I **Date Passed:** 18-May-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Sand
Purified
Washed and Ignited

avantor™ | J.T.Baker®

Material No.: 3382-05
Batch No.: 0000243821
Manufactured Date: 2018/04/09
Retest Date: 2025/04/07
Revision No: 1

Certificate of Analysis

Test	Specification	Result
Substances Soluble in HCl	<= 0.16 %	0.01

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US
Packaging Site: Paris Mfg Ctr & DC

E 2865

James T Ethier

Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

PRODUCTOS QUIMICOS MONTERREY, S.A. DE C.V.

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na_2SO_4
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_4)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO_4)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreing matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

RG-02-01, Ed. 3

Recd. by RB on 7/24/23 E3551

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

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker

Material No.: 9266-A4
Batch No.: 24J0862003
Manufactured Date: 2024-09-12
Expiration Date:2025-12-12
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	2
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Titrable Acid (µeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3828

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials LLC

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™ | J.T.Baker

Material No.: 9254-03
Batch No.: 24H2762008
Manufactured Date: 2024-04-18
Expiration Date:2027-04-18
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected forwater)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	<= 0.3	0.2
Titrable Base (µeq/g)	<= 0.6	<0.1
Water (H_2O)	<= 0.5 %	<0.1 %
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RP on 2/12/25

E 3876

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

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	H303	Quality Test / Release Date	11/07/2024
Lot Number	243570		
Description	HEXANES - OPTIMA		
Country of Origin	United States	Suggested Retest Date	Nov/2029
Chemical Origin	Organic - non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid
ASSAY (N-HEXANE)	%	>= 60	69
ASSAY (SUM C6 HYDROCARBONS)	%	>= 99.9	>99.9
COLOR	APHA	<= 5	<5
DENSITY AT 25 DEGREES C	GM/ML	Inclusive Between 0.653 - 0.673	0.669
EVAPORATION RESIDUE	ppm	<= 1	<1
FLUORESCENCE BACKGROUND	ppb	<= 1	<1
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
OPTICAL ABS AT 195 NM	ABS. UNITS	<= 1	0.74
OPTICAL ABS AT 210 NM	ABS. UNITS	<= 0.25	0.17
OPTICAL ABS AT 220 NM	ABS. UNITS	<= 0.07	0.05
OPTICAL ABS AT 254 NM	ABS. UNITS	<= 0.005	0.001
PESTICIDE RESIDUE ANALYSIS	NG/L	<= 10	<10
REFRACTIVE INDEX @ 25 DEG C		Inclusive Between 1.375 - 1.385	1.379
SUITABILITY FOR GC/MS		= PASS TEST	PASS TEST
SULFUR COMPOUNDS	%	<= 0.005	<0.005
THIOPHENE	PASS/FAIL	= PASS TEST	PASS TEST
WATER (H2O)	%	<= 0.01	<0.01
WATER-SOLUBLE TITRABLE ACID	MEQ/G	<= 0.0003	0.0001

Recd by RP on 2/12/25

E3877

Harout Sahagian - Quality Control Manager - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor | J.T.Baker

Material No.: 9266-A4
Batch No.: 24K1762005
Manufactured Date: 2024-10-08
Expiration Date:2026-01-07
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) 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	5
Residue after Evaporation	<= 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	<= 0.3	0.0
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 3878

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

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

R → 10/13/24
Met dig

M 6/21

Material No.: 9530-33
Batch No.: 0000275677
Manufactured Date: 2020/12/16
Retest Date: 2025/12/15
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCl) (by acid-base titrn)	36.5 - 38.0 %	37.6
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	1
ACS - Specific Gravity at 60°/60°F	1.185 - 1.192	1.190
ACS - Bromide (Br)	<= 0.005 %	< 0.005
ACS - Extractable Organic Substances	<= 5 ppm	1
ACS - Free Chlorine (as Cl_2)	<= 0.5 ppm	< 0.5
Phosphate (PO_4)	<= 0.05 ppm	< 0.03
Sulfate (SO_4)	<= 0.5 ppm	< 0.3
Sulfite (SO_3)	<= 0.8 ppm	0.3
Ammonium (NH_4)	<= 3 ppm	< 1
Trace Impurities - Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities - Aluminum (Al)	<= 10.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities - Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities - Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities - Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities - Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities - Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	29.7
Trace Impurities - Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities - Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities - Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities - Gallium (Ga)	<= 1.0 ppb	< 0.2

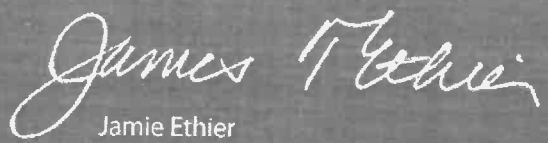
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Material No.: 9530-33
Batch No.: 0000275677

Test	Specification	Result
Trace Impurities - Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities - Gold (Au)	<= 4.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities - Iron (Fe)	<= 15.0 ppb	<1
Trace Impurities - Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities - Lithium (Li)	<= 1.0 ppb	0.2
Trace Impurities - Magnesium (Mg)	<= 10.0 ppb	0.4
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	0.1
Trace Impurities - Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities - Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities - Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities - Selenium (Se), For Information Only	ppb	1.0
Trace Impurities - Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities - Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities - Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Titanium (Ti)	<= 1.0 ppb	0.2
Trace Impurities - Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.3
Trace Impurities - Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC



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

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

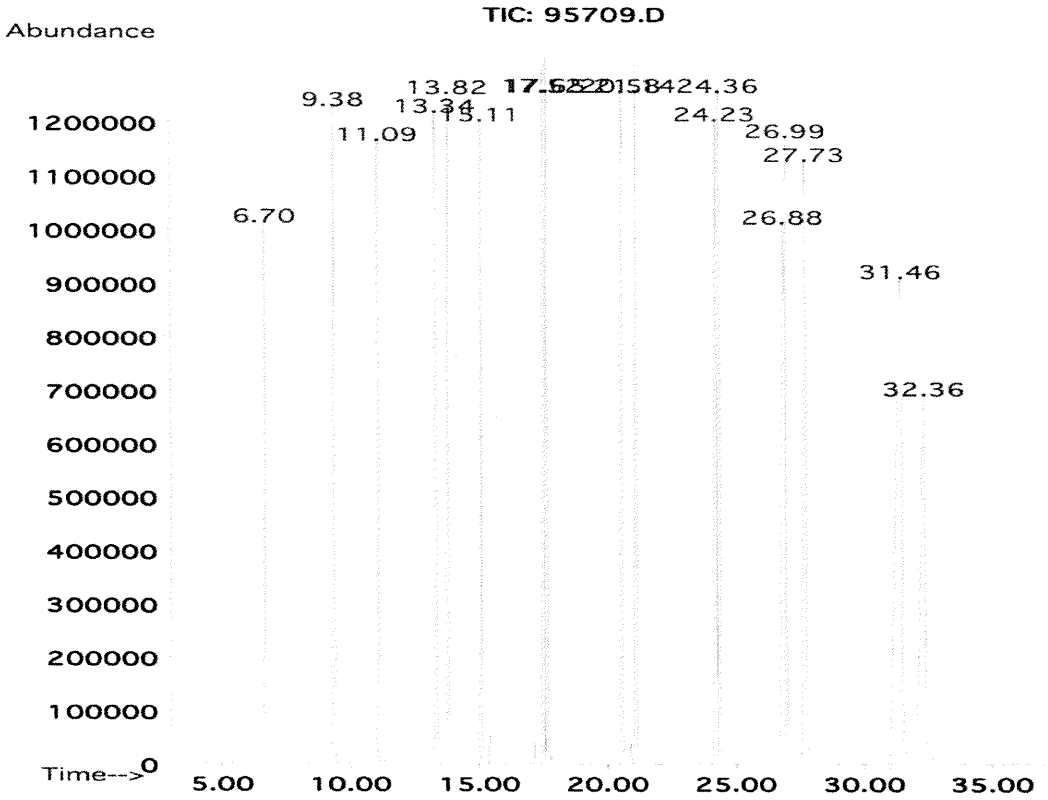
	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Acenaphthene	1	MKBJ4871V	2000	99	0.2	1.01003	1.01010	2000.1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

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Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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P12361 ↓ P12370 } Y.P. 03/16/23

Catalog No. : 30540 **Lot No.:** A0190424

Description : NJEPH Aliphatics Calibration Standard

Aliphatics Calibration Standard 2000µg/mL, Hexane/Carbon Disulfide (80:20), 1mL/ampul

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

Expiration Date : November 30, 2029 **Storage:** 25°C nominal

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Nonane (C9) **CAS #** 111-84-2 (Lot SHBN5361) **Purity** 99%	2,014.0 µg/mL	+/- 11.8193 µg/mL +/- 50.0027 µg/mL +/- 59.9491 µg/mL	Gravimetric Unstressed Stressed
2	n-Decane (C10) **CAS #** 124-18-5 (Lot SHBN8619) **Purity** 99%	2,014.7 µg/mL	+/- 11.8232 µg/mL +/- 50.0193 µg/mL +/- 59.9689 µg/mL	Gravimetric Unstressed Stressed
3	Naphthalene **CAS #** 91-20-3 (Lot MKCH0219) **Purity** 99%	2,015.3 µg/mL	+/- 11.8271 µg/mL +/- 50.0358 µg/mL +/- 59.9888 µg/mL	Gravimetric Unstressed Stressed
4	n-Dodecane (C12) **CAS #** 112-40-3 (Lot SHBN7174) **Purity** 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 49.8538 µg/mL +/- 59.7705 µg/mL	Gravimetric Unstressed Stressed
5	2-Methylnaphthalene **CAS #** 91-57-6 (Lot STBK0259) **Purity** 96%	2,007.0 µg/mL	+/- 11.7784 µg/mL +/- 49.8299 µg/mL +/- 59.7419 µg/mL	Gravimetric Unstressed Stressed
6	n-Tetradecane (C14) **CAS #** 629-59-4 (Lot STBK2282) **Purity** 99%	2,016.7 µg/mL	+/- 11.8349 µg/mL +/- 50.0689 µg/mL +/- 60.0284 µg/mL	Gravimetric Unstressed Stressed
7	n-Hexadecane (C16) **CAS #** 544-76-3 (Lot SHBM4146) **Purity** 98%	2,014.9 µg/mL	+/- 11.8244 µg/mL +/- 50.0246 µg/mL +/- 59.9753 µg/mL	Gravimetric Unstressed Stressed

8	n-Octadecane (C18) **CAS #** 593-45-3 **Purity** 97%	(Lot VZKOJ)	2,004.7	µg/mL	+/- 11.7645 +/- 49.7710 +/- 59.6712	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	n-Eicosane (C20) **CAS #** 112-95-8 **Purity** 99%	(Lot MKCF7888)	2,018.0	µg/mL	+/- 11.8428 +/- 50.1020 +/- 60.0681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	n-Heneicosane (C21) **CAS #** 629-94-7 **Purity** 99%	(Lot MKCL3226)	2,000.7	µg/mL	+/- 11.7410 +/- 49.6717 +/- 59.5522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Docosane (C22) **CAS #** 629-97-0 **Purity** 99%	(Lot MKCL8918)	2,005.3	µg/mL	+/- 11.7684 +/- 49.7876 +/- 59.6911	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	n-Tetracosane (C24) **CAS #** 646-31-1 **Purity** 99%	(Lot MKCN2863)	2,018.0	µg/mL	+/- 11.8428 +/- 50.1020 +/- 60.0681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexacosane (C26) **CAS #** 630-01-3 **Purity** 99%	(Lot MKCD4540)	2,014.0	µg/mL	+/- 11.8193 +/- 50.0027 +/- 59.9491	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	n-Octacosane (C28) **CAS #** 630-02-4 **Purity** 99%	(Lot BCCG0084)	2,002.0	µg/mL	+/- 11.7489 +/- 49.7048 +/- 59.5919	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	n-Triacontane (C30) **CAS #** 638-68-6 **Purity** 97%	(Lot MKCQ9436)	2,011.1	µg/mL	+/- 11.8025 +/- 49.9316 +/- 59.8637	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	n-Dotriacontane (C32) **CAS #** 544-85-4 **Purity** 99%	(Lot BCBW0661)	2,012.0	µg/mL	+/- 11.8075 +/- 49.9531 +/- 59.8895	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	n-Tetratriacontane (C34) **CAS #** 14167-59-0 **Purity** 99%	(Lot OML4N)	2,006.7	µg/mL	+/- 11.7762 +/- 49.8207 +/- 59.7308	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	n-Hexatriacontane (C36) **CAS #** 630-06-8 **Purity** 99%	(Lot Z27H018)	2,017.3	µg/mL	+/- 11.8388 +/- 50.0855 +/- 60.0483	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	n-Octatriacontane (C38) **CAS #** 7194-85-6 **Purity** 96%	(Lot 0000145137)	2,017.3	µg/mL	+/- 11.8385 +/- 50.0842 +/- 60.0467	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	n-Tetracontane (C40) **CAS #** 4181-95-7 **Purity** 99%	(Lot BSBME)	2,008.7	µg/mL	+/- 11.7880 +/- 49.8703 +/- 59.7903	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane/Carbon disulfide (80:20)
CAS # 110-54-3/75-15-0
Purity 99%

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

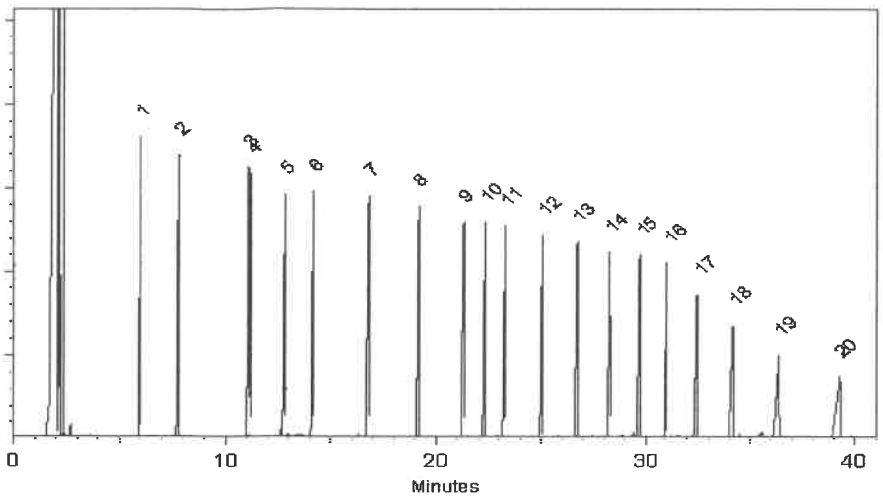
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Morgan Craighead - Mix Technician

Date Mixed: 10-Oct-2022 **Balance:** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 20-Oct-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

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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.)

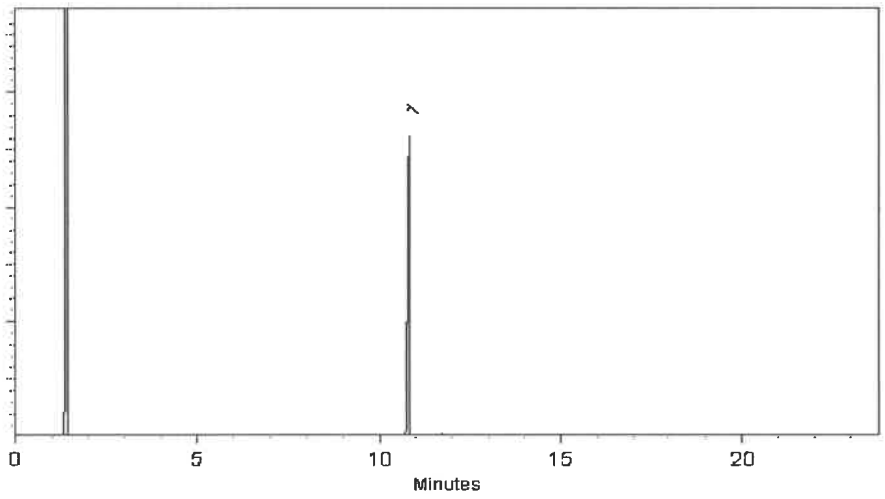
Inj. Temp:
250°C

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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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P12960 & P12991 Y.P. 12/21/2023

Catalog No. : 31098 **Lot No.:** A0204989

Description : 1-Chlorooctadecane Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Chlorooctadecane	3386-33-2	14738400	99%	10,097.3 µg/mL	+/- 567.2675

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

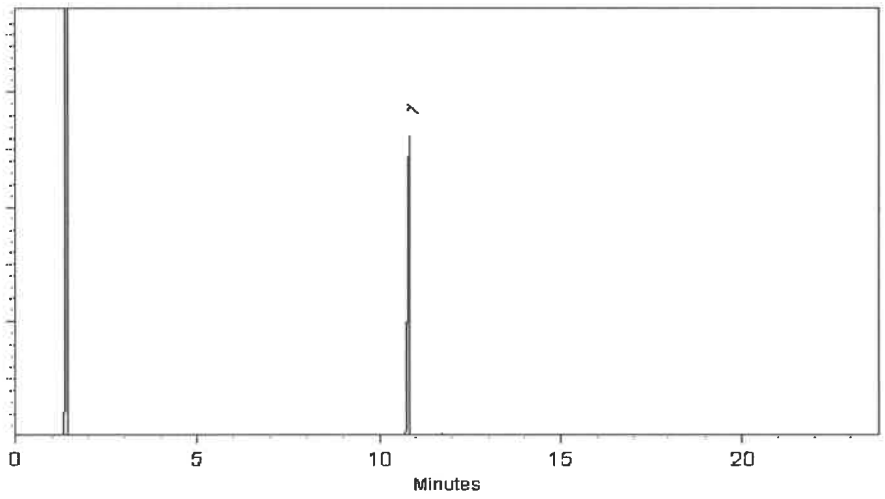
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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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.
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Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
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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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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.)

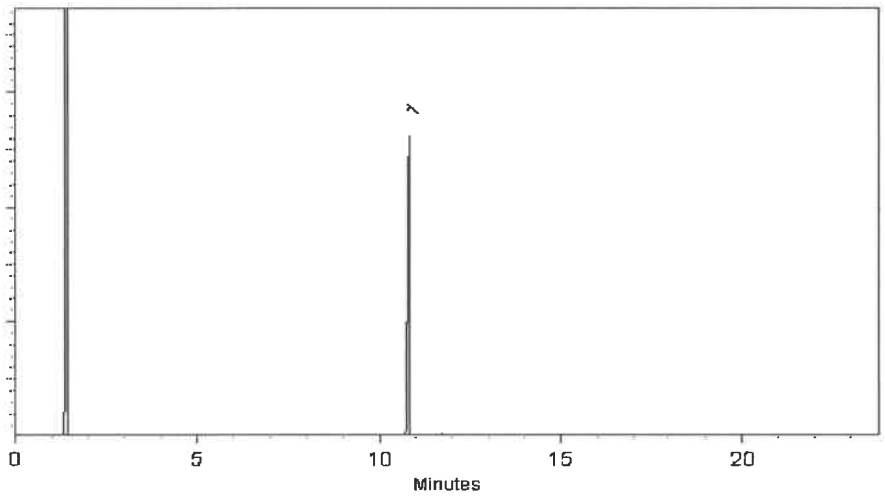
Inj. Temp:
250°C

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.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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

Manufacturing Notes:

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

Handling Notes:

- 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.
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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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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.)

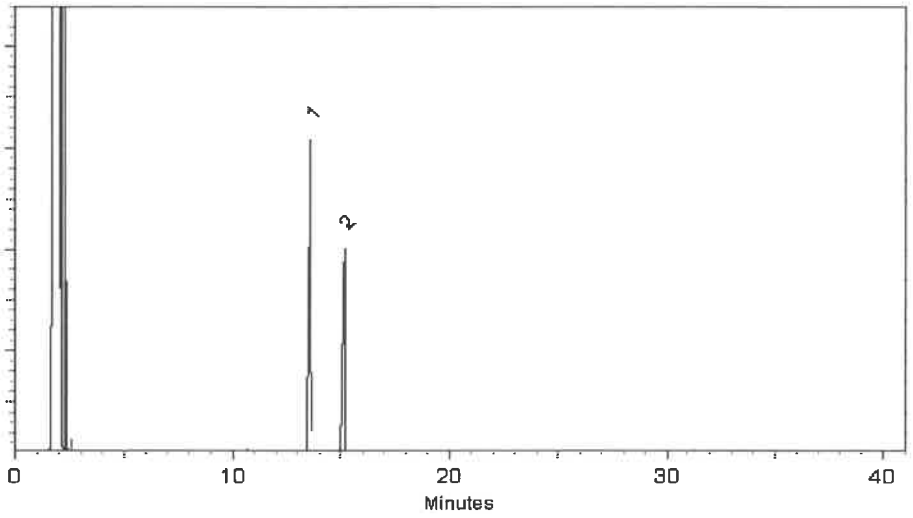
Inj. Temp:
250°C

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

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

Description : MA Fractionation Surrogate Spike Mix

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

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

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

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

P13457 ↓ P13476 Y.P. 07/23/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,031.0 µg/mL	+/- 181.5871
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,037.5 µg/mL	+/- 181.8799

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

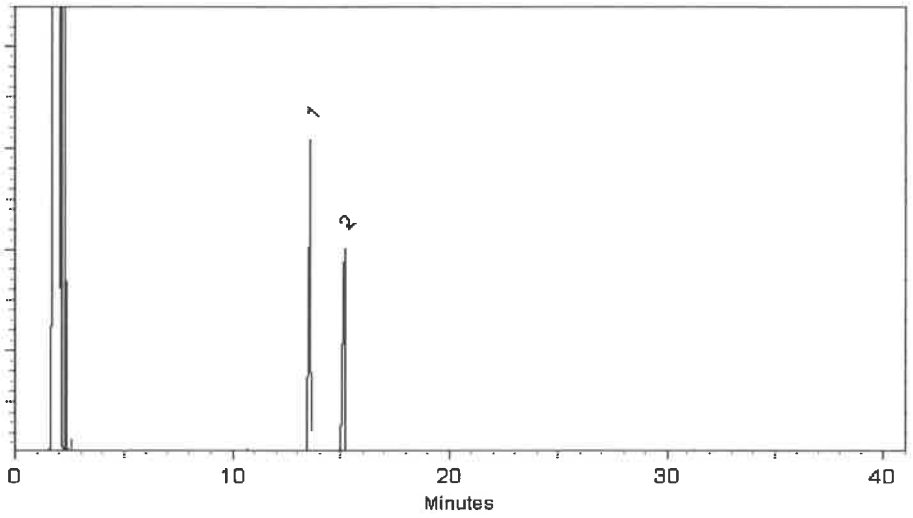
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Stacey Wanner - Operations Technician I

Date Mixed: 29-Apr-2024 **Balance Serial #** B345965662

Dillan Murphy - Operations Technician I

Date Passed: 30-Apr-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 1-Chlorooctadecane Standard

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

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

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

Ship: Ambient

P13595
↓
P13624
Y.P.
10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

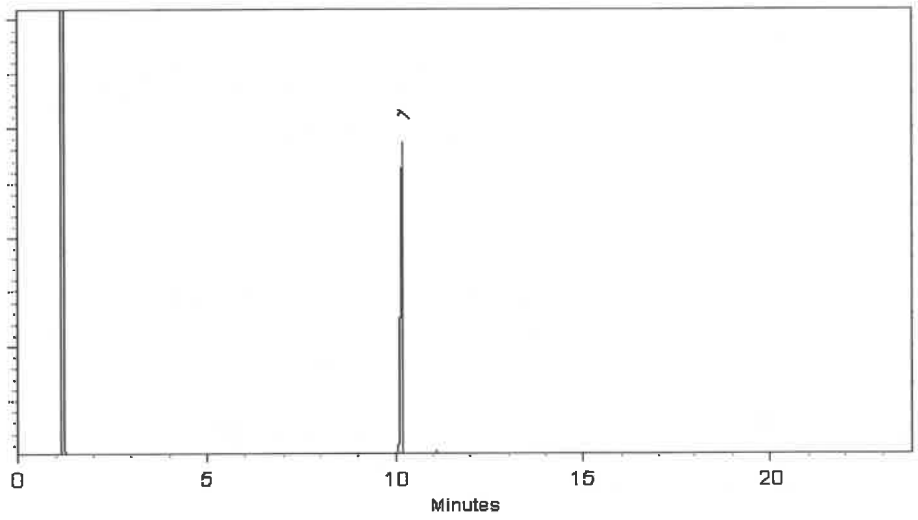
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Stacey Wanner - Operations Technician I

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

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
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Certified Uncertainty Value Notes:

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Catalog No. : 31098 **Lot No.:** A0213283

Description : 1-Chlorooctadecane Standard

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

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

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

Ship: Ambient

P13595
↓
P13624
Y.P.
10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

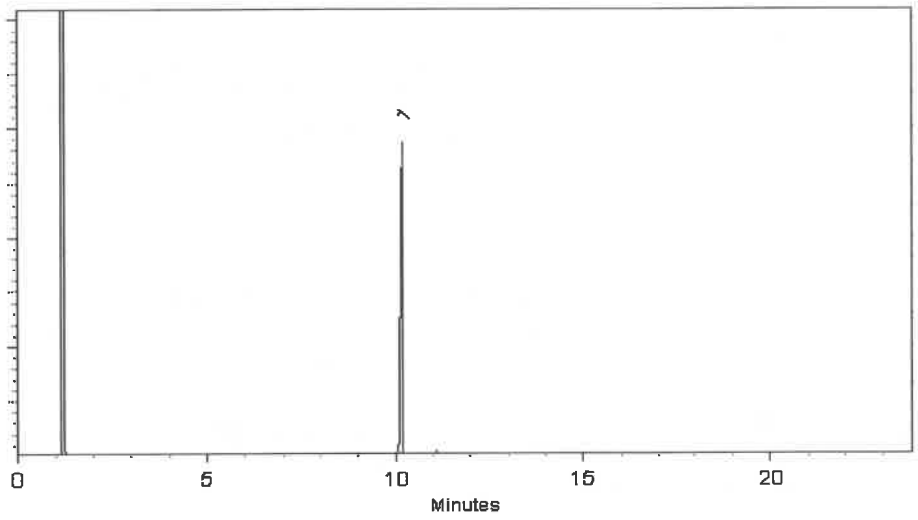
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Stacey Wanner - Operations Technician I

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

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Purity Notes:

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

Manufacturing Notes:

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

Handling Notes:

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

Description : 1-Chlorooctadecane Standard

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

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

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

Ship: Ambient

P13595
↓
P13624
Y.P.
10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

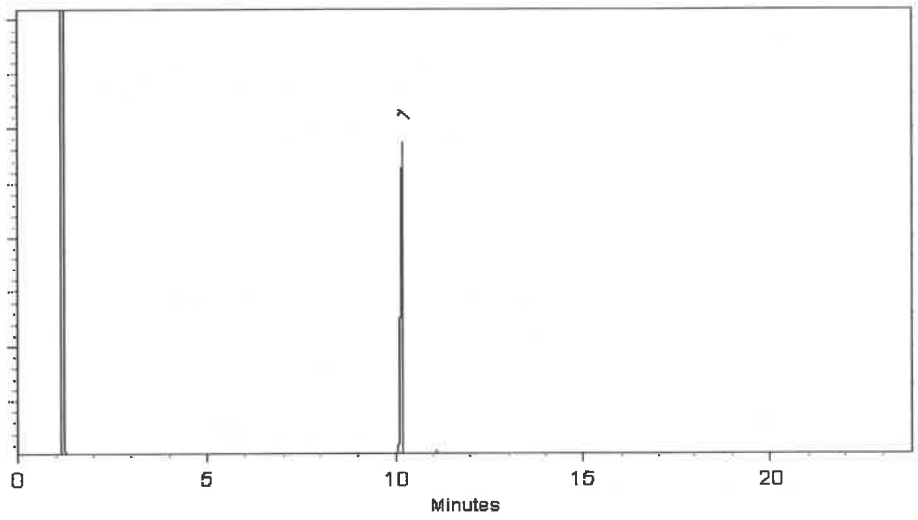
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Stacey Wanner - Operations Technician I

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

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0211112

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13625
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P13644
} Y.P. 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

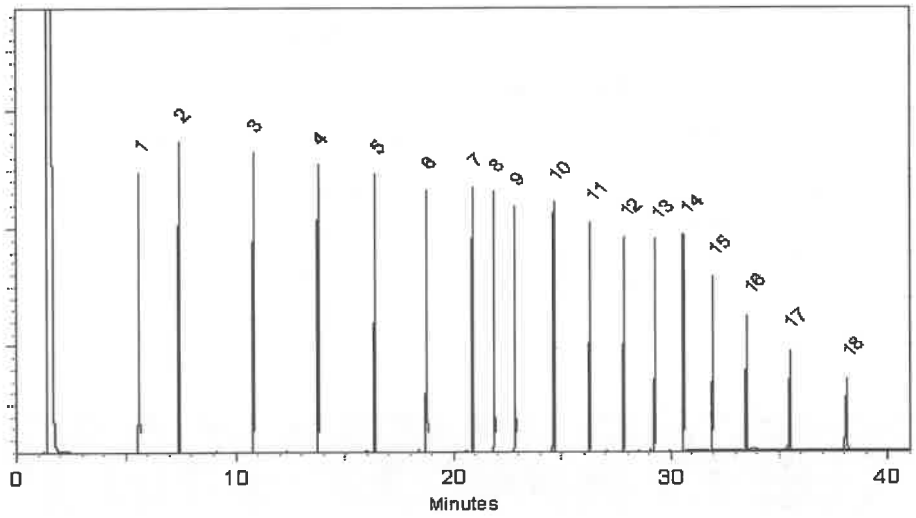
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.02

Certificate of Analysis

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0211112

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13625
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P13644
} Y.P. 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

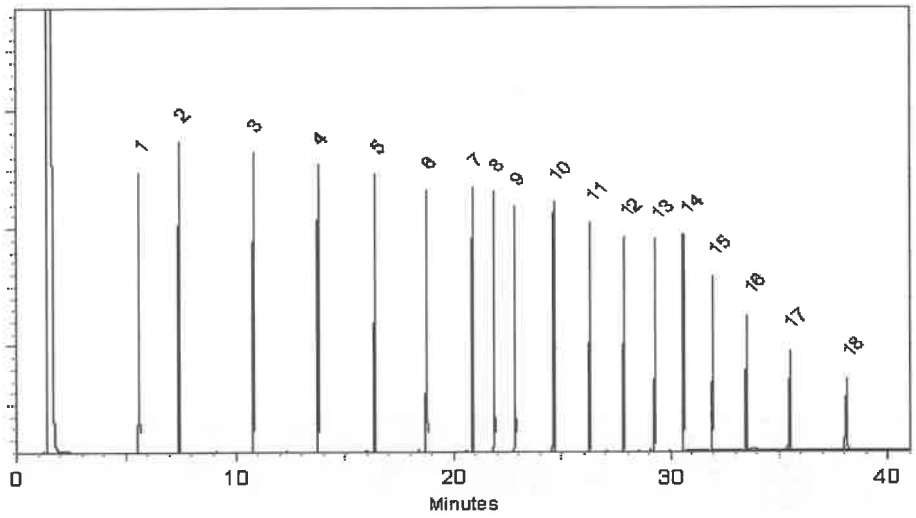
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0211112

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13625
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P13644
} Y.P. 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

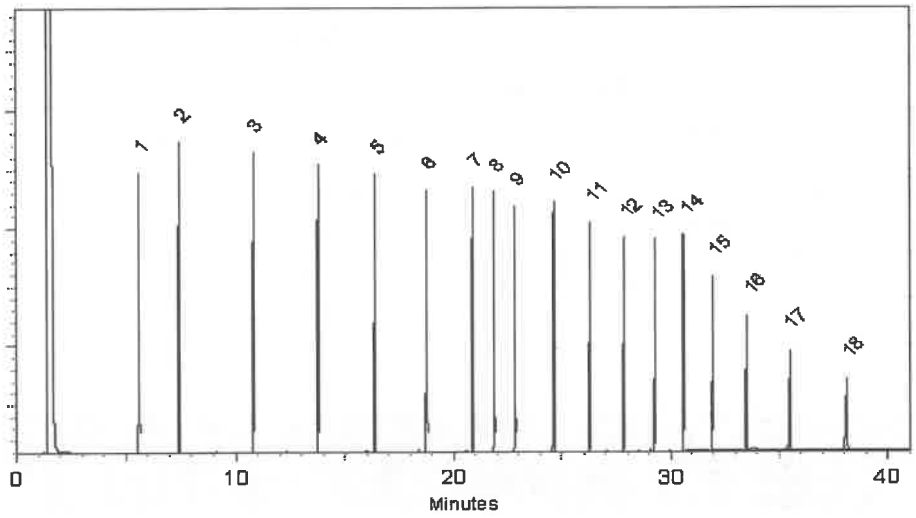
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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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:

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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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Certificate of Analysis

chromatographic plus

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Catalog No. : 30542 **Lot No.:** A0211112

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13625
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P13644
} Y.P. 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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.)

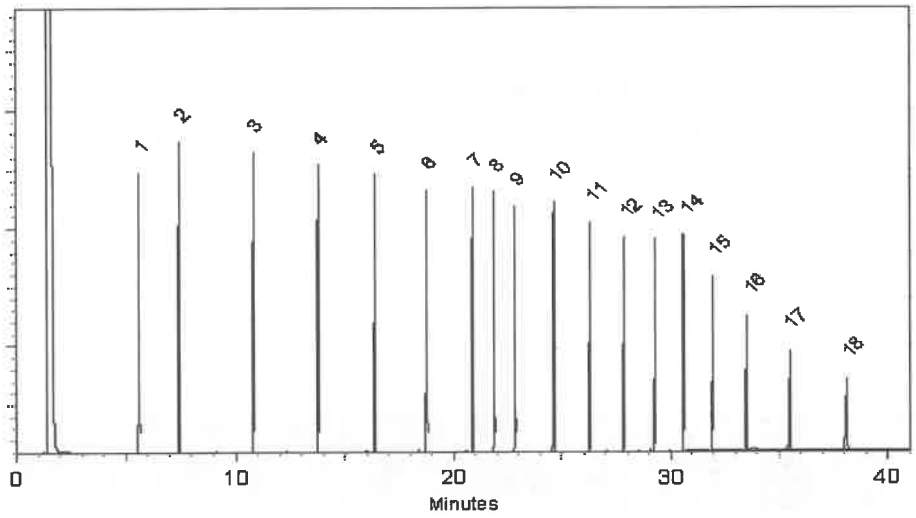
Inj. Temp:
250°C

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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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0211112

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13625
↓
P13644
} Y.P. 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

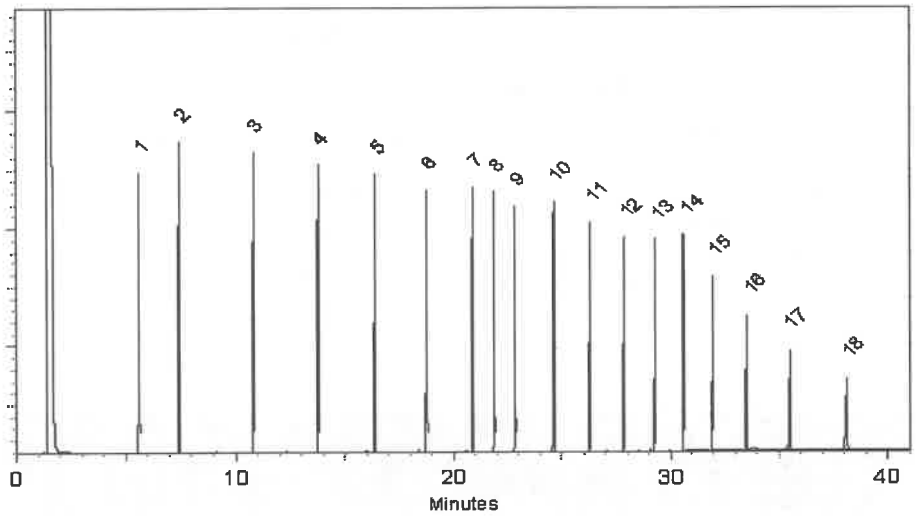
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.02

Certificate of Analysis

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0211112

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13625
↓
P13644
} Y.P. 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

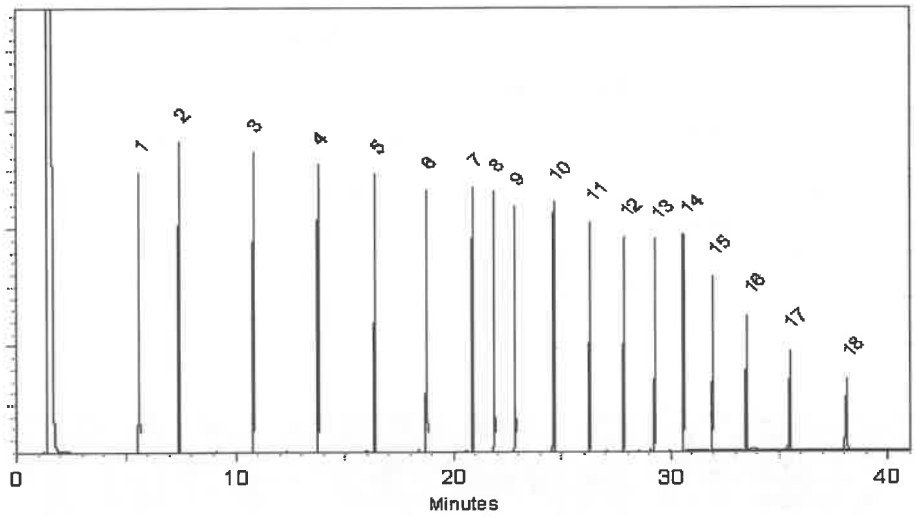
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31097 **Lot No.:** A0216631

Description : o-Terphenyl Standard

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

P13645 ↓ P13694 } Y.P. 10/16/24

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

Expiration Date : April 30, 2028 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,065.0 µg/mL	+/- 453.3336

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

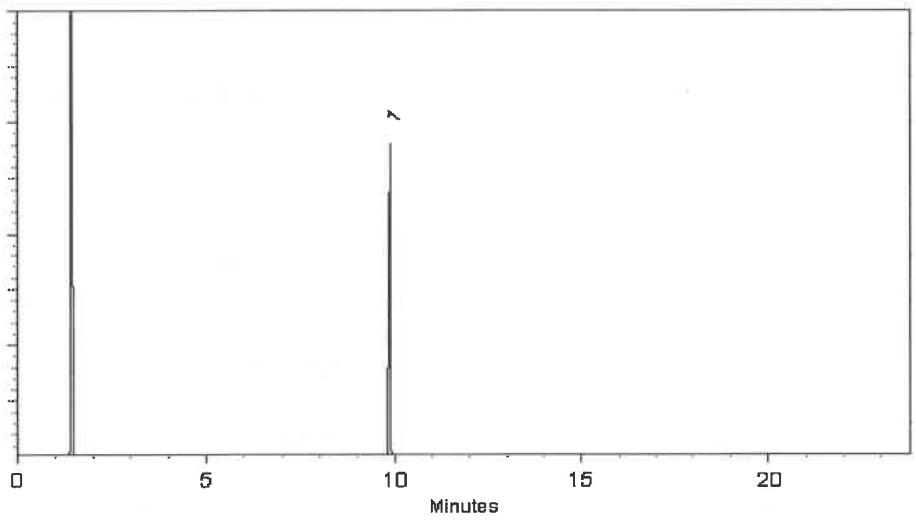
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31097 **Lot No.:** A0216631

Description : o-Terphenyl Standard

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

P13645 ↓ P13694 } Y.P. 10/16/24

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

Expiration Date : April 30, 2028 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,065.0 µg/mL	+/- 453.3336

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

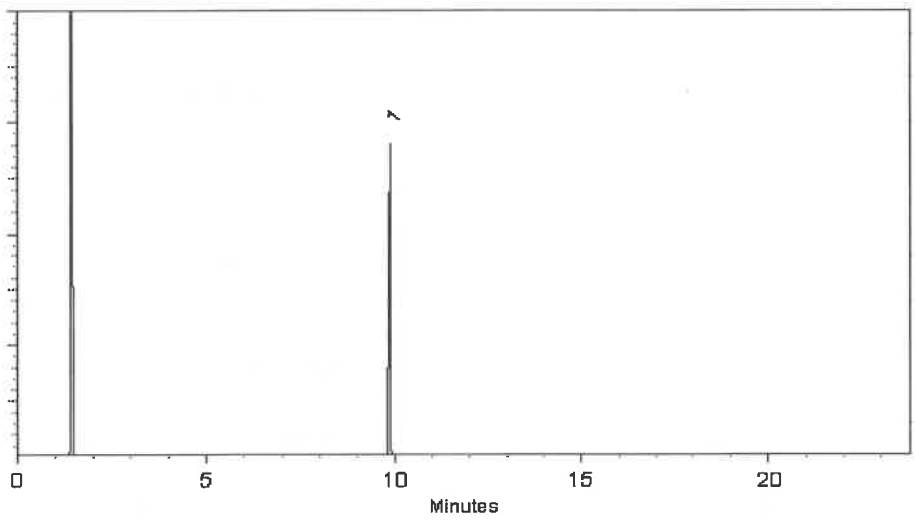
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31097 **Lot No.:** A0216631

Description : o-Terphenyl Standard

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

P13645 ↓ P13694 } Y.P. 10/16/24

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

Expiration Date : April 30, 2028 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,065.0 µg/mL	+/- 453.3336

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

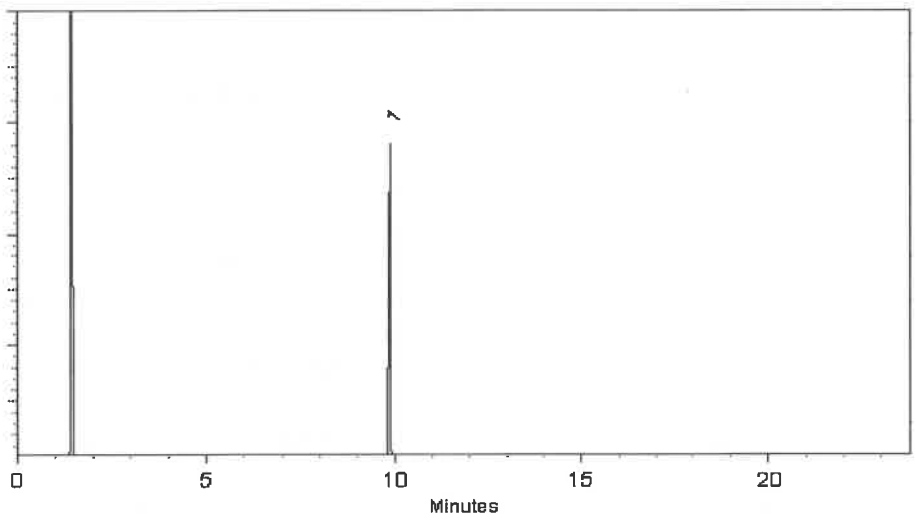
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

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Catalog No. : 31097 **Lot No.:** A0216631

Description : o-Terphenyl Standard

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

P13645 ↓ P13694 } Y.P. 10/16/24

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

Expiration Date : April 30, 2028 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,065.0 µg/mL	+/- 453.3336

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

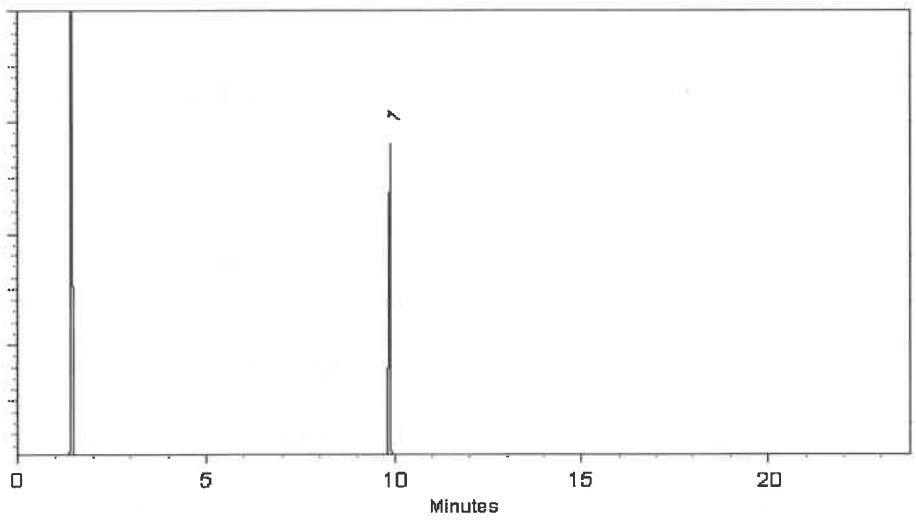
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

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Manufacturing Notes:

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Catalog No. : 31097 **Lot No.:** A0216631

Description : o-Terphenyl Standard

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

P13645 ↓ P13694 } Y.P. 10/16/24

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

Expiration Date : April 30, 2028 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,065.0 µg/mL	+/- 453.3336

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

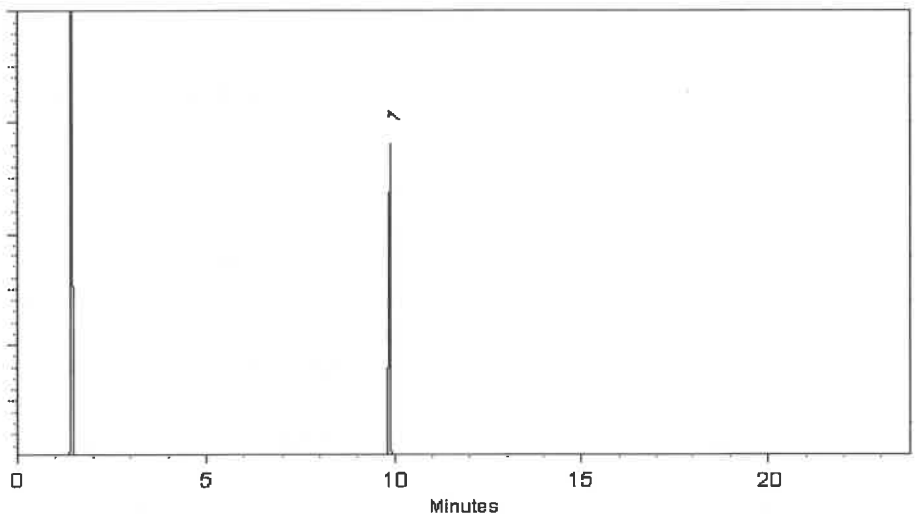
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Catalog No. : 31097 **Lot No.:** A0216631

Description : o-Terphenyl Standard

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

P13645 ↓ P13694 } Y.P. 10/16/24

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

Expiration Date : April 30, 2028 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,065.0 µg/mL	+/- 453.3336

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

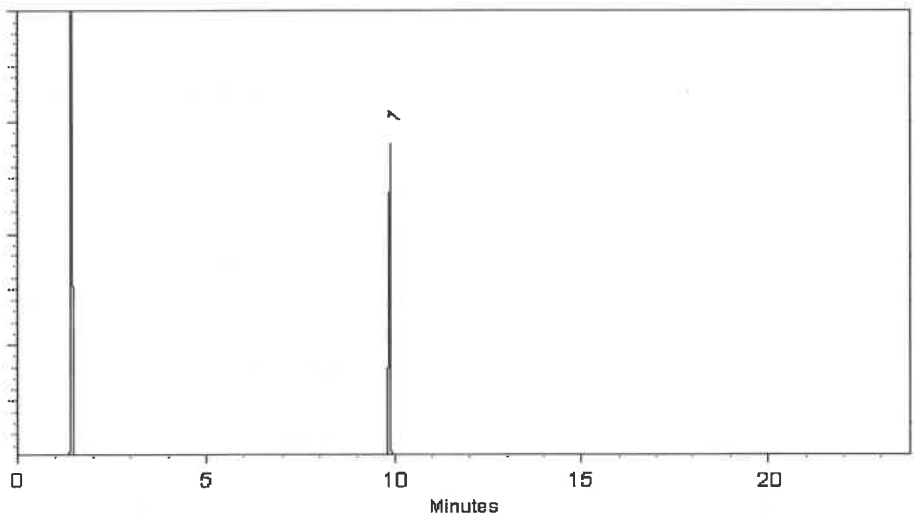
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Description : o-Terphenyl Standard

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

P13645 ↓ P13694 } Y.P. 10/16/24

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

Expiration Date : April 30, 2028 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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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:
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@ 20°C/min. (hold 10 min.)

Inj. Temp:
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Det. Temp:
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Det. Type:
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Split Vent:
10 ml/min.

Inj. Vol
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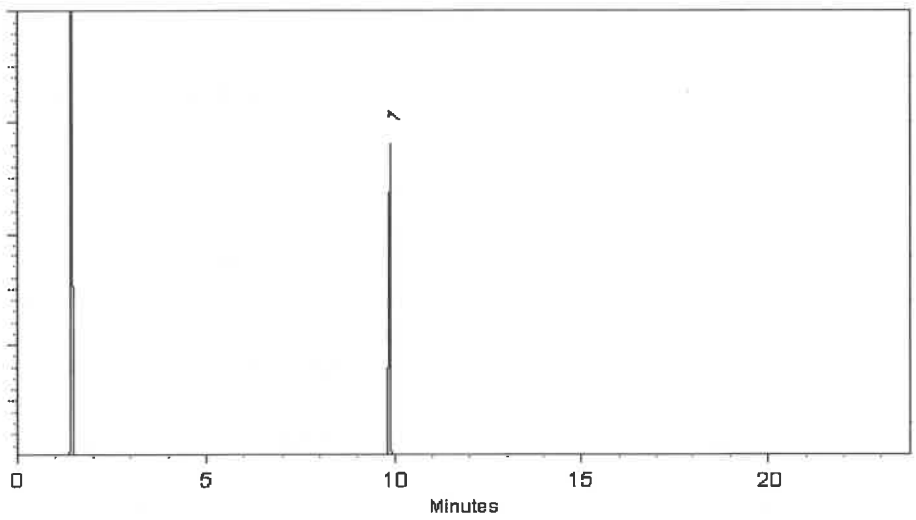

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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

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Description : o-Terphenyl Standard

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

P13645 ↓ P13694 } Y.P. 10/16/24

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

Expiration Date : April 30, 2028 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,065.0 µg/mL	+/- 453.3336

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

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

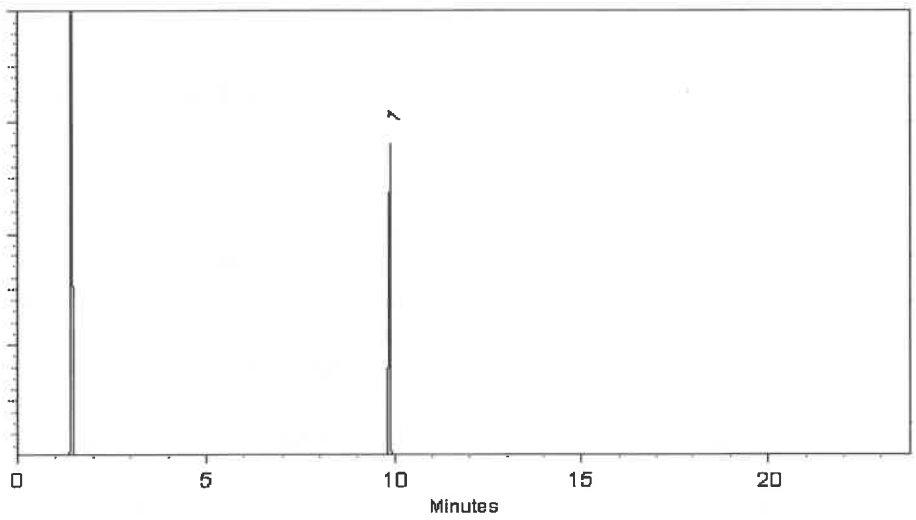
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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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.:** A0211254

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

P13708
↓
P137-16
Y.P. 10/24/24

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

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.)

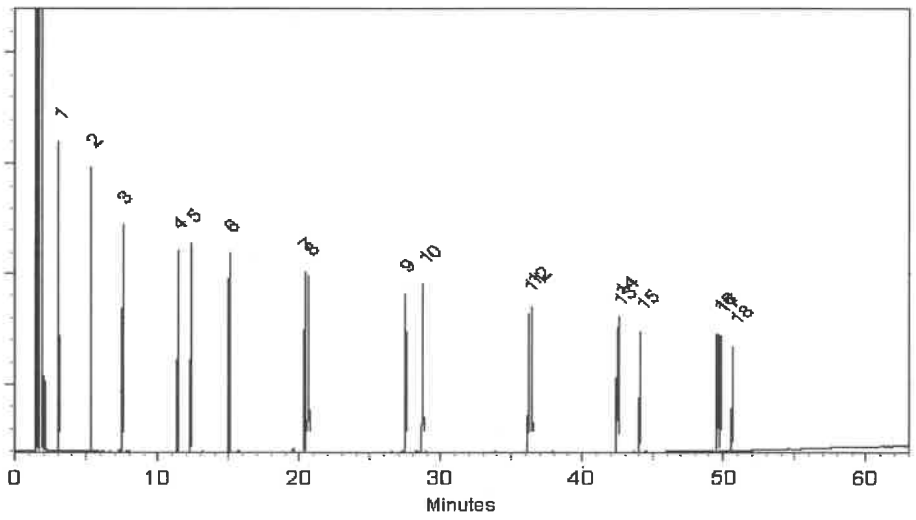
Inj. Temp:
250°C

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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ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

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

P13717 ↓ P13727 Y.P 10/24/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0	µg/mL	+/- 8.9683

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

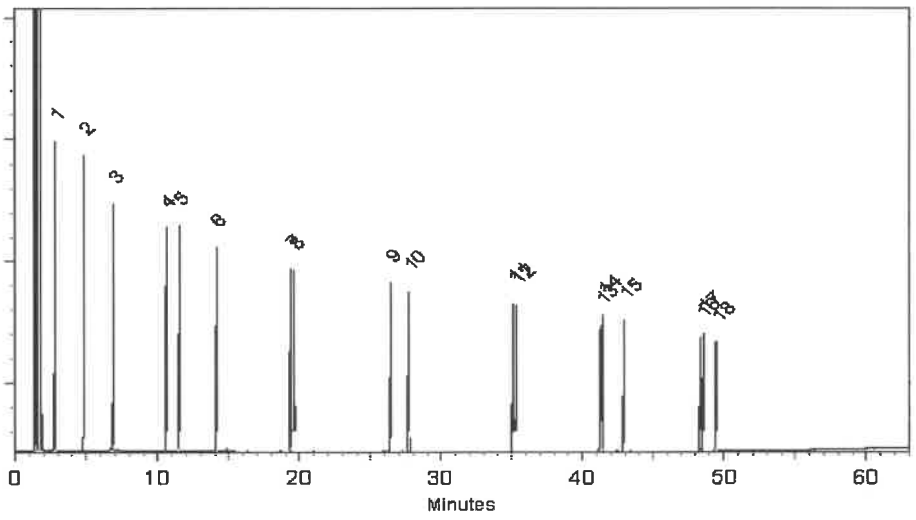
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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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.:** A0214879

Description : MA Fractionation Surrogate Spike Mix

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

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

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

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

P13743 ↓ P13772 } Y.P. 11/01/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,009.0 µg/mL	+/- 180.5961
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,008.5 µg/mL	+/- 180.5736

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

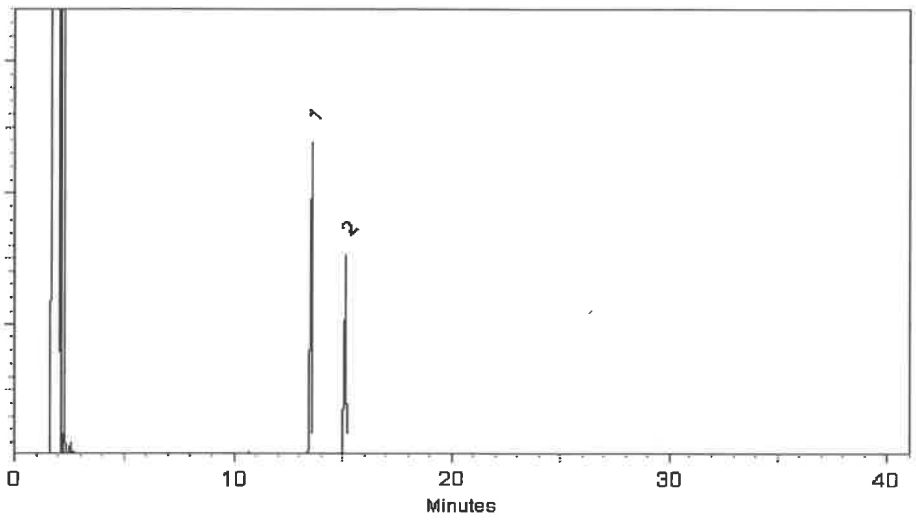
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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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. : 31480 **Lot No.:** A0214879

Description : MA Fractionation Surrogate Spike Mix

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

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

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

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

P13743 ↓ P13772 } Y.P. 11/01/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,009.0 µg/mL	+/- 180.5961
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,008.5 µg/mL	+/- 180.5736

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

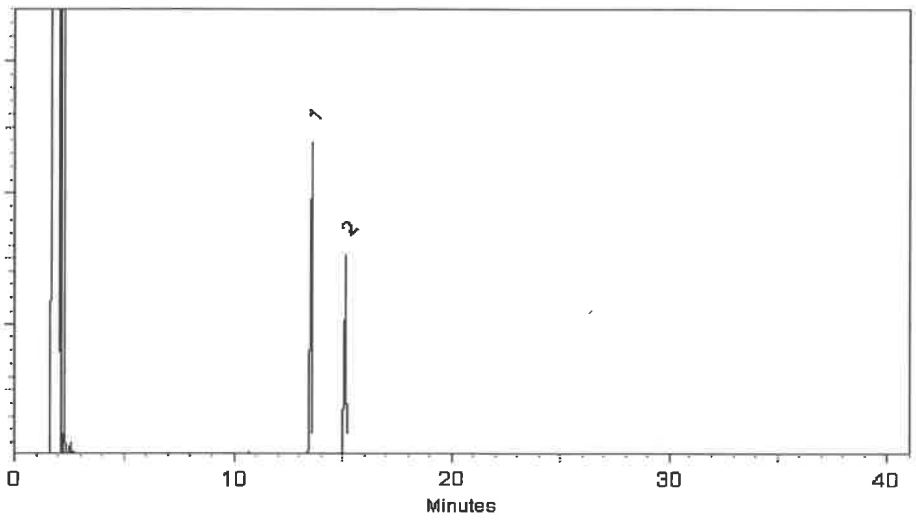
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31480 **Lot No.:** A0214879

Description : MA Fractionation Surrogate Spike Mix

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

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

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

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

P13743 ↓ P13772 } Y.P. 11/01/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,009.0 µg/mL	+/- 180.5961
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,008.5 µg/mL	+/- 180.5736

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

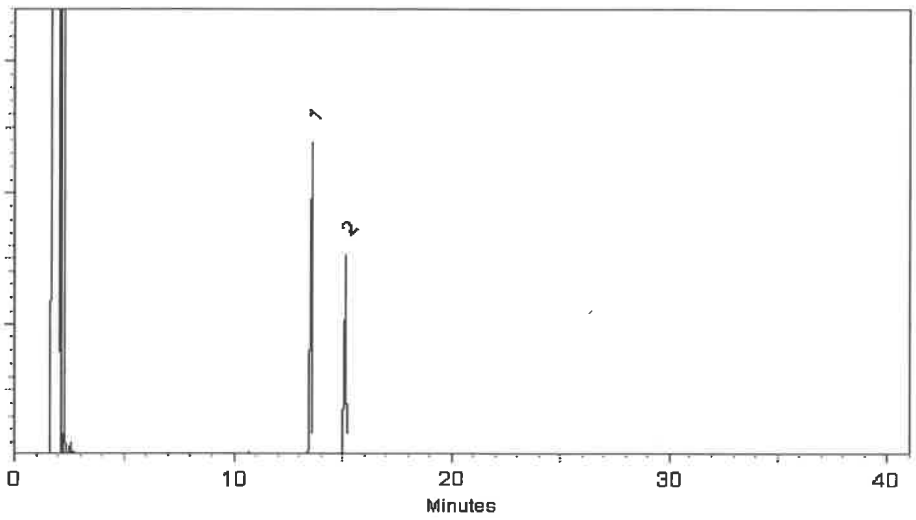
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul

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

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

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

P13743 ↓ P13772 } Y.P. 11/01/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,009.0 µg/mL	+/- 180.5961
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,008.5 µg/mL	+/- 180.5736

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

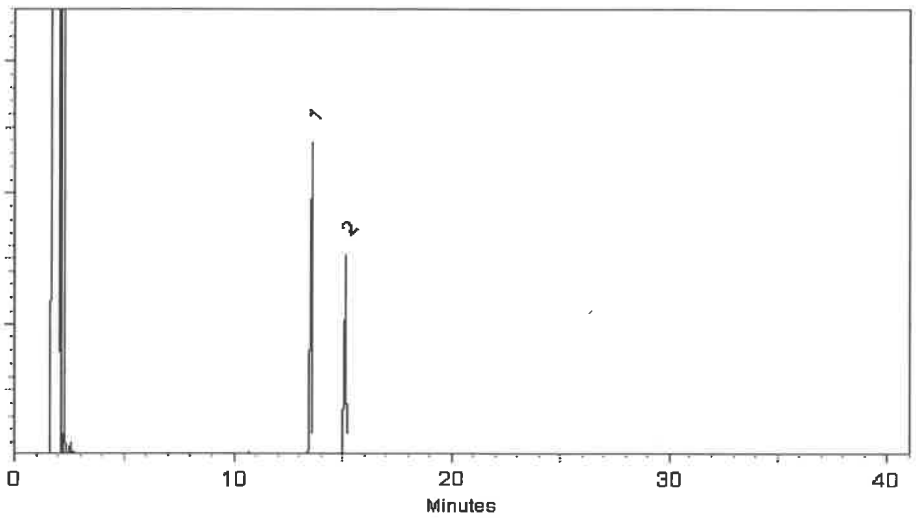
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Catalog No. : 31480 **Lot No.:** A0214879

Description : MA Fractionation Surrogate Spike Mix

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

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

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

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

P13743 ↓ P13772 } Y.P. 11/01/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,009.0 µg/mL	+/- 180.5961
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,008.5 µg/mL	+/- 180.5736

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

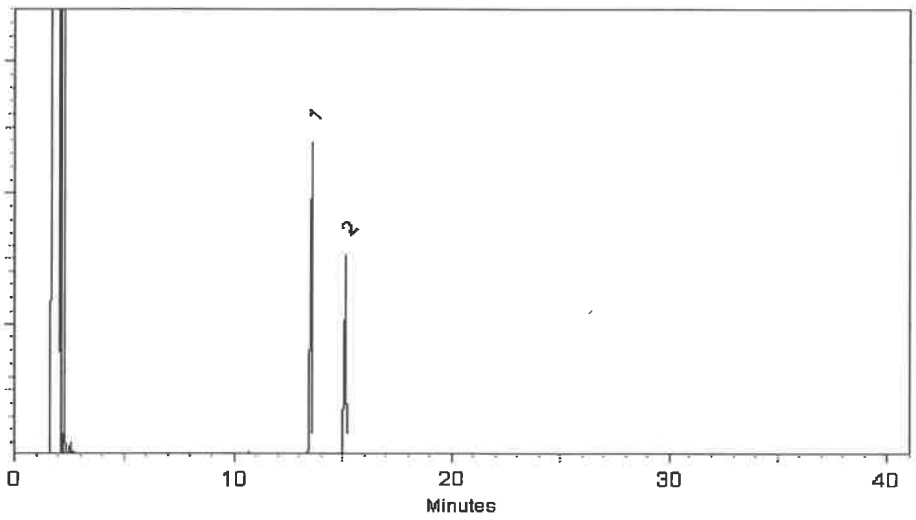
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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Certified Uncertainty Value Notes:

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

Manufacturing Notes:

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

Handling Notes:

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Description : MA Fractionation Surrogate Spike Mix

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

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

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

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

P13743 ↓ P13772 } Y.P. 11/01/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,009.0 µg/mL	+/- 180.5961
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* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

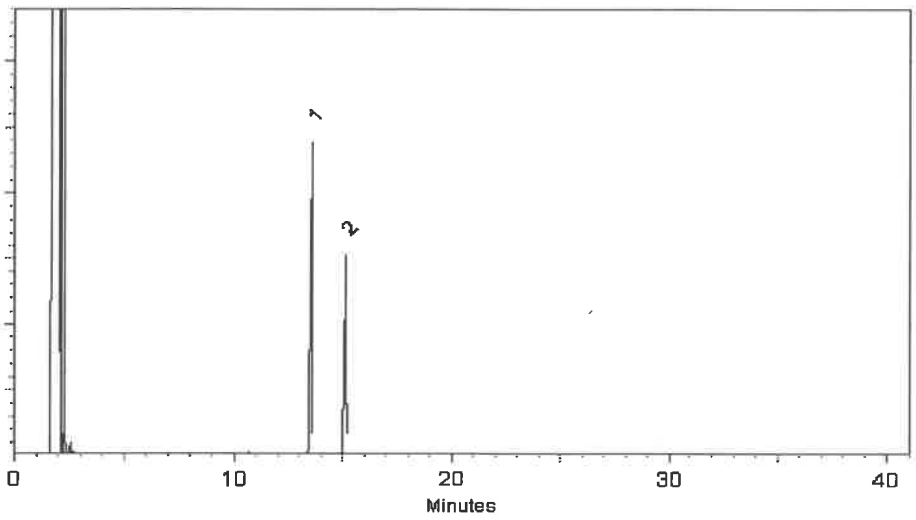
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Manufacturing Notes:

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Column:
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Carrier Gas:
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Temp. Program:
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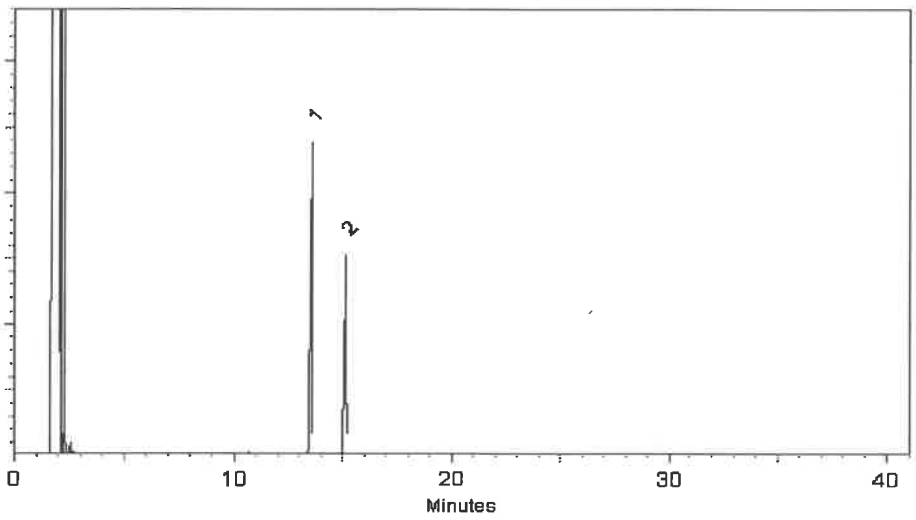

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Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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Solvent: Hexane
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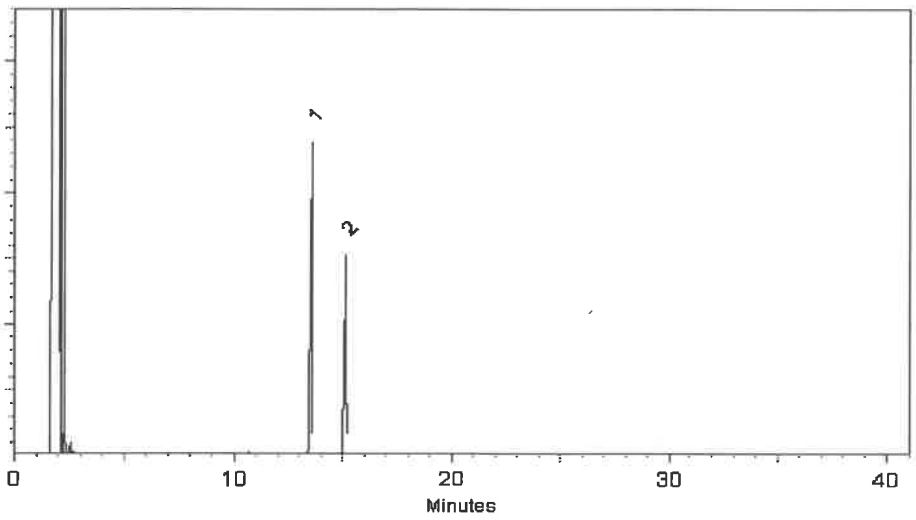

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Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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Certificate of Analysis

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

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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. : 30542 **Lot No.:** A0217408

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13800
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P13889
} Y.P. 12/09/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.7 µg/mL	+/- 5.1839
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.0 µg/mL	+/- 5.1917
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.5 µg/mL	+/- 5.1805
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.5 µg/mL	+/- 5.1805
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.7 µg/mL	+/- 5.1857
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1857
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.9 µg/mL	+/- 5.1888
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.5 µg/mL	+/- 5.1805
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.5 µg/mL	+/- 5.1788
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.6 µg/mL	+/- 5.1822
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.6 µg/mL	+/- 5.1822
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.1 µg/mL	+/- 5.1942
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.9 µg/mL	+/- 5.1891
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.8 µg/mL	+/- 5.1865
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	199.3 µg/mL	+/- 5.1477

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	201.0 µg/mL	+/- 5.1917

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

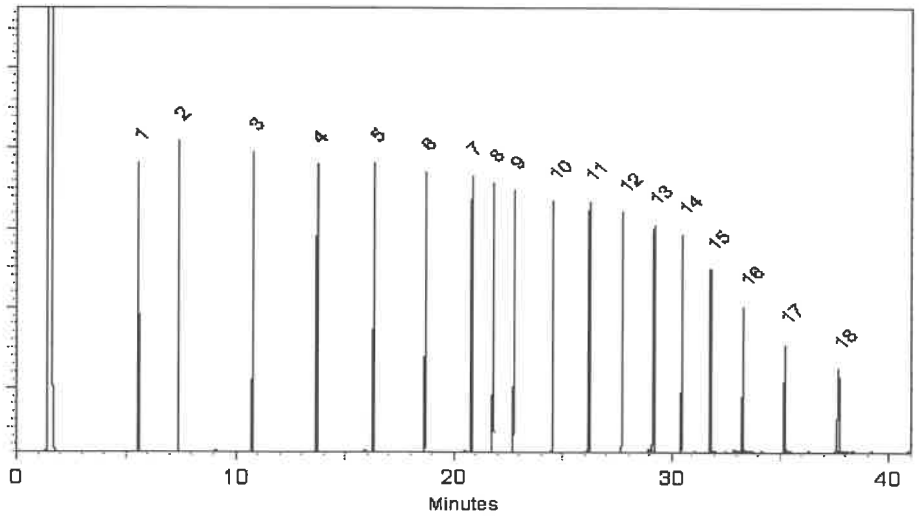
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope D. Riglin
Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Catalog No. : 30542 **Lot No.:** A0217408

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13800
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P13889
} Y.P. 12/09/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.5 µg/mL	+/- 5.1805
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.5 µg/mL	+/- 5.1805
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6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1857
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.9 µg/mL	+/- 5.1888
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.5 µg/mL	+/- 5.1805
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.5 µg/mL	+/- 5.1788
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.6 µg/mL	+/- 5.1822
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.6 µg/mL	+/- 5.1822
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.1 µg/mL	+/- 5.1942
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.9 µg/mL	+/- 5.1891
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.8 µg/mL	+/- 5.1865
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
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* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

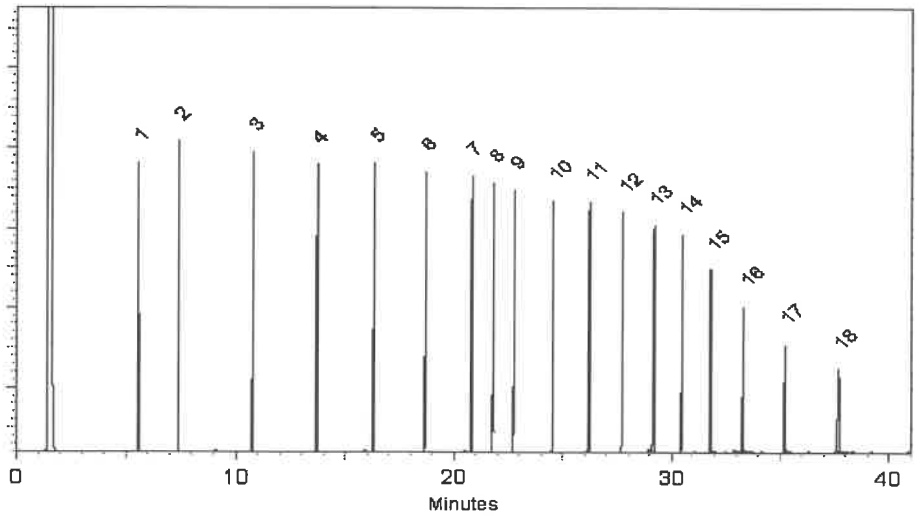
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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Penelope D. Riglin
Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

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Manufacturing Notes:

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Handling Notes:

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Handling: Sonicate prior to use. **Ship:** Ambient

P13800
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9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.5 µg/mL	+/- 5.1788
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Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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Rtx-5 (cat.#10223)

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hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
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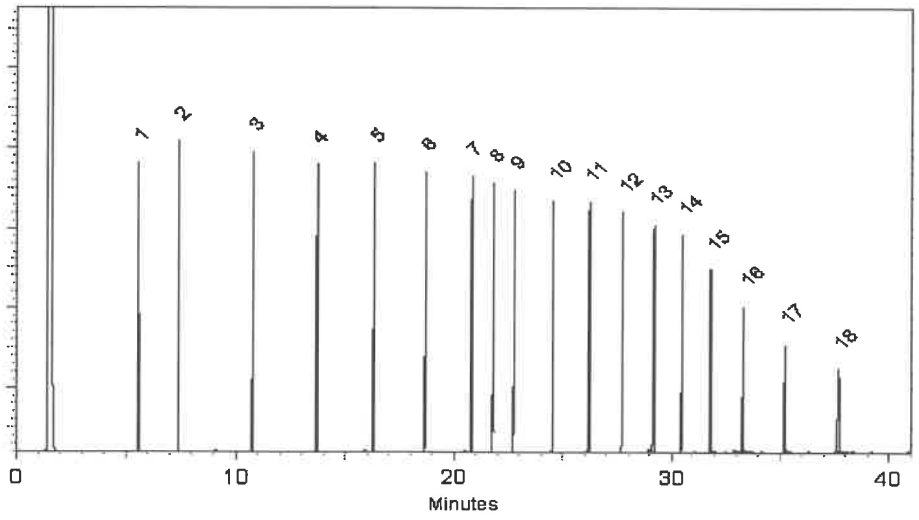
Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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Penelope D. Riglin
Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

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NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

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15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.8 µg/mL	+/- 5.1865
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	199.3 µg/mL	+/- 5.1477

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	201.0 µg/mL	+/- 5.1917

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

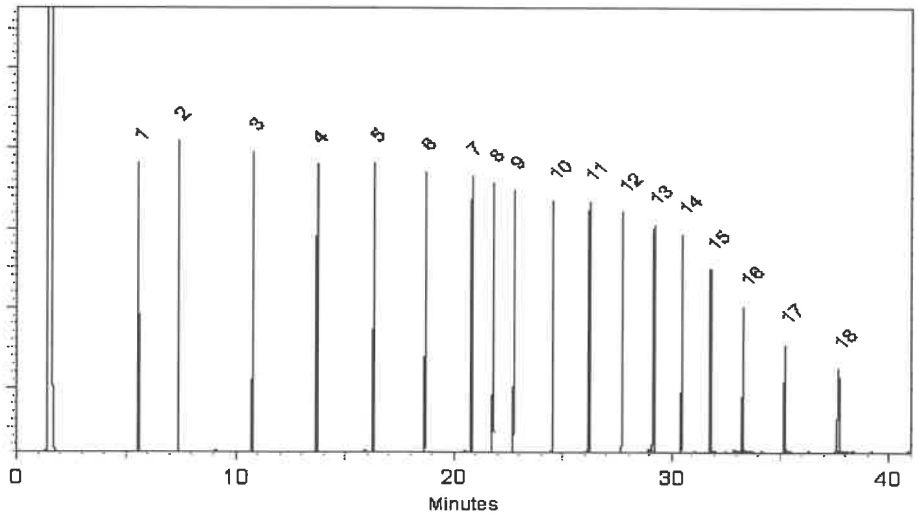
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope D. Riglin
Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/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.

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

P13835 & P13860 Y.P. 12/09/24

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

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.)

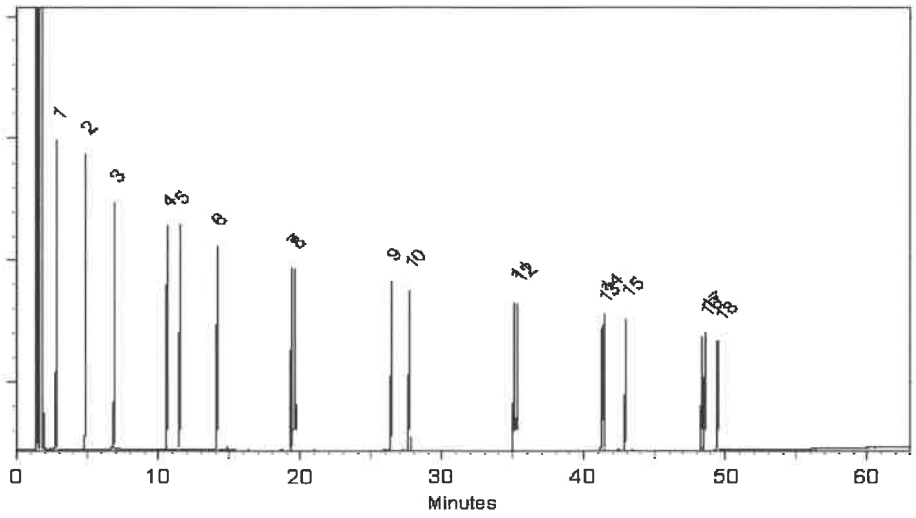
Inj. Temp:
250°C

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:

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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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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

P13835 & P13860 Y.P. 12/09/24

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

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0	µg/mL	+/- 8.9683

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

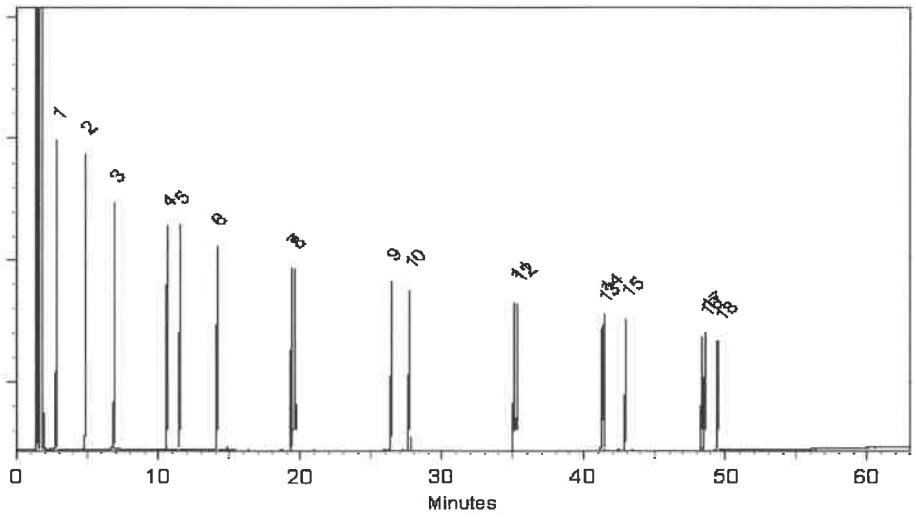
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

P13835 & P13860 Y.P. 12/09/24

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

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
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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.)

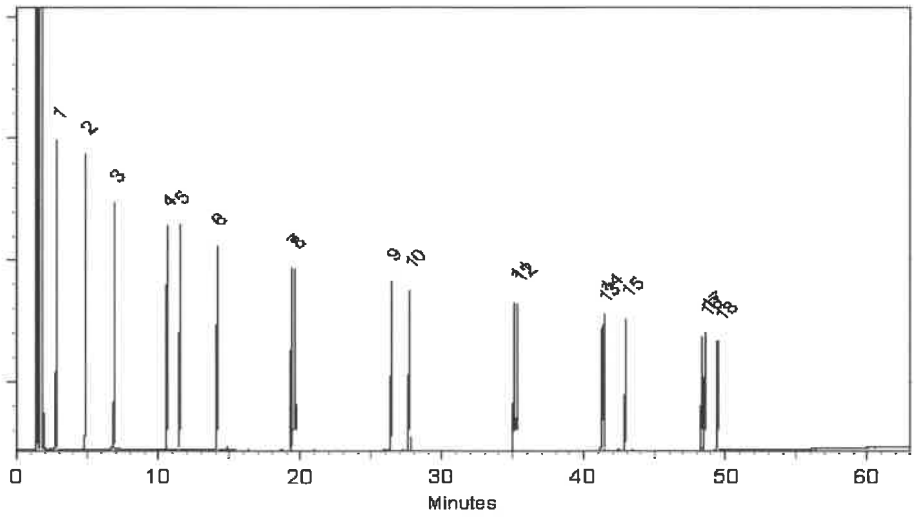
Inj. Temp:
250°C

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:

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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:

- 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

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.

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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

P13835 & P13860 Y.P. 12/09/24

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

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.)

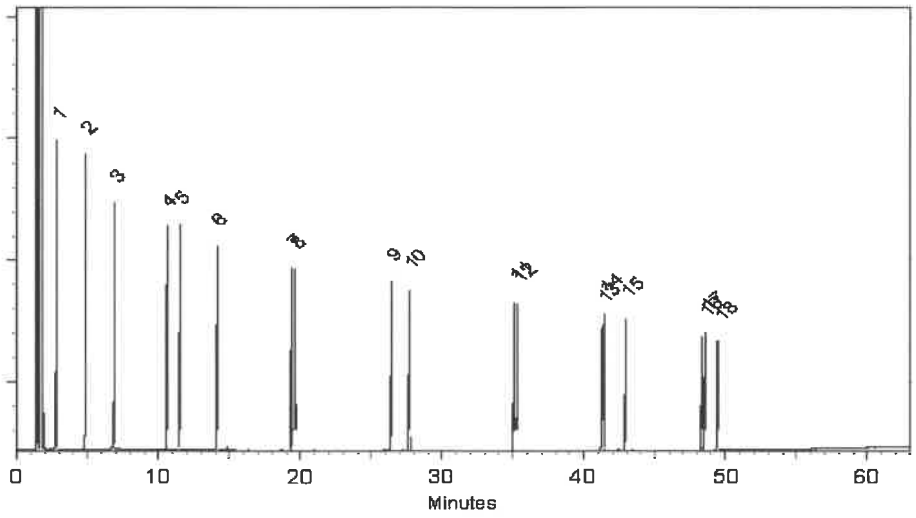
Inj. Temp:
250°C

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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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

P13835 & P13860 Y.P. 12/09/24

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

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.)

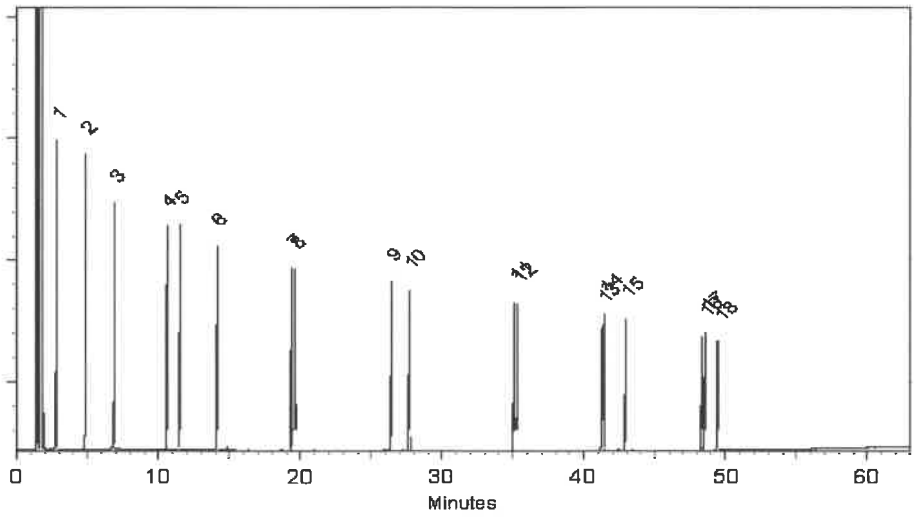
Inj. Temp:
250°C

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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chromatographic plus

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ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

P13835 & P13860 Y.P. 12/09/24

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

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.)

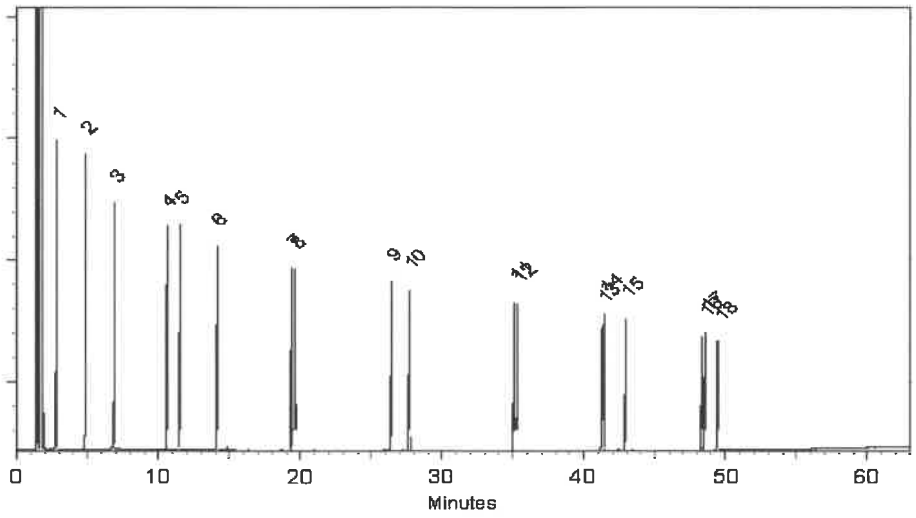
Inj. Temp:
250°C

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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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

P13835 & P13860 Y.P. 12/09/24

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

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.)

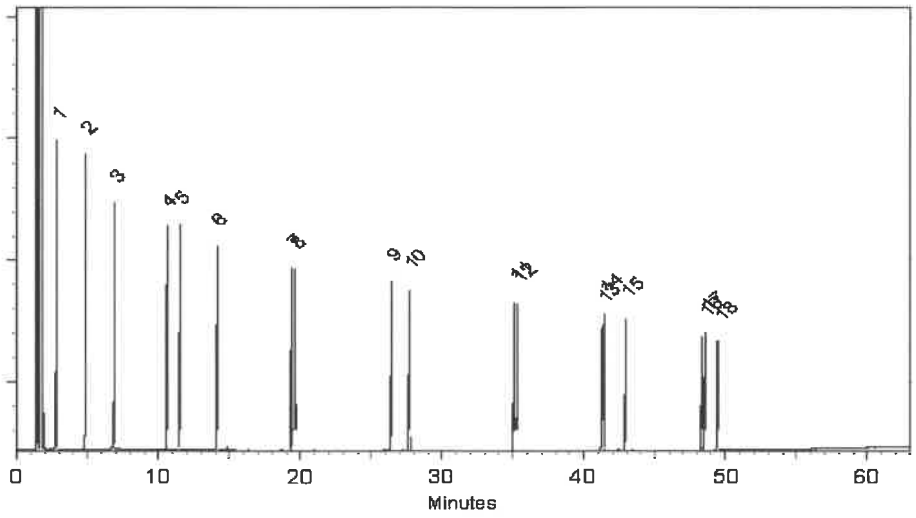
Inj. Temp:
250°C

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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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

P13835 & P13860 Y.P. 12/09/24

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

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.)

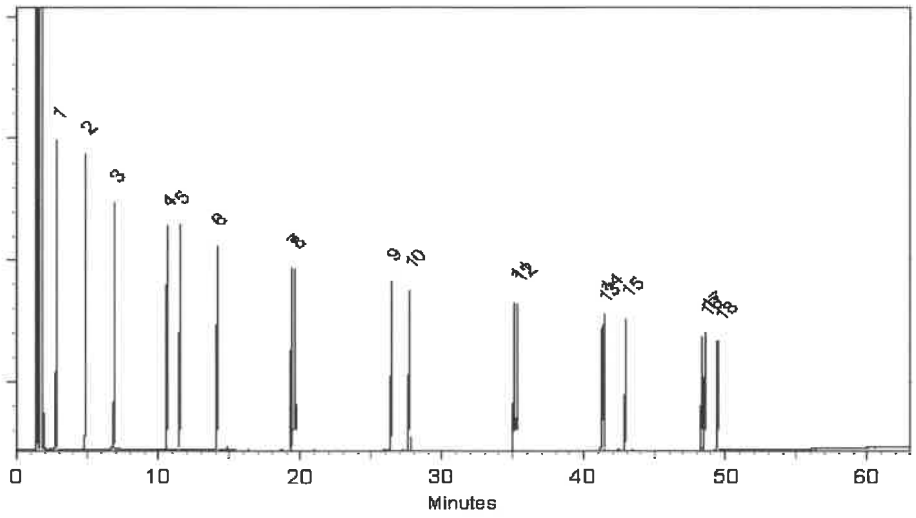
Inj. Temp:
250°C

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.

n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis

avantor™ | J.T.Baker®

W3153
TB
Opyte. 11/25/2024
TB

Certificate of Analysis

Material No.: 9262-03
Batch No.: 24G1962003
Manufactured Date: 2024-05-23
Expiration Date: 2025-08-22
Revision No.: 0

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

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

n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis

avantor™ | J.T.Baker®

W3147

W3147 update. 02/03/2025 JP

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MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO.
QUOTE NO. Q1488
COC Number 2046197

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Gannet Fleming
ADDRESS: 1010 Adams Ave
CITY Audubon STATE: PA ZIP: 19405
ATTENTION: Joe Krupensky
PHONE: 610-301-8342 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Anfrak replacement at SB
PROJECT NO. 95000060818 LOCATION: Kearny NJ
PROJECT MANAGER: Joe Krupensky
e-mail: RaQC@BEMAS.COM
PHONE: 610-301-8342 FAX:

CLIENT BILLING INFORMATION

BILL TO: Alliance PO#:
ADDRESS: 284 Sheffield St
CITY Mountainside STATE: NJ ZIP: 07092
ATTENTION: Samantha Peasly PHONE: 908-788-3148

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

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☒ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC + Raw Data) ☐ NYS ASP A ☐ NYS ASP B ☐ Other _____
☐ EDD FORMAT BEM EDD

ANALYSIS

1. PCBs
2. TAL metals
3. TCL-VOC+10
4. Hex chromium
5. TCL-SVOCs-BNA-20
6. EPH
7. RCRA
8. TCLP
9.

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	ENV-101-SB01	S		X	3/4/25	910	9	X	X	X	X	X	X	X	X		
2.	ENV-101-SB02	S				920	8	X	X	X	X	X	X	X	X		
3.	ENV-102-SB01	S				1005	9	X	X	X	X	X	X	X	X		
4.	ENV-102-SB02	S				1025	9	X	X	X	X	X	X	X	X		
5.	ENV-102-GW01	GW				1045	8	X	X	X	X	X	X				
6.	ENV-104-SB01	S				1200	9	X	X	X	X	X	X	X	X		
7.	ENV-104-SB02	S				1210	9	X	X	X	X	X	X	X	X		
8.	ENV-104-GW01	GW				1230	8	X	X	X	X	X	X				
9.	TB03042025	W				NA	2			X							
10.																	

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	3/4/25 1412	1. 3-4-25 1412
2.		2.
3.	3-4-25 1527	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.7 °C
Comments:

Page ____ of

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

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WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

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

QA Control Code: A2070148

Alliance TECHNICAL GROUP

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1488 PORT06
Client Name : Portal Partners Tri-Venture
Client Contact : Joseph Krupansky
Invoice Name : Portal Partners Tri-Venture
Invoice Contact : Joseph Krupansky

Order Date : 3/4/2025 3:39:00 PM
Project Name : Amtrak Sawtooth Bridges 2
Receive DateTime : 3/4/2025 3:27:00 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
Q1488-01	ENV-101-SB01	Solid	03/04/2025	09:10					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q1488-03	ENV-101-SB02	Solid	03/04/2025	09:20					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q1488-05	ENV-102-SB01	Solid	03/04/2025	10:05					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q1488-07	ENV-102-SB02	Solid	03/04/2025	10:25					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q1488-09	ENV-104-SB01	Solid	03/04/2025	12:00					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q1488-11	ENV-104-SB02	Solid	03/04/2025	12:10					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q1488-13	ENV-102-GW01	Water	03/04/2025	10:45					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
Q1488-14	ENV-104-GW01	Water	03/04/2025	12:30					

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

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Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
					VOC-TCLVOA-10		8260-Low	10 Bus. Days	
Q1488-15	TB03042025	Water	03/04/2025	00:00					
					VOC-TCLVOA-10		8260-Low	10 Bus. Days	

Relinguished By:
Date / Time : 3-4-25 1615

Received By :
Date / Time : 3.4.25 16:15

Storage Area : VOA Refridgerator Room