

DATA REPORTING QUALIFIERS- ORGANIC

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

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

LAB CHRONICLE

OrderID: Q3123
Client: CDM Smith
Contact: Marcie Ann Encinas

OrderDate: 9/16/2025 3:31:49 PM
Project: Con Edison FOPL2
Location: J11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3123-01	TP-2	SOIL	Gasoline Range Organics EPH	8015D NJEPH	09/16/25	09/22/25	09/22/25	09/16/25



QC SUMMARY



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

SOIL EPH SURROGATE RECOVERY

Lab Name: Alliance Contract: CAMP02
Lab Code: ACE SDG No.: Q3123
Run Number: FD092225AR

CLIENT SAMPLE NO.	2-Bromonaphthalene (SURR)	2-Flurobiphenyl (SURR)	ortho-Terphenyl (SURR)	TOT OUT
PB169768BL	69	69	76	0
PB169768BS	73	72	82	0
PB169768BSD	72	71	81	0
TP-2	87	81	68	0
TP-2MS	93	80	64	0
TP-2MSD	93	80	64	0

QC LIMITS

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

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

SOIL EPH SURROGATE RECOVERY

Lab Name: Alliance Contract: CAMP02
Lab Code: ACE SDG No.: Q3123
Run Number: FE092225AL

CLIENT SAMPLE NO.	1-chlorooctadecane (SURR)			TOT OUT
PB169768BL	73			0
PB169768BS	80			0
PB169768BSD	80			0
TP-2	115			0
TP-2MS	108			0
TP-2MSD	108			0

QC LIMITS

1-chlorooctadecane (SURR)

(40-140)

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

SOIL EPH SURROGATE RECOVERY

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

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Alliance</u>	Client:	<u>CDM Smith</u>
Lab Code:	<u>ACE</u>	SDG No:	<u>Q3123</u>
Sample No :	<u>Q3123-01MS</u>	Datafile:	<u>FD049743.D</u>
		Client ID :	<u>TP-2MS</u>

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS (%)
Aromatic C10-C12	7.4	0.33	5.42	69		(40-140)
Aromatic C12-C16	11.0	2.54	12.2	88		(40-140)
Aromatic C16-C21	18.4	16.6	35.9	104		(40-140)
Aromatic C21-C36	29.4	25.5	54.4	98		(40-140)

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS (%)
1,2,3-Trimethylbenzene (C10.1)	3.7	0.0228	2.4556	66		(40-140)
Naphthalene (C11.7)	3.7	0.0323	2.6655	71		(40-140)
2-Methylnaphthalene (C12.89)	3.7	0.0346	2.7230	73		(40-140)
Acenaphthylene (C15.06)	3.7	0.0684	3.2998	87		(40-140)
Acenaphthene (C15.5)	3.7	0.2025	3.4686	88		(40-140)
Fluorene (C16.55)	3.7	0.1747	3.6798	95		(40-140)
Phenanthrene (C19.36)	3.7	1.9602	5.5724	98		(40-140)
Anthracene (C19.43)	3.7	0.5529	4.2874	101		(40-140)
Pyrene (C20.8)	3.7	2.7850	6.5056	101		(40-140)
Fluoranthene (C21.85)	3.7	3.1266	6.7837	99		(40-140)
Benzo[a]anthracene (C26.37)	3.7	3.2721	5.4736	60		(40-140)
Chrysene (C27.41)	3.7	3.2887	10.9783	208	*	(40-140)
Bnezo[k]fluoranthene (C30.14)	3.7	2.5300	9.7976	196	*	(40-140)
Dibenz[a,h]anthracene (C30.36)	3.7	1.5614	8.0226	175	*	(40-140)
benzo[b]fluoranthene (C30.41)	3.7	2.3782	5.2207	77		(40-140)
Benzo[a]pyrene (C31.34)	3.7	1.4103	5.8925	121		(40-140)
Benzo[g,h,i]perylene (C34.01)	3.7	0.8287	3.7423	79		(40-140)
Indeno[1,2,3-cd]pyrene (C35.01)	3.7	1.5329	4.6730	85		(40-140)

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Alliance</u>	Client:	<u>CDM Smith</u>
Lab Code:	<u>ACE</u>	SDG No:	<u>Q3123</u>
Sample No :	<u>Q3123-01MSD</u>	Datafile:	<u>FD049744.D</u>
		Client ID :	<u>TP-2MSD</u>

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	7.4	0.33	5.45	70		0.43 (40-140)	50
Aromatic C12-C16	11.0	2.54	10.6	73		18.2 (40-140)	50
Aromatic C16-C21	18.4	16.6	36.2	106		1.9 (40-140)	50
Aromatic C21-C36	29.4	25.5	54.9	100		1.51 (40-140)	50

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS (%)	QC Limit Of RPD
1,2,3-Trimethylbenzene (C10.1)	3.7	0.0228	2.4721	66		0 (40-140)	50
Naphthalene (C11.7)	3.7	0.0323	2.6891	72		1.4 (40-140)	50
2-Methylnaphthalene (C12.89)	3.7	0.0346	2.7523	73		0 (40-140)	50
Acenaphthylene (C15.06)	3.7	0.0684	3.3313	88		1.14 (40-140)	50
Acenaphthene (C15.5)	3.7	0.2025	3.5000	89		1.13 (40-140)	50
Fluorene (C16.55)	3.7	0.1747	3.7107	96		1.05 (40-140)	50
Phenanthrene (C19.36)	3.7	1.9602	5.6168	99		1.02 (40-140)	50
Anthracene (C19.43)	3.7	0.5529	4.3245	102		0.99 (40-140)	50
Pyrene (C20.8)	3.7	2.7850	6.5488	102		0.99 (40-140)	50
Fluoranthene (C21.85)	3.7	3.1266	6.8309	100		1.01 (40-140)	50
Benzo[a]anthracene (C26.37)	3.7	3.2721	5.5408	61		1.65 (40-140)	50
Chrysene (C27.41)	3.7	3.2887	11.0804	211	*	1.43 (40-140)	50
Bnezo[k]fluoranthene (C30.14)	3.7	2.5300	9.8907	199	*	1.52 (40-140)	50
Dibenz[a,h]anthracene (C30.36)	3.7	1.5614	8.2039	180	*	2.82 (40-140)	50
benzo[b]fluoranthene (C30.41)	3.7	2.3782	5.2648	78		1.29 (40-140)	50
Benzo[a]pyrene (C31.34)	3.7	1.4103	5.9494	123		1.64 (40-140)	50
Benzo[g,h,i]perylene (C34.01)	3.7	0.8287	3.7719	80		1.26 (40-140)	50
Indeno[1,2,3-cd]pyrene (C35.01)	3.7	1.5329	4.7279	86		1.17 (40-140)	50

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Alliance</u>	Client:	<u>CDM Smith</u>
Lab Code:	<u>ACE</u>	SDG No:	<u>Q3123</u>
Sample No :	<u>Q3123-01MS</u>	Datafile:	<u>FE055931.D</u>
		Client ID :	<u>TP-2MS</u>

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS (%)
Aliphatic C9-C12	11.0	0.21	8.10	72		(40-140)
Aliphatic C12-C16	7.4	0.68	8.23	102		(40-140)
Aliphatic C16-C21	11.0	0.60	12.4	107		(40-140)
Aliphatic C21-C28	14.7	0	14.8	100		(40-140)
Aliphatic C28-C40	22.0	8.81	28.5	89		(40-140)

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS (%)
n-Nonane (C9)	3.7	0.0052	2.0274	55		(40-140)
n-Decane (C10)	3.7	0.0080	2.7193	73		(40-140)
Naphthalene (C11.7)	3.7	0.0058	0.1582	4	*	(40-140)
n-Dodecane (C12)	3.7	0.0253	2.9154	78		(40-140)
2-methylnaphthalene (C12.89)	3.7	0.0112	0.1028	2	*	(40-140)
n-Tetradecane (C14)	3.7	0.0555	3.4210	91		(40-140)
n-Hexadecane (C16)	3.7	0.0272	3.7667	101		(40-140)
n-Octadecane (C18)	3.7	0.0445	3.8240	102		(40-140)
n-Eicosane (C20)	3.7	0.0458	4.1028	110		(40-140)
n-Heneicosane (C21)	3.7	0.0500	3.9831	106		(40-140)
n-Docosane (C22)	3.7	0.0373	3.9070	105		(40-140)
n-Tetracosane (C24)	7.3	0.0423	3.6802	50		(40-140)
n-Hexacosane (C26)	3.7	0.0471	3.4625	92		(40-140)
n-Octacosane (C28)	3.7	0.0615	3.3144	88		(40-140)
n-Tricontane (C30)	3.7	0.0922	3.2341	85		(40-140)
n-Dotriacontane (C32)	3.7	0.1017	3.2887	86		(40-140)
n-Tetratriacontane (C34)	3.7	0.1723	3.6451	94		(40-140)
n-Hexatriacontane (C36)	3.7	1.2153	4.2067	81		(40-140)
n-Octatriacontane (C38)	3.7	0.7425	4.6691	106		(40-140)
n-Tetracontane (C40)	3.7	0.0873	3.6276	96		(40-140)

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Alliance Client: CDM Smith
Lab Code: ACE SDG No: Q3123
Sample No : Q3123-01MSD Datafile: FE055932.D Client ID : TP-2MSD

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	11.0	0.21	7.35	65		10.1 (40-140) 50
Aliphatic C12-C16	7.4	0.68	7.72	96		6.37 (40-140) 50
Aliphatic C16-C21	11.0	0.60	12.1	104		2.84 (40-140) 50
Aliphatic C21-C28	14.7	0	15.0	101		1 (40-140) 50
Aliphatic C28-C40	22.1	8.81	29.1	92		2.87 (40-140) 50

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS (%) QC Limit Of RPD
n-Nonane (C9)	3.7	0.0052	1.8215	49		28.07 (40-140) 50
n-Decane (C10)	3.7	0.0080	2.4549	66		76.64 * (40-140) 50
Naphthalene (C11.7)	3.7	0.0058	0.1448	4	*	181.4 * (40-140) 50
n-Dodecane (C12)	3.7	0.0253	2.6563	71		10.67 (40-140) 50
2-methylnaphthalene (C12.89)	3.7	0.0112	0.0956	2	*	190.8 * (40-140) 50
n-Tetradecane (C14)	3.7	0.0555	3.1746	84		4.65 (40-140) 50
n-Hexadecane (C16)	3.7	0.0272	3.5592	95		3.11 (40-140) 50
n-Octadecane (C18)	3.7	0.0445	3.6896	99		2 (40-140) 50
n-Eicosane (C20)	3.7	0.0458	4.0409	108		3.64 (40-140) 50
n-Heneicosane (C21)	3.7	0.0500	3.9704	106		2.79 (40-140) 50
n-Docosane (C22)	3.7	0.0373	3.9195	105		3.74 (40-140) 50
n-Tetracosane (C24)	7.4	0.0423	3.7555	50		98.99 * (40-140) 50
n-Hexacosane (C26)	3.7	0.0471	3.5273	94		3.14 (40-140) 50
n-Octacosane (C28)	3.7	0.0615	3.3583	89		7.57 (40-140) 50
n-Tricontane (C30)	3.7	0.0922	3.2673	86		3.43 (40-140) 50
n-Dotriacontane (C32)	3.7	0.1017	3.3098	87		8.79 (40-140) 50
n-Tetratriacontane (C34)	3.7	0.1723	3.6154	93		4.21 (40-140) 50
n-Hexatriacontane (C36)	3.7	1.2153	4.1888	80		8.38 (40-140) 50
n-Octatriacontane (C38)	3.7	0.7425	5.3096	123		16.74 (40-140) 50
n-Tetracontane (C40)	3.7	0.0873	3.7192	98		4 (40-140) 50

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Alliance</u>	Client:	<u>CDM Smith</u>
Lab Code:	<u>ACE</u>	SDG No:	<u>Q3123</u>
Sample No :	<u>PB169768BS</u>	Datafile:	<u>FD049739.D</u>
		Client ID :	<u>PB169768BS</u>

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS (%)
Aromatic C10-C12	6.7	4.24	64		(40-140)
Aromatic C12-C16	10.0	6.86	69		(40-140)
Aromatic C16-C21	16.7	13.7	82		(40-140)
Aromatic C21-C36	26.7	23.0	86		(40-140)

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS(%)
1,2,3-Trimethylbenzene (C10.1)	3.3	2.04516	62		(40-140)
Naphthalene (C11.7)	3.3	2.18636	66		(40-140)
2-Methylnaphthalene (C12.89)	3.3	2.08425	63		(40-140)
Acenaphthylene (C15.06)	3.3	2.36404	72		(40-140)
Acenaphthene (C15.5)	3.3	2.39919	73		(40-140)
Fluorene (C16.55)	3.3	2.56258	78		(40-140)
Phenanthrene (C19.36)	3.3	2.69341	82		(40-140)
Anthracene (C19.43)	3.3	2.69388	82		(40-140)
Fluoranthene (C21.85)	3.3	2.87084	87		(40-140)
Pyrene (C20.8)	3.3	2.92711	89		(40-140)
Benzo[a]anthracene (C26.37)	3.3	2.97285	90		(40-140)
Chrysene (C27.41)	3.3	3.21539	97		(40-140)
benzo[b]fluoranthene (C30.41)	3.3	2.92275	89		(40-140)
Bnezo[k]fluoranthene (C30.14)	3.3	3.06540	93		(40-140)
Benzo[a]pyrene (C31.34)	3.3	2.85946	87		(40-140)
Indeno[1,2,3-cd]pyrene (C35.01)	3.3	3.09953	94		(40-140)
Dibenz[a,h]anthracene (C30.36)	3.3	2.63398	80		(40-140)
Benzo[g,h,i]perylene (C34.01)	3.3	2.62201	79		(40-140)

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Alliance</u>	Client:	<u>CDM Smith</u>
Lab Code:	<u>ACE</u>	SDG No:	<u>Q3123</u>
Sample No :	<u>PB169768BSD</u>	Datafile:	<u>FD049740.D</u>
		Client ID :	<u>PB169768BSD</u>

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS (%) QC Limit Of RPD
Aromatic C10-C12	6.7	4.18	63		1.3 (40-140) 25
Aromatic C12-C16	10	6.76	68		1.4 (40-140) 25
Aromatic C16-C21	16.7	13.6	82		0.633 (40-140) 25
Aromatic C21-C36	26.6	23.2	87		0.9 (40-140) 25

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS(%) QC Limit Of RPD
1,2,3-Trimethylbenzene (C10.1)	3.3	2.01197	61		1.63 (40-140) 25
Naphthalene (C11.7)	3.3	2.15499	65		1.53 (40-140) 25
2-Methylnaphthalene (C12.89)	3.3	2.05416	62		1.6 (40-140) 25
Acenaphthylene (C15.06)	3.3	2.32991	71		1.4 (40-140) 25
Acenaphthene (C15.5)	3.3	2.35999	72		1.38 (40-140) 25
Flouorene (C16.55)	3.3	2.53493	77		1.29 (40-140) 25
Phenanthrene (C19.36)	3.3	2.67225	81		1.23 (40-140) 25
Anthracene (C19.43)	3.3	2.67718	81		1.23 (40-140) 25
Fluoranthene (C21.85)	3.3	2.84708	86		1.16 (40-140) 25
Pyrene (C20.8)	3.3	2.90349	88		1.13 (40-140) 25
Benzo[a]anthracene (C26.37)	3.3	2.97473	90		0 (40-140) 25
Chrysene (C27.41)	3.3	3.20493	97		0 (40-140) 25
benzo[b]fluoranthene (C30.41)	3.3	2.90474	88		1.13 (40-140) 25
Bnezo[k]fluoranthene (C30.14)	3.3	3.05236	92		1.08 (40-140) 25
Benzo[a]pyrene (C31.34)	3.3	2.85480	87		0 (40-140) 25
Indeno[1,2,3-cd]pyrene (C35.01)	3.3	3.16527	96		2.11 (40-140) 25
Dibenz[a,h]anthracene (C30.36)	3.3	2.77776	84		4.88 (40-140) 25
Benzo[g,h,i]perylene (C34.01)	3.3	2.64820	80		1.26 (40-140) 25

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Alliance</u>	Client:	<u>CDM Smith</u>
Lab Code:	<u>ACE</u>	SDG No:	<u>Q3123</u>
Sample No :	<u>PB169768BS</u>	Datafile:	<u>FE055924.D</u>
		Client ID :	<u>PB169768BS</u>

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS (%)
Aliphatic C9-C12	10.0	5.51	55		(40-140)
Aliphatic C12-C16	6.7	5.08	76		(40-140)
Aliphatic C16-C21	10.0	9.26	93		(40-140)
Aliphatic C21-C28	13.3	11.5	86		(40-140)
Aliphatic C28-C40	20.0	17.1	86		(40-140)

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS(%)
n-Nonane (C9)	3.3	1.52998	46		(40-140)
n-Decane (C10)	3.3	1.84110	56		(40-140)
Naphthalene (C11.7)	3.3	0.00000	0	*	(40-140)
n-Dodecane (C12)	3.3	2.12770	64		(40-140)
2-methylnaphthalene (C12.89)	3.3	0.00000	0	*	(40-140)
n-Tetradecane (C14)	3.3	2.40872	73		(40-140)
n-Hexadecane (C16)	3.3	2.66858	81		(40-140)
n-Octadecane (C18)	3.3	2.88416	87		(40-140)
n-Eicosane (C20)	3.3	3.22951	98		(40-140)
n-Heneicosane (C21)	3.3	3.14703	95		(40-140)
n-Docosane (C22)	3.3	3.10350	94		(40-140)
n-Tetracosane (C24)	6.7	2.96001	44		(40-140)
n-Hexacosane (C26)	3.3	2.75670	84		(40-140)
n-Octacosane (C28)	3.3	2.64710	80		(40-140)
n-Tricontane (C30)	3.3	2.59444	79		(40-140)
n-Dotriacontane (C32)	3.3	2.65887	81		(40-140)
n-Tetratriacontane (C34)	3.3	2.82887	86		(40-140)
n-Hexatriacontane (C36)	3.3	3.05019	92		(40-140)
n-Octatriacontane (C38)	3.3	3.08849	94		(40-140)
n-Tetracontane (C40)	3.3	2.91105	88		(40-140)

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Alliance</u>	Client:	<u>CDM Smith</u>
Lab Code:	<u>ACE</u>	SDG No:	<u>Q3123</u>
Sample No :	<u>PB169768BSD</u>	Datafile:	<u>FE055925.D</u>
		Client ID :	<u>PB169768BSD</u>

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS (%)	QC Limit Of RPD
Aliphatic C9-C12	10	5.71	57		3.7 (40-140)	25
Aliphatic C12-C16	6.7	5.27	79		3.8 (40-140)	25
Aliphatic C16-C21	10	9.38	94		1.4 (40-140)	25
Aliphatic C21-C28	13.3	11.4	86		0.831 (40-140)	25
Aliphatic C28-C40	20.0	17.1	86		0.09 (40-140)	25

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS(%)	QC Limit Of RPD
n-Nonane (C9)	3.3	1.58245	48		4.26 (40-140)	25
n-Decane (C10)	3.3	1.90681	58		3.51 (40-140)	25
Naphthalene (C11.7)	3.3	0.00000	0	*	0 (40-140)	25
n-Dodecane (C12)	3.3	2.21244	67		4.58 (40-140)	25
2-methylnaphthalene (C12.89)	3.3	0.00000	0	*	0 (40-140)	25
n-Tetradecane (C14)	3.3	2.50172	76		4.03 (40-140)	25
n-Hexadecane (C16)	3.3	2.76509	84		3.64 (40-140)	25
n-Octadecane (C18)	3.3	2.95676	90		3.39 (40-140)	25
n-Eicosane (C20)	3.3	3.26772	99		1.02 (40-140)	25
n-Heneicosane (C21)	3.3	3.16261	96		1.05 (40-140)	25
n-Docosane (C22)	3.3	3.09861	94		0 (40-140)	25
n-Tetracosane (C24)	6.7	2.93233	44		0 (40-140)	25
n-Hexacosane (C26)	3.3	2.72827	83		1.2 (40-140)	25
n-Octacosane (C28)	3.3	2.63276	80		0 (40-140)	25
n-Tricontane (C30)	3.3	2.59023	78		1.27 (40-140)	25
n-Dotriacontane (C32)	3.3	2.66215	81		0 (40-140)	25
n-Tetratriacontane (C34)	3.3	2.81730	85		1.17 (40-140)	25
n-Hexatriacontane (C36)	3.3	3.02164	92		0 (40-140)	25
n-Octatriacontane (C38)	3.3	3.11900	95		1.06 (40-140)	25
n-Tetracontane (C40)	3.3	2.98850	91		3.35 (40-140)	25

4B
METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PB169768BL

Lab Name: Alliance

Contract: CAMP02

Lab Code: ACE

SDG NO.: Q3123

Instrument ID: FID_D

Lab Sample ID: PB169768BL

Matrix: (soil/water) Solid

Date Extracted: 9/22/2025 8:35:00 A

Level: (low/med) low

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

CLIENT SAMPLE NO.	LAB SAMPLE ID
PB169768BS	PB169768BS
PB169768BSD	PB169768BSD
TP-2	Q3123-01
TP-2MS	Q3123-01MS
TP-2MSD	Q3123-01MSD

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	09/16/25
Project:	Con Edison FOPL2	Date Received:	09/16/25
Client Sample ID:	TP-2	SDG No.:	Q3123
Lab Sample ID:	Q3123-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.5
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
09/22/25 08:35	09/22/25 17:55	PB169768

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.21	J	1	0.15	1.10	mg/kg	FE055929.D
Aliphatic C12-C16	Aliphatic C12-C16	0.68	J	1	0.12	0.74	mg/kg	FE055929.D
Aliphatic C16-C21	Aliphatic C16-C21	0.60	J	1	0.14	1.10	mg/kg	FE055929.D
Aliphatic C21-C28	Aliphatic C21-C28	0.59	U	1	0.59	1.47	mg/kg	FE055929.D
Aliphatic C28-C40	Aliphatic C28-C40	8.81		1	1.30	2.21	mg/kg	FE055929.D
Aromatic C10-C12	Aromatic C10-C12	0.33	J	1	0.13	0.74	mg/kg	FD049741.D
Aromatic C12-C16	Aromatic C12-C16	2.54		1	0.25	1.10	mg/kg	FD049741.D
Aromatic C16-C21	Aromatic C16-C21	16.6		1	0.44	1.84	mg/kg	FD049741.D
Aromatic C21-C36	Aromatic C21-C36	25.5		1	1.31	2.94	mg/kg	FD049741.D
Total AliphaticEPH	Total AliphaticEPH	10.3			2.30	6.62	mg/kg	
Total AromaticEPH	Total AromaticEPH	45.0			2.14	6.62	mg/kg	
Total EPH	Total EPH	55.3			4.44	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

Report of Analysis

Client:	CDM Smith	Date Collected:	09/16/25
Project:	Con Edison FOPL2	Date Received:	09/16/25
Client Sample ID:	TP-2	SDG No.:	Q3123
Lab Sample ID:	Q3123-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.5
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
FD049741.D	1	09/22/25	09/22/25	PB169768

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.33	J	0.13	0.74	mg/kg
Aromatic C12-C16	Aromatic C12-C16	2.54		0.25	1.10	mg/kg
Aromatic C16-C21	Aromatic C16-C21	16.6		0.44	1.84	mg/kg
Aromatic C21-C36	Aromatic C21-C36	25.5		1.31	2.94	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	43.7		40 - 140	87%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	40.5		40 - 140	81%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	33.9		40 - 140	68%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	Q3123-01	Acq On:	22 Sep 2025 16:58
Client Sample ID:	TP-2	Operator:	YP/AJ
Data file:	FD049741.D	Misc:	
Instrument:	FID_D	ALS Vial:	64
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.389	6.131	516128	4.447	200	ug/ml
Aromatic C12-C16	6.132	8.759	4697228	34.573	300	ug/ml
Aromatic C16-C21	8.760	13.050	30665174	225.86	500	ug/ml
Aromatic C21-C36	13.051	18.469	40976522	346.314	800	ug/ml
Aromatic EPH	4.389	18.469	76855052	611.194		ug/ml
2-Bromonaphthalene (SURR)	7.698	7.698	4918331	43.73		ug/ml
2-Fluorobiphenyl (SURR)	8.561	8.561	3250354	40.49		ug/ml
ortho-Terphenyl (SURR)	11.609	11.609	4788665	33.85		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
 Data File : FD049741.D
 Signal(s) : FID2B.ch
 Acq On : 22 Sep 2025 16:58
 Operator : YP/AJ
 Sample : Q3123-01
 Misc :
 ALS Vial : 64 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 TP-2

Integration File: autoint1.e
 Quant Time: Sep 23 07:29:35 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
 Quant Title : GC Extractables
 QLast Update : Fri Sep 05 06:31:58 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...	7.698	4918331	43.733 ug/ml
Spiked Amount 50.000		Recovery =	87.47%
6) S 2-Fluorobiphenyl (SURR)	8.561	3250354	40.492 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	80.98%
11) S ortho-Terphenyl (SURR)	11.609	4788665	33.847 ug/ml
Spiked Amount 50.000		Recovery =	67.69%

Target Compounds

(f)=RT Delta > 1/2 Window

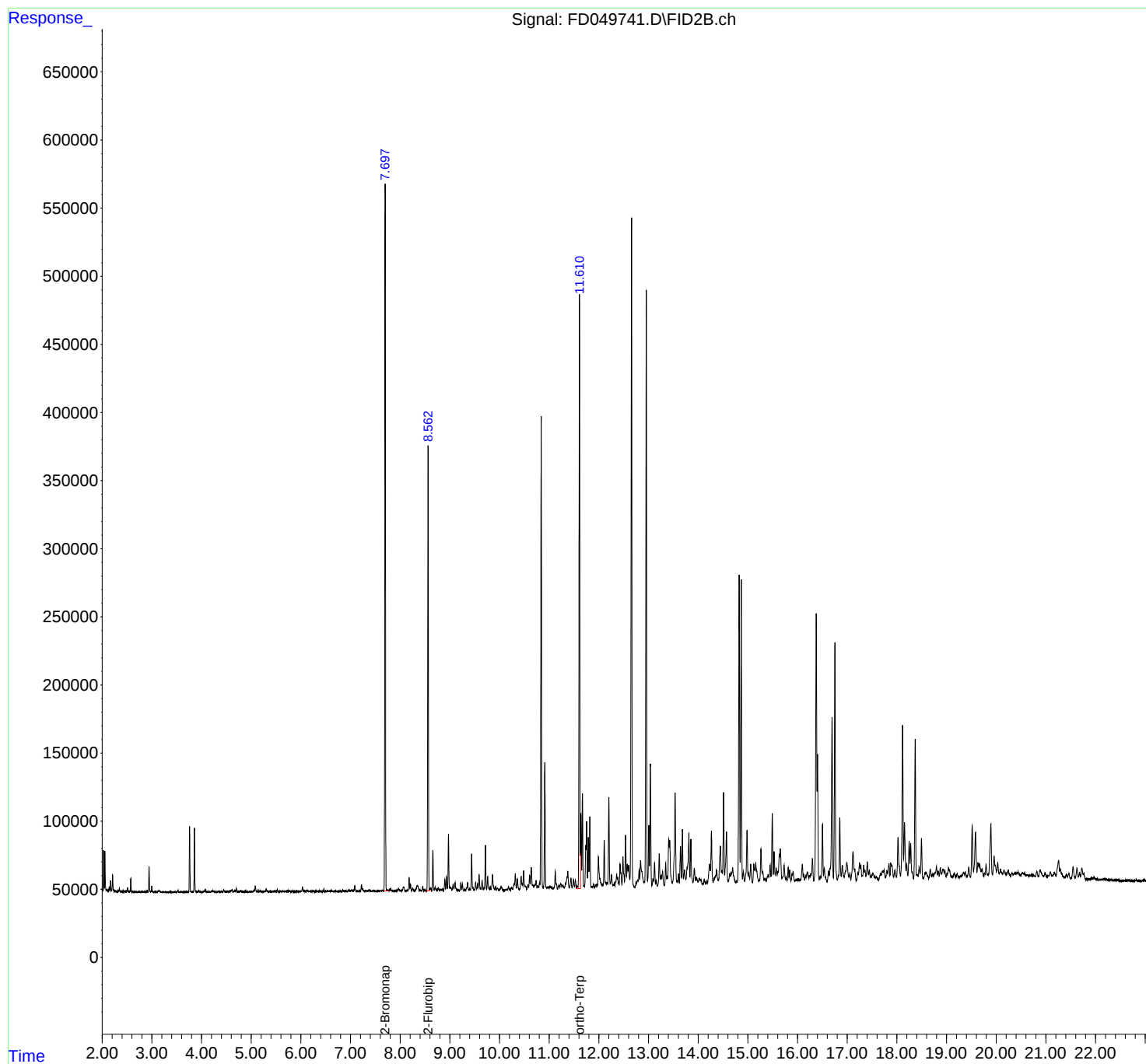
(m)=manual int.

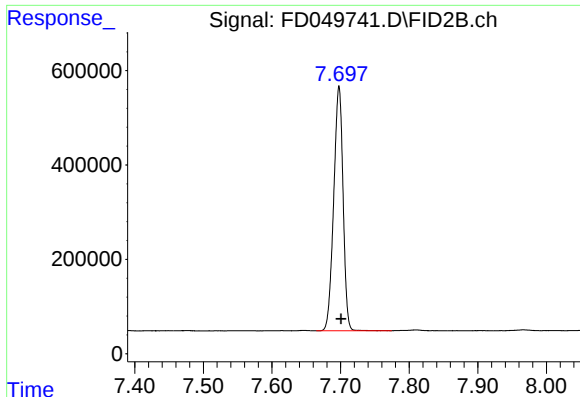
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
Data File : FD049741.D
Signal(s) : FID2B.ch
Acq On : 22 Sep 2025 16:58
Operator : YP/AJ
Sample : Q3123-01
Misc :
ALS Vial : 64 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
TP-2

Integration File: autoint1.e
Quant Time: Sep 23 07:29:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
Quant Title : GC Extractables
QLast Update : Fri Sep 05 06:31:58 2025
Response via : Initial Calibration
Integrator: ChemStation

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

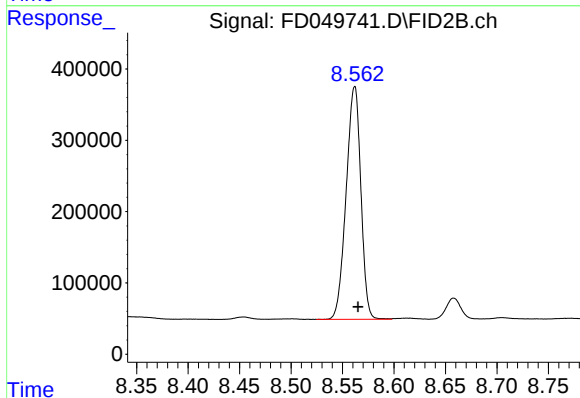




#4 2-Bromonaphthalene (SURRE)

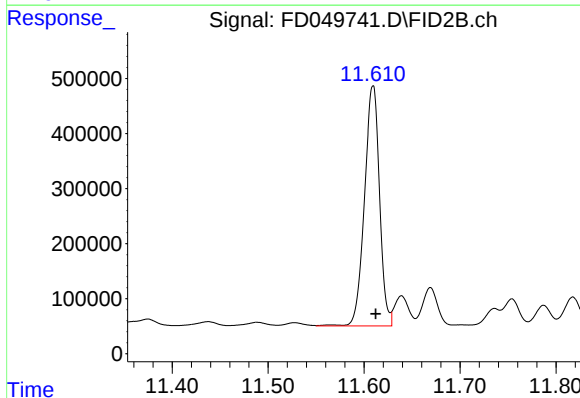
R.T.: 7.698 min
Delta R.T.: -0.003 min
Response: 4918331
Conc: 43.73 ug/ml

Instrument :
FID_D
ClientSampleId :
TP-2



#6 2-Fluorobiphenyl (SURRE)

R.T.: 8.561 min
Delta R.T.: -0.004 min
Response: 3250354
Conc: 40.49 ug/ml



#11 ortho-Terphenyl (SURRE)

R.T.: 11.609 min
Delta R.T.: -0.003 min
Response: 4788665
Conc: 33.85 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
Data File : FD049741.D
Signal(s) : FID2B.ch
Acq On : 22 Sep 2025 16:58
Sample : Q3123-01
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.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	4.345	4.320	4.369	PV	634	8421	0.15%	0.010%
2	4.406	4.369	4.418	VV	534	6834	0.12%	0.008%
3	4.448	4.418	4.475	PV	1896	21142	0.37%	0.024%
4	4.484	4.475	4.489	VV	417	2973	0.05%	0.003%
5	4.494	4.489	4.512	VV	431	4065	0.07%	0.005%
6	4.518	4.512	4.529	VV	446	3116	0.05%	0.004%
7	4.535	4.529	4.541	VV	279	2077	0.04%	0.002%
8	4.547	4.541	4.550	VV	321	1416	0.02%	0.002%
9	4.561	4.550	4.577	VV	508	6244	0.11%	0.007%
10	4.595	4.577	4.603	VV	1227	13230	0.23%	0.015%
11	4.616	4.603	4.648	VV	1911	23482	0.41%	0.027%
12	4.652	4.648	4.656	VV	443	1892	0.03%	0.002%
13	4.671	4.656	4.686	VV	1652	16458	0.29%	0.019%
14	4.701	4.686	4.723	VV	2524	23280	0.41%	0.027%
15	4.756	4.732	4.773	VV	725	8539	0.15%	0.010%
16	4.786	4.773	4.811	VV	890	12869	0.22%	0.015%
17	4.816	4.811	4.842	VV	480	6058	0.11%	0.007%
18	4.873	4.842	4.878	VV	367	5180	0.09%	0.006%
19	4.892	4.878	4.925	VV	643	8103	0.14%	0.009%
20	4.962	4.940	4.970	VV	282	3069	0.05%	0.004%
21	4.975	4.970	4.985	VV	233	1560	0.03%	0.002%
22	5.008	4.985	5.014	VV	425	5152	0.09%	0.006%
23	5.017	5.014	5.033	VV	361	3403	0.06%	0.004%
24	5.056	5.033	5.065	VV	1247	14377	0.25%	0.017%
25	5.082	5.065	5.117	VV	4375	52654	0.92%	0.061%
26	5.140	5.117	5.163	VV	1076	14344	0.25%	0.017%
27	5.180	5.163	5.220	VV	578	13645	0.24%	0.016%
28	5.229	5.220	5.237	VV	294	2382	0.04%	0.003%
29	5.244	5.237	5.248	VV	233	1220	0.02%	0.001%
30	5.272	5.248	5.285	VV	475	6770	0.12%	0.008%
31	5.305	5.285	5.357	VV	2099	29427	0.51%	0.034%
32	5.363	5.357	5.375	VV	307	2133	0.04%	0.002%
33	5.389	5.375	5.426	VV	304	6652	0.12%	0.008%
34	5.452	5.426	5.465	VV	432	7297	0.13%	0.008%
35	5.485	5.465	5.510	VV	949	12785	0.22%	0.015%
36	5.525	5.510	5.548	VV	1574	18098	0.32%	0.021%

					rteres			
37	5.554	5.548	5.558	VV	244	1149	0.02%	0.001%
38	5.585	5.558	5.603	VV	712	10033	0.18%	0.012%
39	5.617	5.603	5.626	VV	426	4383	0.08%	0.005%
40	5.646	5.626	5.655	VV	393	5837	0.10%	0.007%
41	5.662	5.655	5.689	VV	371	6168	0.11%	0.007%
42	5.693	5.689	5.705	VV	349	2201	0.04%	0.003%
43	5.720	5.705	5.725	VV	387	3412	0.06%	0.004%
44	5.729	5.725	5.747	VV	510	3780	0.07%	0.004%
45	5.769	5.747	5.803	VV	551	10250	0.18%	0.012%
46	5.826	5.803	5.832	VV	406	4967	0.09%	0.006%
47	5.834	5.832	5.839	VV	421	1418	0.02%	0.002%
48	5.846	5.839	5.867	VV	444	4560	0.08%	0.005%
49	5.873	5.867	5.880	VV	346	1979	0.03%	0.002%
50	5.889	5.880	5.907	VV	326	3837	0.07%	0.004%
51	5.912	5.907	5.920	VV	304	2022	0.04%	0.002%
52	5.939	5.920	5.964	VV	582	10491	0.18%	0.012%
53	5.978	5.964	5.998	VV	514	8324	0.15%	0.010%
54	6.009	5.998	6.015	VV	428	3789	0.07%	0.004%
55	6.033	6.015	6.066	VV	3560	42378	0.74%	0.049%
56	6.081	6.066	6.102	VV	592	8498	0.15%	0.010%
57	6.124	6.102	6.142	VV	1200	14726	0.26%	0.017%
58	6.146	6.142	6.155	VV	399	2575	0.04%	0.003%
59	6.175	6.155	6.230	VV	492	16549	0.29%	0.019%
60	6.251	6.230	6.287	VV	511	10560	0.18%	0.012%
61	6.297	6.287	6.302	VV	332	1966	0.03%	0.002%
62	6.315	6.302	6.347	VV	582	9413	0.16%	0.011%
63	6.354	6.347	6.362	VV	319	2198	0.04%	0.003%
64	6.395	6.362	6.414	VV	444	7465	0.13%	0.009%
65	6.417	6.414	6.440	VV	334	4092	0.07%	0.005%
66	6.463	6.440	6.490	VV	1871	22519	0.39%	0.026%
67	6.501	6.490	6.517	VV	301	3488	0.06%	0.004%
68	6.547	6.517	6.567	VV	574	11139	0.19%	0.013%
69	6.583	6.567	6.595	VV	641	6690	0.12%	0.008%
70	6.613	6.595	6.632	VV	1334	14924	0.26%	0.017%
71	6.646	6.632	6.657	VV	457	4656	0.08%	0.005%
72	6.684	6.657	6.700	VV	777	8970	0.16%	0.010%
73	6.732	6.710	6.737	VV	235	2299	0.04%	0.003%
74	6.744	6.737	6.775	VV	302	4643	0.08%	0.005%
75	6.787	6.775	6.805	VV	514	5498	0.10%	0.006%
76	6.810	6.805	6.814	VV	289	1002	0.02%	0.001%
77	6.846	6.814	6.875	VV	1091	18980	0.33%	0.022%
78	6.904	6.875	6.938	VV	847	16395	0.29%	0.019%
79	6.956	6.938	6.973	VV	1036	13251	0.23%	0.015%
80	7.005	6.973	7.009	VV	881	14103	0.25%	0.016%
81	7.021	7.009	7.050	VV	1127	16514	0.29%	0.019%
82	7.086	7.050	7.119	VV	4403	58634	1.02%	0.068%
83	7.125	7.119	7.135	VV	321	2740	0.05%	0.003%
84	7.142	7.135	7.147	VV	263	1677	0.03%	0.002%
85	7.174	7.147	7.180	VV	456	6600	0.12%	0.008%
86	7.186	7.180	7.203	VV	512	5099	0.09%	0.006%
87	7.221	7.203	7.236	VV	5099	52209	0.91%	0.060%
88	7.245	7.236	7.293	VV	2299	30480	0.53%	0.035%
89	7.311	7.293	7.337	VV	555	10432	0.18%	0.012%

					rteres			
90	7.352	7.337	7.369	VV	687	6938	0.12%	0.008%
91	7.385	7.369	7.405	VV	1359	15898	0.28%	0.018%
92	7.420	7.405	7.437	VV	363	4473	0.08%	0.005%
93	7.450	7.437	7.462	VV	495	6022	0.11%	0.007%
94	7.476	7.462	7.503	VV	723	7877	0.14%	0.009%
95	7.519	7.513	7.534	VV	248	2049	0.04%	0.002%
96	7.551	7.534	7.579	VV	374	7622	0.13%	0.009%
97	7.596	7.579	7.605	VV	383	4117	0.07%	0.005%
98	7.614	7.605	7.629	VV	584	5398	0.09%	0.006%
99	7.646	7.629	7.669	VV	1031	12845	0.22%	0.015%
100	7.698	7.669	7.752	VV	517900	4933658	86.20%	5.680%
101	7.763	7.752	7.775	VV	630	7145	0.12%	0.008%
102	7.809	7.775	7.855	VV	2093	40382	0.71%	0.046%
103	7.870	7.855	7.885	VV	454	5641	0.10%	0.006%
104	7.905	7.885	7.929	VV	593	9401	0.16%	0.011%
105	7.934	7.929	7.939	VV	467	2223	0.04%	0.003%
106	7.966	7.939	7.992	VV	2289	36541	0.64%	0.042%
107	8.016	7.992	8.028	VV	618	9948	0.17%	0.011%
108	8.063	8.028	8.070	VV	3127	37232	0.65%	0.043%
109	8.076	8.070	8.108	VV	2938	32279	0.56%	0.037%
110	8.180	8.108	8.195	VV	9861	122010	2.13%	0.140%
111	8.208	8.195	8.232	VV	5302	57736	1.01%	0.066%
112	8.253	8.232	8.295	VV	2321	37466	0.65%	0.043%
113	8.342	8.295	8.385	VV	4030	116190	2.03%	0.134%
114	8.397	8.385	8.432	VV	627	12649	0.22%	0.015%
115	8.454	8.432	8.479	VV	3581	42226	0.74%	0.049%
116	8.501	8.479	8.530	VV	995	17344	0.30%	0.020%
117	8.562	8.530	8.596	VV	327394	3262645	57.00%	3.756%
118	8.613	8.596	8.634	VV	1885	30262	0.53%	0.035%
119	8.658	8.634	8.685	VV	30060	306810	5.36%	0.353%
120	8.704	8.685	8.735	VV	2652	44503	0.78%	0.051%
121	8.738	8.735	8.746	VV	948	5596	0.10%	0.006%
122	8.772	8.746	8.800	VV	1714	38339	0.67%	0.044%
123	8.818	8.800	8.836	VV	1088	18596	0.32%	0.021%
124	8.851	8.836	8.867	VV	1051	14137	0.25%	0.016%
125	8.899	8.867	8.915	VV	8390	102119	1.78%	0.118%
126	8.930	8.915	8.949	VV	10361	114140	1.99%	0.131%
127	8.972	8.949	8.994	VV	41599	433310	7.57%	0.499%
128	8.999	8.994	9.010	VV	2426	20894	0.37%	0.024%
129	9.021	9.010	9.040	VV	2660	32839	0.57%	0.038%
130	9.066	9.040	9.082	VV	5056	66905	1.17%	0.077%
131	9.106	9.082	9.149	VV	6110	100019	1.75%	0.115%
132	9.165	9.149	9.196	VV	624	10730	0.19%	0.012%
133	9.222	9.196	9.238	VV	5914	66713	1.17%	0.077%
134	9.254	9.238	9.279	VV	4936	54732	0.96%	0.063%
135	9.302	9.279	9.319	VV	837	14107	0.25%	0.016%
136	9.357	9.319	9.382	VV	6150	92590	1.62%	0.107%
137	9.399	9.382	9.414	VV	1317	16671	0.29%	0.019%
138	9.439	9.414	9.495	VV	27121	312797	5.47%	0.360%
139	9.519	9.495	9.537	VV	6090	77525	1.35%	0.089%
140	9.560	9.537	9.572	VV	5394	68769	1.20%	0.079%
141	9.590	9.572	9.610	VV	11829	152805	2.67%	0.176%

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142	9.619	9.610	9.631	VV	2071	21587	0.38%	0.025%
143	9.650	9.631	9.673	VV	7439	98533	1.72%	0.113%
144	9.688	9.673	9.695	VV	1878	21675	0.38%	0.025%
145	9.717	9.695	9.741	VV	33394	344865	6.03%	0.397%
146	9.762	9.741	9.786	VV	10298	127551	2.23%	0.147%
147	9.790	9.786	9.801	VV	1698	13853	0.24%	0.016%
148	9.815	9.801	9.830	VV	2088	26899	0.47%	0.031%
149	9.860	9.830	9.907	VV	11542	193025	3.37%	0.222%
150	9.923	9.907	9.940	VV	3017	36052	0.63%	0.042%
151	9.959	9.940	9.983	VV	2025	30608	0.53%	0.035%
152	10.037	9.983	10.075	VV	2488	70300	1.23%	0.081%
153	10.093	10.085	10.107	PV	194	1337	0.02%	0.002%
154	10.128	10.107	10.149	VV	926	14602	0.26%	0.017%
155	10.157	10.149	10.161	VV	746	4807	0.08%	0.006%
156	10.182	10.161	10.199	VV	2957	36386	0.64%	0.042%
157	10.207	10.199	10.220	VV	865	8473	0.15%	0.010%
158	10.239	10.220	10.267	VV	1903	35944	0.63%	0.041%
159	10.292	10.267	10.302	VV	5117	67315	1.18%	0.077%
160	10.318	10.302	10.341	VV	12048	157744	2.76%	0.182%
161	10.359	10.341	10.399	VV	8374	118004	2.06%	0.136%
162	10.436	10.399	10.452	VV	10057	142539	2.49%	0.164%
163	10.458	10.452	10.468	VV	4627	40977	0.72%	0.047%
164	10.486	10.468	10.524	VV	14258	213505	3.73%	0.246%
165	10.530	10.524	10.549	VV	2471	27264	0.48%	0.031%
166	10.571	10.549	10.586	VV	3869	54186	0.95%	0.062%
167	10.606	10.586	10.619	VV	10530	128121	2.24%	0.148%
168	10.640	10.619	10.660	VV	16570	246751	4.31%	0.284%
169	10.669	10.660	10.683	VV	3966	46575	0.81%	0.054%
170	10.690	10.683	10.698	VV	2851	24216	0.42%	0.028%
171	10.713	10.698	10.722	VV	3912	49282	0.86%	0.057%
172	10.737	10.722	10.755	VV	6943	86316	1.51%	0.099%
173	10.769	10.755	10.790	VV	3042	50394	0.88%	0.058%
174	10.805	10.790	10.813	VV	5106	49386	0.86%	0.057%
175	10.840	10.813	10.882	VV	346651	3662466	63.99%	4.216%
176	10.912	10.882	10.952	VV	93598	992283	17.34%	1.142%
177	10.967	10.952	10.982	VV	2050	27226	0.48%	0.031%
178	11.020	10.982	11.036	VV	2308	55671	0.97%	0.064%
179	11.050	11.036	11.073	VV	1933	27017	0.47%	0.031%
180	11.122	11.073	11.167	VV	13151	213971	3.74%	0.246%
181	11.198	11.167	11.213	PV	3057	53692	0.94%	0.062%
182	11.233	11.213	11.257	VV	4055	78230	1.37%	0.090%
183	11.276	11.257	11.300	VV	2745	56173	0.98%	0.065%
184	11.375	11.300	11.405	VV	13038	326446	5.70%	0.376%
185	11.437	11.405	11.460	VV	8053	127769	2.23%	0.147%
186	11.489	11.460	11.510	VV	6957	106048	1.85%	0.122%
187	11.527	11.510	11.550	VV	6066	80084	1.40%	0.092%
188	11.565	11.550	11.578	VV	1973	26936	0.47%	0.031%
189	11.609	11.578	11.628	VV	436982	4750386	83.00%	5.469%
190	11.639	11.628	11.654	VV	54904	570801	9.97%	0.657%
191	11.669	11.654	11.694	VV	69979	754788	13.19%	0.869%
192	11.701	11.694	11.710	VV	2088	18589	0.32%	0.021%
193	11.736	11.710	11.742	VV	31911	304782	5.33%	0.351%
194	11.754	11.742	11.771	VV	49338	552118	9.65%	0.636%

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195	11.787	11.771	11.801	VV	37565	415263	7.26%	0.478%
196	11.818	11.801	11.846	VV	52559	617969	10.80%	0.711%
197	11.858	11.846	11.871	VV	1545	16692	0.29%	0.019%
198	11.892	11.871	11.914	VV	3202	42899	0.75%	0.049%
199	11.936	11.914	11.944	VV	2233	29369	0.51%	0.034%
200	11.957	11.944	11.968	VV	2936	34741	0.61%	0.040%
201	11.991	11.968	12.064	VV	23066	472156	8.25%	0.544%
202	12.073	12.064	12.085	VV	2428	27849	0.49%	0.032%
203	12.108	12.085	12.130	VV	35162	414755	7.25%	0.477%
204	12.136	12.130	12.150	VV	3923	43213	0.76%	0.050%
205	12.167	12.150	12.178	VV	4177	59686	1.04%	0.069%
206	12.201	12.178	12.229	VV	66199	768726	13.43%	0.885%
207	12.255	12.229	12.278	VV	9549	154708	2.70%	0.178%
208	12.288	12.278	12.299	VV	2429	27348	0.48%	0.031%
209	12.312	12.299	12.323	VV	2796	33780	0.59%	0.039%
210	12.358	12.323	12.372	VV	9698	167679	2.93%	0.193%
211	12.380	12.372	12.409	VV	7258	105604	1.85%	0.122%
212	12.427	12.409	12.465	VV	17377	305188	5.33%	0.351%
213	12.485	12.465	12.517	VV	22577	355601	6.21%	0.409%
214	12.538	12.517	12.557	VV	38188	487314	8.51%	0.561%
215	12.573	12.557	12.588	VV	16904	250639	4.38%	0.289%
216	12.601	12.588	12.624	VV	16259	248500	4.34%	0.286%
217	12.659	12.624	12.717	VV	490292	5723471	100.00%	6.589%
218	12.749	12.717	12.760	VV	3791	45491	0.79%	0.052%
219	12.780	12.760	12.792	VV	4923	80507	1.41%	0.093%
220	12.812	12.792	12.824	VV	12550	162624	2.84%	0.187%
221	12.840	12.824	12.905	VV	19454	496692	8.68%	0.572%
222	12.914	12.905	12.924	VV	3998	41677	0.73%	0.048%
223	12.956	12.924	12.978	VV	437194	4994138	87.26%	5.750%
224	13.007	12.978	13.020	VV	45193	537720	9.39%	0.619%
225	13.038	13.020	13.068	VV	90079	1070276	18.70%	1.232%
226	13.090	13.068	13.103	VV	5688	81665	1.43%	0.094%
227	13.121	13.103	13.142	VV	17397	221856	3.88%	0.255%
228	13.155	13.142	13.178	VV	4820	55762	0.97%	0.064%
229	13.216	13.178	13.240	VV	24010	333407	5.83%	0.384%
230	13.254	13.240	13.267	VV	8082	110868	1.94%	0.128%
231	13.284	13.267	13.319	VV	11213	171267	2.99%	0.197%
232	13.346	13.319	13.363	VV	17451	216179	3.78%	0.249%
233	13.375	13.363	13.384	VV	6695	75946	1.33%	0.087%
234	13.408	13.384	13.420	VV	34332	493653	8.63%	0.568%
235	13.428	13.420	13.476	VV	33500	476926	8.33%	0.549%
236	13.536	13.476	13.577	VV	68343	1203887	21.03%	1.386%
237	13.604	13.577	13.621	VV	8946	131501	2.30%	0.151%
238	13.644	13.621	13.664	VV	28953	395847	6.92%	0.456%
239	13.683	13.664	13.704	VV	41497	503520	8.80%	0.580%
240	13.725	13.704	13.752	VV	11650	224311	3.92%	0.258%
241	13.813	13.752	13.834	VV	38576	815956	14.26%	0.939%
242	13.853	13.834	13.895	VV	34042	484032	8.46%	0.557%
243	13.923	13.895	13.945	VV	12571	212328	3.71%	0.244%
244	13.960	13.945	14.004	VV	5662	142576	2.49%	0.164%
245	14.019	14.004	14.083	VV	4816	165078	2.88%	0.190%
246	14.094	14.083	14.102	VV	1368	12979	0.23%	0.015%

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247	14.121	14.102	14.159	VV	4339	80121	1.40%	0.092%
248	14.175	14.159	14.188	VV	2995	37184	0.65%	0.043%
249	14.227	14.188	14.246	VV	15220	327007	5.71%	0.376%
250	14.267	14.246	14.301	VV	39836	559859	9.78%	0.645%
251	14.370	14.301	14.405	VV	10134	351602	6.14%	0.405%
252	14.446	14.405	14.467	VV	28334	562709	9.83%	0.648%
253	14.476	14.467	14.488	VV	10377	118925	2.08%	0.137%
254	14.511	14.488	14.532	VV	67643	853001	14.90%	0.982%
255	14.569	14.532	14.601	VV	38847	680581	11.89%	0.784%
256	14.634	14.601	14.649	VV	7565	145481	2.54%	0.167%
257	14.693	14.649	14.755	VV	12309	409921	7.16%	0.472%
258	14.774	14.755	14.783	VV	1906	28316	0.49%	0.033%
259	14.825	14.783	14.844	VV	225943	2765071	48.31%	3.183%
260	14.866	14.844	14.891	VV	223659	2525467	44.12%	2.907%
261	14.910	14.891	14.935	VV	9283	147755	2.58%	0.170%
262	14.983	14.935	15.004	VV	39478	613921	10.73%	0.707%
263	15.016	15.004	15.036	VV	8132	123963	2.17%	0.143%
264	15.056	15.036	15.090	VV	14479	229910	4.02%	0.265%
265	15.119	15.090	15.142	VV	14431	259095	4.53%	0.298%
266	15.158	15.142	15.174	VV	15140	227339	3.97%	0.262%
267	15.178	15.174	15.219	VV	9452	139755	2.44%	0.161%
268	15.263	15.219	15.289	VV	25325	418839	7.32%	0.482%
269	15.299	15.289	15.324	VV	8695	134286	2.35%	0.155%
270	15.344	15.324	15.367	VV	3305	71894	1.26%	0.083%
271	15.407	15.367	15.421	VV	6408	140908	2.46%	0.162%
272	15.448	15.421	15.466	VV	13431	223539	3.91%	0.257%
273	15.491	15.466	15.511	VV	51196	663477	11.59%	0.764%
274	15.528	15.511	15.549	VV	23133	323444	5.65%	0.372%
275	15.572	15.549	15.587	VV	10934	182101	3.18%	0.210%
276	15.602	15.587	15.610	VV	8229	105747	1.85%	0.122%
277	15.633	15.610	15.639	VV	20367	253152	4.42%	0.291%
278	15.652	15.639	15.688	VV	25140	443789	7.75%	0.511%
279	15.729	15.688	15.757	VV	13050	275705	4.82%	0.317%
280	15.770	15.757	15.790	VV	3999	63231	1.10%	0.073%
281	15.812	15.790	15.828	VV	11217	148347	2.59%	0.171%
282	15.842	15.828	15.867	VV	9431	126192	2.20%	0.145%
283	15.888	15.867	15.896	VV	6364	77859	1.36%	0.090%
284	15.911	15.896	15.944	VV	7912	133086	2.33%	0.153%
285	15.956	15.944	15.969	VV	1545	20520	0.36%	0.024%
286	15.990	15.969	16.003	VV	2106	36138	0.63%	0.042%
287	16.020	16.003	16.032	VV	2232	29588	0.52%	0.034%
288	16.046	16.032	16.065	VV	2316	37082	0.65%	0.043%
289	16.097	16.065	16.116	VV	12929	223777	3.91%	0.258%
290	16.126	16.116	16.142	VV	5841	64882	1.13%	0.075%
291	16.160	16.142	16.172	VV	4336	60846	1.06%	0.070%
292	16.199	16.172	16.224	VV	7511	169571	2.96%	0.195%
293	16.237	16.224	16.245	VV	4802	53601	0.94%	0.062%
294	16.300	16.245	16.327	VV	17217	361710	6.32%	0.416%
295	16.377	16.327	16.394	VV	196980	2867922	50.11%	3.302%
296	16.403	16.394	16.440	VV	93671	1007053	17.60%	1.159%
297	16.455	16.440	16.477	VV	3893	72390	1.26%	0.083%
298	16.503	16.477	16.525	VV	42198	530745	9.27%	0.611%
299	16.540	16.525	16.595	VV	9964	177054	3.09%	0.204%

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300	16.624	16.595	16.640	VV	7677	110987	1.94%	0.128%
301	16.696	16.640	16.722	VV	120448	1760780	30.76%	2.027%
302	16.754	16.722	16.805	VV	175454	2249641	39.31%	2.590%
303	16.851	16.805	16.880	VV	46628	641995	11.22%	0.739%
304	16.902	16.880	16.937	VV	11631	231279	4.04%	0.266%
305	16.993	16.937	17.036	VV	13135	437431	7.64%	0.504%
306	17.055	17.036	17.074	VV	6037	85665	1.50%	0.099%
307	17.116	17.074	17.149	VV	20992	493177	8.62%	0.568%
308	17.153	17.149	17.183	VV	7846	80704	1.41%	0.093%
309	17.213	17.183	17.226	PV	6261	87553	1.53%	0.101%
310	17.249	17.226	17.262	VV	12786	200014	3.49%	0.230%
311	17.274	17.262	17.307	VV	11477	188639	3.30%	0.217%
312	17.333	17.307	17.348	VV	11211	177385	3.10%	0.204%
313	17.358	17.348	17.379	VV	7689	107562	1.88%	0.124%
314	17.404	17.379	17.432	VV	13497	243829	4.26%	0.281%
315	17.445	17.432	17.465	VV	7405	106404	1.86%	0.122%
316	17.472	17.465	17.487	VV	2793	31404	0.55%	0.036%
317	17.518	17.487	17.547	VV	4966	131067	2.29%	0.151%
318	17.557	17.547	17.570	VV	2399	26788	0.47%	0.031%
319	17.589	17.570	17.607	VV	2634	37854	0.66%	0.044%
320	17.620	17.607	17.635	VV	1261	12310	0.22%	0.014%
321	17.667	17.635	17.686	VV	4289	83797	1.46%	0.096%
322	17.710	17.686	17.729	VV	6302	136245	2.38%	0.157%
323	17.743	17.729	17.769	VV	7326	116371	2.03%	0.134%
324	17.798	17.769	17.815	VV	6773	119648	2.09%	0.138%
325	17.841	17.815	17.861	VV	11526	207284	3.62%	0.239%
326	17.880	17.861	17.892	VV	11264	156417	2.73%	0.180%
327	17.900	17.892	17.934	VV	10139	164346	2.87%	0.189%
328	17.959	17.934	17.991	VV	6704	125902	2.20%	0.145%
329	18.023	17.991	18.072	VV	30374	567285	9.91%	0.653%
330	18.115	18.072	18.136	VV	112179	1606384	28.07%	1.849%
331	18.154	18.136	18.184	VV	41398	660409	11.54%	0.760%
332	18.197	18.184	18.222	VV	10844	151728	2.65%	0.175%
333	18.247	18.222	18.262	VV	27267	372797	6.51%	0.429%
334	18.278	18.262	18.335	VV	25976	417936	7.30%	0.481%
335	18.369	18.335	18.395	PV	101861	1275467	22.28%	1.468%
336	18.405	18.395	18.422	VV	2704	35312	0.62%	0.041%
337	18.448	18.422	18.467	VV	7501	121724	2.13%	0.140%
338	18.495	18.467	18.500	VBA	29035	313527	5.48%	0.361%
Sum of corrected areas:							86861044	

Aromatic EPH 090425.M Tue Sep 23 08:03:15 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	09/16/25
Project:	Con Edison FOPL2	Date Received:	09/16/25
Client Sample ID:	TP-2	SDG No.:	Q3123
Lab Sample ID:	Q3123-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.5
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
FE055929.D	1	09/22/25	09/22/25	PB169768

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	0.21	J	0.15	1.10	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	0.68	J	0.12	0.74	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	0.60	J	0.14	1.10	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	1.47	U	0.59	1.47	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	8.81		1.30	2.21	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	57.6		40 - 140	115%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q3123-01	Acq On:	22 Sep 2025 17:55
Client Sample ID:	TP-2	Operator:	YP\AJ
Data file:	FE055929.D	Misc:	
Instrument:	FID_E	ALS Vial:	17
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.312	6.947	364538	2.839	300	ug/ml
Aliphatic C12-C16	6.948	10.400	1238929	9.171	200	ug/ml
Aliphatic C16-C21	10.401	13.780	1170328	8.115	300	ug/ml
Aliphatic C21-C28	13.781	17.452	1105224	7.716	400	ug/ml
Aliphatic C28-C40	17.453	22.472	16497934	119.794	600	ug/ml
Aliphatic EPH	3.312	22.472	20376953	147.635		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.514	13.514	7206345	57.63		ug/ml
Aliphatic C9-C28	3.312	17.452	3879019	27.841	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
 Data File : FE055929.D
 Signal(s) : FID1B.ch
 Acq On : 22 Sep 2025 17:55
 Operator : YP\AJ
 Sample : Q3123-01
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 TP-2

Integration File: sample.E
 Quant Time: Sep 23 04:33:18 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
 Quant Title : GC Extractables
 QLast Update : Fri Aug 29 08:12:09 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...	13.514	7206345	57.630 ug/ml
Spiked Amount 50.000		Recovery	= 115.26%

Target Compounds

(f)=RT Delta > 1/2 Window

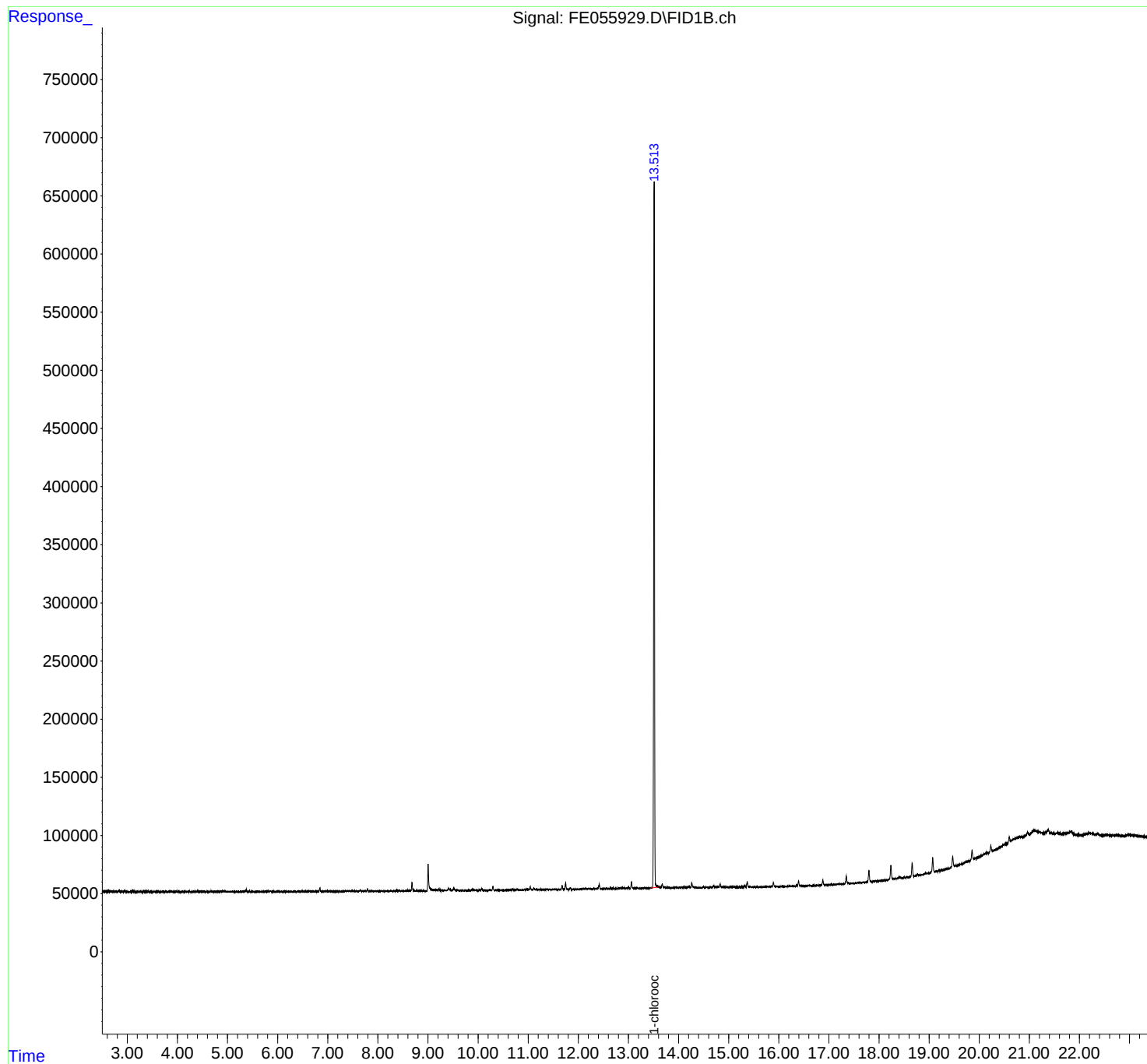
(m)=manual int.

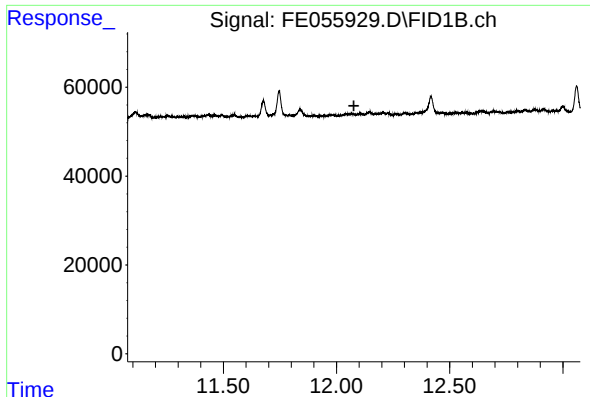
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
Data File : FE055929.D
Signal(s) : FID1B.ch
Acq On : 22 Sep 2025 17:55
Operator : YP\AJ
Sample : Q3123-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
TP-2

Integration File: sample.E
Quant Time: Sep 23 04:33:18 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
Quant Title : GC Extractables
QLast Update : Fri Aug 29 08:12:09 2025
Response via : Initial Calibration
Integrator: ChemStation

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

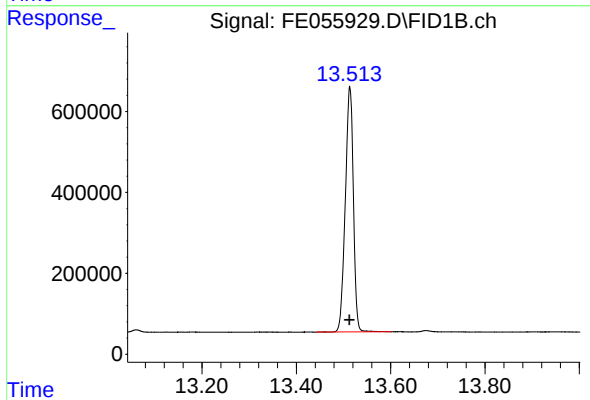




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T.: 12.077 min
Response: 0
Conc: N.D.

Instrument :
FID_E
ClientSampleId :
TP-2



#12 1-chlorooctadecane (SURR)

R.T.: 13.514 min
Delta R.T.: 0.000 min
Response: 7206345
Conc: 57.63 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
 Data File : FE055929.D
 Signal(s) : FID1B.ch
 Acq On : 22 Sep 2025 17:55
 Sample : Q3123-01
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.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	2.827	2.805	2.871	BV	892	14053	0.19%	0.051%
2	2.879	2.871	2.915	VV	204	2107	0.03%	0.008%
3	2.949	2.915	3.075	VV	879	12358	0.17%	0.045%
4	3.105	3.075	3.134	PV	700	8218	0.11%	0.030%
5	3.144	3.134	3.168	VV	132	1908	0.03%	0.007%
6	3.195	3.168	3.228	VV	144	3762	0.05%	0.014%
7	3.235	3.228	3.248	VV	114	1139	0.02%	0.004%
8	3.254	3.248	3.299	VV	158	2649	0.04%	0.010%
9	3.315	3.299	3.338	VV	162	2151	0.03%	0.008%
10	3.345	3.338	3.354	VV	109	853	0.01%	0.003%
11	3.369	3.354	3.387	VV	232	2067	0.03%	0.007%
12	3.413	3.387	3.454	VV	412	6825	0.09%	0.025%
13	3.468	3.454	3.511	VV	158	2826	0.04%	0.010%
14	3.530	3.511	3.575	VV	134	3541	0.05%	0.013%
15	3.582	3.575	3.621	VV	98	2698	0.04%	0.010%
16	3.642	3.621	3.679	VV	169	3962	0.05%	0.014%
17	3.688	3.679	3.696	VV	161	1105	0.02%	0.004%
18	3.703	3.696	3.714	VV	124	1056	0.01%	0.004%
19	3.729	3.714	3.741	VV	113	1316	0.02%	0.005%
20	3.764	3.741	3.786	VV	180	3652	0.05%	0.013%
21	3.802	3.786	3.848	VV	220	4003	0.05%	0.014%
22	3.867	3.848	3.905	VV	170	2549	0.04%	0.009%
23	3.926	3.905	3.938	VV	127	1483	0.02%	0.005%
24	3.966	3.938	4.081	VV	169	7103	0.10%	0.026%
25	4.111	4.081	4.133	VV	153	3067	0.04%	0.011%
26	4.139	4.133	4.171	VV	128	1880	0.03%	0.007%
27	4.209	4.171	4.224	VV	354	4920	0.07%	0.018%
28	4.242	4.224	4.295	VV	523	6826	0.09%	0.025%
29	4.318	4.295	4.345	PV	185	2763	0.04%	0.010%
30	4.412	4.345	4.498	VV	425	15730	0.22%	0.057%
31	4.509	4.498	4.554	VV	159	3643	0.05%	0.013%
32	4.573	4.554	4.621	VV	161	4620	0.06%	0.017%
33	4.670	4.621	4.735	VV	711	13890	0.19%	0.050%
34	4.751	4.735	4.766	VV	137	1689	0.02%	0.006%
35	4.791	4.766	4.817	VV	245	4541	0.06%	0.016%
36	4.858	4.817	4.876	VV	684	10026	0.14%	0.036%

					rteres			
37	4.892	4.876	4.906	VV	401	5253	0.07%	0.019%
38	4.921	4.906	4.937	VV	534	6339	0.09%	0.023%
39	4.954	4.937	5.008	VV	958	13112	0.18%	0.047%
40	5.019	5.008	5.040	VV	146	2597	0.04%	0.009%
41	5.085	5.040	5.100	VV	272	5903	0.08%	0.021%
42	5.115	5.100	5.161	VV	200	5098	0.07%	0.018%
43	5.172	5.161	5.178	VV	137	1223	0.02%	0.004%
44	5.184	5.178	5.206	VV	140	1421	0.02%	0.005%
45	5.288	5.206	5.317	VV	188	5041	0.07%	0.018%
46	5.373	5.317	5.413	PV	1987	28874	0.40%	0.104%
47	5.434	5.413	5.454	VV	437	5725	0.08%	0.021%
48	5.466	5.454	5.477	VV	163	1572	0.02%	0.006%
49	5.485	5.477	5.560	VV	199	2497	0.03%	0.009%
50	5.588	5.560	5.605	VV	161	2203	0.03%	0.008%
51	5.621	5.605	5.641	VV	226	2680	0.04%	0.010%
52	5.676	5.641	5.747	PV	182	6332	0.09%	0.023%
53	5.774	5.747	5.789	VV	182	2781	0.04%	0.010%
54	5.810	5.789	5.831	VV	741	8655	0.12%	0.031%
55	5.853	5.831	5.901	VV	808	11049	0.15%	0.040%
56	5.912	5.901	5.934	VV	300	2443	0.03%	0.009%
57	6.000	5.934	6.031	PV	283	7096	0.10%	0.026%
58	6.067	6.031	6.090	VV	117	2845	0.04%	0.010%
59	6.106	6.090	6.118	VV	202	1862	0.03%	0.007%
60	6.123	6.118	6.155	VV	226	2235	0.03%	0.008%
61	6.167	6.155	6.191	VV	128	1814	0.02%	0.007%
62	6.205	6.191	6.275	VV	137	3113	0.04%	0.011%
63	6.295	6.275	6.308	VV	133	1286	0.02%	0.005%
64	6.321	6.308	6.331	VV	164	1382	0.02%	0.005%
65	6.340	6.331	6.374	VV	116	2511	0.03%	0.009%
66	6.394	6.374	6.428	VV	380	6660	0.09%	0.024%
67	6.440	6.428	6.470	VV	267	4744	0.07%	0.017%
68	6.489	6.470	6.521	VV	519	8048	0.11%	0.029%
69	6.551	6.521	6.593	VV	329	8101	0.11%	0.029%
70	6.629	6.593	6.712	VV	354	14602	0.20%	0.053%
71	6.724	6.712	6.751	VV	192	3085	0.04%	0.011%
72	6.771	6.751	6.781	VV	198	2409	0.03%	0.009%
73	6.805	6.781	6.820	VV	194	3575	0.05%	0.013%
74	6.844	6.820	6.910	VV	3410	41223	0.57%	0.149%
75	6.930	6.910	6.951	VV	414	6364	0.09%	0.023%
76	6.969	6.951	6.979	VV	316	3650	0.05%	0.013%
77	6.998	6.979	7.025	VV	934	11031	0.15%	0.040%
78	7.035	7.025	7.056	VV	406	4930	0.07%	0.018%
79	7.073	7.056	7.105	VV	450	6218	0.09%	0.022%
80	7.138	7.105	7.154	VV	172	3620	0.05%	0.013%
81	7.170	7.154	7.207	VV	171	4272	0.06%	0.015%
82	7.223	7.207	7.280	PV	201	6200	0.09%	0.022%
83	7.302	7.280	7.338	VV	415	8121	0.11%	0.029%
84	7.356	7.338	7.395	VV	742	14540	0.20%	0.052%
85	7.419	7.395	7.448	VV	551	12821	0.18%	0.046%
86	7.485	7.448	7.511	VV	781	16205	0.22%	0.058%
87	7.526	7.511	7.549	VV	301	5289	0.07%	0.019%
88	7.568	7.549	7.581	VV	422	5846	0.08%	0.021%
89	7.593	7.581	7.612	VV	403	4996	0.07%	0.018%

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90	7.651	7.612	7.693	VV	1505	24129	0.33%	0.087%
91	7.713	7.693	7.748	VV	438	9896	0.14%	0.036%
92	7.759	7.748	7.772	VV	471	5455	0.07%	0.020%
93	7.795	7.772	7.839	VV	2436	32117	0.44%	0.116%
94	7.856	7.839	7.875	VV	333	5313	0.07%	0.019%
95	7.887	7.875	7.915	VV	454	6046	0.08%	0.022%
96	7.922	7.915	7.928	VV	144	1042	0.01%	0.004%
97	7.935	7.928	7.945	VV	174	1286	0.02%	0.005%
98	7.970	7.945	8.040	VV	289	7808	0.11%	0.028%
99	8.061	8.040	8.083	PV	684	7788	0.11%	0.028%
100	8.096	8.083	8.128	VV	205	4508	0.06%	0.016%
101	8.236	8.128	8.248	VV	281	14255	0.20%	0.051%
102	8.256	8.248	8.271	VV	319	3218	0.04%	0.012%
103	8.282	8.271	8.308	VV	281	3460	0.05%	0.012%
104	8.327	8.308	8.344	VV	274	3352	0.05%	0.012%
105	8.372	8.344	8.404	VV	1073	13869	0.19%	0.050%
106	8.428	8.404	8.478	VV	946	14071	0.19%	0.051%
107	8.498	8.478	8.517	VV	369	4712	0.06%	0.017%
108	8.534	8.517	8.544	VV	241	3136	0.04%	0.011%
109	8.586	8.544	8.651	VV	1103	23509	0.32%	0.085%
110	8.681	8.651	8.757	VV	7646	99308	1.36%	0.358%
111	8.778	8.757	8.812	VV	563	12095	0.17%	0.044%
112	8.833	8.812	8.865	VV	418	9999	0.14%	0.036%
113	8.877	8.865	8.900	VV	328	3729	0.05%	0.013%
114	8.916	8.900	8.948	VV	307	4055	0.06%	0.015%
115	9.003	8.948	9.127	VV	23248	366758	5.04%	1.324%
116	9.149	9.127	9.165	VV	1106	20439	0.28%	0.074%
117	9.174	9.165	9.200	VV	901	15603	0.21%	0.056%
118	9.222	9.200	9.271	VV	1557	33275	0.46%	0.120%
119	9.284	9.271	9.311	VV	406	8475	0.12%	0.031%
120	9.342	9.311	9.363	VV	494	10276	0.14%	0.037%
121	9.413	9.363	9.435	VV	2453	47118	0.65%	0.170%
122	9.445	9.435	9.484	VV	1250	24876	0.34%	0.090%
123	9.512	9.484	9.559	VV	2206	53305	0.73%	0.192%
124	9.601	9.559	9.631	VV	655	15214	0.21%	0.055%
125	9.649	9.631	9.674	VV	375	5870	0.08%	0.021%
126	9.695	9.674	9.715	VV	292	4724	0.06%	0.017%
127	9.753	9.715	9.765	VV	312	6797	0.09%	0.025%
128	9.770	9.765	9.785	VV	249	2605	0.04%	0.009%
129	9.815	9.785	9.856	VV	619	14058	0.19%	0.051%
130	9.885	9.856	9.924	VV	1184	27035	0.37%	0.098%
131	9.933	9.924	9.965	VV	707	11383	0.16%	0.041%
132	9.975	9.965	10.000	VV	524	6960	0.10%	0.025%
133	10.022	10.000	10.051	VV	815	14509	0.20%	0.052%
134	10.075	10.051	10.105	VV	1963	25346	0.35%	0.091%
135	10.121	10.105	10.152	VV	285	6217	0.09%	0.022%
136	10.167	10.152	10.191	VV	286	4295	0.06%	0.016%
137	10.216	10.191	10.270	VV	943	21750	0.30%	0.079%
138	10.296	10.270	10.355	VV	3611	51282	0.70%	0.185%
139	10.370	10.355	10.451	VV	390	14864	0.20%	0.054%
140	10.465	10.451	10.485	VV	258	3799	0.05%	0.014%
141	10.494	10.485	10.533	VV	157	2949	0.04%	0.011%

					rteres			
142	10.575	10.533	10.595	PV	276	6457	0.09%	0.023%
143	10.615	10.595	10.631	VV	277	4876	0.07%	0.018%
144	10.645	10.631	10.655	VV	362	4586	0.06%	0.017%
145	10.689	10.655	10.715	VV	1317	23709	0.33%	0.086%
146	10.735	10.715	10.755	VV	537	9801	0.13%	0.035%
147	10.780	10.755	10.805	VV	618	12656	0.17%	0.046%
148	10.830	10.805	10.868	VV	429	9942	0.14%	0.036%
149	10.898	10.868	10.908	VV	431	7408	0.10%	0.027%
150	10.968	10.908	11.004	VV	816	31779	0.44%	0.115%
151	11.039	11.004	11.075	VV	3097	49635	0.68%	0.179%
152	11.112	11.075	11.135	VV	1419	27990	0.38%	0.101%
153	11.165	11.135	11.201	VV	798	21186	0.29%	0.076%
154	11.255	11.201	11.288	VV	476	16460	0.23%	0.059%
155	11.296	11.288	11.309	VV	326	3092	0.04%	0.011%
156	11.325	11.309	11.339	VV	335	4325	0.06%	0.016%
157	11.366	11.339	11.394	VV	512	11741	0.16%	0.042%
158	11.435	11.394	11.451	VV	645	15267	0.21%	0.055%
159	11.465	11.451	11.480	VV	537	7624	0.10%	0.028%
160	11.494	11.480	11.515	VV	542	7226	0.10%	0.026%
161	11.549	11.515	11.591	VV	537	10238	0.14%	0.037%
162	11.607	11.591	11.645	VV	400	7668	0.11%	0.028%
163	11.677	11.645	11.701	VV	3749	49840	0.68%	0.180%
164	11.746	11.701	11.780	VV	5831	83141	1.14%	0.300%
165	11.790	11.780	11.806	VV	391	5055	0.07%	0.018%
166	11.839	11.806	11.877	VV	1650	28066	0.39%	0.101%
167	11.903	11.877	11.924	VV	250	3553	0.05%	0.013%
168	11.946	11.924	11.954	PV	200	2237	0.03%	0.008%
169	11.980	11.954	12.013	VV	236	6807	0.09%	0.025%
170	12.057	12.013	12.088	VV	574	17075	0.23%	0.062%
171	12.104	12.088	12.125	VV	581	9519	0.13%	0.034%
172	12.145	12.125	12.166	VV	821	15191	0.21%	0.055%
173	12.180	12.166	12.188	VV	460	5508	0.08%	0.020%
174	12.205	12.188	12.248	VV	682	17519	0.24%	0.063%
175	12.262	12.248	12.278	VV	368	5043	0.07%	0.018%
176	12.300	12.278	12.327	VV	547	10787	0.15%	0.039%
177	12.355	12.327	12.371	VV	594	12537	0.17%	0.045%
178	12.417	12.371	12.452	VV	4275	77402	1.06%	0.279%
179	12.463	12.452	12.491	VV	521	10071	0.14%	0.036%
180	12.517	12.491	12.537	VV	457	10549	0.14%	0.038%
181	12.556	12.537	12.611	VV	516	17281	0.24%	0.062%
182	12.640	12.611	12.671	VV	814	21219	0.29%	0.077%
183	12.694	12.671	12.740	VV	728	22094	0.30%	0.080%
184	12.757	12.740	12.778	VV	528	9864	0.14%	0.036%
185	12.796	12.778	12.818	VV	833	14652	0.20%	0.053%
186	12.833	12.818	12.854	VV	1021	16922	0.23%	0.061%
187	12.875	12.854	12.901	VV	935	22276	0.31%	0.080%
188	12.916	12.901	12.938	VV	1060	17559	0.24%	0.063%
189	12.958	12.938	12.977	VV	685	14751	0.20%	0.053%
190	13.000	12.977	13.031	VV	1647	29743	0.41%	0.107%
191	13.061	13.031	13.111	VV	6200	89664	1.23%	0.324%
192	13.123	13.111	13.139	VV	606	8250	0.11%	0.030%
193	13.181	13.139	13.223	VV	715	24499	0.34%	0.088%
194	13.245	13.223	13.264	VV	434	7197	0.10%	0.026%

					rteres			
195	13.275	13.264	13.292	VV	266	3813	0.05%	0.014%
196	13.319	13.292	13.371	VV	585	19553	0.27%	0.071%
197	13.387	13.371	13.407	VV	428	7048	0.10%	0.025%
198	13.427	13.407	13.440	VV	566	9012	0.12%	0.033%
199	13.461	13.440	13.475	VV	805	13108	0.18%	0.047%
200	13.514	13.475	13.611	VV	607395	7280174	100.00%	26.279%
201	13.620	13.611	13.643	VV	1261	19181	0.26%	0.069%
202	13.675	13.643	13.708	VV	3986	71381	0.98%	0.258%
203	13.729	13.708	13.766	VV	935	25670	0.35%	0.093%
204	13.773	13.766	13.821	VV	521	15277	0.21%	0.055%
205	13.859	13.821	13.871	VV	486	11422	0.16%	0.041%
206	13.903	13.871	13.921	VV	718	16817	0.23%	0.061%
207	13.954	13.921	14.001	VV	724	27075	0.37%	0.098%
208	14.026	14.001	14.040	VV	590	10537	0.14%	0.038%
209	14.062	14.040	14.083	VV	678	15326	0.21%	0.055%
210	14.114	14.083	14.146	VV	914	24700	0.34%	0.089%
211	14.156	14.146	14.160	VV	501	3880	0.05%	0.014%
212	14.211	14.160	14.241	VV	1332	37720	0.52%	0.136%
213	14.263	14.241	14.310	VV	4592	72564	1.00%	0.262%
214	14.324	14.310	14.373	VV	600	16414	0.23%	0.059%
215	14.389	14.373	14.435	VV	327	8573	0.12%	0.031%
216	14.493	14.435	14.525	VV	766	22051	0.30%	0.080%
217	14.561	14.525	14.585	VV	419	12121	0.17%	0.044%
218	14.596	14.585	14.613	VV	395	5167	0.07%	0.019%
219	14.631	14.613	14.641	VV	518	5691	0.08%	0.021%
220	14.703	14.641	14.725	VV	2003	41076	0.56%	0.148%
221	14.739	14.725	14.747	VV	512	6004	0.08%	0.022%
222	14.787	14.747	14.804	VV	693	19022	0.26%	0.069%
223	14.828	14.804	14.855	VV	2985	41464	0.57%	0.150%
224	14.865	14.855	14.885	VV	533	7648	0.11%	0.028%
225	14.905	14.885	14.916	VV	475	8206	0.11%	0.030%
226	14.925	14.916	14.938	VV	456	5343	0.07%	0.019%
227	14.960	14.938	15.005	VV	487	13776	0.19%	0.050%
228	15.036	15.005	15.070	VV	482	11975	0.16%	0.043%
229	15.104	15.070	15.161	VV	536	19677	0.27%	0.071%
230	15.180	15.161	15.199	VV	411	6953	0.10%	0.025%
231	15.224	15.199	15.251	VV	489	9928	0.14%	0.036%
232	15.261	15.251	15.287	VV	377	5222	0.07%	0.019%
233	15.324	15.287	15.343	VV	1222	22836	0.31%	0.082%
234	15.370	15.343	15.398	VV	4731	68725	0.94%	0.248%
235	15.411	15.398	15.478	VV	591	14475	0.20%	0.052%
236	15.516	15.478	15.538	VV	179	3796	0.05%	0.014%
237	15.570	15.538	15.608	VV	338	6590	0.09%	0.024%
238	15.640	15.608	15.664	VV	198	4623	0.06%	0.017%
239	15.710	15.664	15.723	PV	340	6654	0.09%	0.024%
240	15.762	15.723	15.786	VV	363	8019	0.11%	0.029%
241	15.805	15.786	15.831	VV	354	6372	0.09%	0.023%
242	15.851	15.831	15.868	VV	573	9424	0.13%	0.034%
243	15.892	15.868	15.928	VV	3562	52449	0.72%	0.189%
244	15.942	15.928	15.985	VV	391	8967	0.12%	0.032%
245	15.990	15.985	16.017	VV	153	1715	0.02%	0.006%
246	16.045	16.017	16.056	PV	245	2447	0.03%	0.009%

					rteres			
247	16.073	16.056	16.091	VV	318	3962	0.05%	0.014%
248	16.130	16.091	16.145	VV	309	5427	0.07%	0.020%
249	16.159	16.145	16.175	VV	260	3062	0.04%	0.011%
250	16.212	16.175	16.246	VV	487	12477	0.17%	0.045%
251	16.273	16.246	16.310	VV	323	8464	0.12%	0.031%
252	16.358	16.310	16.371	VV	938	16834	0.23%	0.061%
253	16.394	16.371	16.493	VV	4755	74700	1.03%	0.270%
254	16.523	16.493	16.544	VV	274	5089	0.07%	0.018%
255	16.579	16.544	16.593	PV	309	6820	0.09%	0.025%
256	16.610	16.593	16.661	VV	415	8665	0.12%	0.031%
257	16.705	16.661	16.735	PV	382	11849	0.16%	0.043%
258	16.770	16.735	16.814	VV	263	8329	0.11%	0.030%
259	17.879	16.814	16.936	PV	4247	74290	1.02%	0.268%
260	16.949	16.936	16.958	VV	190	1694	0.02%	0.006%
261	16.962	16.958	16.970	VV	150	843	0.01%	0.003%
262	17.042	16.970	17.075	VV	405	13883	0.19%	0.050%
263	17.098	17.075	17.109	VV	368	4835	0.07%	0.017%
264	17.123	17.109	17.137	VV	290	3517	0.05%	0.013%
265	17.228	17.137	17.265	VV	544	18131	0.25%	0.065%
266	17.347	17.265	17.408	PV	6871	118909	1.63%	0.429%
267	17.501	17.408	17.524	VV	271	14355	0.20%	0.052%
268	17.612	17.524	17.652	PV	488	20182	0.28%	0.073%
269	17.684	17.652	17.717	VV	398	8215	0.11%	0.030%
270	17.799	17.717	17.865	PV	10176	159982	2.20%	0.577%
271	17.889	17.865	17.906	VV	402	5577	0.08%	0.020%
272	17.932	17.906	17.957	VV	621	9723	0.13%	0.035%
273	18.018	17.957	18.035	PV	290	4032	0.06%	0.015%
274	18.150	18.035	18.164	PV	237	4516	0.06%	0.016%
275	18.237	18.164	18.273	VV	12156	185214	2.54%	0.669%
276	18.304	18.273	18.316	VV	389	9763	0.13%	0.035%
277	18.337	18.316	18.351	VV	202	3885	0.05%	0.014%
278	18.403	18.351	18.468	VV	1352	40183	0.55%	0.145%
279	18.504	18.468	18.528	VV	491	7229	0.10%	0.026%
280	18.661	18.528	18.703	PV	11734	173566	2.38%	0.627%
281	18.771	18.703	18.818	PV	1451	29731	0.41%	0.107%
282	18.929	18.818	18.958	PV	865	27655	0.38%	0.100%
283	18.973	18.958	18.984	VV	454	6423	0.09%	0.023%
284	19.071	18.984	19.118	VV	12952	202881	2.79%	0.732%
285	19.195	19.118	19.217	VV	915	22271	0.31%	0.080%
286	19.243	19.217	19.261	PV	783	11459	0.16%	0.041%
287	19.329	19.261	19.347	VV	1066	27125	0.37%	0.098%
288	19.378	19.347	19.394	VV	982	21699	0.30%	0.078%
289	19.470	19.394	19.502	VV	10299	197759	2.72%	0.714%
290	19.526	19.502	19.545	VV	1906	42687	0.59%	0.154%
291	19.722	19.545	19.738	VV	3076	255119	3.50%	0.921%
292	19.774	19.738	19.784	VV	3174	84401	1.16%	0.305%
293	19.857	19.784	19.887	VV	12013	330929	4.55%	1.195%
294	19.914	19.887	19.931	VV	4350	112060	1.54%	0.404%
295	20.101	19.931	20.114	VV	6747	590569	8.11%	2.132%
296	20.232	20.114	20.264	VV	12249	693621	9.53%	2.504%
297	20.600	20.264	20.626	VV	16089	2179902	29.94%	7.869%
298	20.772	20.626	20.781	VV	14574	1275644	17.52%	4.605%
299	20.823	20.781	20.851	VV	14390	596169	8.19%	2.152%

					rteres			
300	20.965	20.851	20.996	VV	17411	1296663	17.81%	4.681%
301	21.097	20.996	21.160	VV	17606	1597097	21.94%	5.765%
302	21.172	21.160	21.297	VV	15560	1175688	16.15%	4.244%
303	21.375	21.297	21.463	VV	15334	1314535	18.06%	4.745%
304	21.485	21.463	21.519	VV	11344	373201	5.13%	1.347%
305	21.580	21.519	21.640	VV	10820	746627	10.26%	2.695%
306	21.710	21.640	21.725	VV	9078	455348	6.25%	1.644%
307	21.733	21.725	21.742	VV	8927	92871	1.28%	0.335%
308	21.830	21.742	21.943	VV	9565	968022	13.30%	3.494%
309	21.955	21.943	21.998	VV	5734	178197	2.45%	0.643%
310	22.007	21.998	22.061	VV	4772	168433	2.31%	0.608%
311	22.227	22.061	22.308	VV	4525	624523	8.58%	2.254%
312	22.360	22.308	22.451	VV	2950	152203	2.09%	0.549%
					Sum of corrected areas:		27703318	

Aliphatic EPH 082925.M Tue Sep 23 06:42:57 2025



CALIBRATION SUMMARY

Initial Calibration Report for SequenceID : FD090425AR

AreaCount

Parameter Range	FD049718.D	FD049719.D	FD049720.D	FD049721.D	FD049722.D	
Aromatic C10-C12	22703296.000	11086087.000	4643611.000	2277248.000	1259509.000	
Aromatic C12-C16	39984460.000	19661953.000	8193867.000	4001323.000	2175378.000	
Aromatic C16-C21	53345381.000	26489360.000	11024855.000	5315893.000	2846688.000	
Aromatic C21-C36	100704025.000	50911530.000	21618248.000	10600307.000	5791358.000	
Aromatic EPH	216737162.000	108148930.000	45480581.000	22194771.000	12072933.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aromatic C10-C12	116056.185	5.027				
Aromatic C12-C16	135865.6606664	4.034				
Aromatic C16-C21	135770.533	3.132				
Aromatic C21-C36	118321.9011106	5.659				
Aromatic EPH	124871.5885552	4.611				

Concentration

Parameter Range	FD049718.D	FD049719.D	FD049720.D	FD049721.D	FD049722.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	FD049718.D	FD049719.D	FD049720.D	FD049721.D	FD049722.D	
Aromatic C10-C12	113516.480000	110860.870000	116090.275000	113862.400000	125950.900000	
Aromatic C12-C16	133281.533333	131079.686666	136564.450000	133377.433333	145025.200000	
Aromatic C16-C21	133363.452500	132446.800000	137810.687500	132897.325000	142334.400000	
Aromatic C21-C36	111893.361111	113136.733333	120101.377777	117781.188888	128696.844444	
Aromatic EPH	120409.534444	120165.477777	126334.947222	123304.283333	134143.700000	

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
 Data File : FD049718.D
 Signal(s) : FID2B.ch
 Acq On : 04 Sep 2025 09:36
 Operator : YP/AJ
 Sample : 100 PPM AROMATIC HC STD1
 Misc :
 ALS Vial : 61 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 100 PPM AROMATIC HC STD1

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 09/05/2025
 Supervised By :mohammad ahmed 09/08/2025

Integration File: autoint1.e
 Quant Time: Sep 05 06:20:15 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
 Quant Title : GC Extractables
 QLast Update : Fri Sep 05 06:18:55 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...	7.703	11112746	98.565 ug/ml
Spiked Amount 50.000		Recovery =	197.13%
6) S 2-Fluorobiphenyl (SURR)	8.569	7949975	98.006 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	196.01%#
11) S ortho-Terphenyl (SURR)	11.617	13622959	95.092 ug/ml
Spiked Amount 50.000		Recovery =	190.18%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.491	10441049	97.009 ug/ml
2) T Naphthalene (C11.7)	6.037	12262247	98.452 ug/ml
3) T 2-Methylnaphthalene (...)	7.093	12922112	98.860 ug/ml
5) T Acenaphthylene (C15.06)	8.373	13531887	97.031 ug/ml
7) T Acenaphthene (C15.5)	8.672	13530461	96.977 ug/ml
8) T Flouorene (C16.55)	9.453	13563710	96.723 ug/ml
9) T Phenanthrene (C19.36)	10.853	13732189	96.729 ug/ml
10) T Anthracene (C19.43)	10.930	12946823	96.523 ug/ml
12) T Fluoranthene (C21.85)	12.668	13257933	97.088 ug/ml
13) T Pyrene (C20.8)	12.967	13102659	97.119 ug/ml
14) T Benzo[a]anthracene (C...	14.839	11657187	96.783 ug/ml
15) T Chrysene (C27.41)	14.887	11738473	96.196 ug/ml
16) T benzo[b]fluoranthene ...	16.393	11363538	94.070 ug/ml
17) T Bnezo[k]fluoranthene ...	16.433	10483846	91.683 ug/mlm
18) T Benzo[a]pyrene (C31.34)	16.775	10977142	92.154 ug/ml
19) T Indeno[1,2,3-cd]pyren...	18.141	10414194	93.978 ug/ml
20) T Dibenz[a,h]anthracene...	18.181	10061727	85.544 ug/ml
21) T Benzo[g,h,i]perylene ...	18.403	10749985	90.198 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
Data File : FD049718.D
Signal(s) : FID2B.ch
Acq On : 04 Sep 2025 09:36
Operator : YP/AJ
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 61 Sample Multiplier: 1

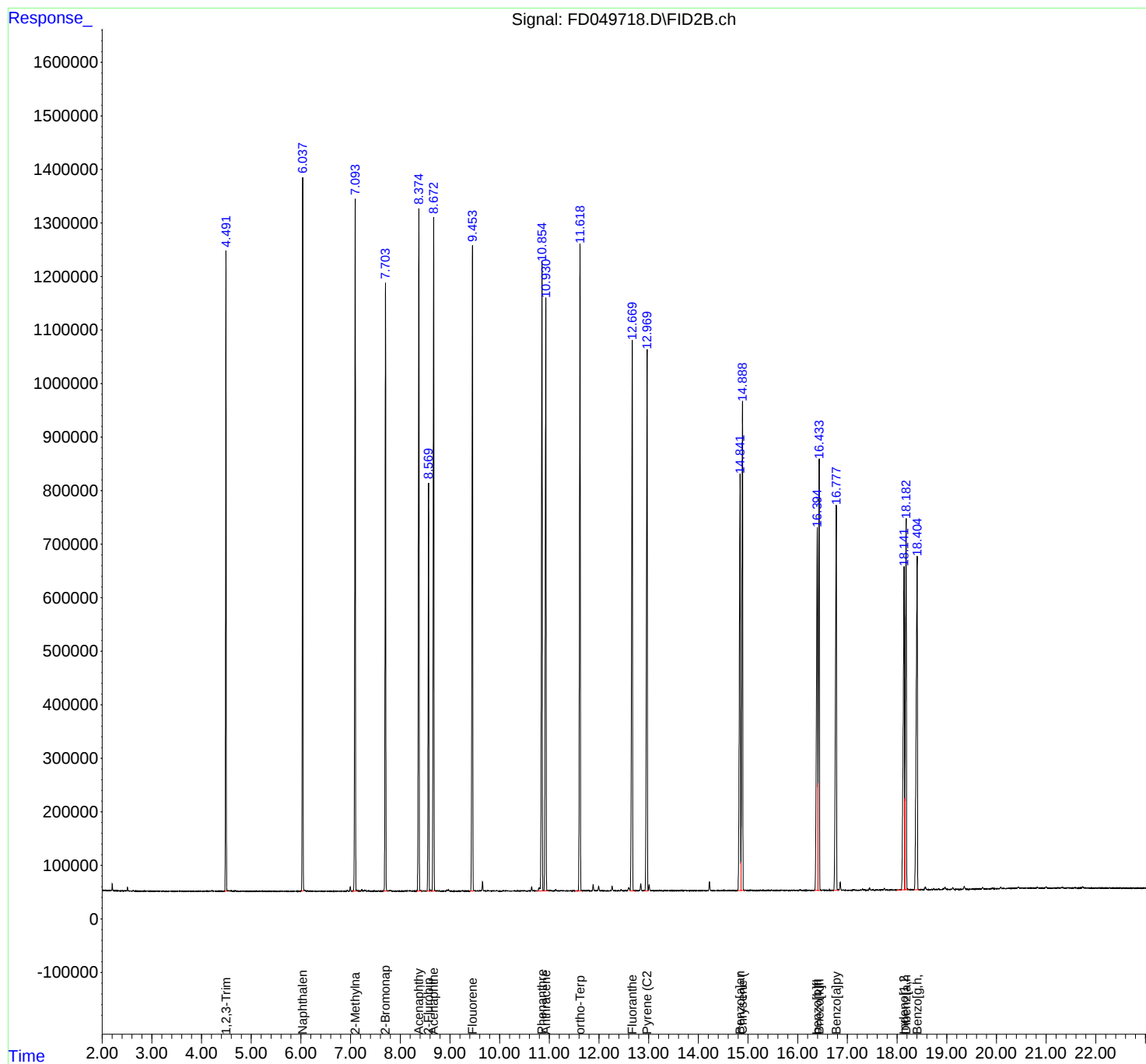
Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1

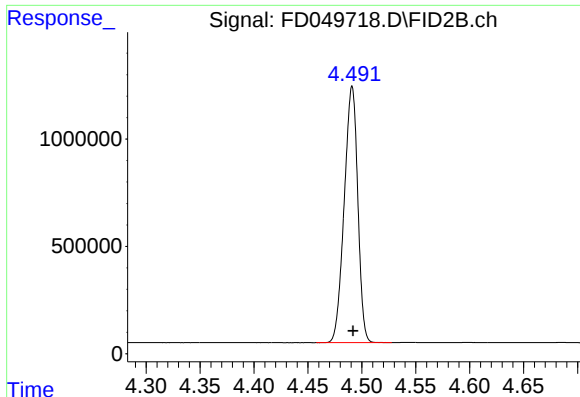
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 09/05/2025
Supervised By :mohammad ahmed 09/08/2025

Integration File: autoint1.e
Quant Time: Sep 05 06:20:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
Quant Title : GC Extractables
QLast Update : Fri Sep 05 06:18:55 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.: 4.491 min
Delta R.T.: -0.001 min
Response: 10441049
Conc: 97.01 ug/ml

Instrument :

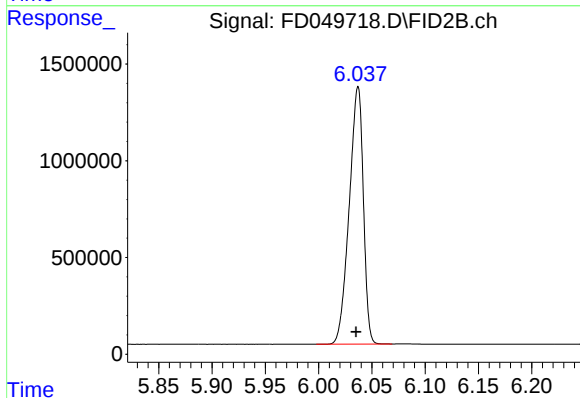
FID_D

ClientSampleId :

100 PPM AROMATIC HC STD1

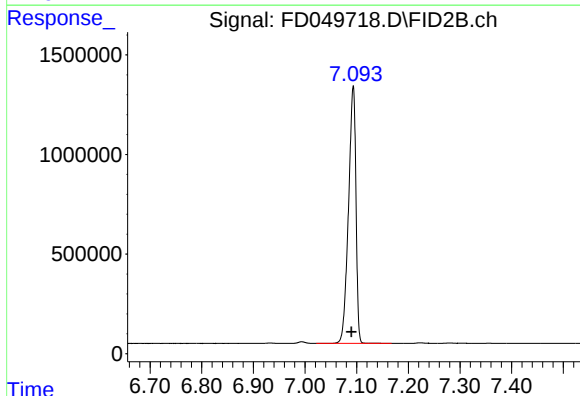
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 09/05/2025
Supervised By :mohammad ahmed 09/08/2025



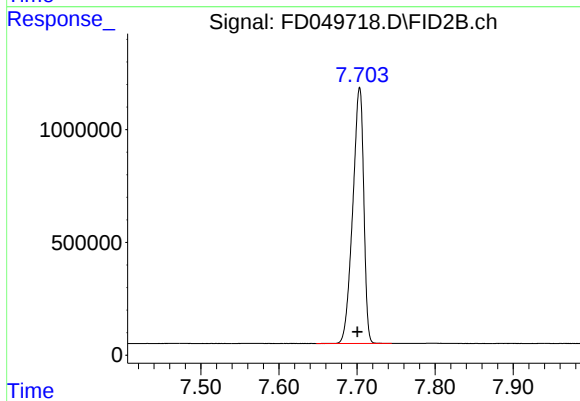
#2 Naphthalene (C11.7)

R.T.: 6.037 min
Delta R.T.: 0.001 min
Response: 12262247
Conc: 98.45 ug/ml



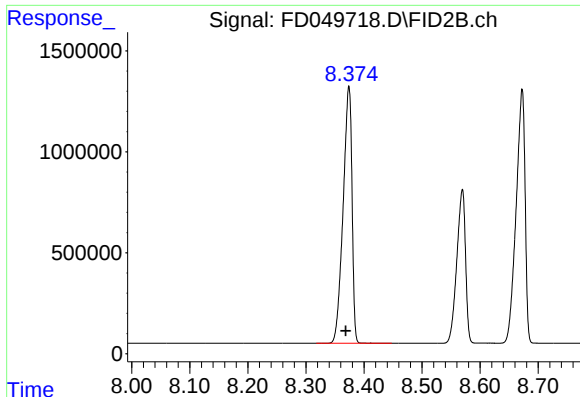
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.093 min
Delta R.T.: 0.003 min
Response: 12922112
Conc: 98.86 ug/ml



#4 2-Bromonaphthalene (SURR)

R.T.: 7.703 min
Delta R.T.: 0.002 min
Response: 11112746
Conc: 98.56 ug/ml



#5 Acenaphthylene (C15.06)

R.T.: 8.373 min
Delta R.T.: 0.005 min
Response: 13531887
Conc: 97.03 ug/ml

Instrument :

FID_D

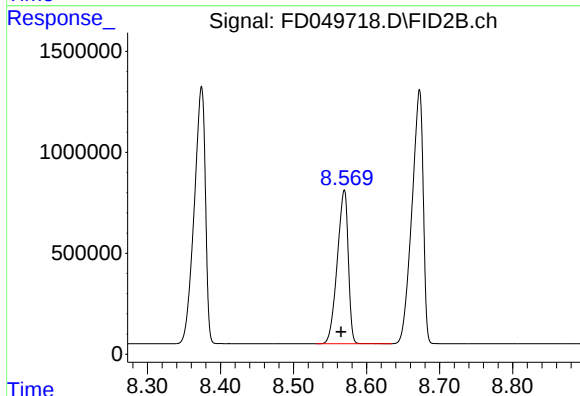
ClientSampleId :

100 PPM AROMATIC HC STD1

Manual Integrations

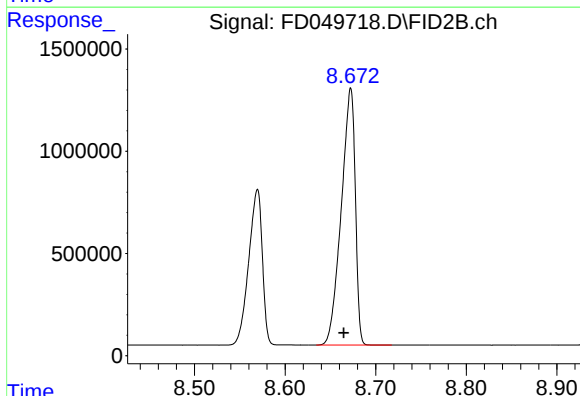
APPROVED

Reviewed By :Yogesh Patel 09/05/2025
Supervised By :mohammad ahmed 09/08/2025



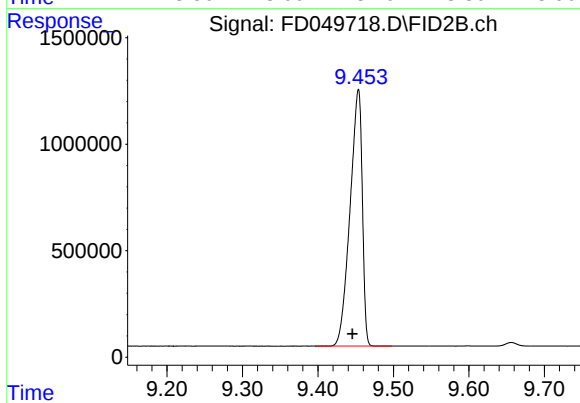
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.569 min
Delta R.T.: 0.004 min
Response: 7949975
Conc: 98.01 ug/ml



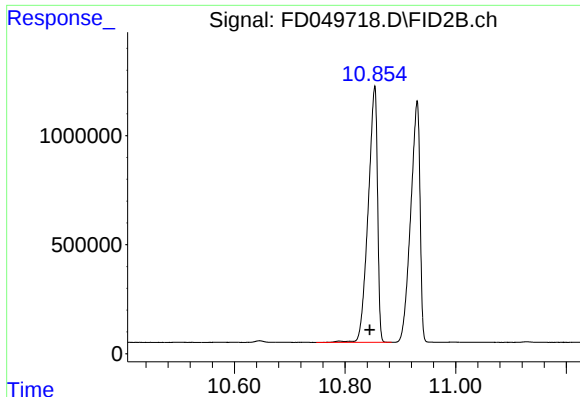
#7 Acenaphthene (C15.5)

R.T.: 8.672 min
Delta R.T.: 0.007 min
Response: 13530461
Conc: 96.98 ug/ml



#8 Fluorene (C16.55)

R.T.: 9.453 min
Delta R.T.: 0.007 min
Response: 13563710
Conc: 96.72 ug/ml



#9 Phenanthrene (C19.36)

R.T.: 10.853 min
Delta R.T.: 0.008 min
Response: 13732189
Conc: 96.73 ug/ml

Instrument :

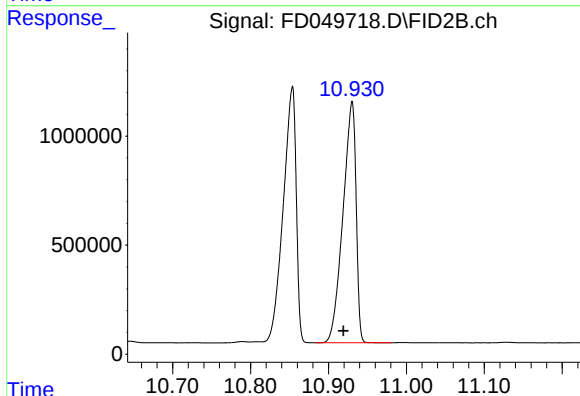
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ClientSampleId :

100 PPM AROMATIC HC STD1

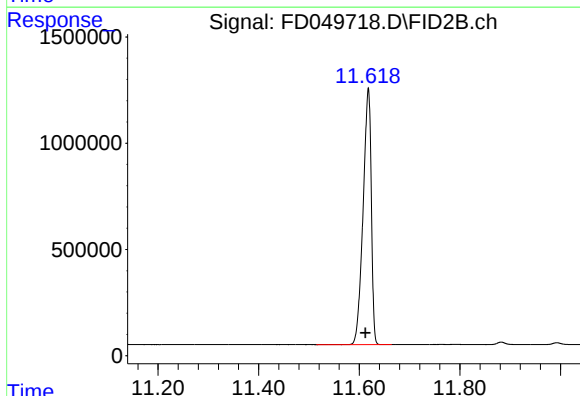
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 09/05/2025
Supervised By :mohammad ahmed 09/08/2025



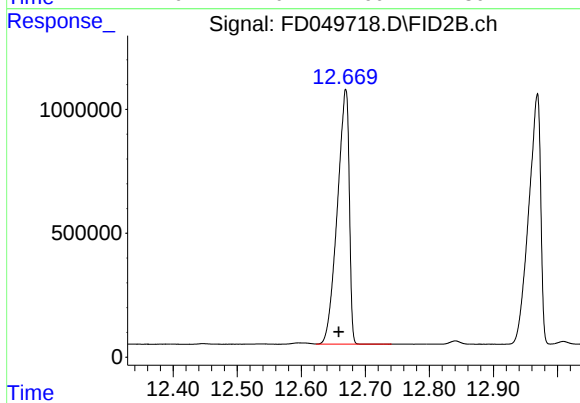
#10 Anthracene (C19.43)

R.T.: 10.930 min
Delta R.T.: 0.010 min
Response: 12946823
Conc: 96.52 ug/ml



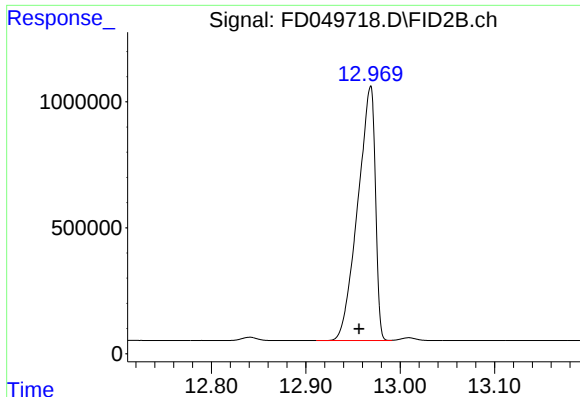
#11 ortho-Terphenyl (SURR)

R.T.: 11.617 min
Delta R.T.: 0.005 min
Response: 13622959
Conc: 95.09 ug/ml



#12 Fluoranthene (C21.85)

R.T.: 12.668 min
Delta R.T.: 0.010 min
Response: 13257933
Conc: 97.09 ug/ml



#13 Pyrene (C20.8)

R.T.: 12.967 min
Delta R.T.: 0.011 min
Response: 13102659
Conc: 97.12 ug/ml

Instrument :

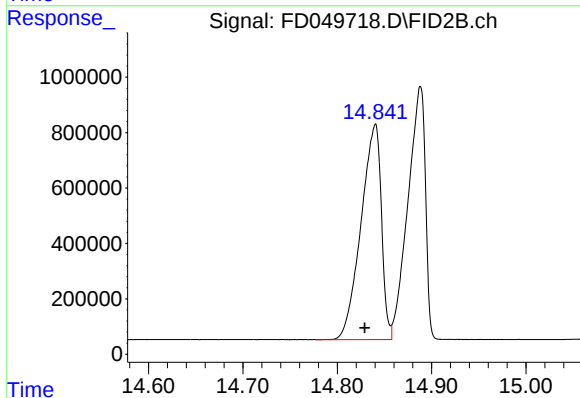
FID_D

ClientSampleId :

100 PPM AROMATIC HC STD1

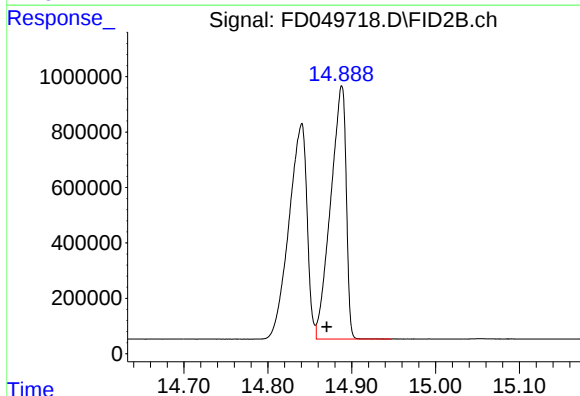
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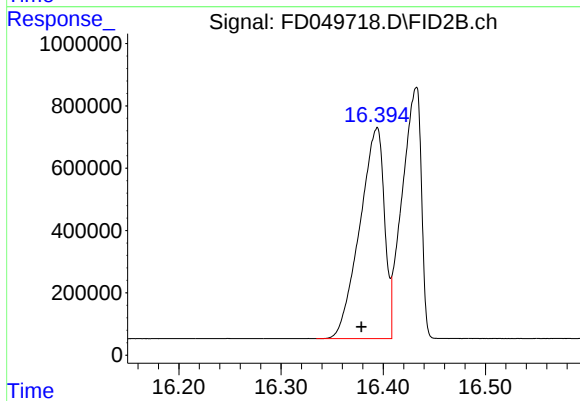
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.839 min
Delta R.T.: 0.010 min
Response: 11657187
Conc: 96.78 ug/ml



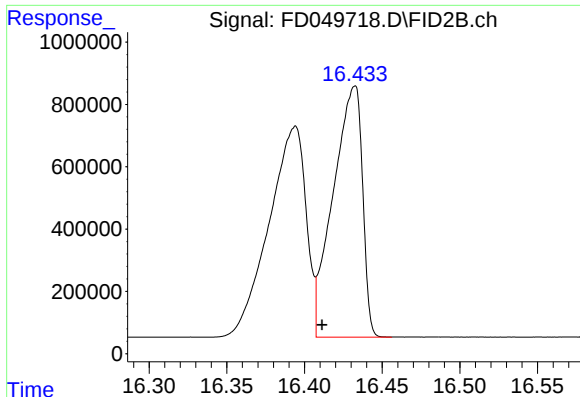
#15 Chrysene (C27.41)

R.T.: 14.887 min
Delta R.T.: 0.017 min
Response: 11738473
Conc: 96.20 ug/ml



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

R.T.: 16.393 min
Delta R.T.: 0.014 min
Response: 11363538
Conc: 94.07 ug/ml



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

R.T.: 16.433 min
Delta R.T.: 0.021 min
Response: 10483846
Conc: 91.68 ug/ml

Instrument :

FID_D

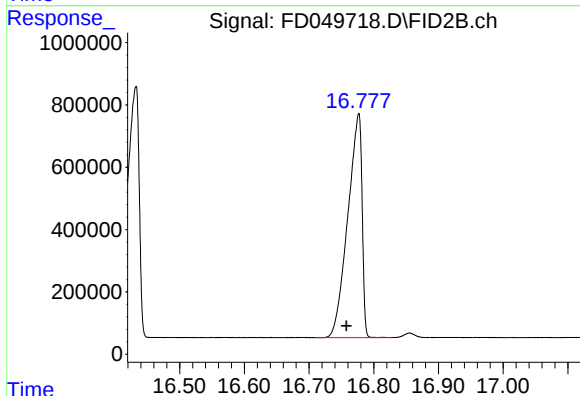
ClientSampleId :

100 PPM AROMATIC HC STD1

Manual Integrations

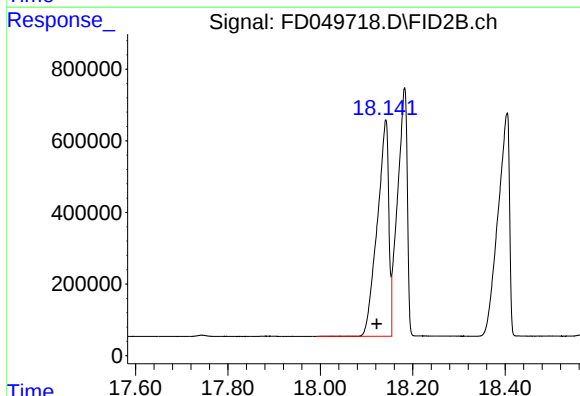
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Supervised By :mohammad ahmed 09/08/2025



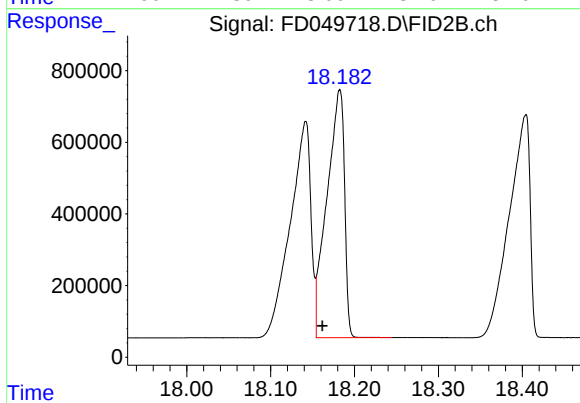
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.775 min
Delta R.T.: 0.017 min
Response: 10977142
Conc: 92.15 ug/ml



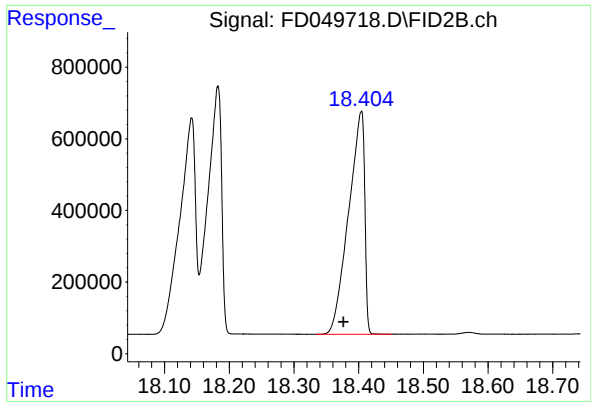
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.141 min
Delta R.T.: 0.019 min
Response: 10414194
Conc: 93.98 ug/ml



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

R.T.: 18.181 min
Delta R.T.: 0.020 min
Response: 10061727
Conc: 85.54 ug/ml



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

R.T.: 18.403 min
Delta R.T.: 0.026 min
Response: 10749985
Conc: 90.20 ug/ml

Instrument :

FID_D

ClientSampleId :

100 PPM AROMATIC HC STD1

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 09/05/2025

Supervised By :mohammad ahmed 09/08/2025

Instrument :
FID_D
LabSampleId :
100 PPM AROMATIC HC STD1

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD
Data File : FD049718.D
Signal(s) : FID2B.ch
Acq On : 04 Sep 2025 09:36
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Reviewed By :Yogesh Patel 09/05/2025
Supervised By :mohammad ahmed 09/08/2025

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.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	4.491	4.458	4.528	BV	1198692	10441049	76.03%	4.186%
2	6.037	5.998	6.069	BV	1355527	12262247	89.30%	4.916%
3	7.093	7.022	7.168	PB	1320087	12922112	94.10%	5.181%
4	7.703	7.648	7.744	BB	1158899	11112746	80.92%	4.456%
5	8.373	8.318	8.448	BB	1288669	13531887	98.54%	5.426%
6	8.569	8.531	8.634	BV	749339	7949975	57.89%	3.187%
7	8.672	8.634	8.718	VB	1240077	13530461	98.53%	5.425%
8	9.453	9.398	9.498	BB	1236783	13563710	98.77%	5.438%
9	10.853	10.748	10.884	BV	1210003	13732189	100.00%	5.506%
10	10.930	10.884	10.981	VV	1130848	12946823	94.28%	5.191%
11	11.617	11.514	11.664	BB	1208922	13622959	99.20%	5.462%
12	12.668	12.623	12.741	VB	1018056	13257933	96.55%	5.316%
13	12.967	12.911	12.991	BV	1008591	13102659	95.42%	5.253%
14	14.839	14.778	14.858	BV	792237	11657187	84.89%	4.674%
15	14.887	14.858	14.948	VB	920593	11738473	85.48%	4.706%
16	16.393	16.334	16.408	BV	683944	11363538	82.75%	4.556%
17	16.431	16.408	16.494	VB	801715	10473293	76.27%	4.199%
18	16.775	16.711	16.828	BV	704214	10977142	79.94%	4.401%
19	18.141	17.991	18.154	BV	604763	10414194	75.84%	4.175%
20	18.181	18.154	18.244	VB	690310	10061727	73.27%	4.034%
21	18.403	18.334	18.451	BB	635209	10749985	78.28%	4.310%
Sum of corrected areas:						249412288		

Aromatic EPH 090425.M Fri Sep 05 06:43:24 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
 Data File : FD049719.D
 Signal(s) : FID2B.ch
 Acq On : 04 Sep 2025 10:16
 Operator : YP/AJ
 Sample : 50 PPM AROMATIC HC STD2
 Misc :
 ALS Vial : 62 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 50 PPM AROMATIC HC STD2

Integration File: autoint1.e
 Quant Time: Sep 05 06:20:47 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
 Quant Title : GC Extractables
 QLast Update : Fri Sep 05 06:18:55 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...	7.699	5439535	48.246 ug/ml
Spiked Amount 50.000		Recovery =	96.49%
6) S 2-Fluorobiphenyl (SURR)	8.564	3904709	48.137 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	96.27%
11) S ortho-Terphenyl (SURR)	11.611	6776278	47.300 ug/ml
Spiked Amount 50.000		Recovery =	94.60%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.488	5097348	47.360 ug/ml
2) T Naphthalene (C11.7)	6.033	5988739	48.083 ug/ml
3) T 2-Methylnaphthalene (...)	7.088	6309415	48.270 ug/ml
5) T Acenaphthylene (C15.06)	8.368	6676398	47.873 ug/ml
7) T Acenaphthene (C15.5)	8.665	6676140	47.850 ug/ml
8) T Fluorene (C16.55)	9.446	6718389	47.909 ug/ml
9) T Phenanthrene (C19.36)	10.845	6815270	48.006 ug/ml
10) T Anthracene (C19.43)	10.920	6448326	48.075 ug/ml
12) T Fluoranthene (C21.85)	12.660	6577964	48.171 ug/ml
13) T Pyrene (C20.8)	12.958	6507375	48.234 ug/ml
14) T Benzo[a]anthracene (C...	14.831	5800499	48.158 ug/ml
15) T Chrysene (C27.41)	14.875	5856393	47.993 ug/ml
16) T benzo[b]fluoranthene ...	16.382	5727605	47.414 ug/ml
17) T Bnezo[k]fluoranthene ...	16.417	5322884	46.550 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.762	5566382	46.730 ug/ml
19) T Indeno[1,2,3-cd]pyren...	18.127	5209247	47.008 ug/ml
20) T Dibenz[a,h]anthracene...	18.167	5337048	45.375 ug/ml
21) T Benzo[g,h,i]perylene ...	18.385	5513508	46.261 ug/ml

(f)=RT Delta > 1/2 Window

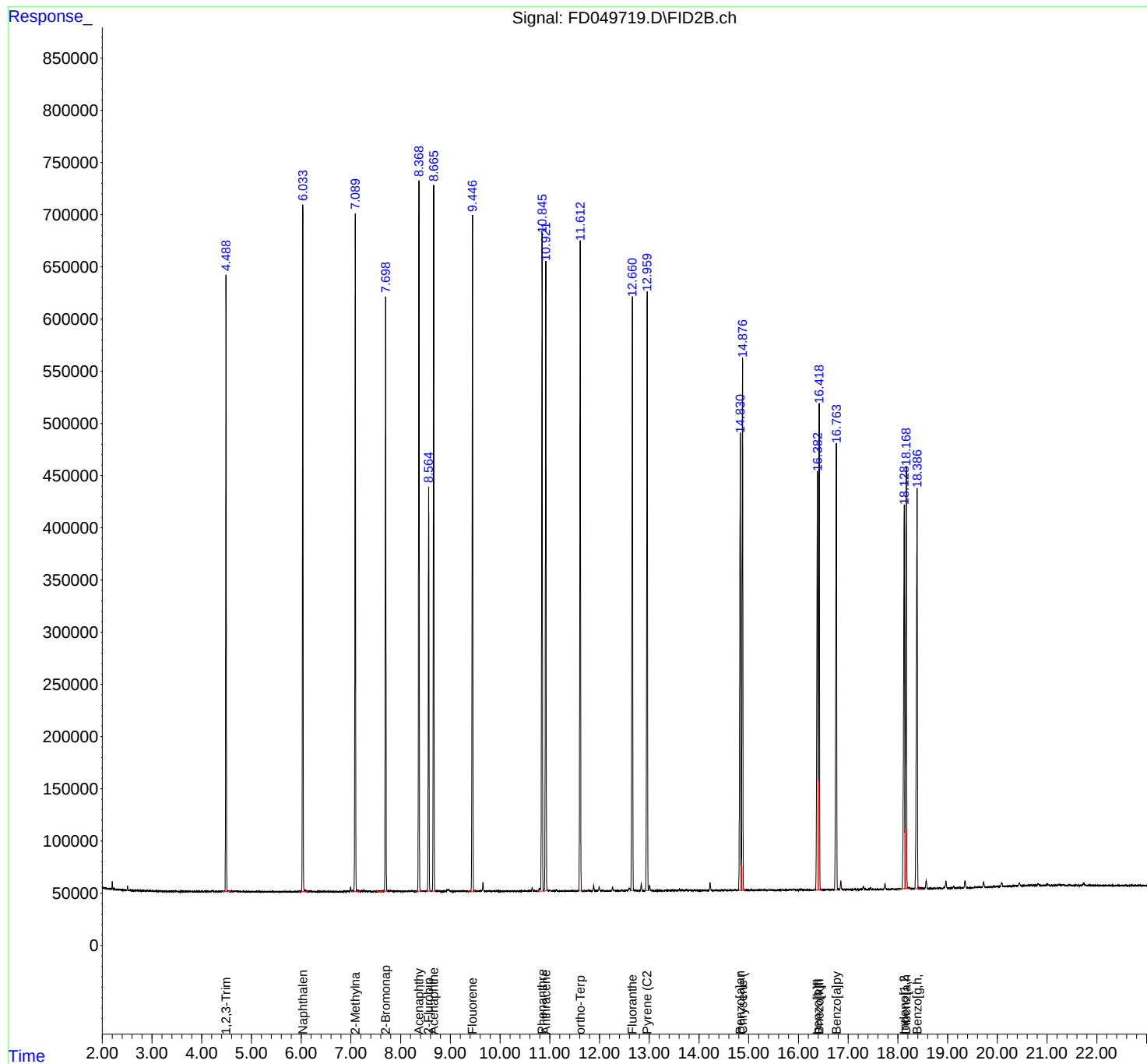
(m)=manual int.

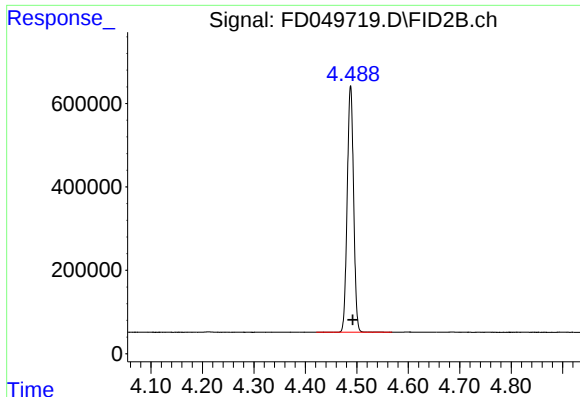
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
Data File : FD049719.D
Signal(s) : FID2B.ch
Acq On : 04 Sep 2025 10:16
Operator : YP/AJ
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2

Integration File: autoint1.e
Quant Time: Sep 05 06:20:47 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
Quant Title : GC Extractables
QLast Update : Fri Sep 05 06:18:55 2025
Response via : Initial Calibration
Integrator: ChemStation

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

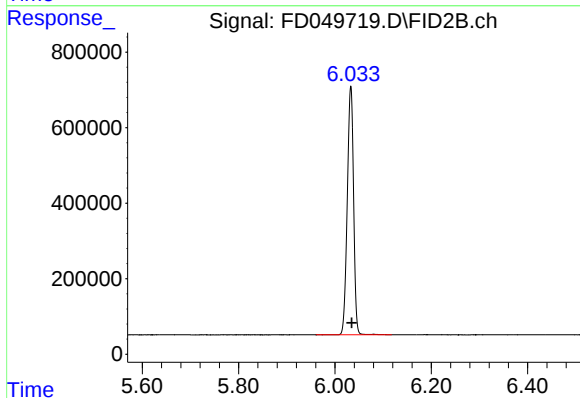




#1 1,2,3-Trimethylbenzene (C10.1)

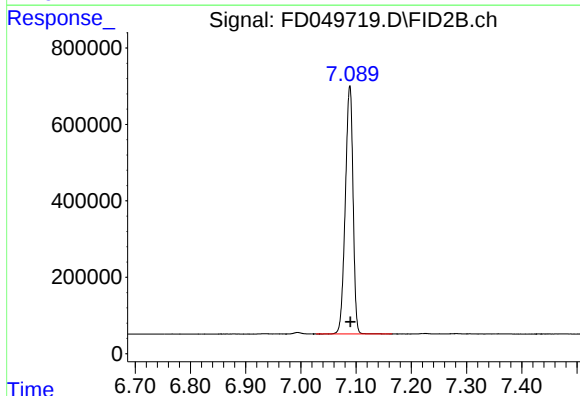
R.T.: 4.488 min
Delta R.T.: -0.004 min
Response: 5097348
Conc: 47.36 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



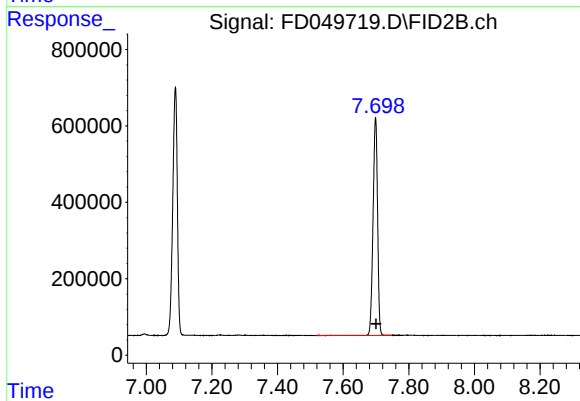
#2 Naphthalene (C11.7)

R.T.: 6.033 min
Delta R.T.: -0.002 min
Response: 5988739
Conc: 48.08 ug/ml



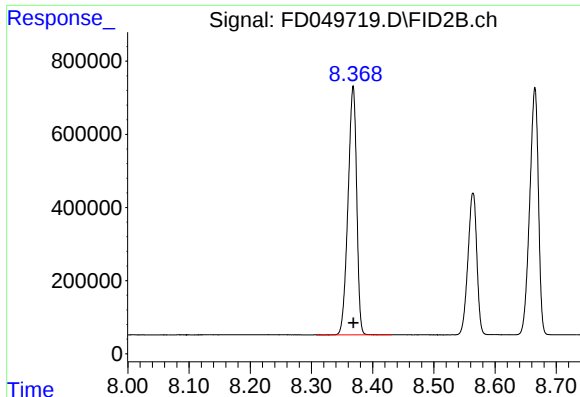
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.088 min
Delta R.T.: -0.001 min
Response: 6309415
Conc: 48.27 ug/ml



#4 2-Bromonaphthalene (SURR)

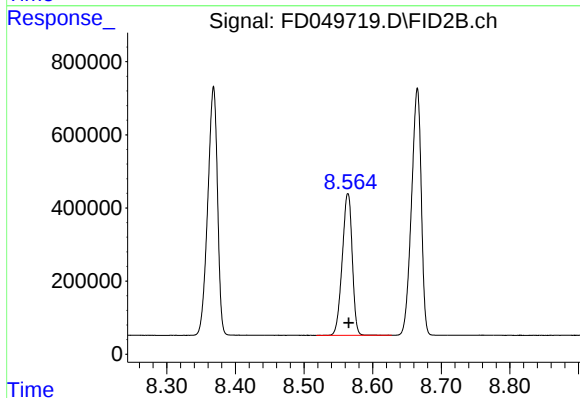
R.T.: 7.699 min
Delta R.T.: -0.002 min
Response: 5439535
Conc: 48.25 ug/ml



#5 Acenaphthylene (C15.06)

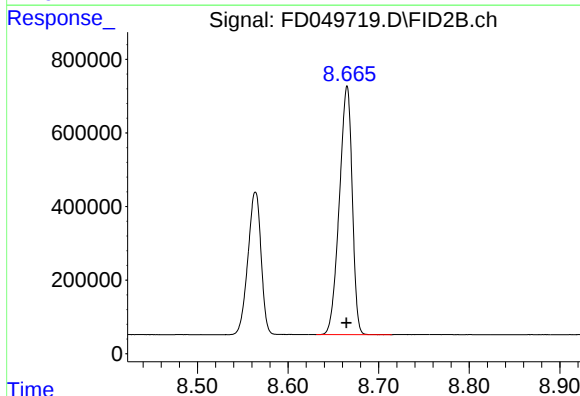
R.T.: 8.368 min
Delta R.T.: 0.000 min
Response: 6676398
Conc: 47.87 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



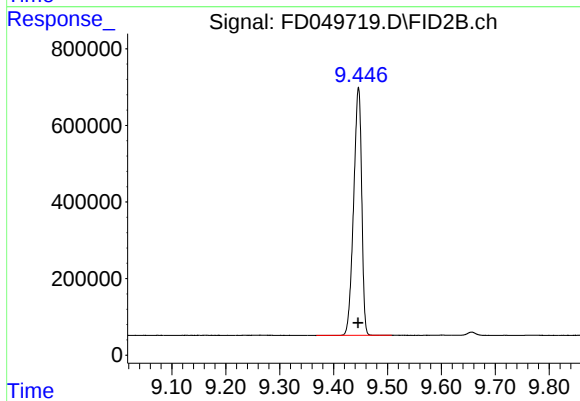
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.564 min
Delta R.T.: -0.001 min
Response: 3904709
Conc: 48.14 ug/ml



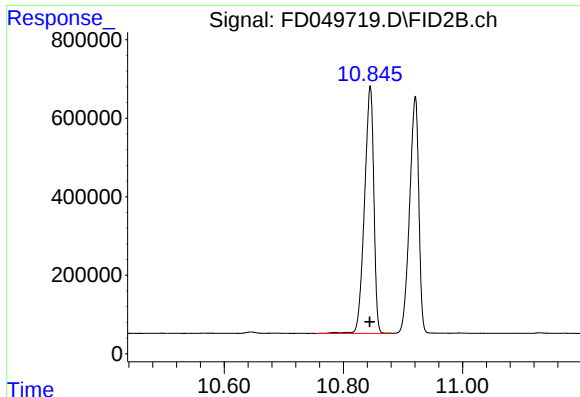
#7 Acenaphthene (C15.5)

R.T.: 8.665 min
Delta R.T.: 0.000 min
Response: 6676140
Conc: 47.85 ug/ml



#8 Fluorene (C16.55)

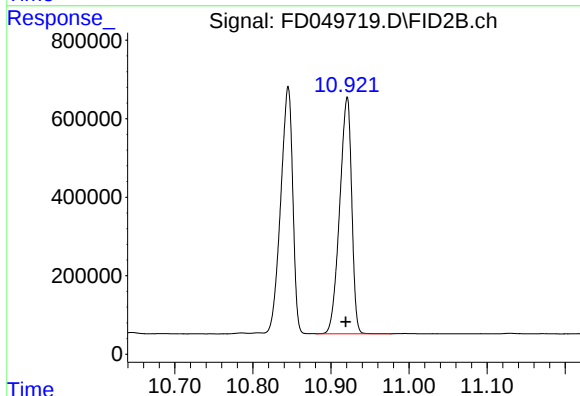
R.T.: 9.446 min
Delta R.T.: 0.000 min
Response: 6718389
Conc: 47.91 ug/ml



#9 Phenanthrene (C19.36)

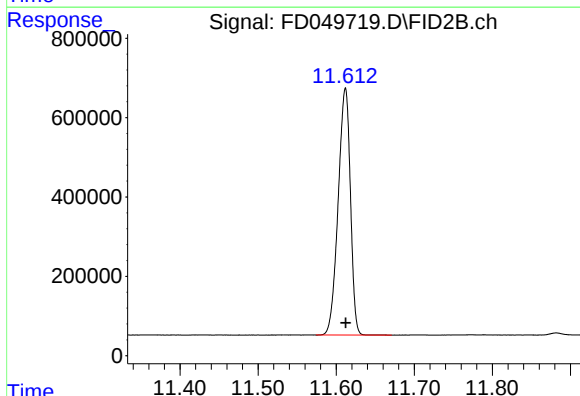
R.T.: 10.845 min
Delta R.T.: 0.000 min
Response: 6815270
Conc: 48.01 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



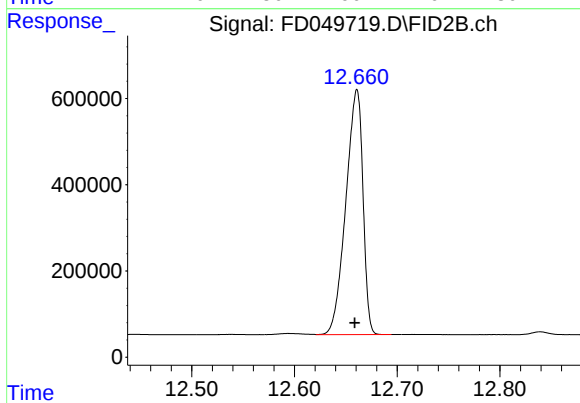
#10 Anthracene (C19.43)

R.T.: 10.920 min
Delta R.T.: 0.001 min
Response: 6448326
Conc: 48.07 ug/ml



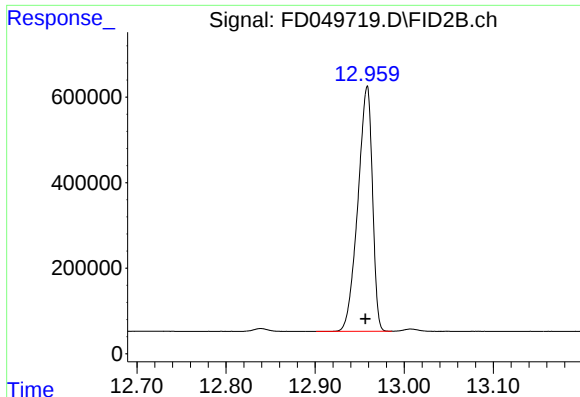
#11 ortho-Terphenyl (SURR)

R.T.: 11.611 min
Delta R.T.: 0.000 min
Response: 6776278
Conc: 47.30 ug/ml



#12 Fluoranthene (C21.85)

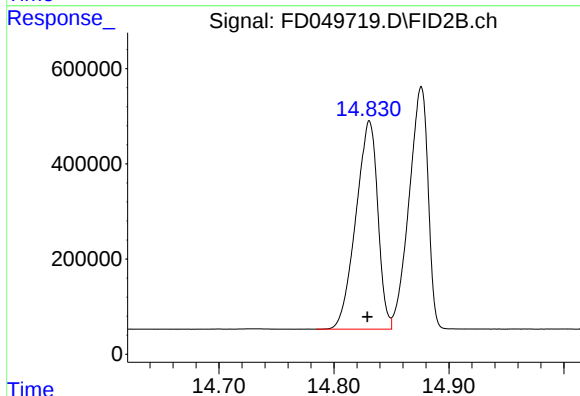
R.T.: 12.660 min
Delta R.T.: 0.002 min
Response: 6577964
Conc: 48.17 ug/ml



#13 Pyrene (C20.8)

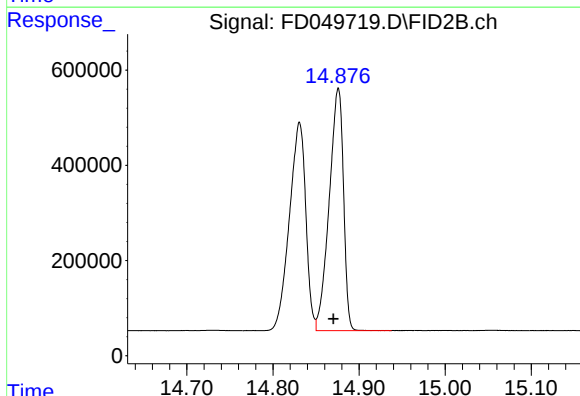
R.T.: 12.958 min
Delta R.T.: 0.001 min
Response: 6507375
Conc: 48.23 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



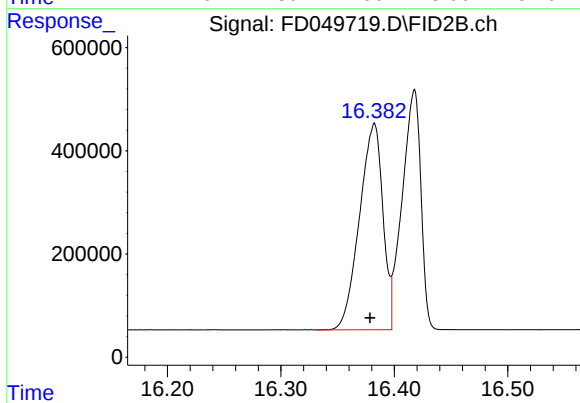
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.831 min
Delta R.T.: 0.002 min
Response: 5800499
Conc: 48.16 ug/ml



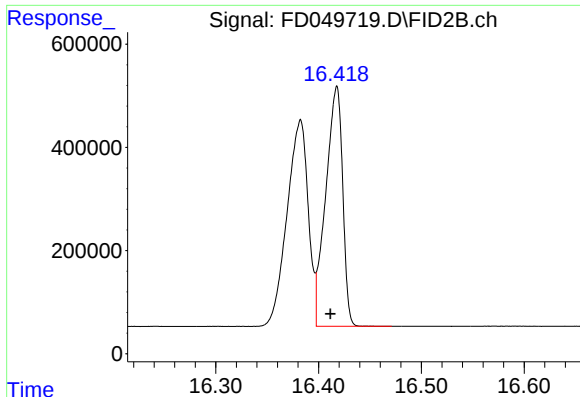
#15 Chrysene (C27.41)

R.T.: 14.875 min
Delta R.T.: 0.005 min
Response: 5856393
Conc: 47.99 ug/ml



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

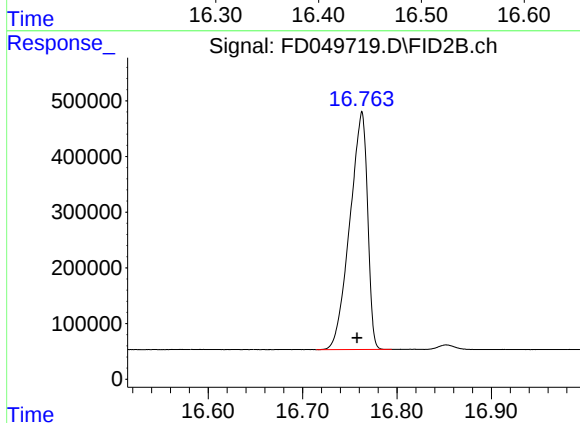
R.T.: 16.382 min
Delta R.T.: 0.003 min
Response: 5727605
Conc: 47.41 ug/ml



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

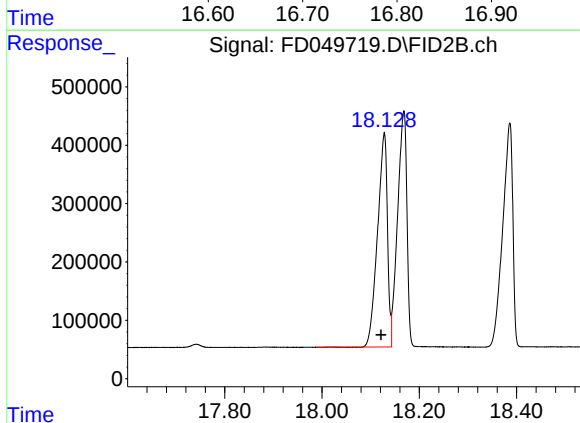
R.T.: 16.417 min
Delta R.T.: 0.006 min
Response: 5322884
Conc: 46.55 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



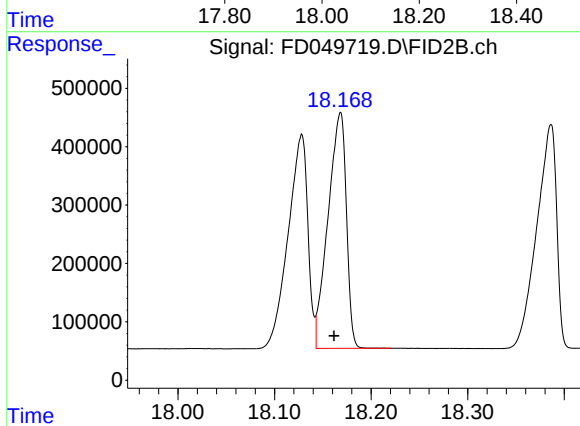
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.762 min
Delta R.T.: 0.004 min
Response: 5566382
Conc: 46.73 ug/ml



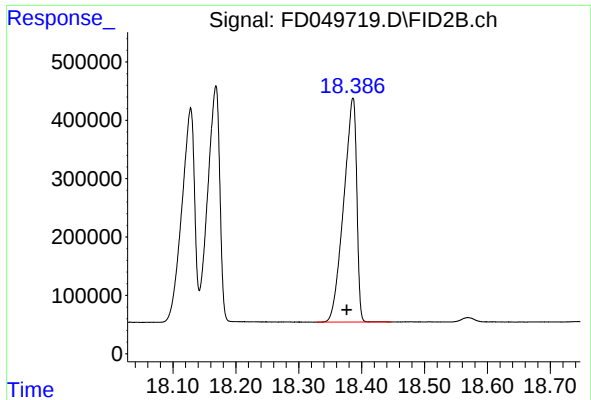
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.127 min
Delta R.T.: 0.006 min
Response: 5209247
Conc: 47.01 ug/ml



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

R.T.: 18.167 min
Delta R.T.: 0.006 min
Response: 5337048
Conc: 45.38 ug/ml



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

R.T.: 18.385 min
Delta R.T.: 0.009 min
Response: 5513508
Conc: 46.26 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
Data File : FD049719.D
Signal(s) : FID2B.ch
Acq On : 04 Sep 2025 10:16
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.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	4.488	4.421	4.568	BB	589718	5097348	74.79%	4.102%
2	6.033	5.961	6.118	BB	664447	5988739	87.87%	4.819%
3	7.088	7.028	7.164	BB	647592	6309415	92.58%	5.077%
4	7.699	7.518	7.748	BB	567038	5439535	79.81%	4.377%
5	8.368	8.308	8.431	BB	678832	6676398	97.96%	5.373%
6	8.564	8.518	8.628	BB	390522	3904709	57.29%	3.142%
7	8.665	8.631	8.714	BB	673258	6676140	97.96%	5.372%
8	9.446	9.368	9.508	BB	640245	6718389	98.58%	5.406%
9	10.845	10.754	10.881	BV	628583	6815270	100.00%	5.484%
10	10.920	10.881	10.978	VV	609499	6448326	94.62%	5.189%
11	11.611	11.574	11.671	BB	621060	6776278	99.43%	5.453%
12	12.660	12.621	12.694	VB	574120	6577964	96.52%	5.293%
13	12.958	12.901	12.986	BV	571912	6507375	95.48%	5.237%
14	14.831	14.784	14.850	BV	439510	5800499	85.11%	4.668%
15	14.875	14.850	14.938	VB	506198	5856393	85.93%	4.713%
16	16.382	16.331	16.398	BV	396436	5727605	84.04%	4.609%
17	16.417	16.398	16.471	VB	468851	5322884	78.10%	4.283%
18	16.762	16.714	16.794	BB	417777	5566382	81.68%	4.479%
19	18.127	17.988	18.143	BV	367702	5209247	76.43%	4.192%
20	18.167	18.143	18.221	VB	405279	5337048	78.31%	4.295%
21	18.385	18.328	18.448	BB	381726	5513508	80.90%	4.437%
Sum of corrected areas:						124269453		

Aromatic EPH 090425.M Fri Sep 05 06:44:05 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
 Data File : FD049720.D
 Signal(s) : FID2B.ch
 Acq On : 04 Sep 2025 10:56
 Operator : YP/AJ
 Sample : 20 PPM AROMATIC HC STD3
 Misc :
 ALS Vial : 63 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 20 PPM AROMATIC HC STD3

Integration File: autoint1.e
 Quant Time: Sep 05 06:21:15 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
 Quant Title : GC Extractables
 QLast Update : Fri Sep 05 06:18:55 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...	7.701	2254913	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
6) S 2-Fluorobiphenyl (SURR)	8.565	1622343	20.000 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	40.00%
11) S ortho-Terphenyl (SURR)	11.612	2865224	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.492	2152601	20.000 ug/ml
2) T Naphthalene (C11.7)	6.035	2491010	20.000 ug/ml
3) T 2-Methylnaphthalene (...)	7.090	2614218	20.000 ug/ml
5) T Acenaphthylene (C15.06)	8.369	2789202	20.000 ug/ml
7) T Acenaphthene (C15.5)	8.665	2790447	20.000 ug/ml
8) T Flouorene (C16.55)	9.446	2804645	20.000 ug/ml
9) T Phenanthrene (C19.36)	10.845	2839318	20.000 ug/ml
10) T Anthracene (C19.43)	10.919	2682635	20.000 ug/ml
12) T Fluoranthene (C21.85)	12.659	2731115	20.000 ug/ml
13) T Pyrene (C20.8)	12.956	2698257	20.000 ug/ml
14) T Benzo[a]anthracene (C...	14.829	2408933	20.000 ug/ml
15) T Chrysene (C27.41)	14.870	2440531	20.000 ug/ml
16) T benzo[b]fluoranthene ...	16.379	2415976	20.000 ug/ml
17) T Bnezo[k]fluoranthene ...	16.411	2286971	20.000 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.758	2382359	20.000 ug/ml
19) T Indeno[1,2,3-cd]pyren...	18.122	2216312	20.000 ug/ml
20) T Dibenz[a,h]anthracene...	18.162	2352402	20.000 ug/ml
21) T Benzo[g,h,i]perylene ...	18.376	2383649	20.000 ug/ml

(f)=RT Delta > 1/2 Window

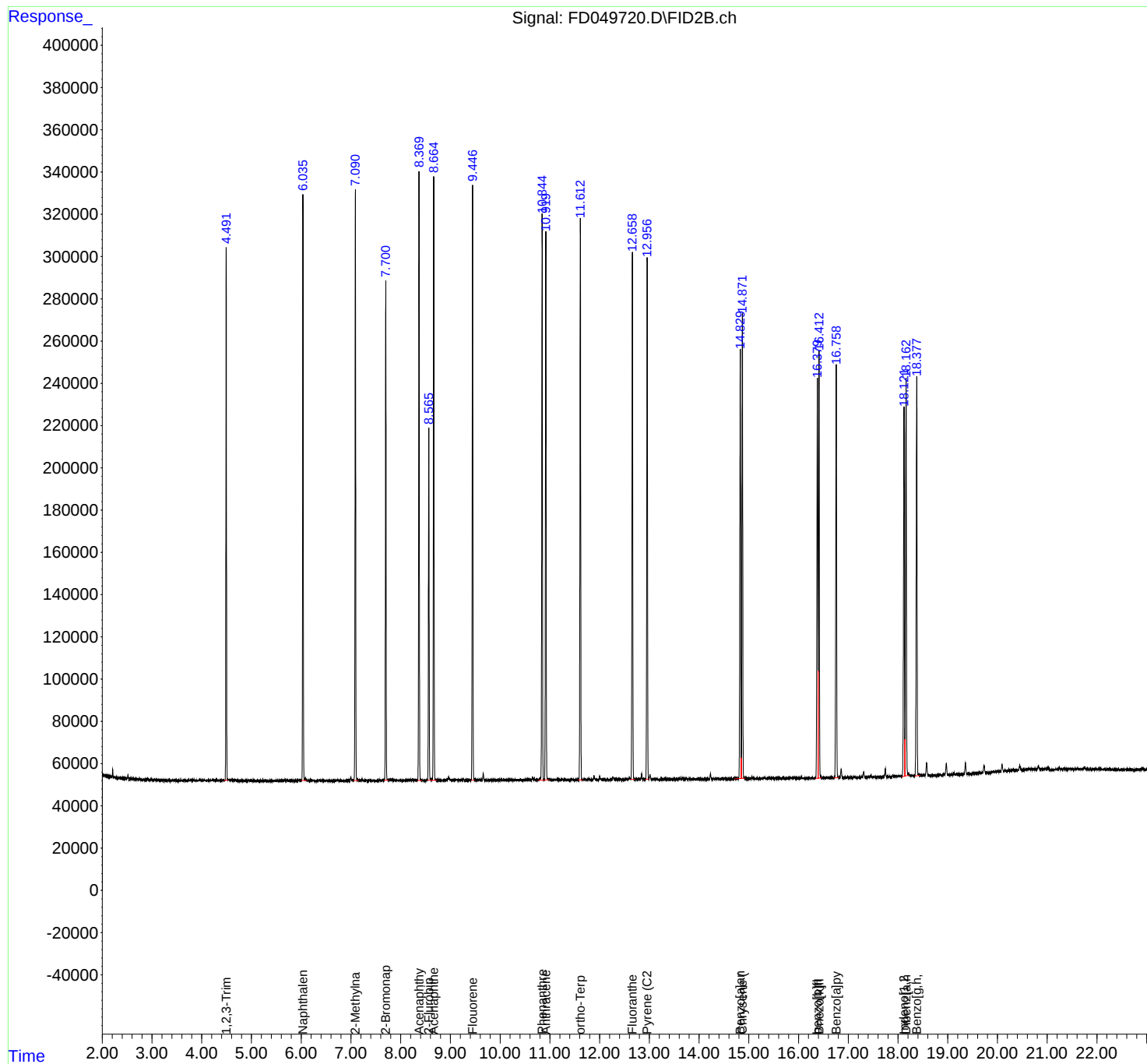
(m)=manual int.

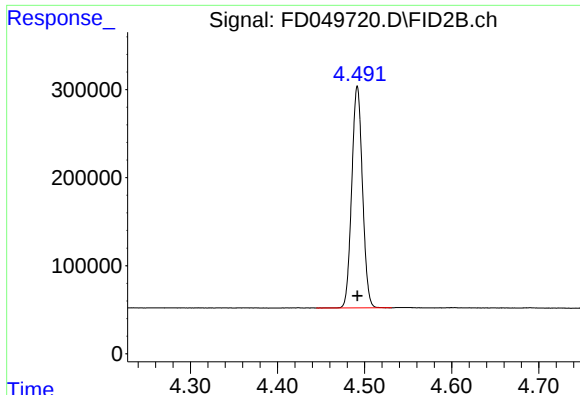
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
Data File : FD049720.D
Signal(s) : FID2B.ch
Acq On : 04 Sep 2025 10:56
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 63 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3

Integration File: autoint1.e
Quant Time: Sep 05 06:21:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
Quant Title : GC Extractables
QLast Update : Fri Sep 05 06:18:55 2025
Response via : Initial Calibration
Integrator: ChemStation

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

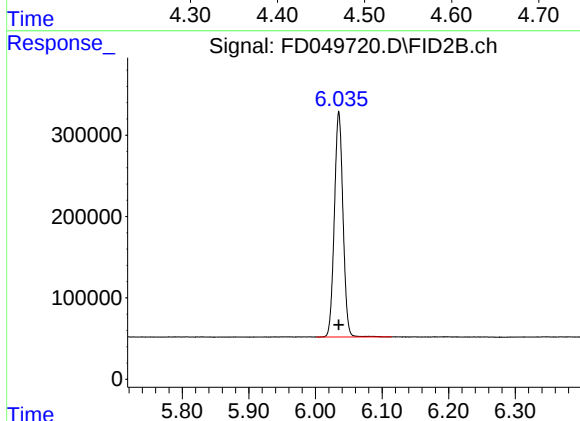




#1 1,2,3-Trimethylbenzene (C10.1)

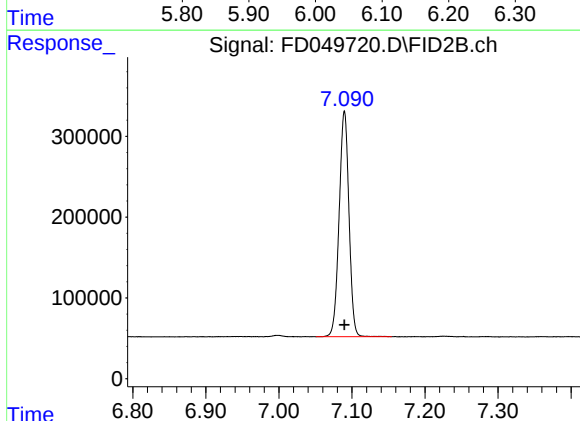
R.T.: 4.492 min
Delta R.T.: 0.000 min
Response: 2152601
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



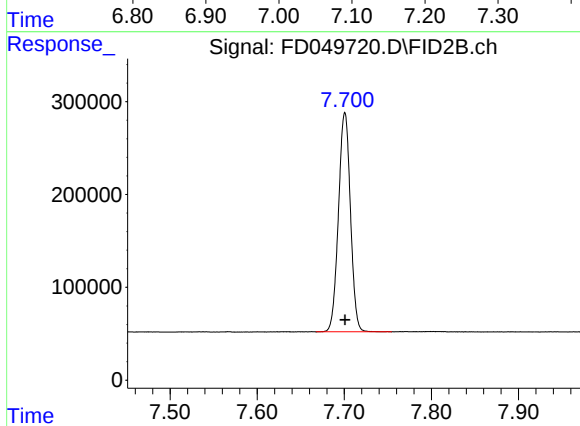
#2 Naphthalene (C11.7)

R.T.: 6.035 min
Delta R.T.: 0.000 min
Response: 2491010
Conc: 20.00 ug/ml



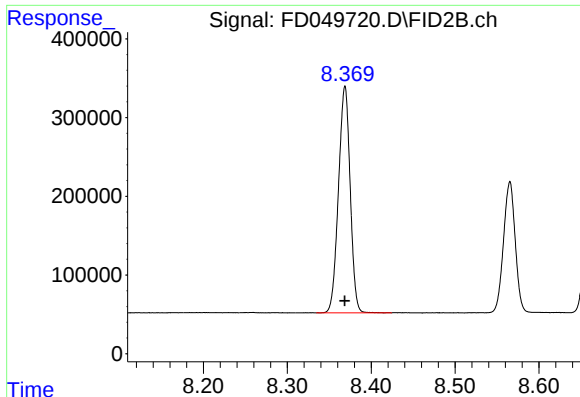
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.090 min
Delta R.T.: 0.000 min
Response: 2614218
Conc: 20.00 ug/ml



#4 2-Bromonaphthalene (SURR)

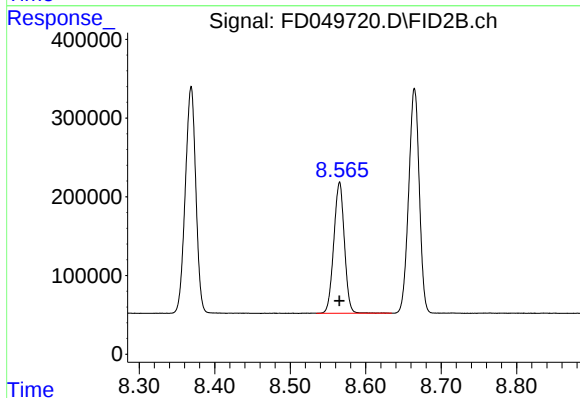
R.T.: 7.701 min
Delta R.T.: 0.000 min
Response: 2254913
Conc: 20.00 ug/ml



#5 Acenaphthylene (C15.06)

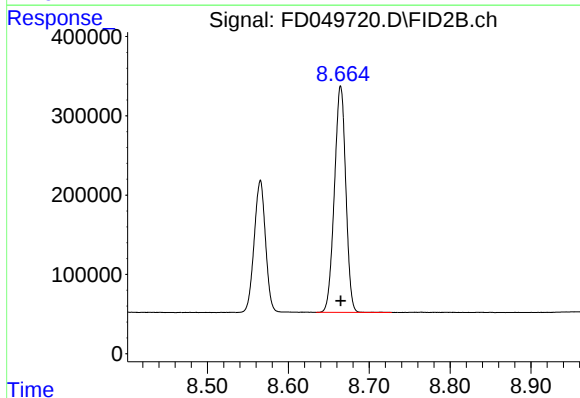
R.T.: 8.369 min
Delta R.T.: 0.000 min
Response: 2789202
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



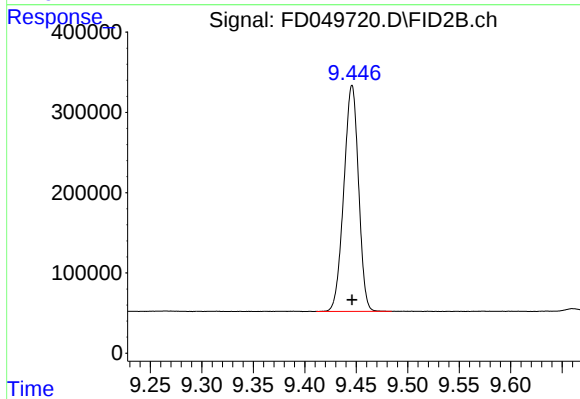
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.565 min
Delta R.T.: 0.000 min
Response: 1622343
Conc: 20.00 ug/ml



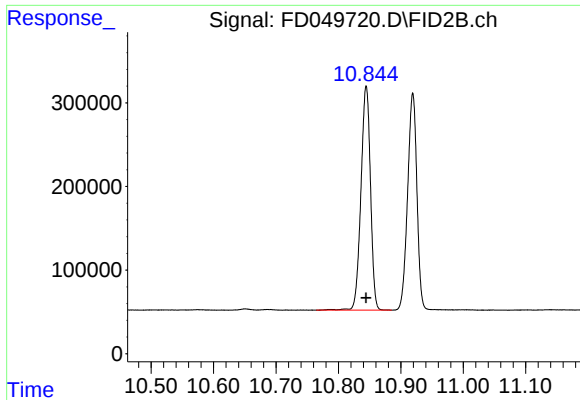
#7 Acenaphthene (C15.5)

R.T.: 8.665 min
Delta R.T.: 0.000 min
Response: 2790447
Conc: 20.00 ug/ml



#8 Fluorene (C16.55)

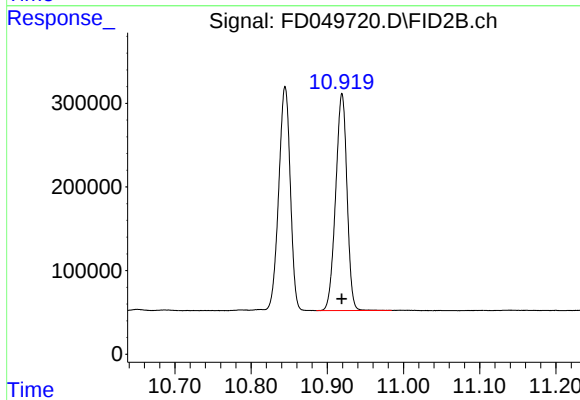
R.T.: 9.446 min
Delta R.T.: 0.000 min
Response: 2804645
Conc: 20.00 ug/ml



#9 Phenanthrene (C19.36)

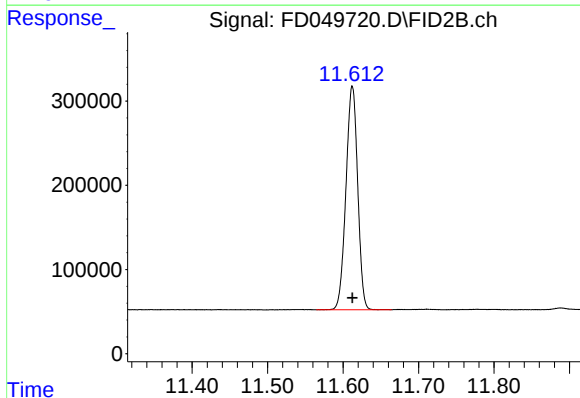
R.T.: 10.845 min
Delta R.T.: 0.000 min
Response: 2839318
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



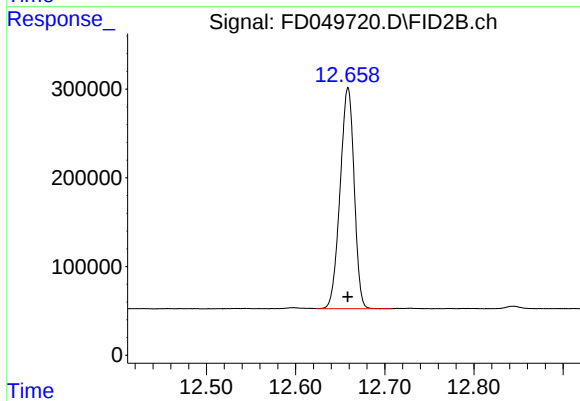
#10 Anthracene (C19.43)

R.T.: 10.919 min
Delta R.T.: 0.000 min
Response: 2682635
Conc: 20.00 ug/ml



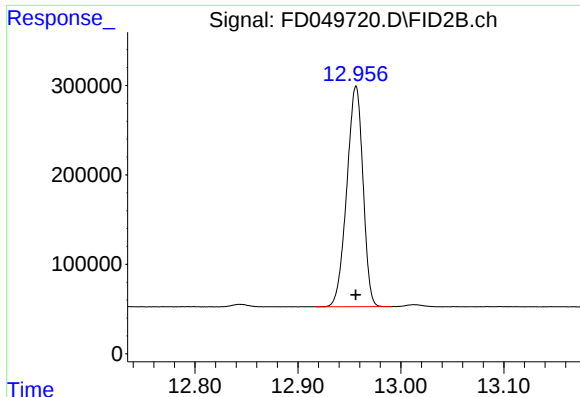
#11 ortho-Terphenyl (SURR)

R.T.: 11.612 min
Delta R.T.: 0.000 min
Response: 2865224
Conc: 20.00 ug/ml



#12 Fluoranthene (C21.85)

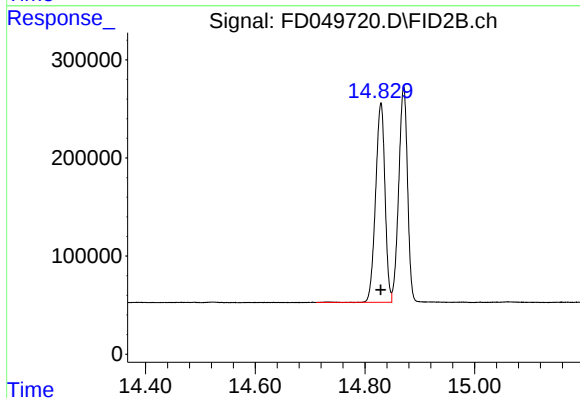
R.T.: 12.659 min
Delta R.T.: 0.000 min
Response: 2731115
Conc: 20.00 ug/ml



#13 Pyrene (C20.8)

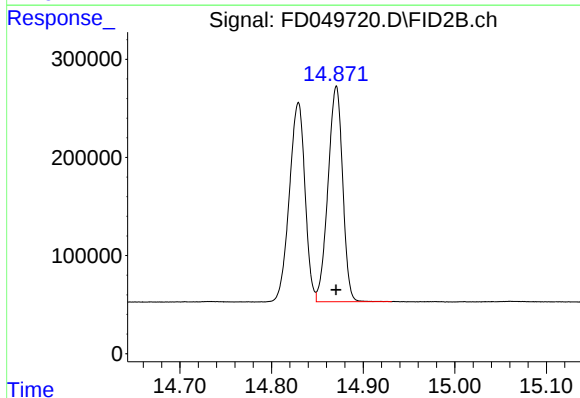
R.T.: 12.956 min
Delta R.T.: 0.000 min
Response: 2698257
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



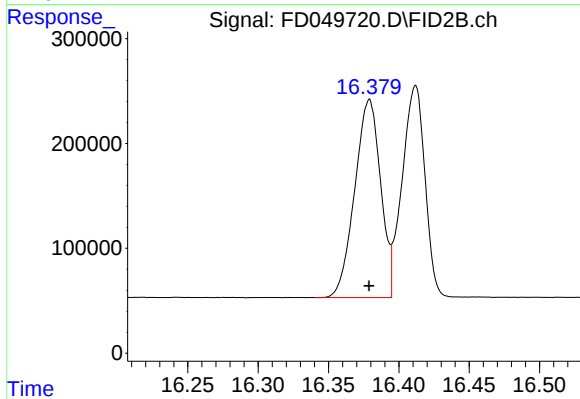
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.829 min
Delta R.T.: 0.000 min
Response: 2408933
Conc: 20.00 ug/ml



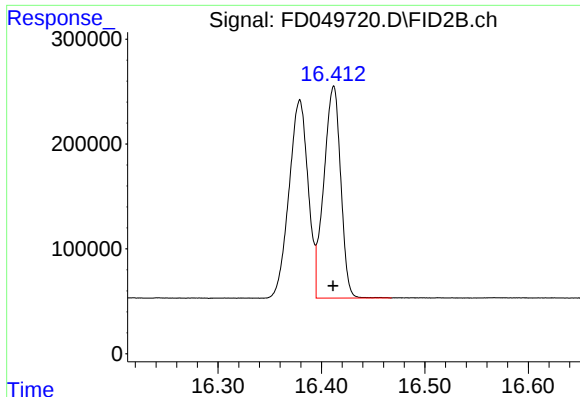
#15 Chrysene (C27.41)

R.T.: 14.870 min
Delta R.T.: 0.000 min
Response: 2440531
Conc: 20.00 ug/ml



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

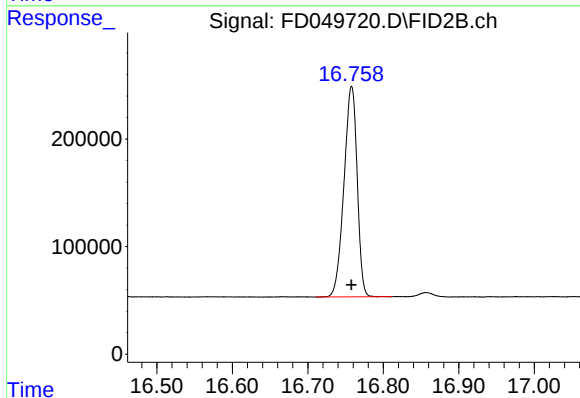
R.T.: 16.379 min
Delta R.T.: 0.000 min
Response: 2415976
Conc: 20.00 ug/ml



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

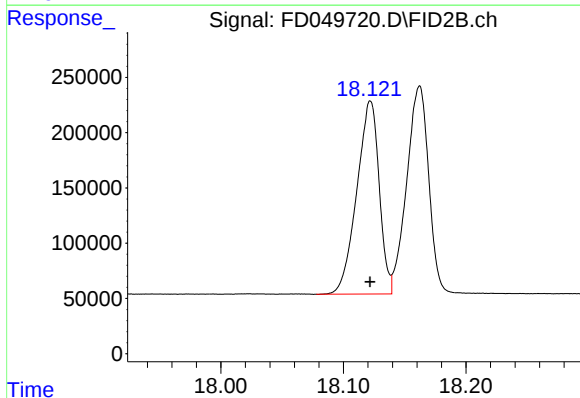
R.T.: 16.411 min
Delta R.T.: 0.000 min
Response: 2286971
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



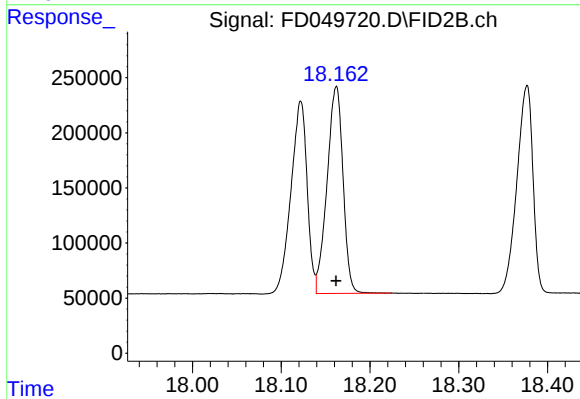
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.758 min
Delta R.T.: 0.000 min
Response: 2382359
Conc: 20.00 ug/ml



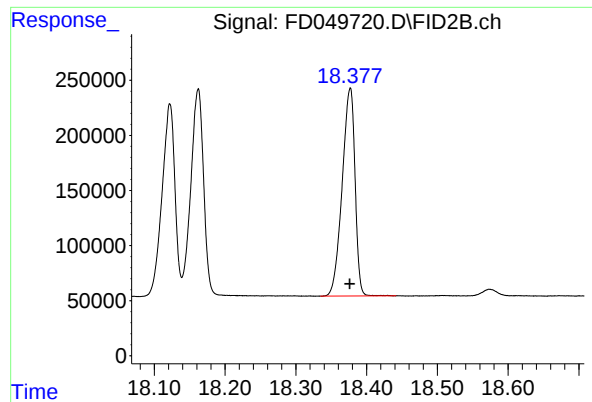
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.122 min
Delta R.T.: 0.000 min
Response: 2216312
Conc: 20.00 ug/ml



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

R.T.: 18.162 min
Delta R.T.: 0.000 min
Response: 2352402
Conc: 20.00 ug/ml



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

R.T.: 18.376 min
Delta R.T.: 0.000 min
Response: 2383649
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
Data File : FD049720.D
Signal(s) : FID2B.ch
Acq On : 04 Sep 2025 10:56
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.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	4.492	4.444	4.531	BV	251006	2152601	75.13%	4.122%
2	6.035	6.001	6.114	BB	275132	2491010	86.94%	4.770%
3	7.090	7.051	7.154	BB	278974	2614218	91.24%	5.006%
4	7.701	7.668	7.754	BB	236508	2254913	78.70%	4.318%
5	8.369	8.334	8.424	BB	285866	2789202	97.35%	5.341%
6	8.565	8.534	8.634	BB	164924	1622343	56.62%	3.107%
7	8.665	8.634	8.728	BB	286084	2790447	97.39%	5.343%
8	9.446	9.411	9.484	BB	279966	2804645	97.89%	5.371%
9	10.845	10.764	10.885	BV	268419	2839318	99.10%	5.437%
10	10.919	10.885	10.984	PB	257528	2682635	93.63%	5.137%
11	11.612	11.564	11.664	BB	265077	2865224	100.00%	5.487%
12	12.659	12.623	12.708	VV	248840	2731115	95.32%	5.230%
13	12.956	12.918	12.991	BV	247991	2698257	94.17%	5.167%
14	14.829	14.711	14.849	BV	201790	2408933	84.07%	4.613%
15	14.870	14.849	14.931	VB	220616	2440531	85.18%	4.673%
16	16.379	16.341	16.395	BV	187779	2415976	84.32%	4.626%
17	16.411	16.395	16.468	VB	201483	2286971	79.82%	4.379%
18	16.758	16.711	16.811	BB	196308	2382359	83.15%	4.562%
19	18.122	18.078	18.139	BV	175224	2216312	77.35%	4.244%
20	18.162	18.139	18.224	VB	187210	2352402	82.10%	4.505%
21	18.376	18.334	18.441	BB	191440	2383649	83.19%	4.564%
Sum of corrected areas:						52223060		

Aromatic EPH 090425.M Fri Sep 05 06:44:21 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
 Data File : FD049721.D
 Signal(s) : FID2B.ch
 Acq On : 04 Sep 2025 11:38
 Operator : YP/AJ
 Sample : 10 PPM AROMATIC HC STD4
 Misc :
 ALS Vial : 64 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 10 PPM AROMATIC HC STD4

Integration File: autoint1.e
 Quant Time: Sep 05 06:21:38 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
 Quant Title : GC Extractables
 QLast Update : Fri Sep 05 06:18:55 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...	7.696	1103950	9.792 ug/ml
Spiked Amount 50.000		Recovery =	19.58%
6) S 2-Fluorobiphenyl (SURR)	8.560	784665	9.673 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	19.35%
11) S ortho-Terphenyl (SURR)	11.607	1399473	9.769 ug/ml
Spiked Amount 50.000		Recovery =	19.54%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.489	1063806	9.884 ug/ml
2) T Naphthalene (C11.7)	6.032	1213442	9.743 ug/ml
3) T 2-Methylnaphthalene (...)	7.085	1271229	9.725 ug/ml
5) T Acenaphthylene (C15.06)	8.364	1364366	9.783 ug/ml
7) T Acenaphthene (C15.5)	8.659	1365728	9.789 ug/ml
8) T Flouorene (C16.55)	9.441	1362341	9.715 ug/ml
9) T Phenanthrene (C19.36)	10.839	1363521	9.605 ug/ml
10) T Anthracene (C19.43)	10.913	1291559	9.629 ug/ml
12) T Fluoranthene (C21.85)	12.652	1306755	9.569 ug/ml
13) T Pyrene (C20.8)	12.949	1298472	9.625 ug/ml
14) T Benzo[a]anthracene (C...	14.821	1173101	9.740 ug/ml
15) T Chrysene (C27.41)	14.863	1194158	9.786 ug/ml
16) T benzo[b]fluoranthene ...	16.371	1196416	9.904 ug/ml
17) T Bnezo[k]fluoranthene ...	16.403	1135613	9.931 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.750	1175249	9.866 ug/ml
19) T Indeno[1,2,3-cd]pyren...	18.113	1079787	9.744 ug/ml
20) T Dibenz[a,h]anthracene...	18.154	1161284	9.873 ug/ml
21) T Benzo[g,h,i]perylene ...	18.366	1177944	9.884 ug/ml

(f)=RT Delta > 1/2 Window

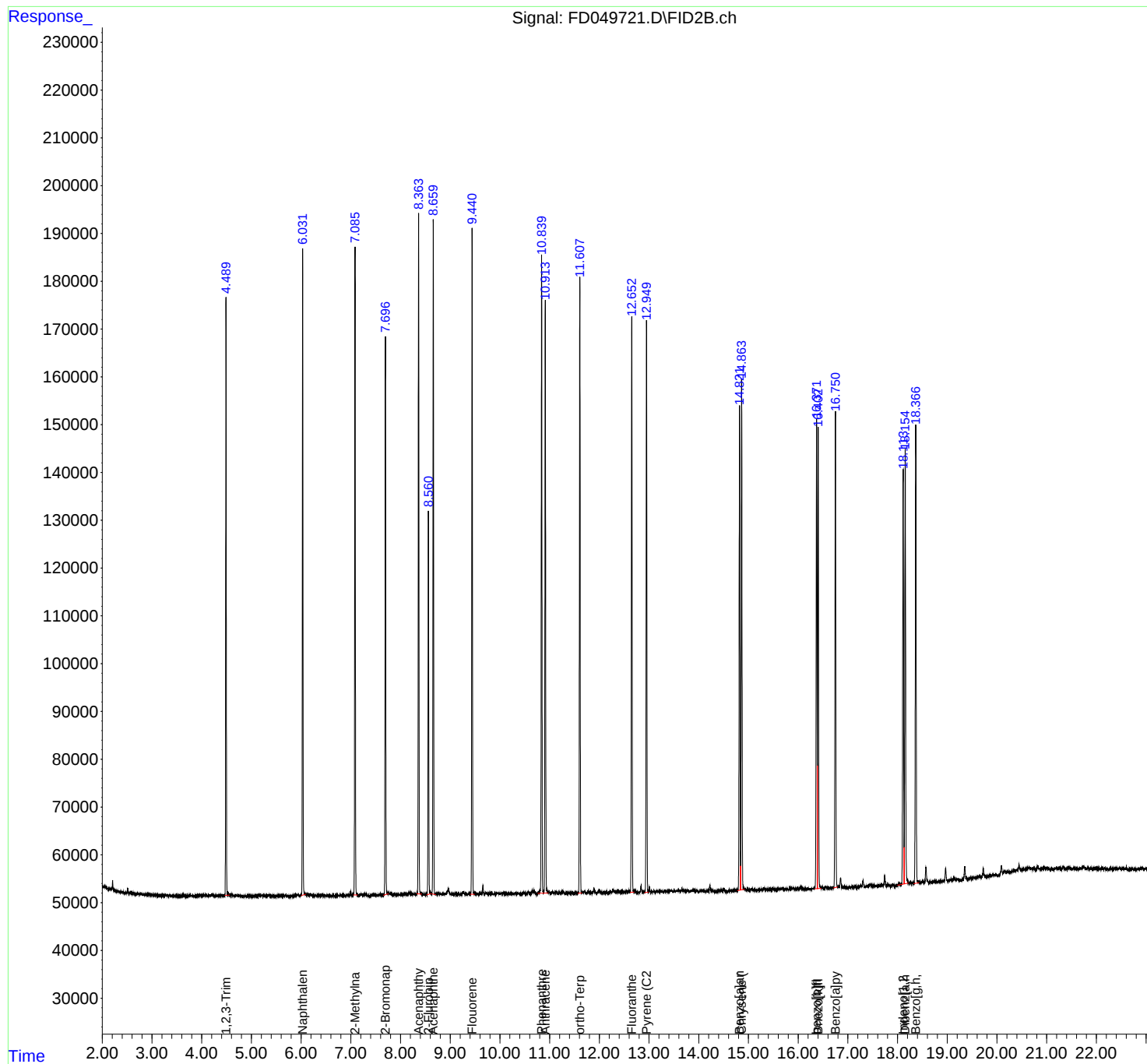
(m)=manual int.

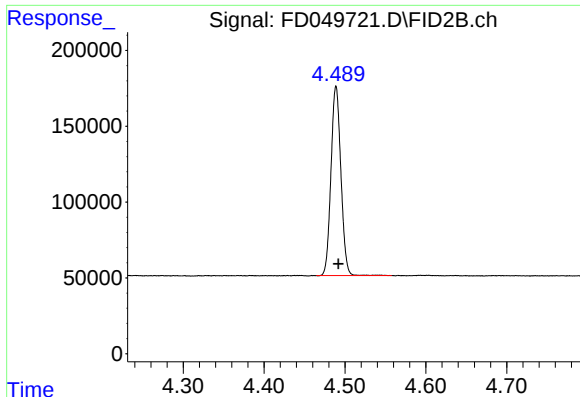
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
Data File : FD049721.D
Signal(s) : FID2B.ch
Acq On : 04 Sep 2025 11:38
Operator : YP/AJ
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 64 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

Integration File: autoint1.e
Quant Time: Sep 05 06:21:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
Quant Title : GC Extractables
QLast Update : Fri Sep 05 06:18:55 2025
Response via : Initial Calibration
Integrator: ChemStation

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

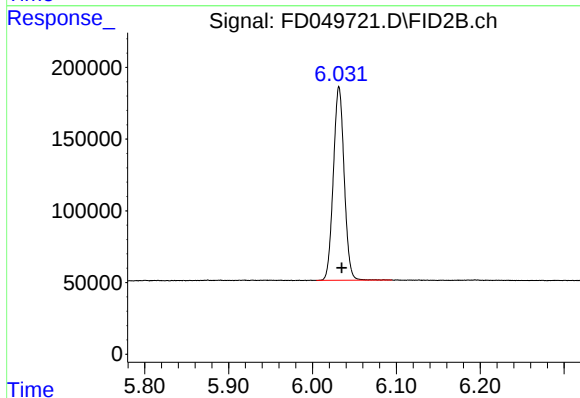




#1 1,2,3-Trimethylbenzene (C10.1)

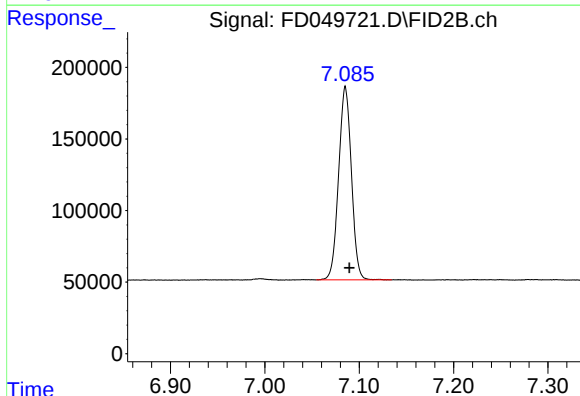
R.T.: 4.489 min
Delta R.T.: -0.003 min
Response: 1063806
Conc: 9.88 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



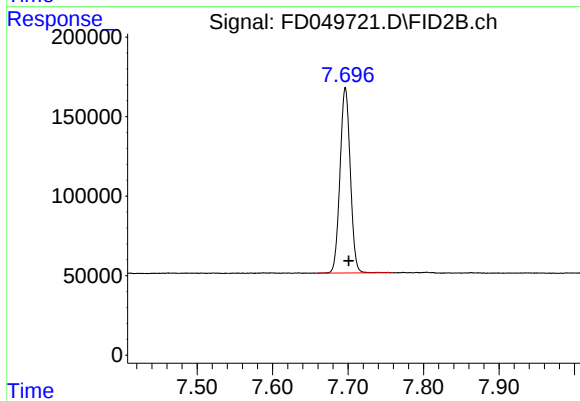
#2 Naphthalene (C11.7)

R.T.: 6.032 min
Delta R.T.: -0.004 min
Response: 1213442
Conc: 9.74 ug/ml



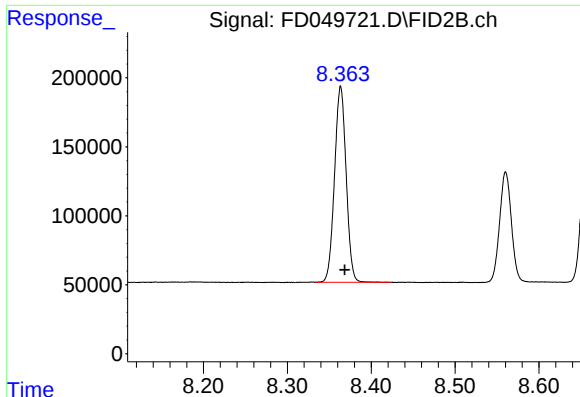
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.085 min
Delta R.T.: -0.004 min
Response: 1271229
Conc: 9.73 ug/ml



#4 2-Bromonaphthalene (SURR)

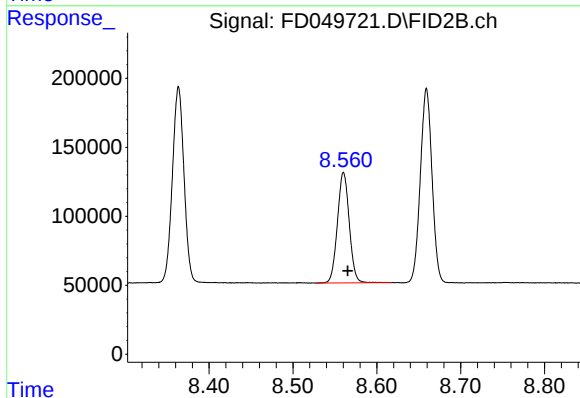
R.T.: 7.696 min
Delta R.T.: -0.004 min
Response: 1103950
Conc: 9.79 ug/ml



#5 Acenaphthylene (C15.06)

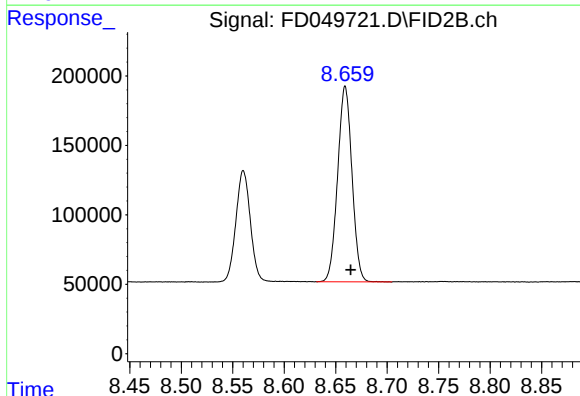
R.T.: 8.364 min
Delta R.T.: -0.005 min
Response: 1364366
Conc: 9.78 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



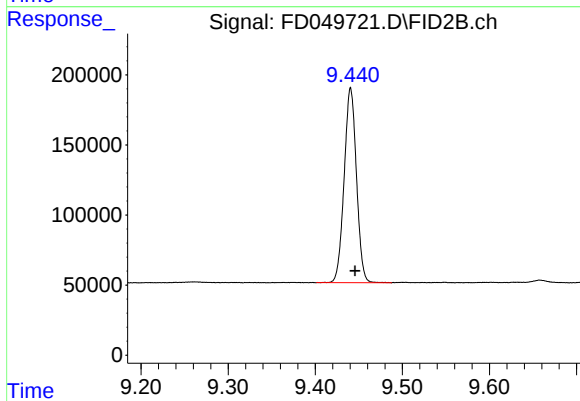
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.560 min
Delta R.T.: -0.005 min
Response: 784665
Conc: 9.67 ug/ml



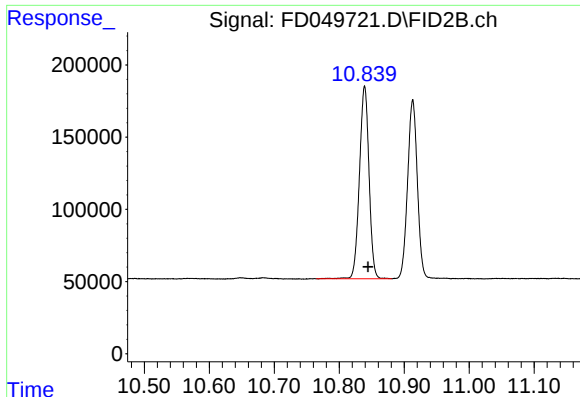
#7 Acenaphthene (C15.5)

R.T.: 8.659 min
Delta R.T.: -0.005 min
Response: 1365728
Conc: 9.79 ug/ml



#8 Fluorene (C16.55)

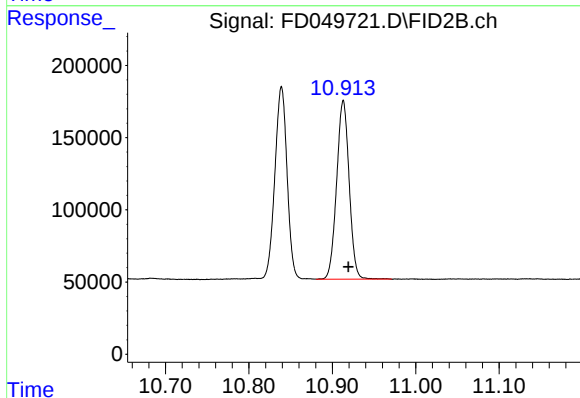
R.T.: 9.441 min
Delta R.T.: -0.005 min
Response: 1362341
Conc: 9.71 ug/ml



#9 Phenanthrene (C19.36)

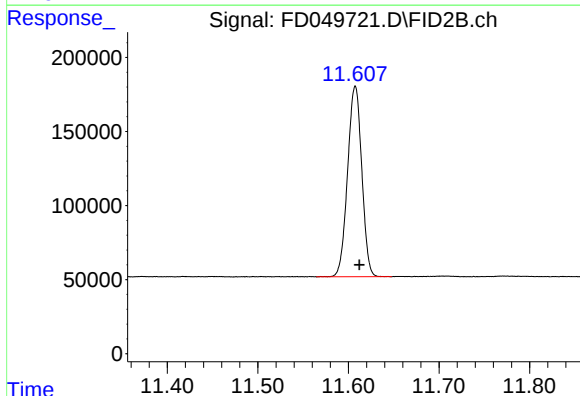
R.T.: 10.839 min
Delta R.T.: -0.006 min
Response: 1363521
Conc: 9.60 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



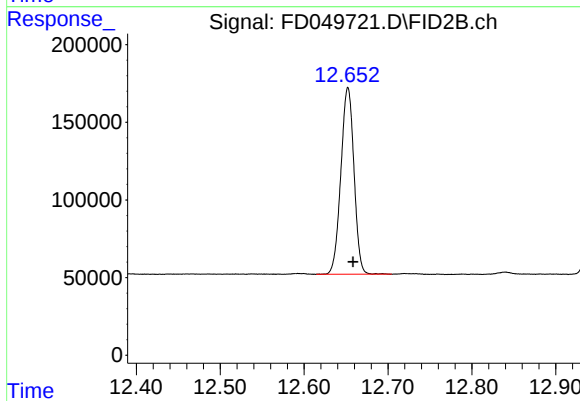
#10 Anthracene (C19.43)

R.T.: 10.913 min
Delta R.T.: -0.006 min
Response: 1291559
Conc: 9.63 ug/ml



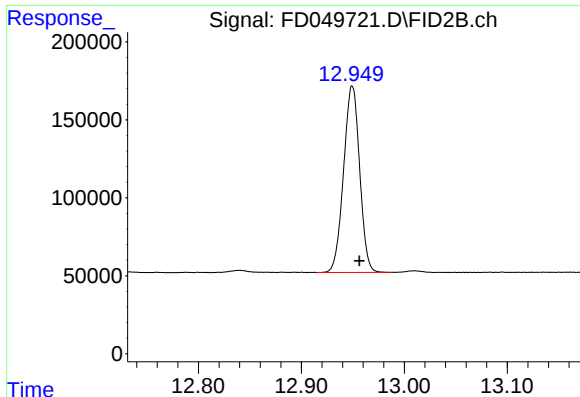
#11 ortho-Terphenyl (SURR)

R.T.: 11.607 min
Delta R.T.: -0.005 min
Response: 1399473
Conc: 9.77 ug/ml



#12 Fluoranthene (C21.85)

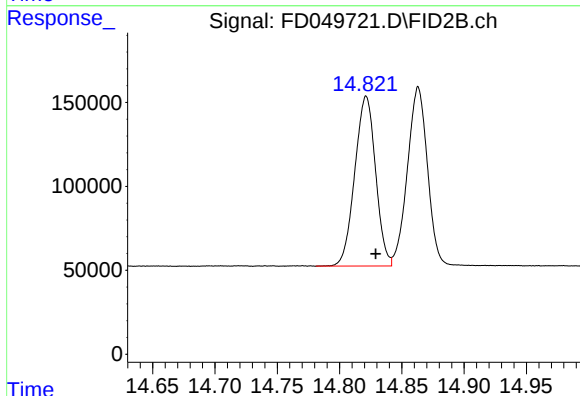
R.T.: 12.652 min
Delta R.T.: -0.006 min
Response: 1306755
Conc: 9.57 ug/ml



#13 Pyrene (C20.8)

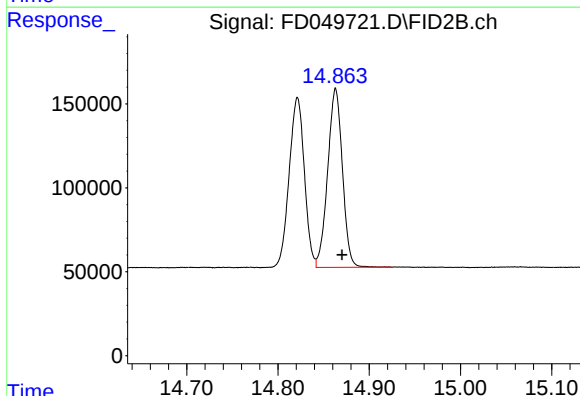
R.T.: 12.949 min
Delta R.T.: -0.007 min
Response: 1298472
Conc: 9.62 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



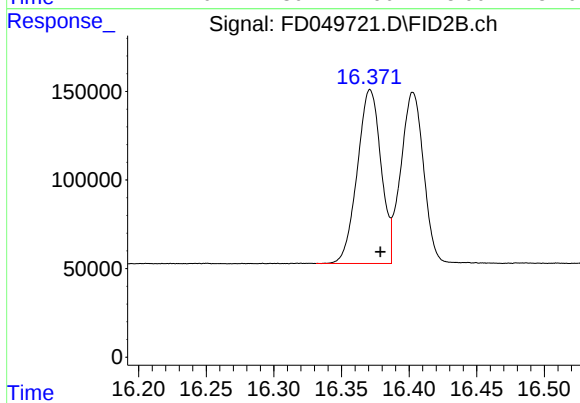
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.821 min
Delta R.T.: -0.008 min
Response: 1173101
Conc: 9.74 ug/ml



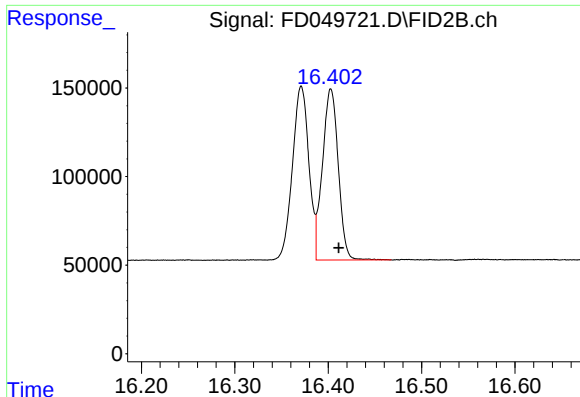
#15 Chrysene (C27.41)

R.T.: 14.863 min
Delta R.T.: -0.007 min
Response: 1194158
Conc: 9.79 ug/ml



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

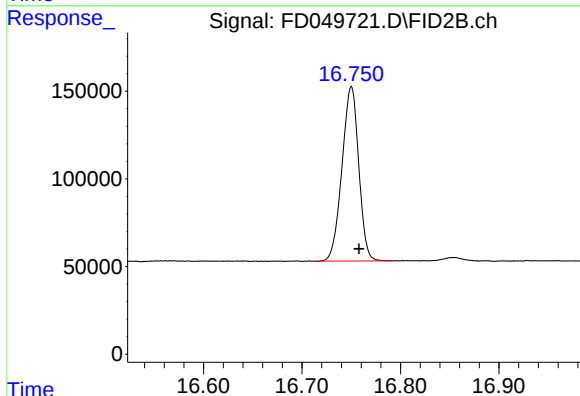
R.T.: 16.371 min
Delta R.T.: -0.008 min
Response: 1196416
Conc: 9.90 ug/ml



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

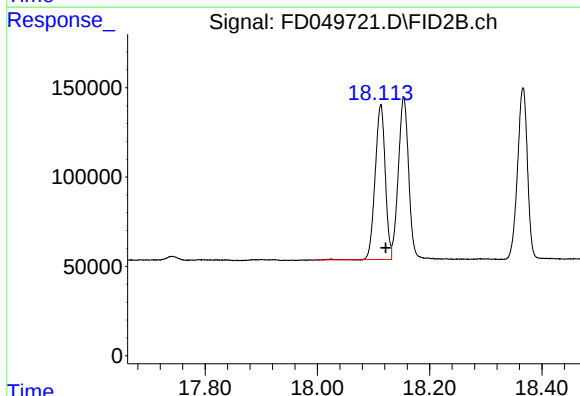
R.T.: 16.403 min
Delta R.T.: -0.009 min
Response: 1135613
Conc: 9.93 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



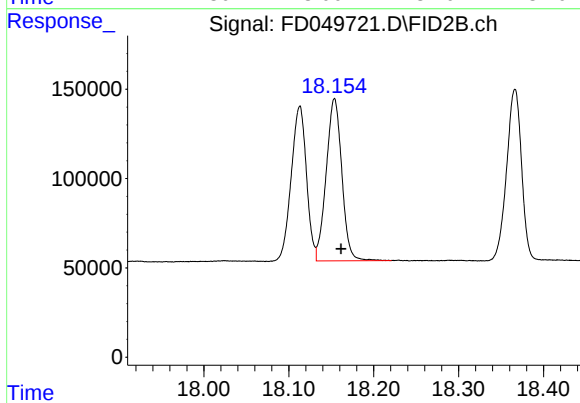
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.750 min
Delta R.T.: -0.008 min
Response: 1175249
Conc: 9.87 ug/ml



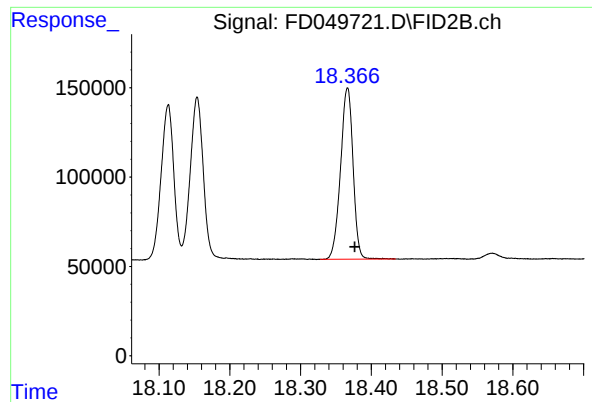
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.113 min
Delta R.T.: -0.009 min
Response: 1079787
Conc: 9.74 ug/ml



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

R.T.: 18.154 min
Delta R.T.: -0.008 min
Response: 1161284
Conc: 9.87 ug/ml



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

R.T.: 18.366 min
Delta R.T.: -0.010 min
Response: 1177944
Conc: 9.88 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
Data File : FD049721.D
Signal(s) : FID2B.ch
Acq On : 04 Sep 2025 11:38
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.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	4.489	4.464	4.558	BB	124181	1063806	76.01%	4.175%
2	6.032	6.004	6.094	BB	134532	1213442	86.71%	4.762%
3	7.085	7.054	7.134	BB	134163	1271229	90.84%	4.989%
4	7.696	7.658	7.758	BB	115807	1103950	78.88%	4.332%
5	8.364	8.334	8.424	BB	141863	1364366	97.49%	5.354%
6	8.560	8.528	8.618	BB	79804	784665	56.07%	3.079%
7	8.659	8.631	8.704	BB	139440	1365728	97.59%	5.359%
8	9.441	9.401	9.488	BB	138561	1362341	97.35%	5.346%
9	10.839	10.764	10.881	BV	132485	1363521	97.43%	5.351%
10	10.913	10.881	10.971	PB	123326	1291559	92.29%	5.068%
11	11.607	11.564	11.648	BB	128777	1399473	100.00%	5.492%
12	12.652	12.614	12.704	BV	119940	1306755	93.37%	5.128%
13	12.949	12.914	12.988	BV	119411	1298472	92.78%	5.095%
14	14.821	14.781	14.842	BV	101155	1173101	83.82%	4.603%
15	14.863	14.842	14.924	VB	106138	1194158	85.33%	4.686%
16	16.371	16.331	16.387	BV	98180	1196416	85.49%	4.695%
17	16.403	16.387	16.468	VB	96574	1135613	81.15%	4.456%
18	16.750	16.714	16.791	BB	99992	1175249	83.98%	4.612%
19	18.113	17.998	18.132	BV	87120	1079787	77.16%	4.237%
20	18.154	18.132	18.221	VB	90851	1161284	82.98%	4.557%
21	18.366	18.328	18.434	BB	96607	1177944	84.17%	4.622%
Sum of corrected areas:						25482857		

Aromatic EPH 090425.M Fri Sep 05 06:44:37 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
 Data File : FD049722.D
 Signal(s) : FID2B.ch
 Acq On : 04 Sep 2025 12:19
 Operator : YP/AJ
 Sample : 5 PPM AROMATIC HC STD5
 Misc :
 ALS Vial : 65 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 5 PPM AROMATIC HC STD5

Integration File: autoint1.e
 Quant Time: Sep 05 06:22:02 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
 Quant Title : GC Extractables
 QLast Update : Fri Sep 05 06:18:55 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...	7.697	596288	5.289 ug/ml
Spiked Amount 50.000		Recovery =	10.58%
6) S 2-Fluorobiphenyl (SURR)	8.561	420895	5.189 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	10.38%
11) S ortho-Terphenyl (SURR)	11.607	762216	5.320 ug/ml
Spiked Amount 50.000		Recovery =	10.64%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.489	591988	5.500 ug/ml
2) T Naphthalene (C11.7)	6.032	667521	5.359 ug/ml
3) T 2-Methylnaphthalene (...)	7.086	692097	5.295 ug/ml
5) T Acenaphthylene (C15.06)	8.364	742304	5.323 ug/ml
7) T Acenaphthene (C15.5)	8.659	740977	5.311 ug/ml
8) T Flouorene (C16.55)	9.441	735487	5.245 ug/ml
9) T Phenanthrene (C19.36)	10.838	722864	5.092 ug/ml
10) T Anthracene (C19.43)	10.913	692408	5.162 ug/ml
12) T Fluoranthene (C21.85)	12.652	709917	5.199 ug/ml
13) T Pyrene (C20.8)	12.949	695929	5.158 ug/ml
14) T Benzo[a]anthracene (C...	14.821	637941	5.296 ug/ml
15) T Chrysene (C27.41)	14.862	661550	5.421 ug/ml
16) T benzo[b]fluoranthene ...	16.370	653575	5.410 ug/ml
17) T Bnezo[k]fluoranthene ...	16.401	620851	5.429 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.748	644952	5.414 ug/ml
19) T Indeno[1,2,3-cd]pyren...	18.111	584175	5.272 ug/ml
20) T Dibenz[a,h]anthracene...	18.152	643201	5.468 ug/ml
21) T Benzo[g,h,i]perylene ...	18.364	635196	5.330 ug/ml

(f)=RT Delta > 1/2 Window

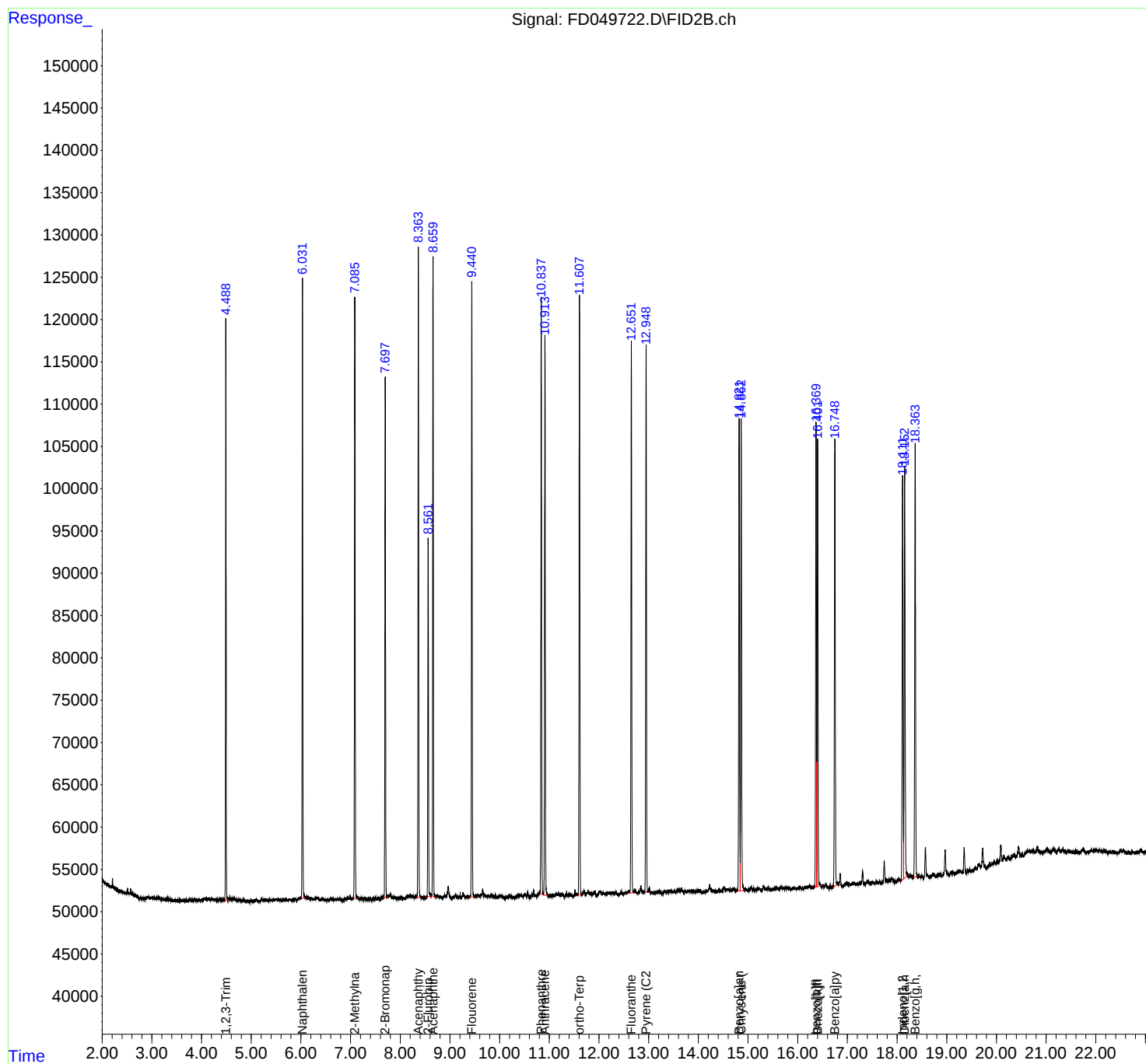
(m)=manual int.

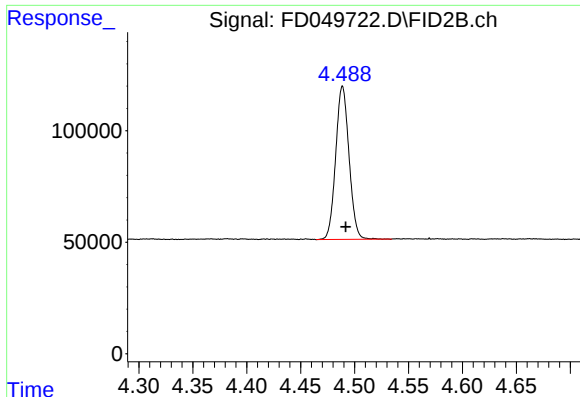
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
Data File : FD049722.D
Signal(s) : FID2B.ch
Acq On : 04 Sep 2025 12:19
Operator : YP/AJ
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 65 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

Integration File: autoint1.e
Quant Time: Sep 05 06:22:02 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
Quant Title : GC Extractables
QLast Update : Fri Sep 05 06:18:55 2025
Response via : Initial Calibration
Integrator: ChemStation

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

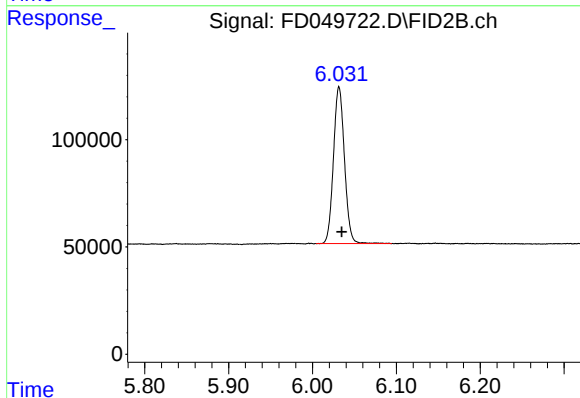




#1 1,2,3-Trimethylbenzene (C10.1)

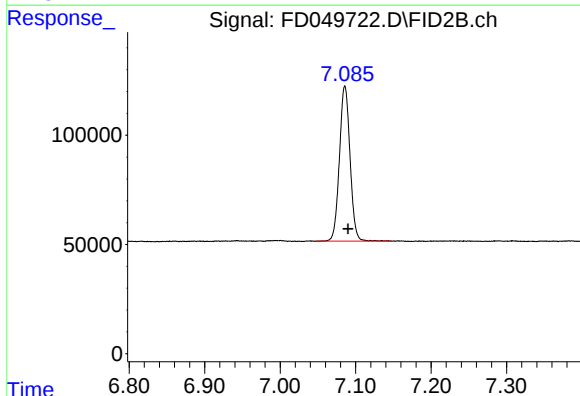
R.T.: 4.489 min
Delta R.T.: -0.003 min
Response: 591988
Conc: 5.50 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



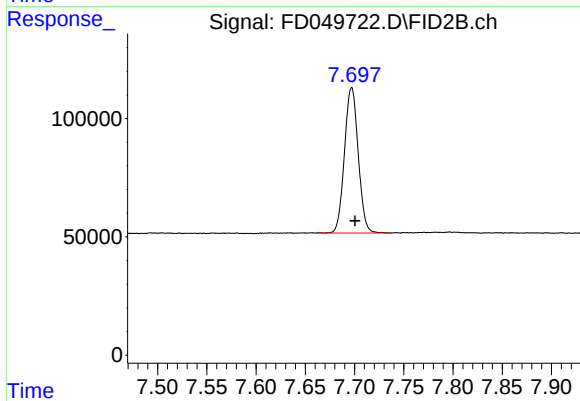
#2 Naphthalene (C11.7)

R.T.: 6.032 min
Delta R.T.: -0.003 min
Response: 667521
Conc: 5.36 ug/ml



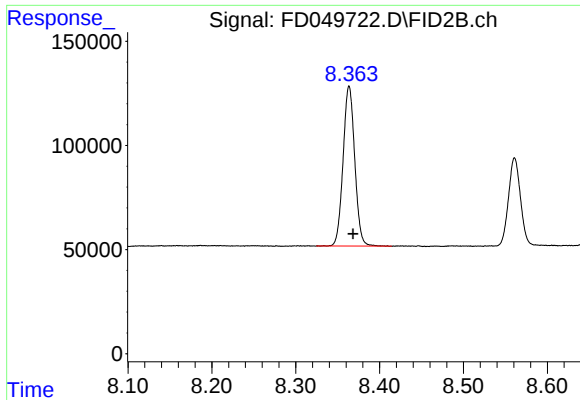
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.086 min
Delta R.T.: -0.004 min
Response: 692097
Conc: 5.29 ug/ml



#4 2-Bromonaphthalene (SURR)

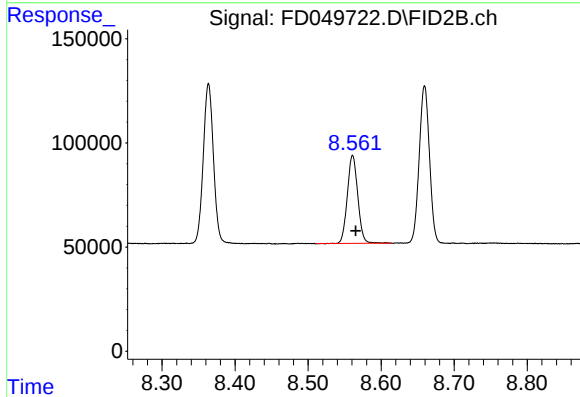
R.T.: 7.697 min
Delta R.T.: -0.004 min
Response: 596288
Conc: 5.29 ug/ml



#5 Acenaphthylene (C15.06)

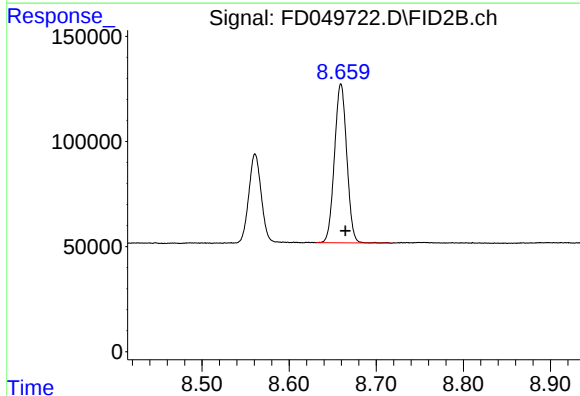
R.T.: 8.364 min
Delta R.T.: -0.005 min
Response: 742304
Conc: 5.32 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



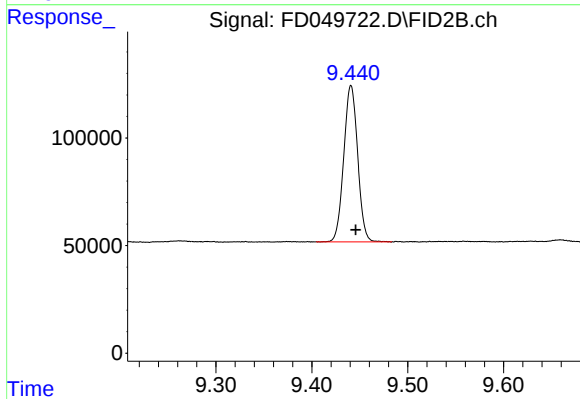
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.561 min
Delta R.T.: -0.004 min
Response: 420895
Conc: 5.19 ug/ml



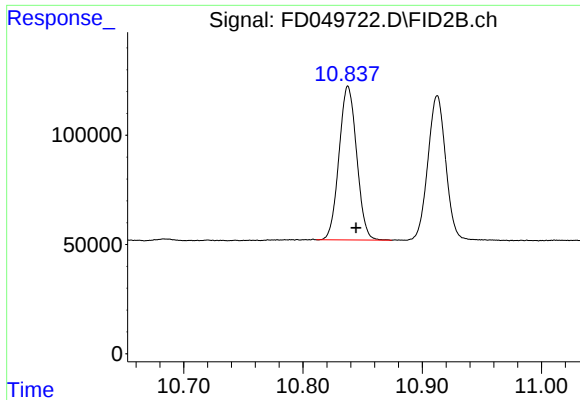
#7 Acenaphthene (C15.5)

R.T.: 8.659 min
Delta R.T.: -0.005 min
Response: 740977
Conc: 5.31 ug/ml



#8 Fluorene (C16.55)

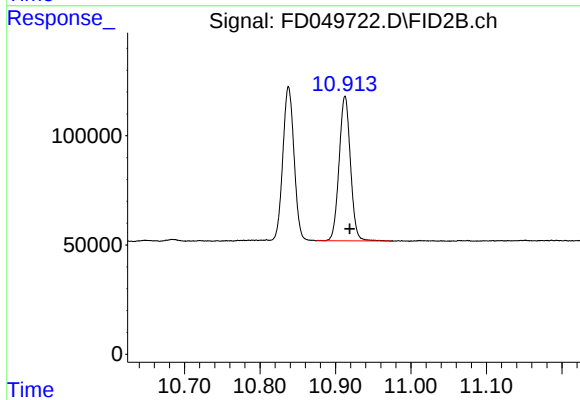
R.T.: 9.441 min
Delta R.T.: -0.005 min
Response: 735487
Conc: 5.24 ug/ml



#9 Phenanthrene (C19.36)

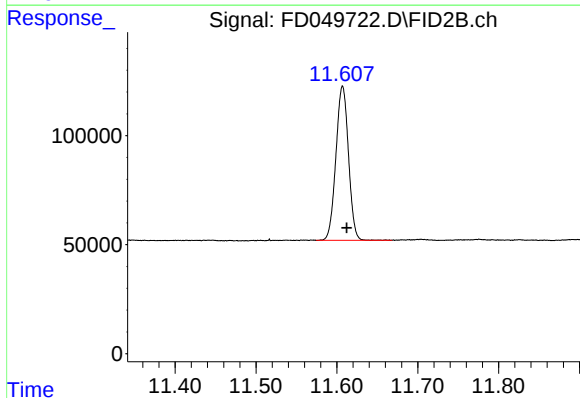
R.T.: 10.838 min
Delta R.T.: -0.007 min
Response: 722864
Conc: 5.09 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



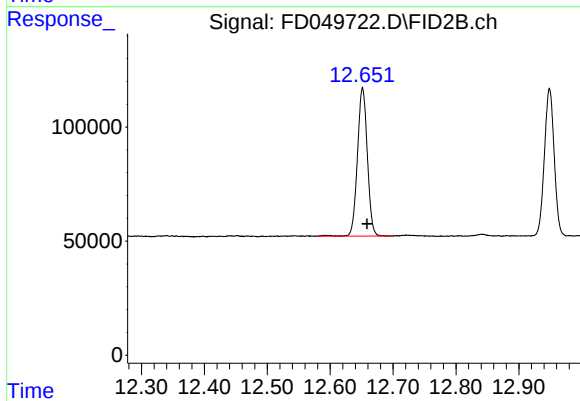
#10 Anthracene (C19.43)

R.T.: 10.913 min
Delta R.T.: -0.007 min
Response: 692408
Conc: 5.16 ug/ml



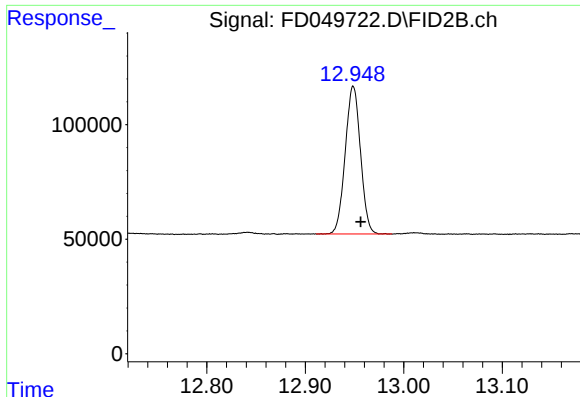
#11 ortho-Terphenyl (SURR)

R.T.: 11.607 min
Delta R.T.: -0.005 min
Response: 762216
Conc: 5.32 ug/ml



#12 Fluoranthene (C21.85)

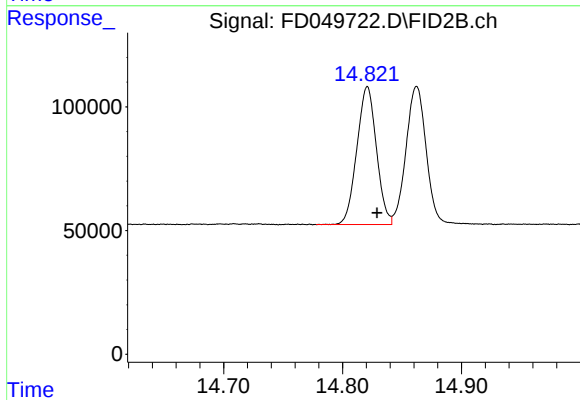
R.T.: 12.652 min
Delta R.T.: -0.007 min
Response: 709917
Conc: 5.20 ug/ml



#13 Pyrene (C20.8)

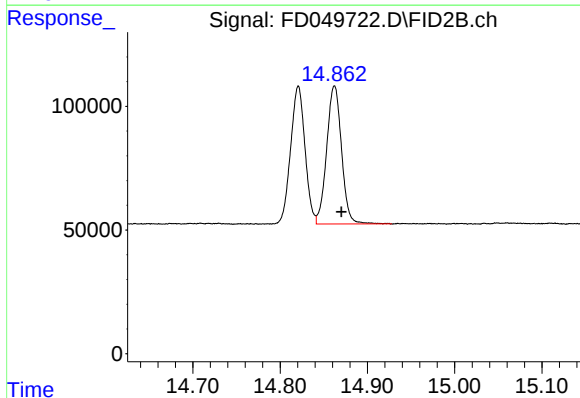
R.T.: 12.949 min
Delta R.T.: -0.008 min
Response: 695929
Conc: 5.16 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



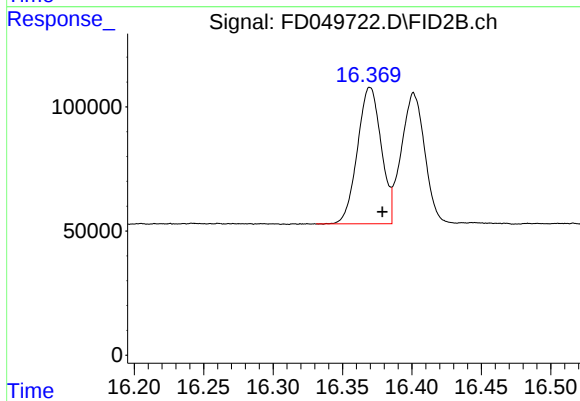
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.821 min
Delta R.T.: -0.008 min
Response: 637941
Conc: 5.30 ug/ml



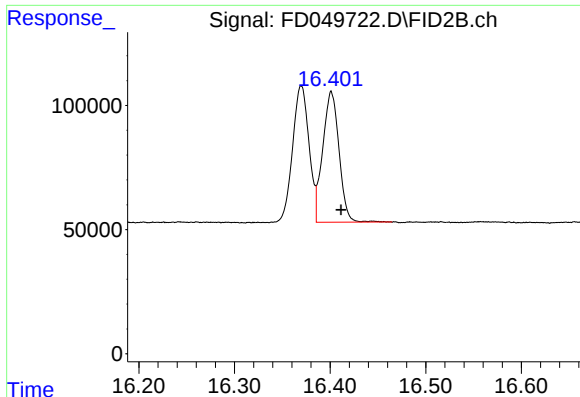
#15 Chrysene (C27.41)

R.T.: 14.862 min
Delta R.T.: -0.008 min
Response: 661550
Conc: 5.42 ug/ml



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

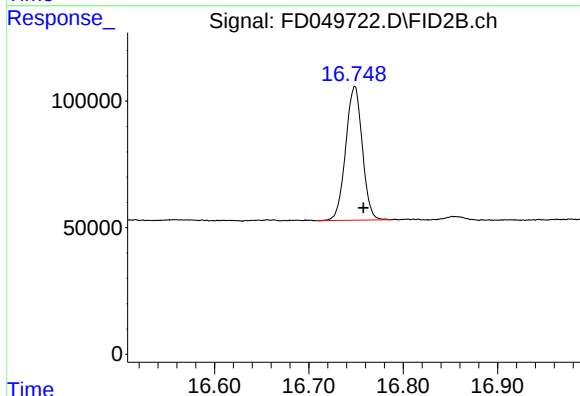
R.T.: 16.370 min
Delta R.T.: -0.009 min
Response: 653575
Conc: 5.41 ug/ml



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

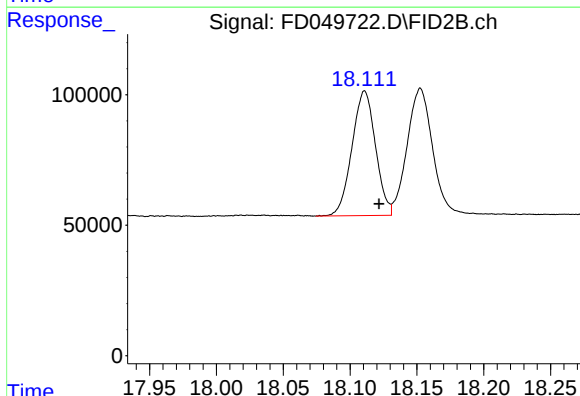
R.T.: 16.401 min
Delta R.T.: -0.010 min
Response: 620851
Conc: 5.43 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



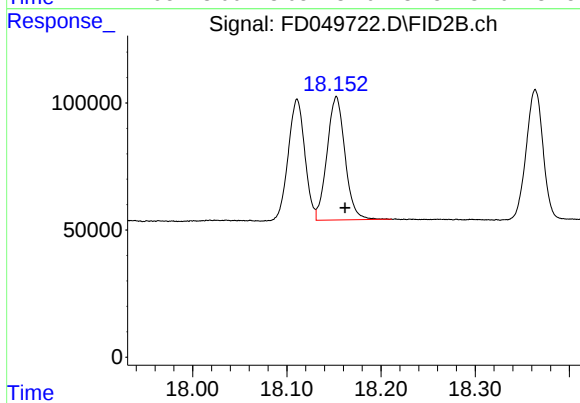
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.748 min
Delta R.T.: -0.010 min
Response: 644952
Conc: 5.41 ug/ml



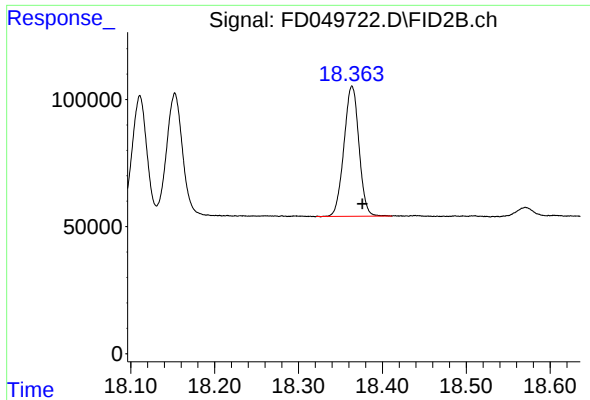
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.111 min
Delta R.T.: -0.011 min
Response: 584175
Conc: 5.27 ug/ml



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

R.T.: 18.152 min
Delta R.T.: -0.009 min
Response: 643201
Conc: 5.47 ug/ml



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

R.T.: 18.364 min
Delta R.T.: -0.013 min
Response: 635196
Conc: 5.33 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
Data File : FD049722.D
Signal(s) : FID2B.ch
Acq On : 04 Sep 2025 12:19
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.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	4.489	4.464	4.534	BB	68364	591988	77.67%	4.274%
2	6.032	6.004	6.094	BB	72868	667521	87.58%	4.819%
3	7.086	7.048	7.148	BB	70940	692097	90.80%	4.996%
4	7.697	7.661	7.738	BB	61552	596288	78.23%	4.305%
5	8.364	8.324	8.414	BB	76666	742304	97.39%	5.359%
6	8.561	8.511	8.614	BB	42276	420895	55.22%	3.038%
7	8.659	8.631	8.718	BB	75382	740977	97.21%	5.349%
8	9.441	9.404	9.483	BB	72685	735487	96.49%	5.309%
9	10.838	10.811	10.874	BV	70347	722864	94.84%	5.218%
10	10.913	10.874	10.974	PB	65896	692408	90.84%	4.998%
11	11.607	11.574	11.668	BB	70704	762216	100.00%	5.502%
12	12.652	12.578	12.698	BV	64853	709917	93.14%	5.125%
13	12.949	12.911	12.988	BV	64502	695929	91.30%	5.024%
14	14.821	14.778	14.841	BV	55846	637941	83.70%	4.605%
15	14.862	14.841	14.928	VB	55811	661550	86.79%	4.776%
16	16.370	16.331	16.386	BV	55126	653575	85.75%	4.718%
17	16.401	16.386	16.464	VB	52548	620851	81.45%	4.482%
18	16.748	16.708	16.788	BB	52614	644952	84.62%	4.656%
19	18.111	18.074	18.131	BV	47841	584175	76.64%	4.217%
20	18.152	18.131	18.211	VB	48113	643201	84.39%	4.643%
21	18.364	18.321	18.411	BB	51167	635196	83.34%	4.585%
Sum of corrected areas:						13852330		

Aromatic EPH 090425.M Fri Sep 05 06:44:54 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
 Data File : FD049723.D
 Signal(s) : FID2B.ch
 Acq On : 04 Sep 2025 13:00
 Operator : YP/AJ
 Sample : 20 PPM AROMATIC HC STD ICV
 Misc :
 ALS Vial : 66 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 20 PPM AROMATIC HC STD ICV

Integration File: autoint1.e
 Quant Time: Sep 05 06:33:19 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
 Quant Title : GC Extractables
 QLast Update : Fri Sep 05 06:31:58 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...	7.697	2231641	19.843 ug/ml
Spiked Amount 50.000		Recovery =	39.69%
6) S 2-Fluorobiphenyl (SURR)	8.562	1599409	19.925 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	39.85%
11) S ortho-Terphenyl (SURR)	11.609	2804214	19.820 ug/ml
Spiked Amount 50.000		Recovery =	39.64%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.487	2140546	19.865 ug/ml
2) T Naphthalene (C11.7)	6.031	2479492	19.938 ug/ml
3) T 2-Methylnaphthalene (...)	7.086	2596693	19.924 ug/ml
5) T Acenaphthylene (C15.06)	8.365	2749499	19.832 ug/ml
7) T Acenaphthene (C15.5)	8.661	2751173	19.846 ug/ml
8) T Flouorene (C16.55)	9.442	2761041	19.905 ug/ml
9) T Phenanthrene (C19.36)	10.840	2765682	19.854 ug/ml
10) T Anthracene (C19.43)	10.915	2617228	19.821 ug/ml
12) T Fluoranthene (C21.85)	12.655	2654106	19.708 ug/ml
13) T Pyrene (C20.8)	12.952	2629491	19.767 ug/ml
14) T Benzo[a]anthracene (C...	14.824	2340110	19.569 ug/ml
15) T Chrysene (C27.41)	14.867	2375059	19.523 ug/ml
16) T benzo[b]fluoranthene ...	16.375	2350033	19.605 ug/ml
17) T Bnezo[k]fluoranthene ...	16.407	2218226	19.687 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.754	2314710	19.725 ug/ml
19) T Indeno[1,2,3-cd]pyren...	18.117	2138000	19.652 ug/ml
20) T Dibenz[a,h]anthracene...	18.158	2236318	19.626 ug/ml
21) T Benzo[g,h,i]perylene ...	18.373	2303694	19.798 ug/ml

(f)=RT Delta > 1/2 Window

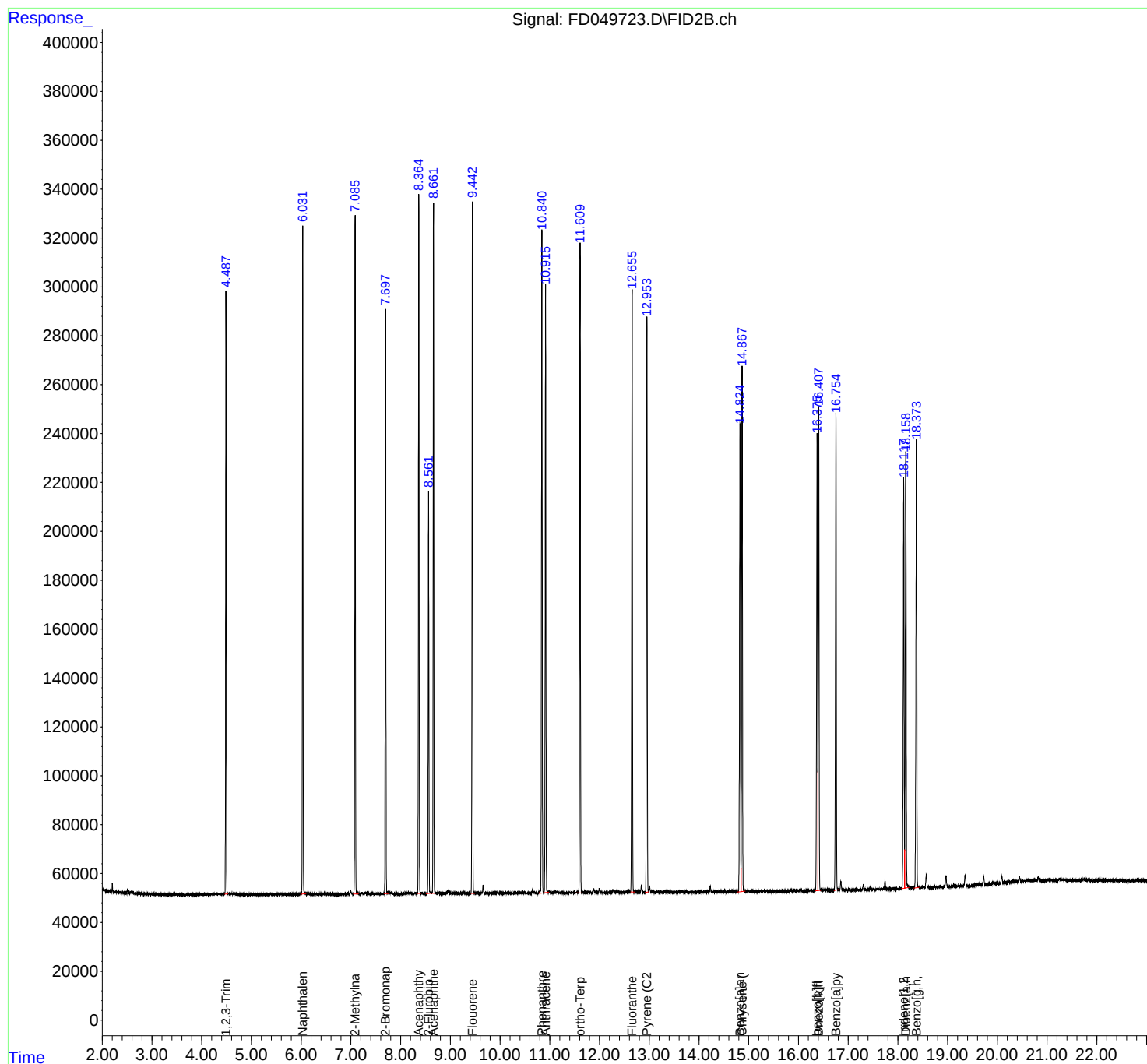
(m)=manual int.

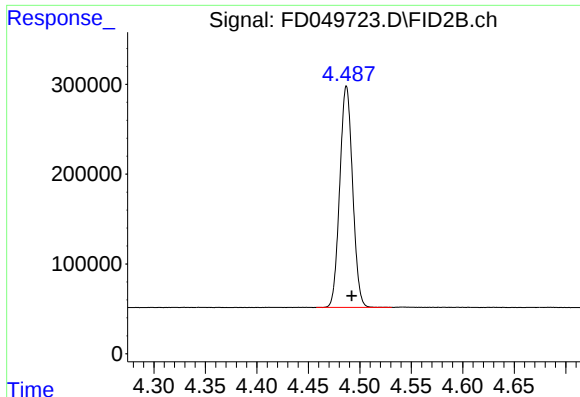
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
Data File : FD049723.D
Signal(s) : FID2B.ch
Acq On : 04 Sep 2025 13:00
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 66 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Sep 05 06:33:19 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
Quant Title : GC Extractables
QLast Update : Fri Sep 05 06:31:58 2025
Response via : Initial Calibration
Integrator: ChemStation

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

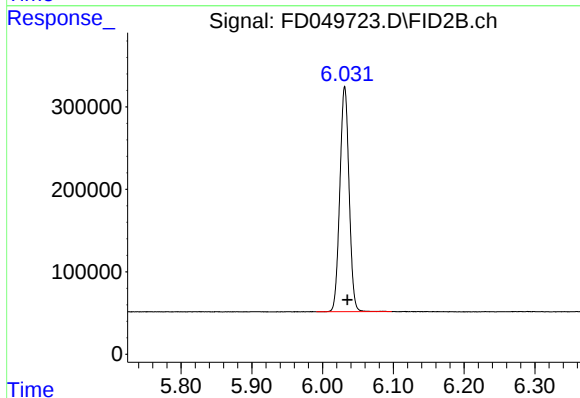




#1 1,2,3-Trimethylbenzene (C10.1)

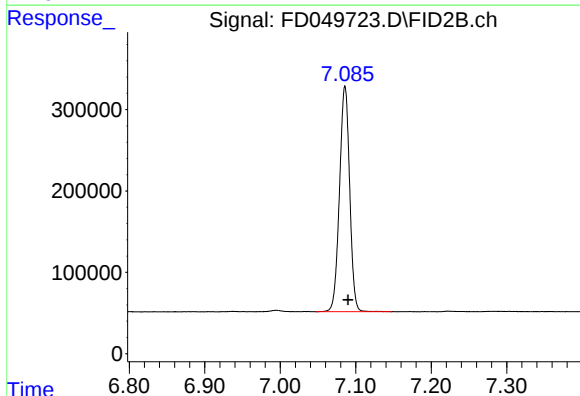
R.T.: 4.487 min
Delta R.T.: -0.005 min
Response: 2140546
Conc: 19.87 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



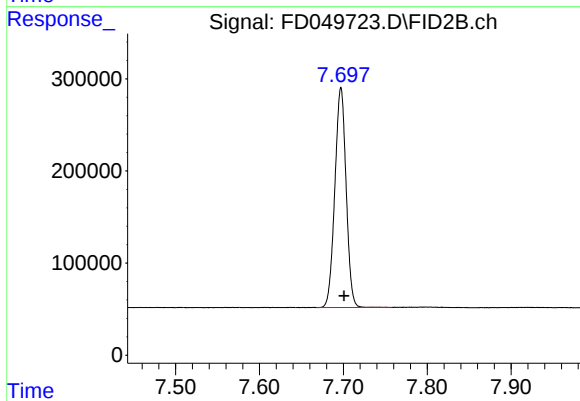
#2 Naphthalene (C11.7)

R.T.: 6.031 min
Delta R.T.: -0.004 min
Response: 2479492
Conc: 19.94 ug/ml



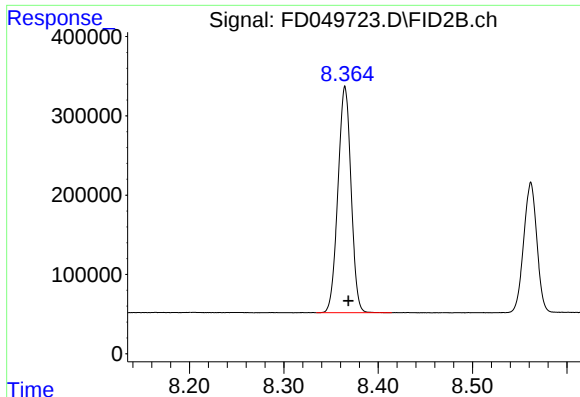
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.086 min
Delta R.T.: -0.004 min
Response: 2596693
Conc: 19.92 ug/ml



#4 2-Bromonaphthalene (SURR)

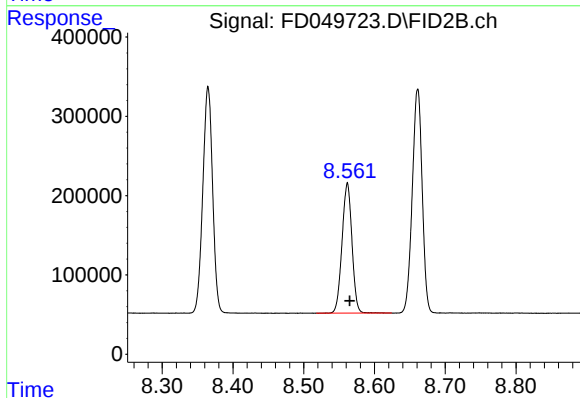
R.T.: 7.697 min
Delta R.T.: -0.004 min
Response: 2231641
Conc: 19.84 ug/ml



#5 Acenaphthylene (C15.06)

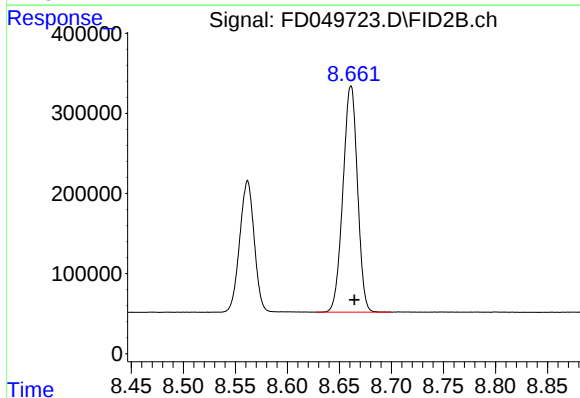
R.T.: 8.365 min
Delta R.T.: -0.004 min
Response: 2749499
Conc: 19.83 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



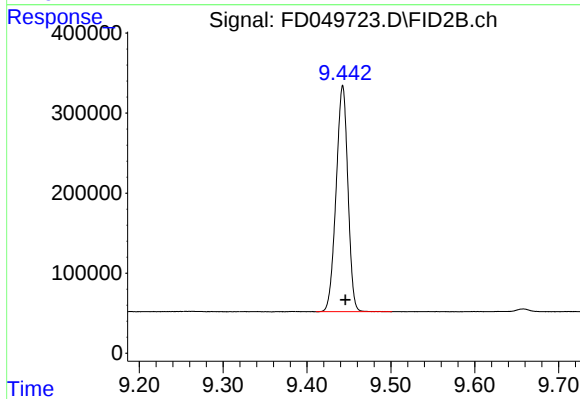
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.562 min
Delta R.T.: -0.004 min
Response: 1599409
Conc: 19.93 ug/ml



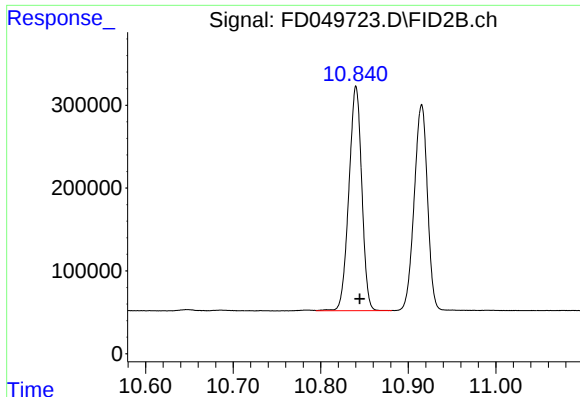
#7 Acenaphthene (C15.5)

R.T.: 8.661 min
Delta R.T.: -0.004 min
Response: 2751173
Conc: 19.85 ug/ml



#8 Fluorene (C16.55)

R.T.: 9.442 min
Delta R.T.: -0.003 min
Response: 2761041
Conc: 19.90 ug/ml



#9 Phenanthrene (C19.36)

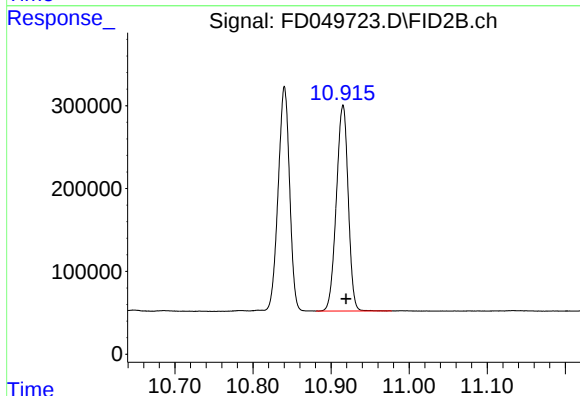
R.T.: 10.840 min
Delta R.T.: -0.004 min
Response: 2765682
Conc: 19.85 ug/ml

Instrument :

FID_D

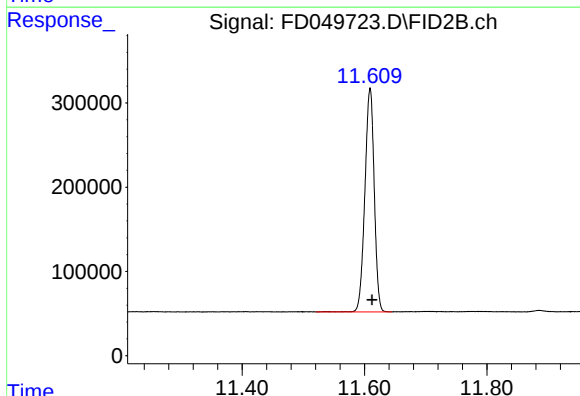
ClientSampleId :

20 PPM AROMATIC HC STD ICV



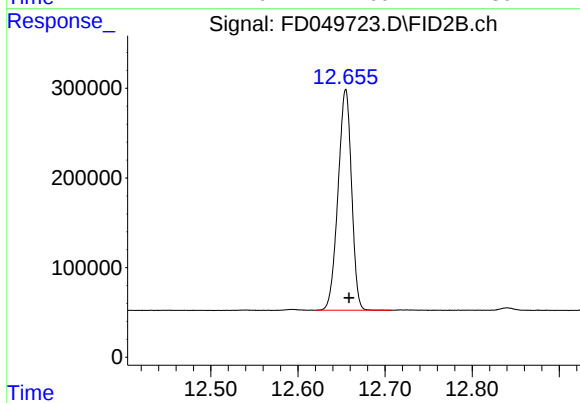
#10 Anthracene (C19.43)

R.T.: 10.915 min
Delta R.T.: -0.004 min
Response: 2617228
Conc: 19.82 ug/ml



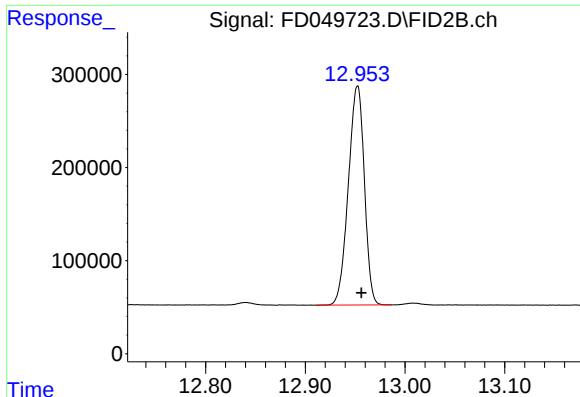
#11 ortho-Terphenyl (SURR)

R.T.: 11.609 min
Delta R.T.: -0.003 min
Response: 2804214
Conc: 19.82 ug/ml



#12 Fluoranthene (C21.85)

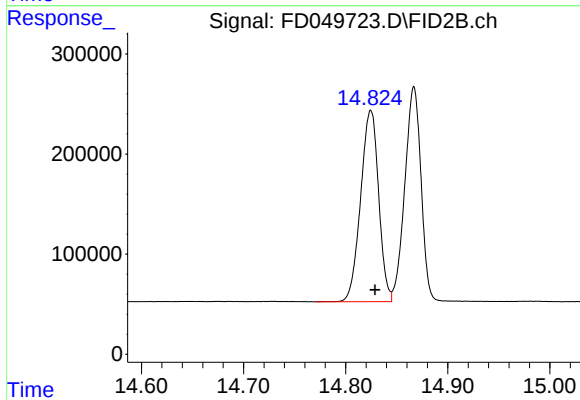
R.T.: 12.655 min
Delta R.T.: -0.004 min
Response: 2654106
Conc: 19.71 ug/ml



#13 Pyrene (C20.8)

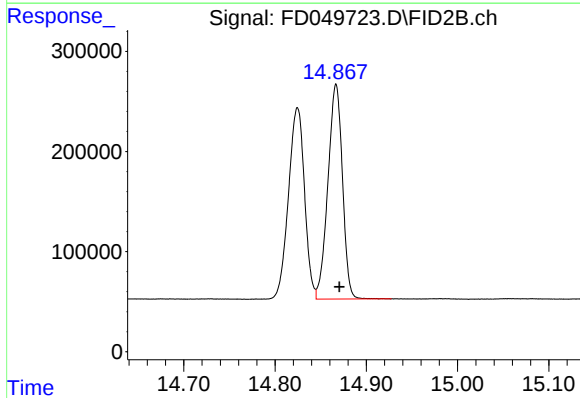
R.T.: 12.952 min
Delta R.T.: -0.004 min
Response: 2629491
Conc: 19.77 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



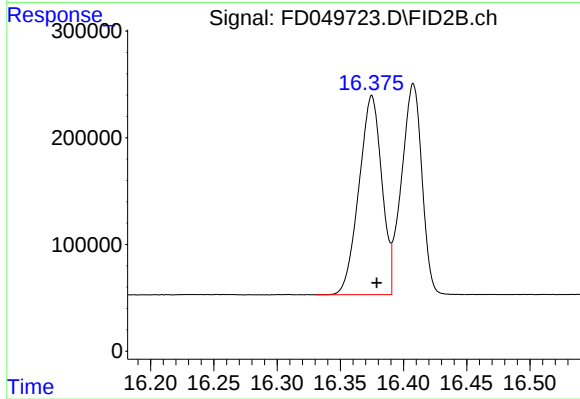
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.824 min
Delta R.T.: -0.005 min
Response: 2340110
Conc: 19.57 ug/ml



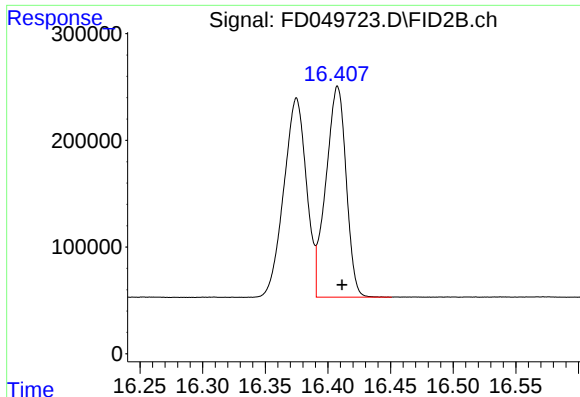
#15 Chrysene (C27.41)

R.T.: 14.867 min
Delta R.T.: -0.004 min
Response: 2375059
Conc: 19.52 ug/ml



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

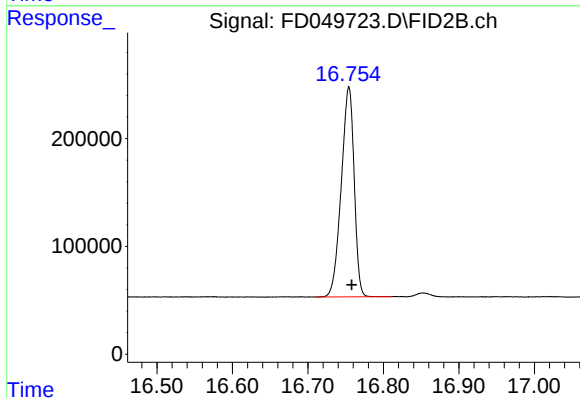
R.T.: 16.375 min
Delta R.T.: -0.004 min
Response: 2350033
Conc: 19.61 ug/ml



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

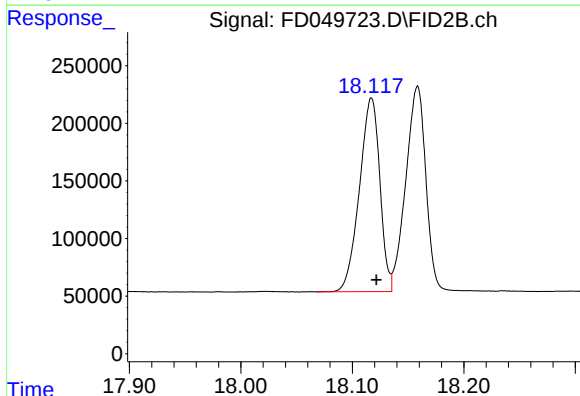
R.T.: 16.407 min
Delta R.T.: -0.004 min
Response: 2218226
Conc: 19.69 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



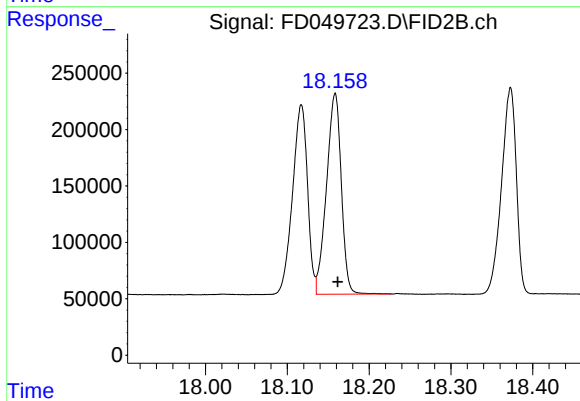
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.754 min
Delta R.T.: -0.004 min
Response: 2314710
Conc: 19.73 ug/ml



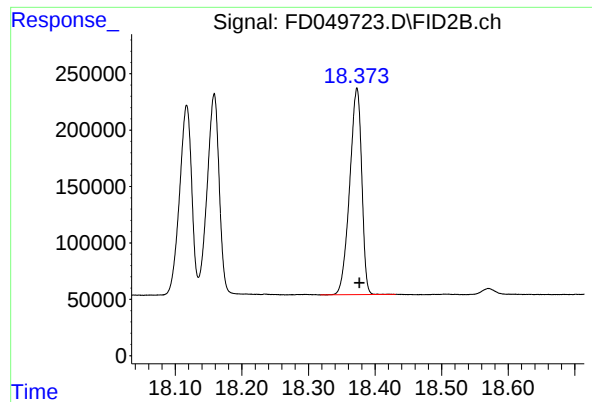
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.117 min
Delta R.T.: -0.005 min
Response: 2138000
Conc: 19.65 ug/ml



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

R.T.: 18.158 min
Delta R.T.: -0.004 min
Response: 2236318
Conc: 19.63 ug/ml



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

R.T.: 18.373 min
Delta R.T.: -0.004 min
Response: 2303694
Conc: 19.80 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD090425AR\
Data File : FD049723.D
Signal(s) : FID2B.ch
Acq On : 04 Sep 2025 13:00
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.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	4.487	4.458	4.531	BB	246115	2140546	76.33%	4.193%
2	6.031	5.991	6.098	BB	272485	2479492	88.42%	4.856%
3	7.086	7.048	7.148	BB	275318	2596693	92.60%	5.086%
4	7.697	7.668	7.758	BB	239042	2231641	79.58%	4.371%
5	8.365	8.334	8.414	BB	284957	2749499	98.05%	5.385%
6	8.562	8.518	8.624	BB	162641	1599409	57.04%	3.133%
7	8.661	8.628	8.700	BB	283355	2751173	98.11%	5.389%
8	9.442	9.411	9.501	BB	279347	2761041	98.46%	5.408%
9	10.840	10.795	10.881	VV	271275	2765682	98.63%	5.417%
10	10.915	10.881	10.978	VB	247545	2617228	93.33%	5.126%
11	11.609	11.521	11.644	BB	263980	2804214	100.00%	5.492%
12	12.655	12.621	12.708	BB	246534	2654106	94.65%	5.198%
13	12.952	12.911	12.987	BV	234856	2629491	93.77%	5.150%
14	14.824	14.771	14.845	BV	191324	2340110	83.45%	4.583%
15	14.867	14.845	14.928	VB	215019	2375059	84.70%	4.652%
16	16.375	16.331	16.391	BV	186222	2350033	83.80%	4.603%
17	16.408	16.391	16.451	VB	198031	2218226	79.10%	4.345%
18	16.754	16.711	16.811	BB	195320	2314710	82.54%	4.534%
19	18.117	18.068	18.135	BV	168949	2138000	76.24%	4.188%
20	18.158	18.135	18.228	VB	177787	2236318	79.75%	4.380%
21	18.373	18.318	18.431	BB	181688	2303694	82.15%	4.512%
Sum of corrected areas:						51056365		

Aromatic EPH 090425.M Fri Sep 05 06:45:12 2025

Initial Calibration Report for SequenceID : FE082925AL

AreaCount

Parameter Range	FE055545.D	FE055546.D	FE055547.D	FE055548.D	FE055549.D	
Aliphatic C9-C12	36131908.000	18793237.000	7683758.000	3922762.000	2062046.000	
Aliphatic C12-C16	25458636.000	13147541.000	5377243.000	2752069.000	1446731.000	
Aliphatic C16-C21	40534429.000	20932155.000	8616013.000	4440715.000	2321992.000	
Aliphatic C21-C28	53136513.000	27590202.000	11417606.000	5910364.000	3098144.000	
Aliphatic C28-C40	75097151.000	39091365.000	16277300.000	8645814.000	4601724.000	
Aliphatic EPH	230358637.000	119554500.000	49371920.000	25671724.000	13530637.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aliphatic C9-C12	128403.8079996	4.941				
Aliphatic C12-C16	135095.243	4.86				
Aliphatic C16-C21	144217.1959996	5.275				
Aliphatic C21-C28	143235.7335	5.974				
Aliphatic C28-C40	137719.6669998	8.144				
Aliphatic EPH	138184.1352218	6.281				

Concentration

Parameter Range	FE055545.D	FE055546.D	FE055547.D	FE055548.D	FE055549.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	FE055545.D	FE055546.D	FE055547.D	FE055548.D	FE055549.D	
Aliphatic C9-C12	120439.693333	125288.246666	128062.633333	130758.733333	137469.733333	
Aliphatic C12-C16	127293.180000	131475.410000	134431.075000	137603.450000	144673.100000	
Aliphatic C16-C21	135114.763333	139547.700000	143600.216666	148023.833333	154799.466666	

Initial Calibration Report for SequenceID : FE082925AL

Aliphatic C21-C28	132841.282500	137951.010000	142720.075000	147759.100000	154907.200000	
Aliphatic C28-C40	125161.918333	130304.550000	135644.166666	144096.900000	153390.800000	
Aliphatic EPH	127977.020555	132838.333333	137144.222222	142620.688888	150340.411111	

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
 Data File : FE055545.D
 Signal(s) : FID1B.ch
 Acq On : 28 Aug 2025 09:34
 Operator : YP\AJ
 Sample : 100 PPM ALIPHATIC HC STD1
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
 Quant Time: Aug 29 08:04:32 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
 Quant Title : GC Extractables
 Qlast Update : Fri Aug 29 08:03:47 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)	12.086	15313716	93.459 ug/ml
Spiked Amount 50.000		Recovery =	186.92%
12) S 1-chlorooctadecane (S...	13.519	11795222	94.406 ug/ml
Spiked Amount 50.000		Recovery =	188.81%
Target Compounds			
1) T n-Nonane (C9)	3.417	11828350	93.483 ug/ml
2) T n-Decane (C10)	4.676	12034240	94.331 ug/ml
3) T A~Naphthalene (C11.7)	6.396	13856606	94.733 ug/ml
4) T n-Dodecane (C12)	6.853	12269318	94.318 ug/ml
5) T A~2-methylnaphthalene...	7.499	13568882	95.843 ug/ml
6) T n-Tetradecane (C14)	8.690	12358220	94.192 ug/ml
7) T n-Hexadecane (C16)	10.307	13100416	95.165 ug/ml
8) T n-Octadecane (C18)	11.758	13658190	94.035 ug/ml
10) T n-Eicosane (C20)	13.071	13479465	94.109 ug/ml
11) T n-Heneicosane (C21)	13.686	13396774	94.130 ug/ml
13) T n-Docosane (C22)	14.274	13403516	93.930 ug/ml
14) T n-Tetracosane (C24)	15.381	13447515	93.151 ug/ml
15) T n-Hexacosane (C26)	16.405	13239746	92.937 ug/ml
16) T n-Octacosane (C28)	17.357	13045736	92.287 ug/ml
17) T n-Tricontane (C30)	18.247	13338524	90.923 ug/ml
18) T n-Dotriacontane (C32)	19.082	13157990	90.097 ug/ml
19) T n-Tetratriacontane (C34)	19.866	12802849	91.142 ug/ml
20) T n-Hexatriacontane (C36)	20.607	12140628	92.667 ug/ml
21) T n-Octatriacontane (C38)	21.386	11994777	94.464 ug/ml
22) T n-Tetracontane (C40)	22.376	11662383	95.080 ug/ml

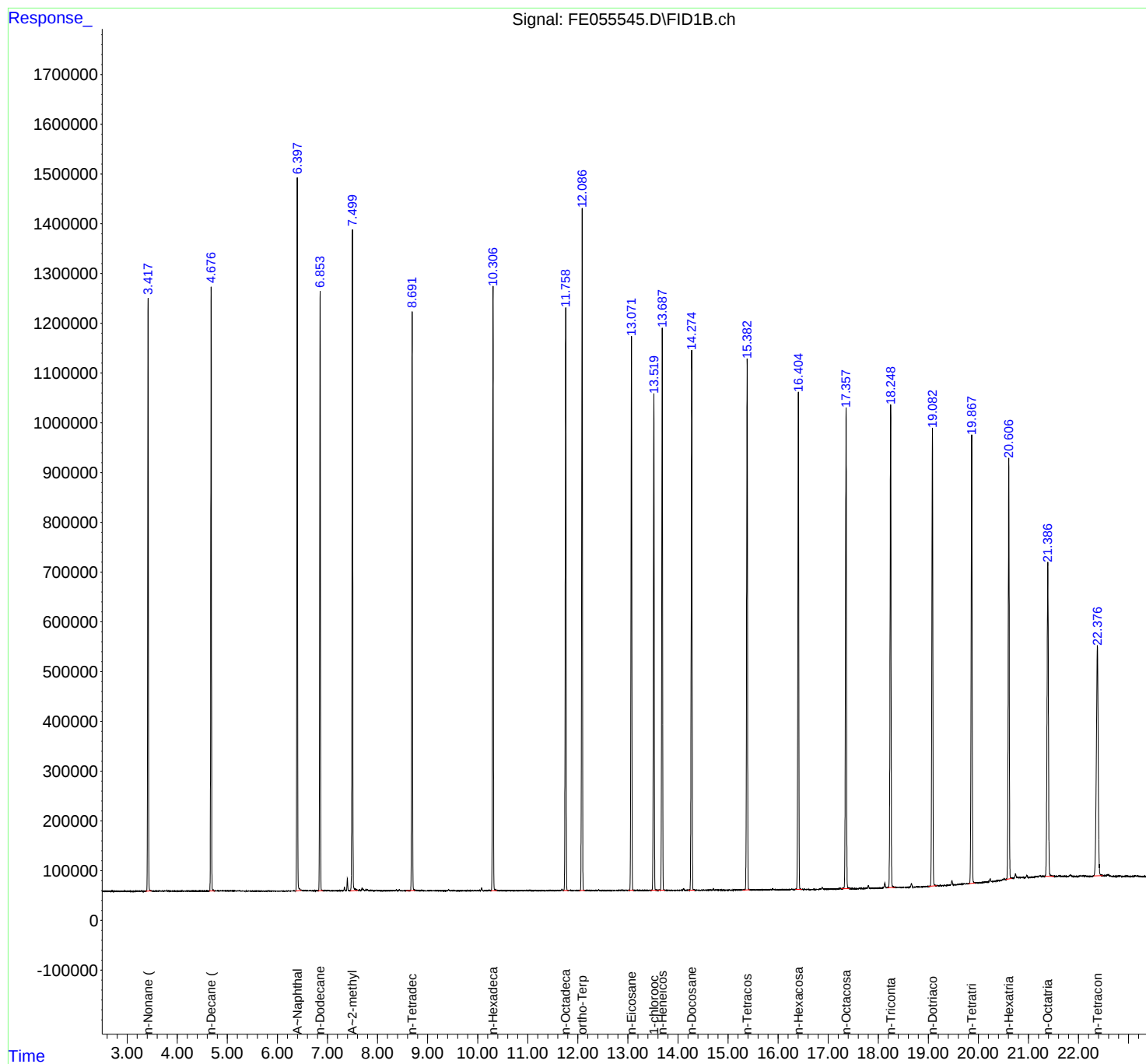
(f)=RT Delta > 1/2 Window

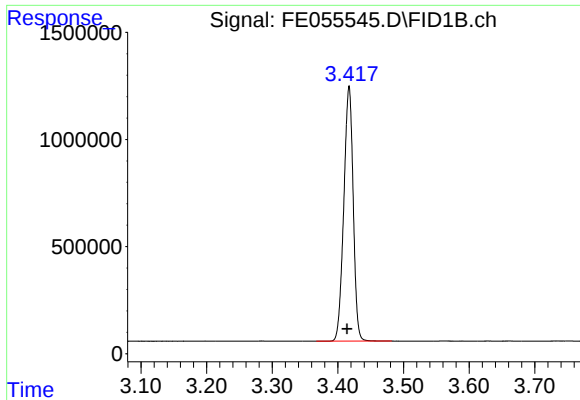
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
Data File : FE055545.D
Signal(s) : FID1B.ch
Acq On : 28 Aug 2025 09:34
Operator : YP\AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 08:04:32 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
Quant Title : GC Extractables
QLast Update : Fri Aug 29 08:03:47 2025
Response via : Initial Calibration
Integrator: ChemStation

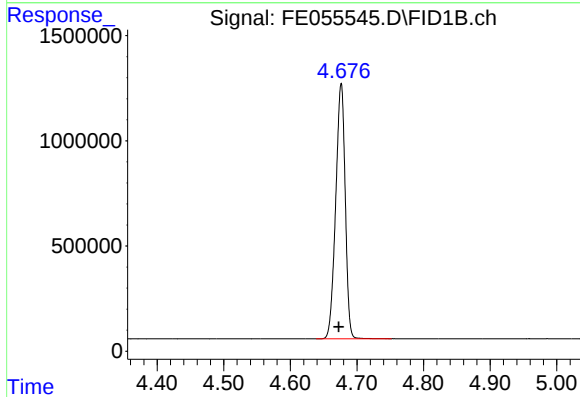
Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um





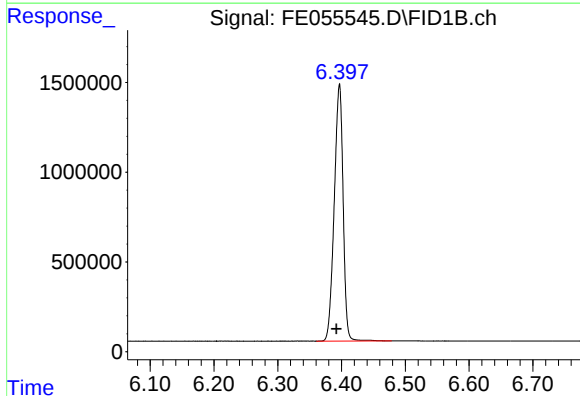
#1 n-Nonane (C9)

R.T.: 3.417 min
Delta R.T.: 0.003 min
Response: 11828350
Conc: 93.48 ug/ml



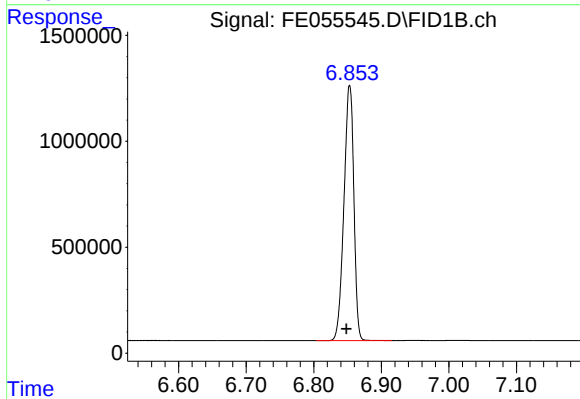
#2 n-Decane (C10)

R.T.: 4.676 min
Delta R.T.: 0.003 min
Response: 12034240
Conc: 94.33 ug/ml



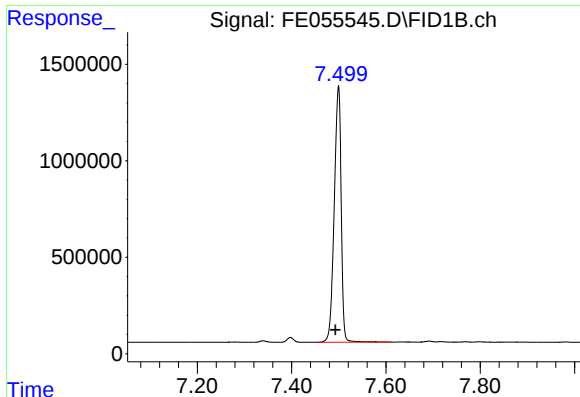
#3 A~Naphthalene (C11.7)

R.T.: 6.396 min
Delta R.T.: 0.004 min
Response: 13856606
Conc: 94.73 ug/ml



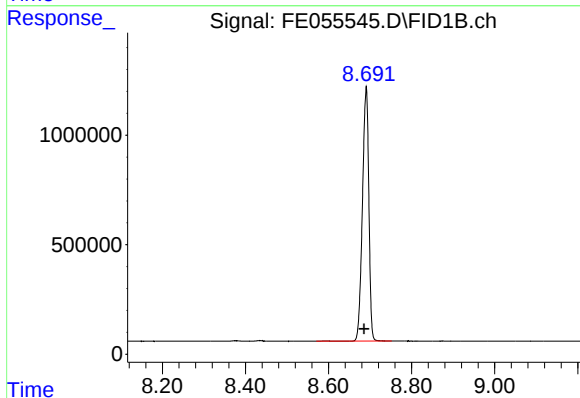
#4 n-Dodecane (C12)

R.T.: 6.853 min
Delta R.T.: 0.005 min
Response: 12269318
Conc: 94.32 ug/ml



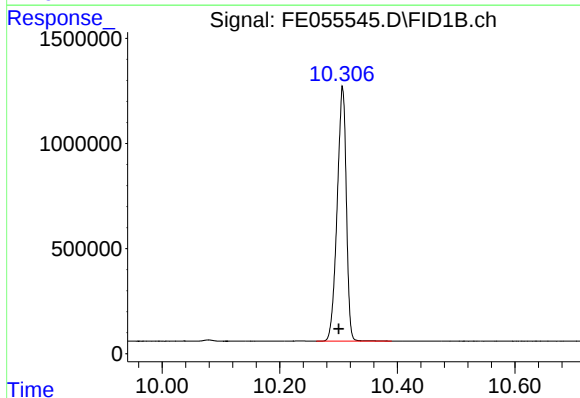
#5 A~2-methylnaphthalene (C12.89)

R.T.: 7.499 min
Delta R.T.: 0.006 min
Response: 13568882
Conc: 95.84 ug/ml



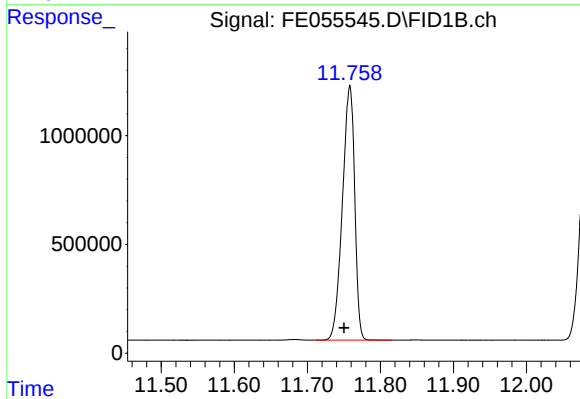
#6 n-Tetradecane (C14)

R.T.: 8.690 min
Delta R.T.: 0.005 min
Response: 12358220
Conc: 94.19 ug/ml



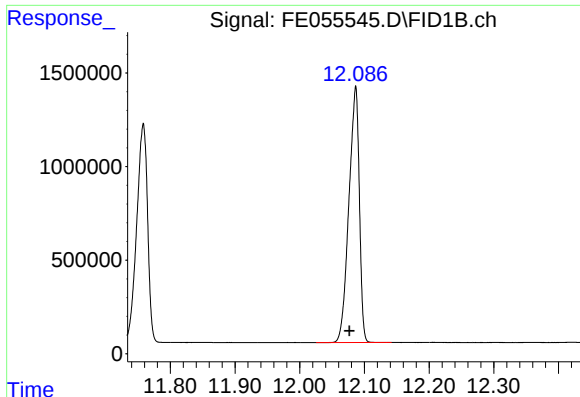
#7 n-Hexadecane (C16)

R.T.: 10.307 min
Delta R.T.: 0.006 min
Response: 13100416
Conc: 95.17 ug/ml



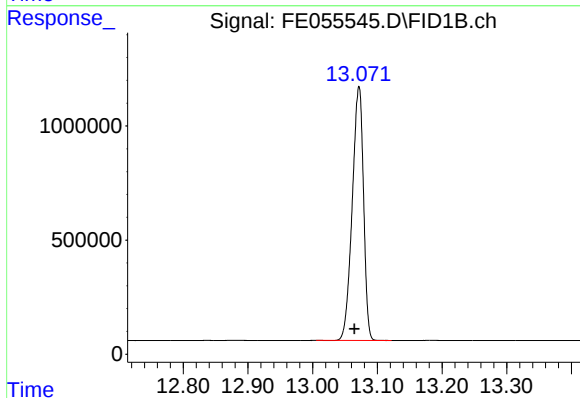
#8 n-Octadecane (C18)

R.T.: 11.758 min
Delta R.T.: 0.008 min
Response: 13658190
Conc: 94.03 ug/ml



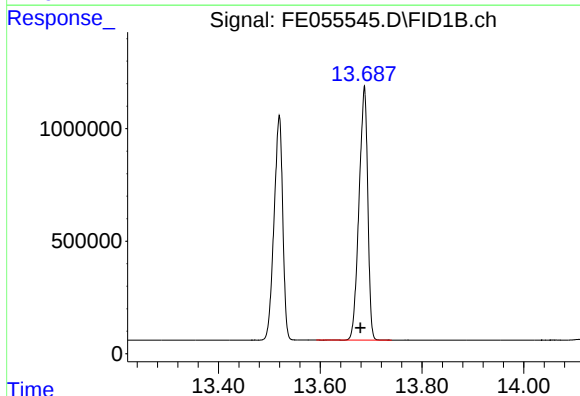
#9 ortho-Terphenyl (SURR)

R.T.: 12.086 min
Delta R.T.: 0.009 min
Response: 15313716
Conc: 93.46 ug/ml



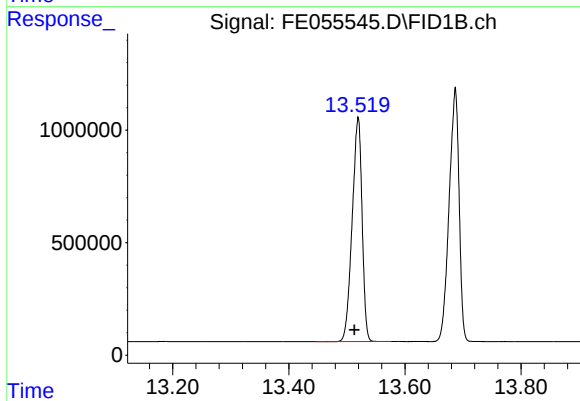
#10 n-Eicosane (C20)

R.T.: 13.071 min
Delta R.T.: 0.007 min
Response: 13479465
Conc: 94.11 ug/ml



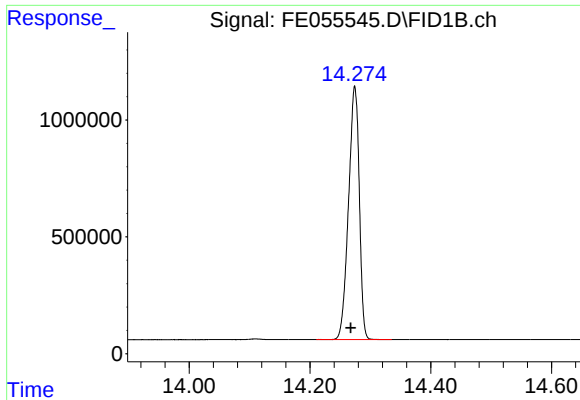
#11 n-Heneicosane (C21)

R.T.: 13.686 min
Delta R.T.: 0.008 min
Response: 13396774
Conc: 94.13 ug/ml



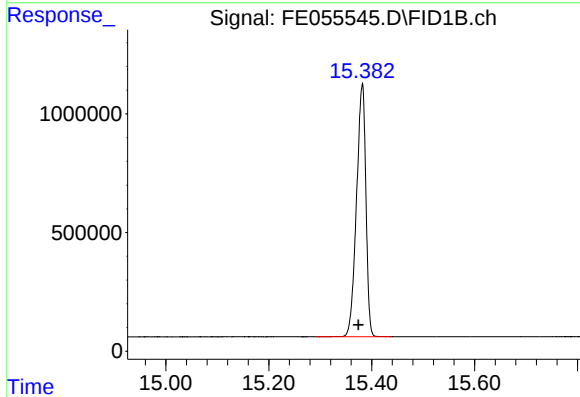
#12 1-chlorooctadecane (SURR)

R.T.: 13.519 min
Delta R.T.: 0.006 min
Response: 11795222
Conc: 94.41 ug/ml



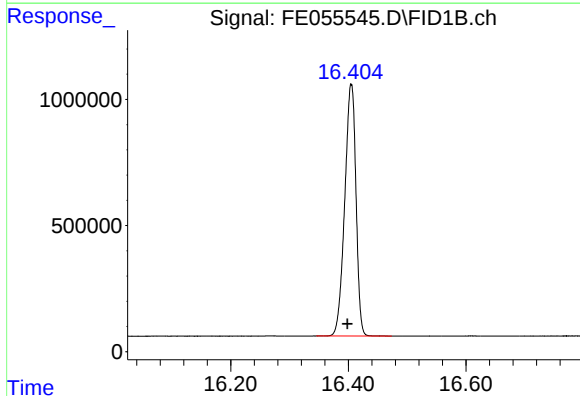
#13 n-Docosane (C22)

R.T.: 14.274 min
Delta R.T.: 0.007 min
Response: 13403516
Conc: 93.93 ug/ml



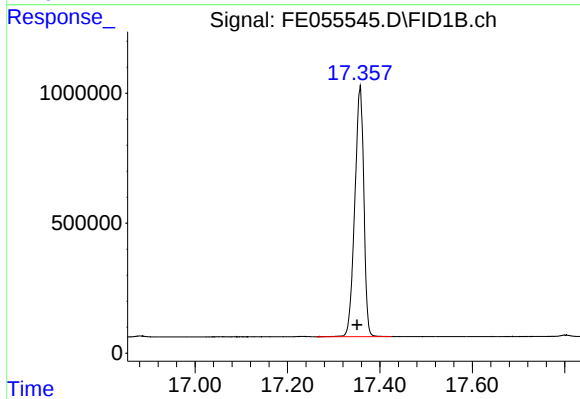
#14 n-Tetracosane (C24)

R.T.: 15.381 min
Delta R.T.: 0.007 min
Response: 13447515
Conc: 93.15 ug/ml



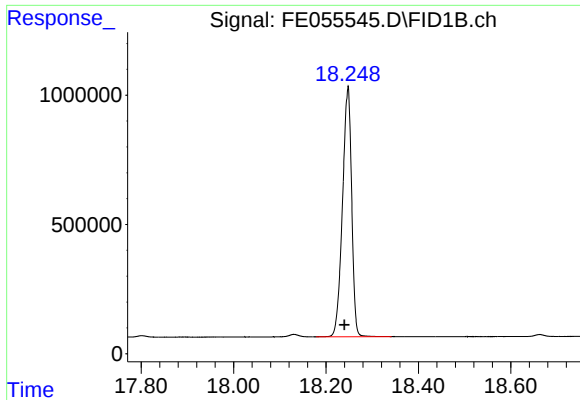
#15 n-Hexacosane (C26)

R.T.: 16.405 min
Delta R.T.: 0.006 min
Response: 13239746
Conc: 92.94 ug/ml



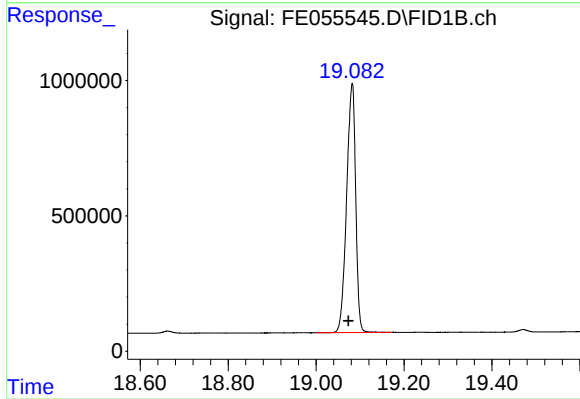
#16 n-Octacosane (C28)

R.T.: 17.357 min
Delta R.T.: 0.007 min
Response: 13045736
Conc: 92.29 ug/ml



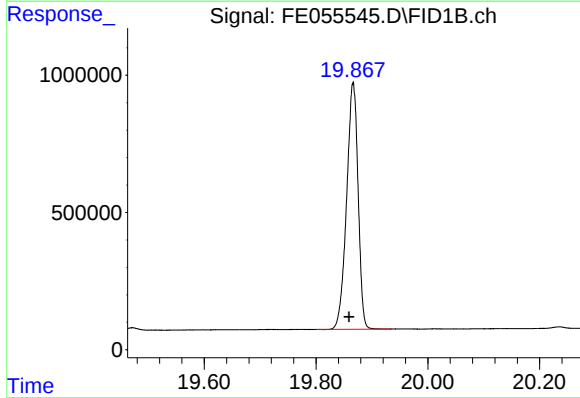
#17 n-Tricontane (C30)

R.T.: 18.247 min
Delta R.T.: 0.008 min
Response: 13338524
Conc: 90.92 ug/ml



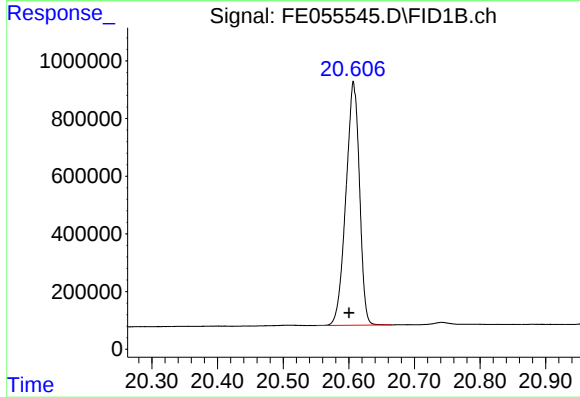
#18 n-Dotriacontane (C32)

R.T.: 19.082 min
Delta R.T.: 0.008 min
Response: 13157990
Conc: 90.10 ug/ml



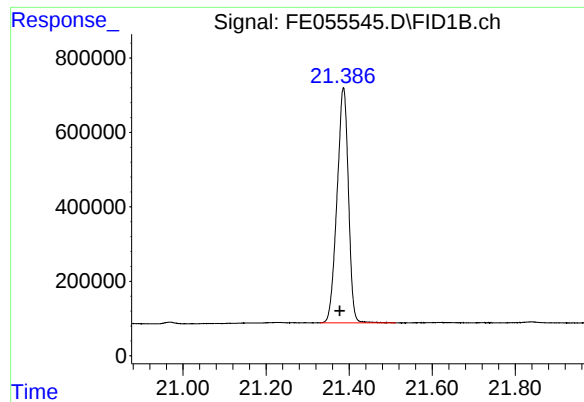
#19 n-Tetratriacontane (C34)

R.T.: 19.866 min
Delta R.T.: 0.007 min
Response: 12802849
Conc: 91.14 ug/ml



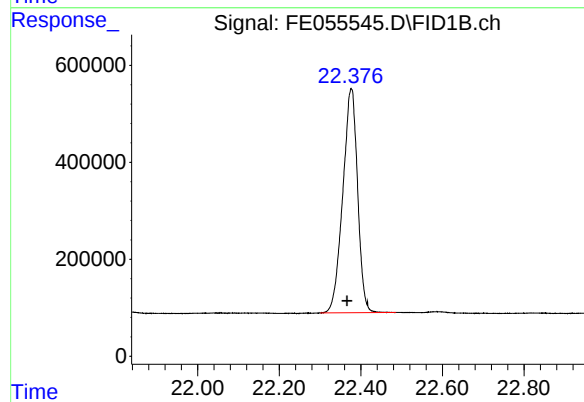
#20 n-Hexatriacontane (C36)

R.T.: 20.607 min
Delta R.T.: 0.007 min
Response: 12140628
Conc: 92.67 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.386 min
Delta R.T.: 0.009 min
Response: 11994777
Conc: 94.46 ug/ml



#22 n-Tetracontane (C40)

R.T.: 22.376 min
Delta R.T.: 0.010 min
Response: 11662383
Conc: 95.08 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
 Data File : FE055545.D
 Signal(s) : FID1B.ch
 Acq On : 28 Aug 2025 09:34
 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 082925.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	3.417	3.367	3.482	BB	1191648	11828350	77.24%	4.152%
2	4.676	4.639	4.752	BB	1211536	12034240	78.58%	4.224%
3	6.396	6.360	6.479	BB	1439260	13856606	90.48%	4.864%
4	6.853	6.804	6.915	BB	1206551	12269318	80.12%	4.307%
5	7.499	7.452	7.612	BB	1322770	13568882	88.61%	4.763%
6	8.690	8.570	8.752	BB	1156261	12358220	80.70%	4.338%
7	10.307	10.262	10.390	BB	1210090	13100416	85.55%	4.598%
8	11.758	11.712	11.815	BB	1176381	13658190	89.19%	4.794%
9	12.086	12.025	12.142	BB	1353894	15313716	100.00%	5.375%
10	13.071	13.005	13.122	BB	1117183	13479465	88.02%	4.731%
11	13.519	13.447	13.577	BB	991309	11795222	77.02%	4.140%
12	13.686	13.592	13.740	BB	1134552	13396774	87.48%	4.702%
13	14.274	14.210	14.335	BB	1083904	13403516	87.53%	4.705%
14	15.381	15.292	15.439	BB	1068125	13447515	87.81%	4.720%
15	16.405	16.345	16.474	BB	998531	13239746	86.46%	4.647%
16	17.357	17.262	17.425	BB	959033	13045736	85.19%	4.579%
17	18.247	18.179	18.342	BB	962203	13338524	87.10%	4.682%
18	19.082	19.000	19.172	BB	921202	13157990	85.92%	4.619%
19	19.866	19.800	19.935	BB	900975	12802849	83.60%	4.494%
20	20.607	20.550	20.665	BB	843789	12140628	79.28%	4.261%
21	21.386	21.330	21.512	BB	632408	11994777	78.33%	4.210%
22	22.376	22.300	22.485	BB	462197	11662383	76.16%	4.094%
Sum of corrected areas:						284893060		

Aliphatic EPH 082925.M Fri Aug 29 08:19:39 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
 Data File : FE055546.D
 Signal(s) : FID1B.ch
 Acq On : 28 Aug 2025 10:04
 Operator : YP\AJ
 Sample : 50 PPM ALIPHATIC HC STD2
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
 Quant Time: Aug 29 08:04:56 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
 Quant Title : GC Extractables
 Qlast Update : Fri Aug 29 08:03:47 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)	12.081	7933806	48.420 ug/ml
Spiked Amount 50.000		Recovery =	96.84%
12) S 1-chlorooctadecane (S...	13.516	6092142	48.760 ug/ml
Spiked Amount 50.000		Recovery =	97.52%
Target Compounds			
1) T n-Nonane (C9)	3.416	6168124	48.749 ug/ml
2) T n-Decane (C10)	4.674	6258750	49.059 ug/ml
3) T A~Naphthalene (C11.7)	6.394	7168456	49.008 ug/ml
4) T n-Dodecane (C12)	6.851	6366363	48.940 ug/ml
5) T A~2-methylnaphthalene...	7.496	6971341	49.242 ug/ml
6) T n-Tetradecane (C14)	8.688	6399972	48.779 ug/ml
7) T n-Hexadecane (C16)	10.303	6747569	49.016 ug/ml
8) T n-Octadecane (C18)	11.753	7052281	48.554 ug/ml
10) T n-Eicosane (C20)	13.068	6959863	48.591 ug/ml
11) T n-Heneicosane (C21)	13.682	6920011	48.622 ug/ml
13) T n-Docosane (C22)	14.270	6934567	48.596 ug/ml
14) T n-Tetracosane (C24)	15.377	6974373	48.311 ug/ml
15) T n-Hexacosane (C26)	16.402	6883971	48.322 ug/ml
16) T n-Octacosane (C28)	17.353	6797291	48.085 ug/ml
17) T n-Tricontane (C30)	18.243	6954737	47.407 ug/ml
18) T n-Dotriacontane (C32)	19.077	6869783	47.040 ug/ml
19) T n-Tetratriacontane (C34)	19.863	6674365	47.514 ug/ml
20) T n-Hexatriacontane (C36)	20.604	6315211	48.203 ug/ml
21) T n-Octatriacontane (C38)	21.384	6168238	48.578 ug/ml
22) T n-Tetracontane (C40)	22.370	6109031	49.805 ug/ml

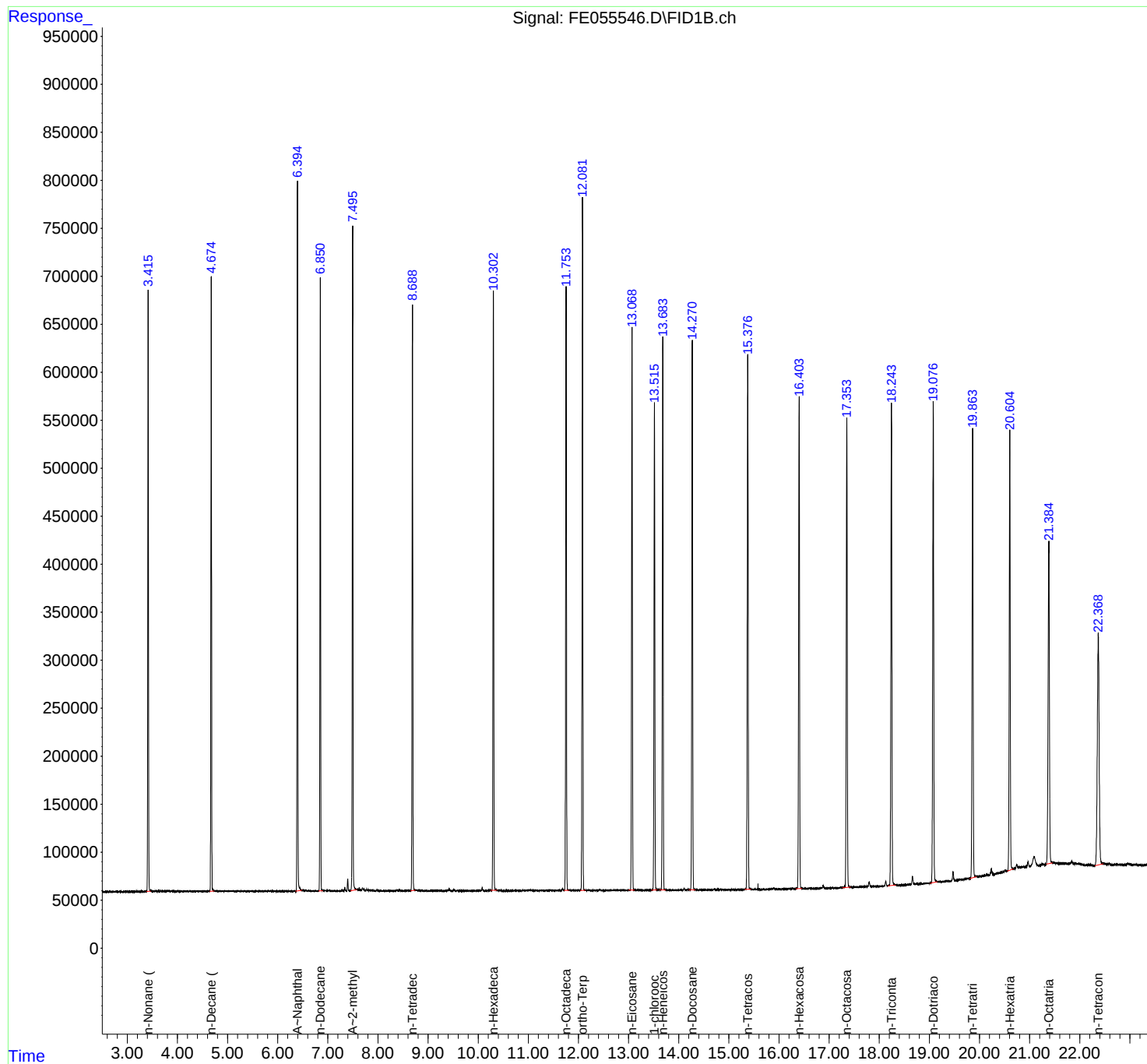
(f)=RT Delta > 1/2 Window

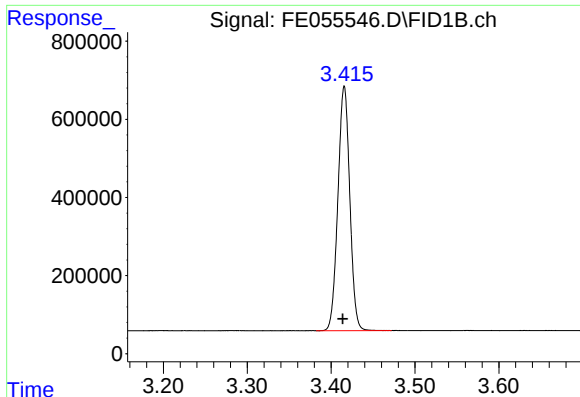
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
Data File : FE055546.D
Signal(s) : FID1B.ch
Acq On : 28 Aug 2025 10:04
Operator : YP\AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 08:04:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
Quant Title : GC Extractables
QLast Update : Fri Aug 29 08:03:47 2025
Response via : Initial Calibration
Integrator: ChemStation

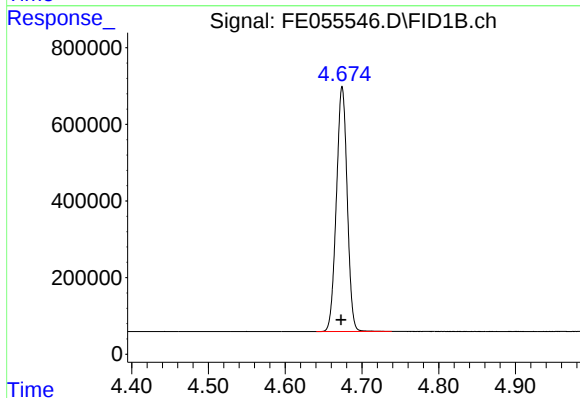
Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um





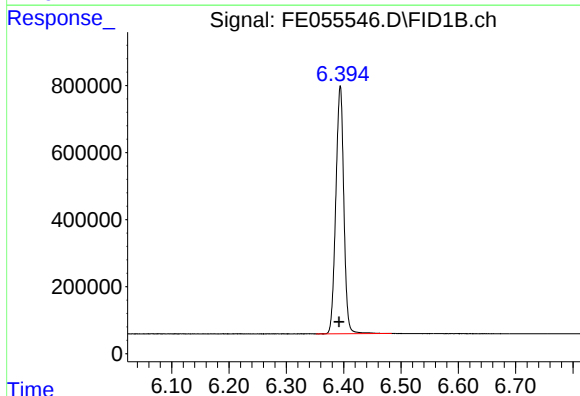
#1 n-Nonane (C9)

R.T.: 3.416 min
Delta R.T.: 0.002 min
Response: 6168124
Conc: 48.75 ug/ml



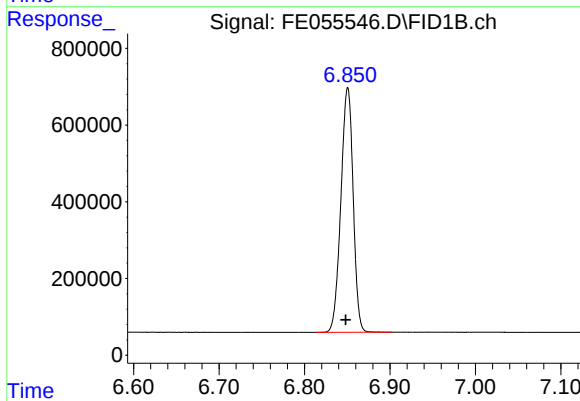
#2 n-Decane (C10)

R.T.: 4.674 min
Delta R.T.: 0.002 min
Response: 6258750
Conc: 49.06 ug/ml



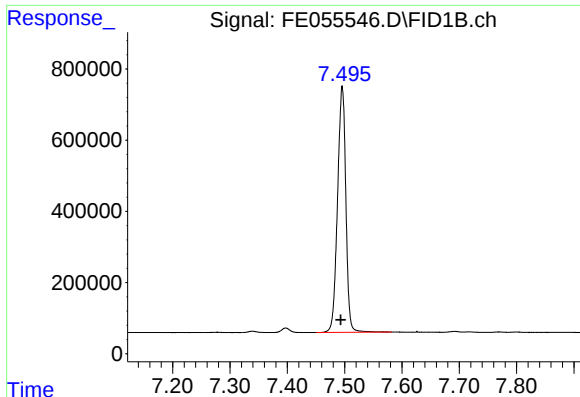
#3 A~Naphthalene (C11.7)

R.T.: 6.394 min
Delta R.T.: 0.002 min
Response: 7168456
Conc: 49.01 ug/ml



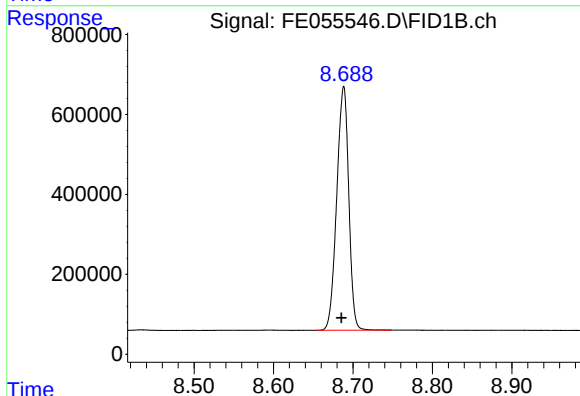
#4 n-Dodecane (C12)

R.T.: 6.851 min
Delta R.T.: 0.002 min
Response: 6366363
Conc: 48.94 ug/ml



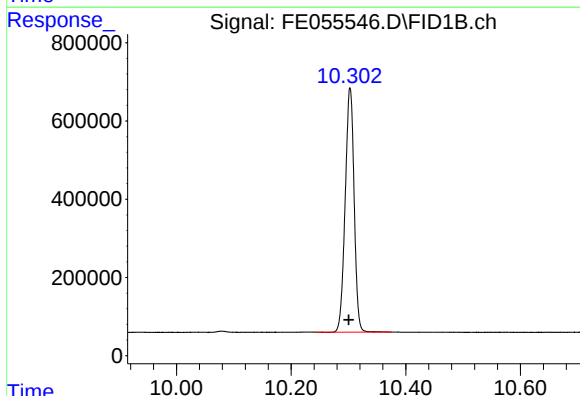
#5 A~2-methylnaphthalene (C12.89)

R.T.: 7.496 min
Delta R.T.: 0.002 min
Response: 6971341
Conc: 49.24 ug/ml



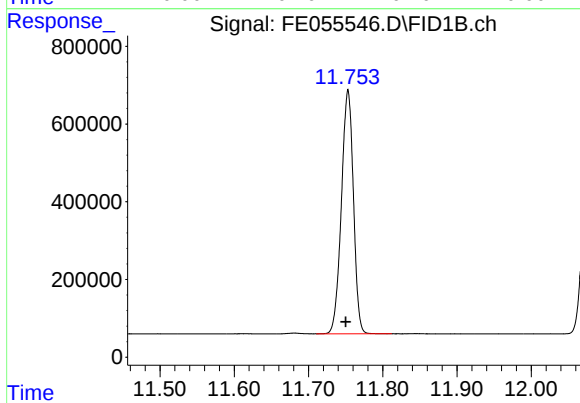
#6 n-Tetradecane (C14)

R.T.: 8.688 min
Delta R.T.: 0.003 min
Response: 6399972
Conc: 48.78 ug/ml



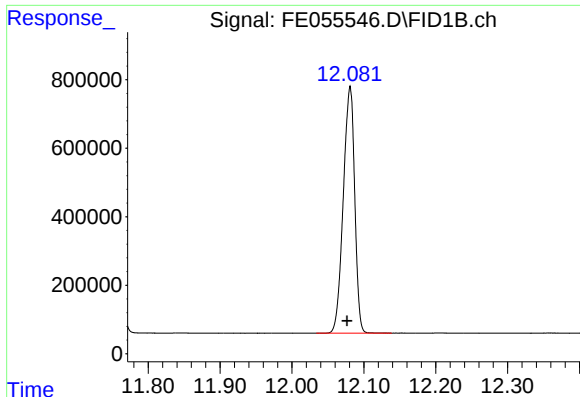
#7 n-Hexadecane (C16)

R.T.: 10.303 min
Delta R.T.: 0.003 min
Response: 6747569
Conc: 49.02 ug/ml



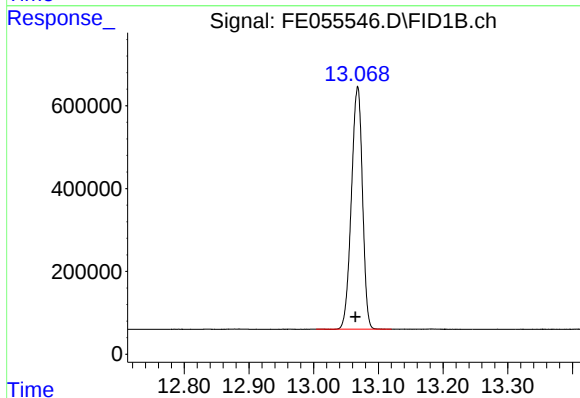
#8 n-Octadecane (C18)

R.T.: 11.753 min
Delta R.T.: 0.003 min
Response: 7052281
Conc: 48.55 ug/ml



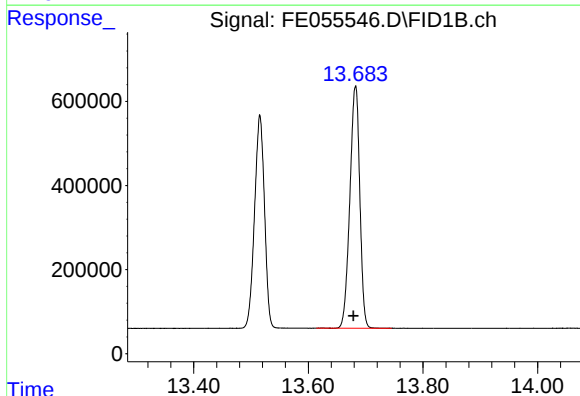
#9 ortho-Terphenyl (SURR)

R.T.: 12.081 min
Delta R.T.: 0.004 min
Response: 7933806
Conc: 48.42 ug/ml



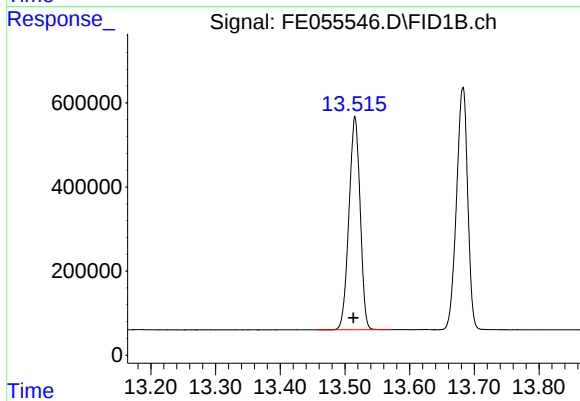
#10 n-Eicosane (C20)

R.T.: 13.068 min
Delta R.T.: 0.003 min
Response: 6959863
Conc: 48.59 ug/ml



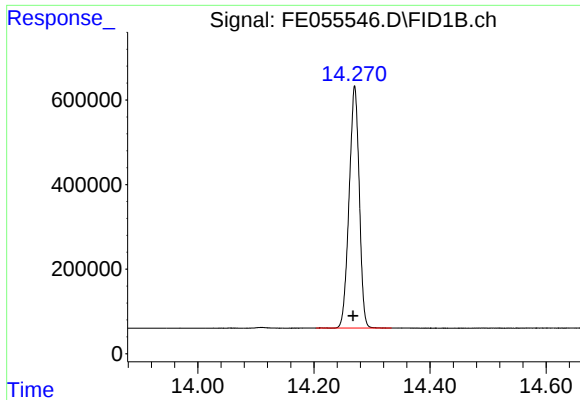
#11 n-Heneicosane (C21)

R.T.: 13.682 min
Delta R.T.: 0.003 min
Response: 6920011
Conc: 48.62 ug/ml



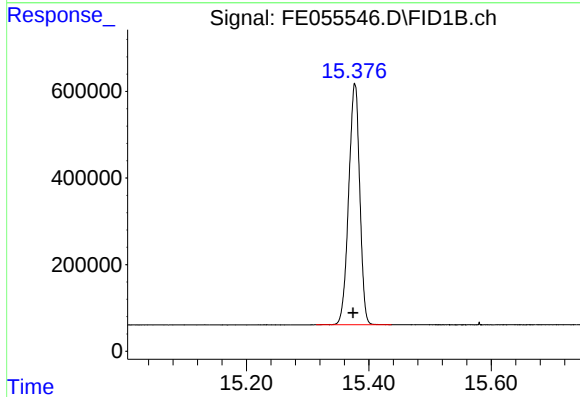
#12 1-chlorooctadecane (SURR)

R.T.: 13.516 min
Delta R.T.: 0.003 min
Response: 6092142
Conc: 48.76 ug/ml



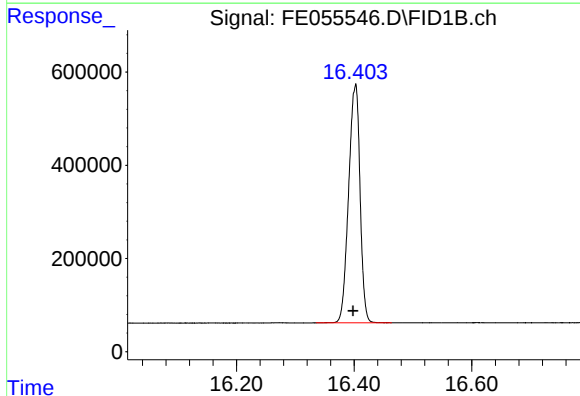
#13 n-Docosane (C22)

R.T.: 14.270 min
Delta R.T.: 0.003 min
Response: 6934567
Conc: 48.60 ug/ml



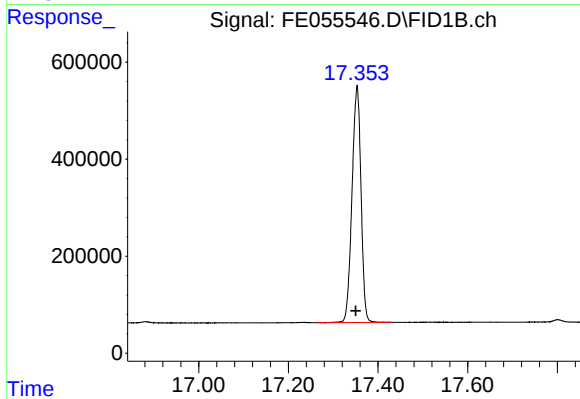
#14 n-Tetracosane (C24)

R.T.: 15.377 min
Delta R.T.: 0.002 min
Response: 6974373
Conc: 48.31 ug/ml



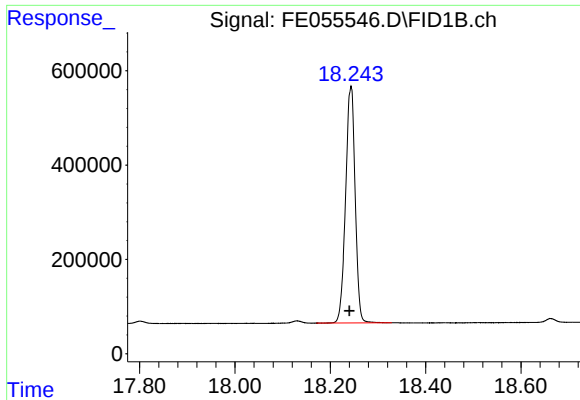
#15 n-Hexacosane (C26)

R.T.: 16.402 min
Delta R.T.: 0.003 min
Response: 6883971
Conc: 48.32 ug/ml



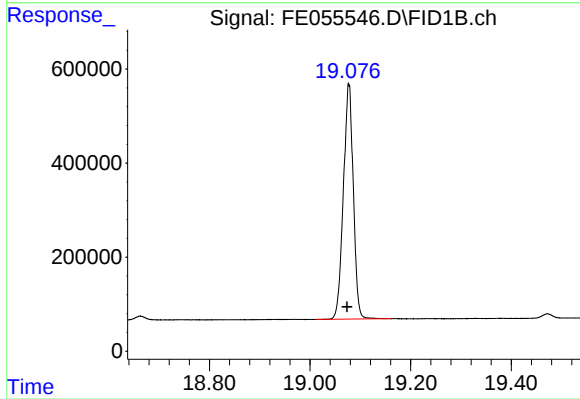
#16 n-Octacosane (C28)

R.T.: 17.353 min
Delta R.T.: 0.003 min
Response: 6797291
Conc: 48.08 ug/ml



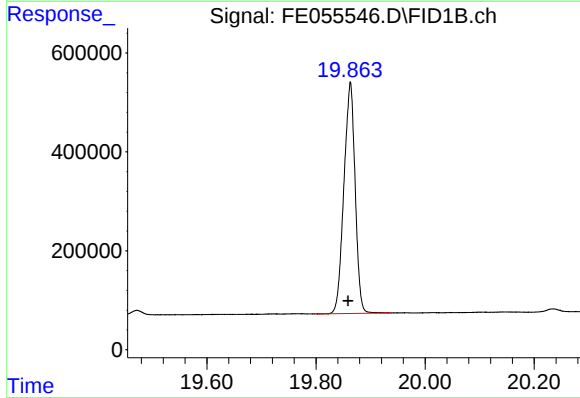
#17 n-Tricontane (C30)

R.T.: 18.243 min
Delta R.T.: 0.003 min
Response: 6954737
Conc: 47.41 ug/ml



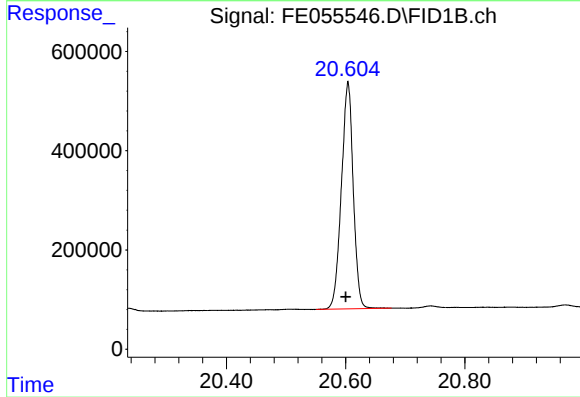
#18 n-Dotriacontane (C32)

R.T.: 19.077 min
Delta R.T.: 0.003 min
Response: 6869783
Conc: 47.04 ug/ml



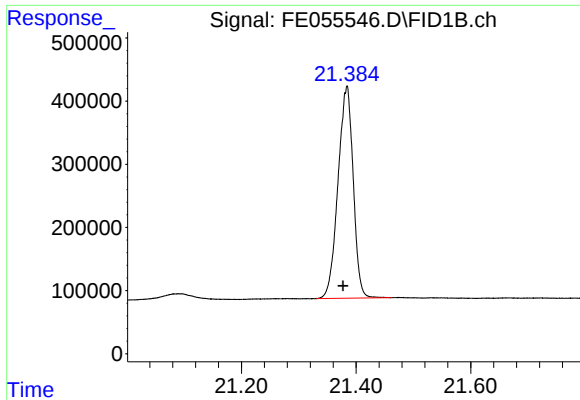
#19 n-Tetratriacontane (C34)

R.T.: 19.863 min
Delta R.T.: 0.004 min
Response: 6674365
Conc: 47.51 ug/ml



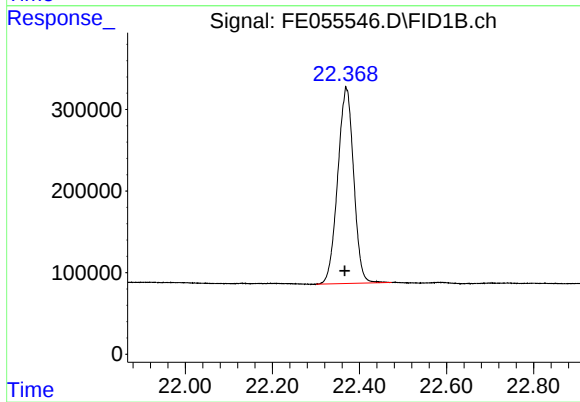
#20 n-Hexatriacontane (C36)

R.T.: 20.604 min
Delta R.T.: 0.003 min
Response: 6315211
Conc: 48.20 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.384 min
Delta R.T.: 0.006 min
Response: 6168238
Conc: 48.58 ug/ml



#22 n-Tetracontane (C40)

R.T.: 22.370 min
Delta R.T.: 0.004 min
Response: 6109031
Conc: 49.80 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
 Data File : FE055546.D
 Signal(s) : FID1B.ch
 Acq On : 28 Aug 2025 10:04
 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 082925.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	3.416	3.382	3.472	BB	625995	6168124	77.74%	4.176%
2	4.674	4.640	4.739	BB	639264	6258750	78.89%	4.237%
3	6.394	6.352	6.484	BB	740311	7168456	90.35%	4.853%
4	6.851	6.814	6.902	BB	638794	6366363	80.24%	4.310%
5	7.496	7.450	7.582	BB	692688	6971341	87.87%	4.719%
6	8.688	8.654	8.749	BB	614230	6399972	80.67%	4.332%
7	10.303	10.244	10.375	BB	626472	6747569	85.05%	4.568%
8	11.753	11.710	11.812	BB	629313	7052281	88.89%	4.774%
9	12.081	12.034	12.139	BB	719382	7933806	100.00%	5.371%
10	13.068	13.004	13.120	BB	582752	6959863	87.72%	4.712%
11	13.516	13.455	13.572	BB	507700	6092142	76.79%	4.124%
12	13.682	13.614	13.745	BB	575245	6920011	87.22%	4.685%
13	14.270	14.204	14.334	BB	572853	6934567	87.41%	4.694%
14	15.377	15.314	15.437	BB	557114	6974373	87.91%	4.721%
15	16.402	16.335	16.464	BB	509688	6883971	86.77%	4.660%
16	17.353	17.262	17.430	BB	490696	6797291	85.68%	4.601%
17	18.243	18.170	18.329	BB	503057	6954737	87.66%	4.708%
18	19.077	19.012	19.162	BB	499413	6869783	86.59%	4.651%
19	19.863	19.800	19.939	BB	466529	6674365	84.13%	4.518%
20	20.604	20.550	20.677	BB	458043	6315211	79.60%	4.275%
21	21.384	21.330	21.462	BB	336062	6168238	77.75%	4.176%
22	22.370	22.300	22.474	BB	238304	6109031	77.00%	4.136%

Sum of corrected areas: 147720243

Aliphatic EPH 082925.M Fri Aug 29 08:20:00 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
 Data File : FE055547.D
 Signal(s) : FID1B.ch
 Acq On : 28 Aug 2025 10:34
 Operator : YP\AJ
 Sample : 20 PPM ALIPHATIC HC STD3
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
 Quant Time: Aug 29 08:05:30 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
 Quant Title : GC Extractables
 Qlast Update : Fri Aug 29 08:03:47 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)	12.077	3277094	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
12) S 1-chlorooctadecane (S...	13.513	2498820	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
Target Compounds			
1) T n-Nonane (C9)	3.414	2530579	20.000 ug/ml
2) T n-Decane (C10)	4.673	2551497	20.000 ug/ml
3) T A~Naphthalene (C11.7)	6.392	2925404	20.000 ug/ml
4) T n-Dodecane (C12)	6.848	2601682	20.000 ug/ml
5) T A~2-methylnaphthalene...	7.493	2831487	20.000 ug/ml
6) T n-Tetradecane (C14)	8.685	2624050	20.000 ug/ml
7) T n-Hexadecane (C16)	10.300	2753193	20.000 ug/ml
8) T n-Octadecane (C18)	11.750	2904925	20.000 ug/ml
10) T n-Eicosane (C20)	13.064	2864643	20.000 ug/ml
11) T n-Heneicosane (C21)	13.679	2846445	20.000 ug/ml
13) T n-Docosane (C22)	14.267	2853950	20.000 ug/ml
14) T n-Tetracosane (C24)	15.375	2887260	20.000 ug/ml
15) T n-Hexacosane (C26)	16.398	2849191	20.000 ug/ml
16) T n-Octacosane (C28)	17.350	2827205	20.000 ug/ml
17) T n-Tricontane (C30)	18.240	2934030	20.000 ug/ml
18) T n-Dotriacontane (C32)	19.074	2920846	20.000 ug/ml
19) T n-Tetratriacontane (C34)	19.859	2809431	20.000 ug/ml
20) T n-Hexatriacontane (C36)	20.601	2620265	20.000 ug/ml
21) T n-Octatriacontane (C38)	21.377	2539543	20.000 ug/ml
22) T n-Tetracontane (C40)	22.366	2453185	20.000 ug/ml

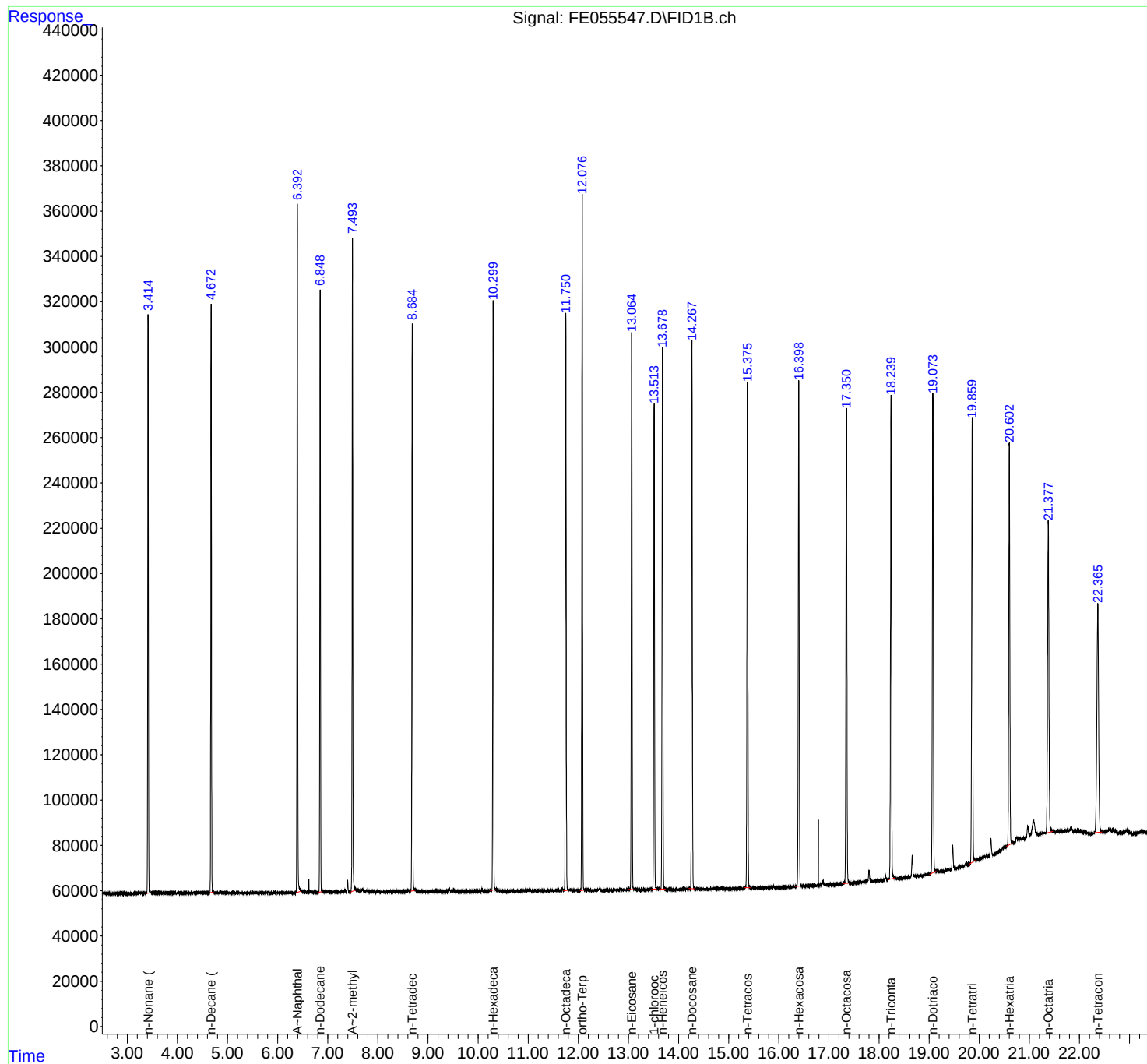
(f)=RT Delta > 1/2 Window

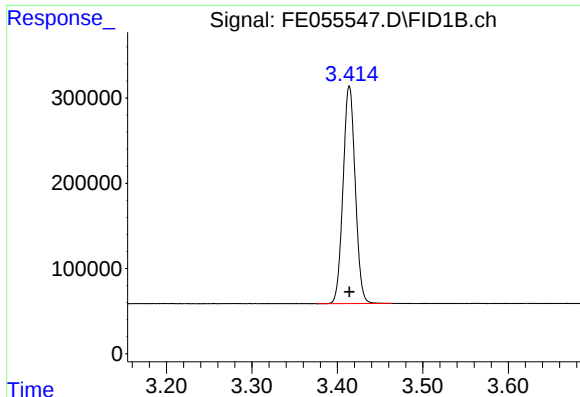
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
Data File : FE055547.D
Signal(s) : FID1B.ch
Acq On : 28 Aug 2025 10:34
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 08:05:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
Quant Title : GC Extractables
QLast Update : Fri Aug 29 08:03:47 2025
Response via : Initial Calibration
Integrator: ChemStation

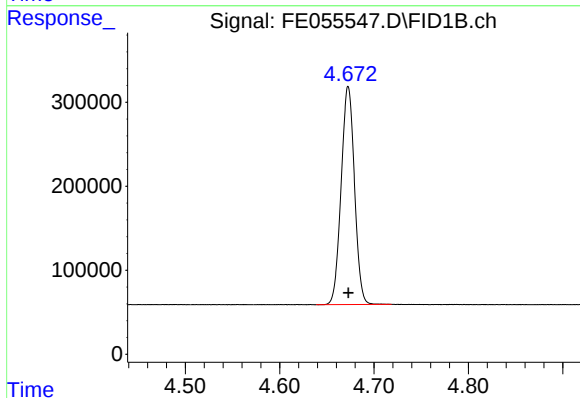
Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um





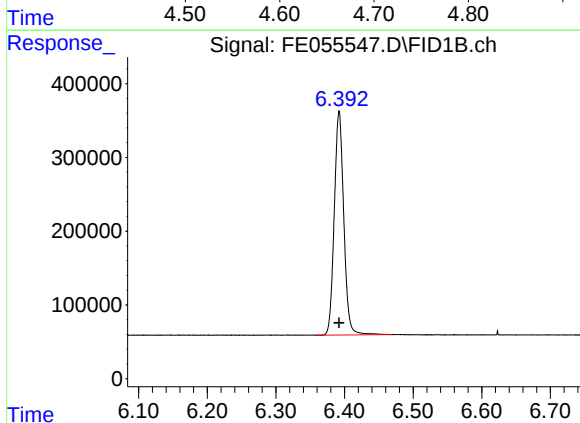
#1 n-Nonane (C9)

R.T.: 3.414 min
Delta R.T.: 0.000 min
Response: 2530579
Conc: 20.00 ug/ml



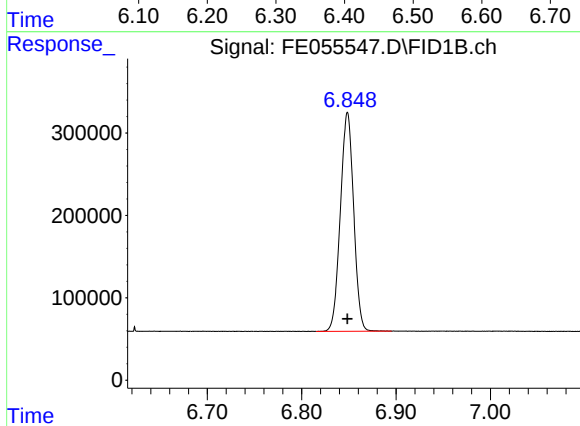
#2 n-Decane (C10)

R.T.: 4.673 min
Delta R.T.: 0.000 min
Response: 2551497
Conc: 20.00 ug/ml



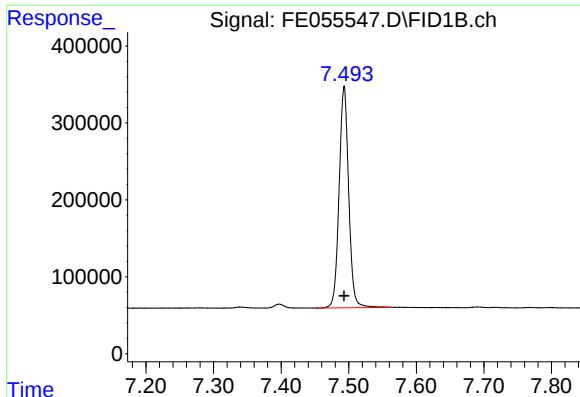
#3 A~Naphthalene (C11.7)

R.T.: 6.392 min
Delta R.T.: 0.000 min
Response: 2925404
Conc: 20.00 ug/ml



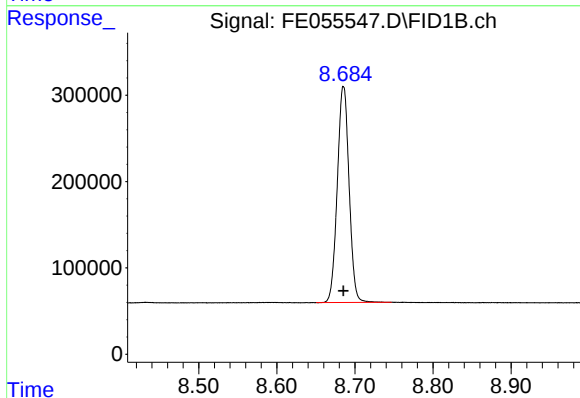
#4 n-Dodecane (C12)

R.T.: 6.848 min
Delta R.T.: 0.000 min
Response: 2601682
Conc: 20.00 ug/ml



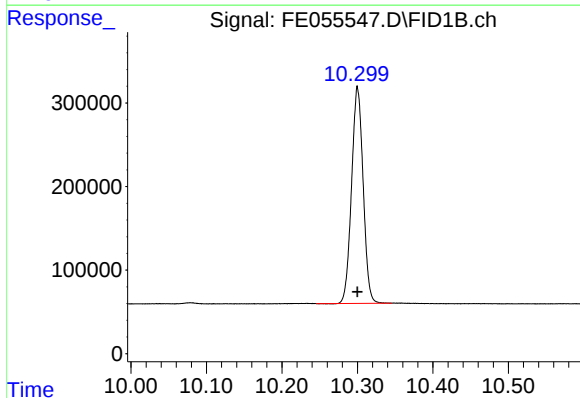
#5 A~2-methylnaphthalene (C12.89)

R.T.: 7.493 min
Delta R.T.: 0.000 min
Response: 2831487
Conc: 20.00 ug/ml



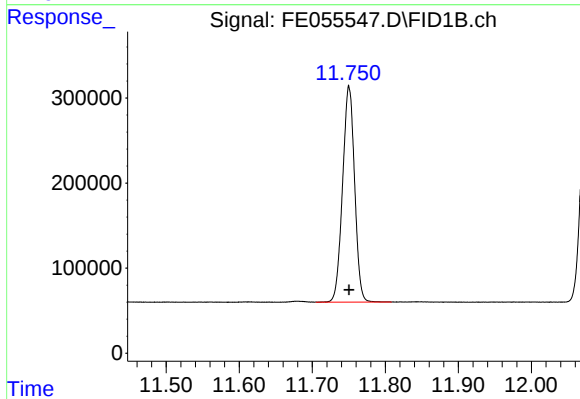
#6 n-Tetradecane (C14)

R.T.: 8.685 min
Delta R.T.: 0.000 min
Response: 2624050
Conc: 20.00 ug/ml



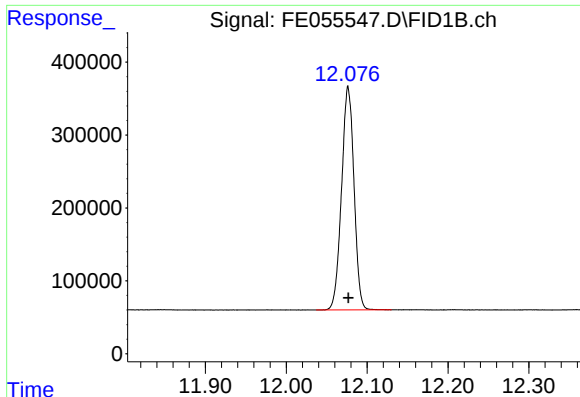
#7 n-Hexadecane (C16)

R.T.: 10.300 min
Delta R.T.: 0.000 min
Response: 2753193
Conc: 20.00 ug/ml



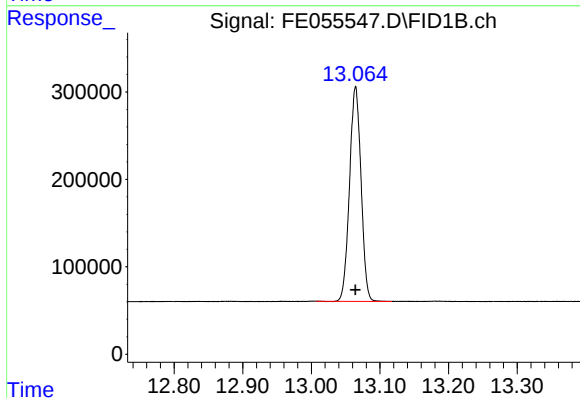
#8 n-Octadecane (C18)

R.T.: 11.750 min
Delta R.T.: 0.000 min
Response: 2904925
Conc: 20.00 ug/ml



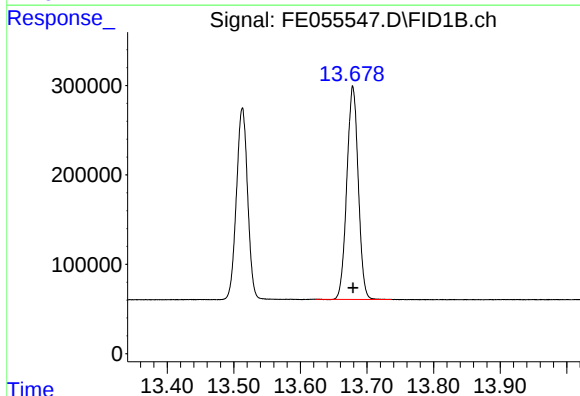
#9 ortho-Terphenyl (SURR)

R.T.: 12.077 min
Delta R.T.: 0.000 min
Response: 3277094
Conc: 20.00 ug/ml



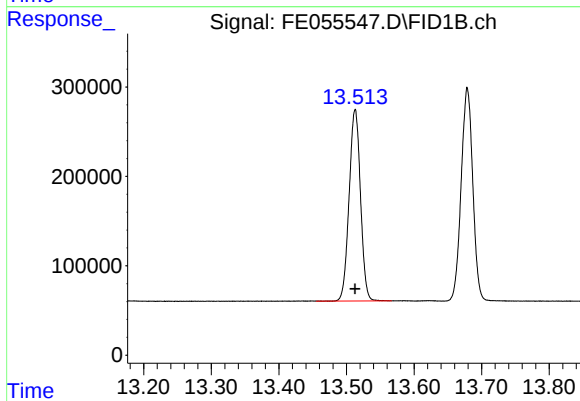
#10 n-Eicosane (C20)

R.T.: 13.064 min
Delta R.T.: 0.000 min
Response: 2864643
Conc: 20.00 ug/ml



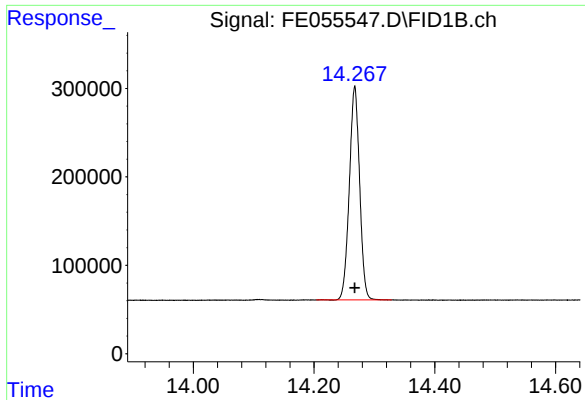
#11 n-Heneicosane (C21)

R.T.: 13.679 min
Delta R.T.: 0.000 min
Response: 2846445
Conc: 20.00 ug/ml



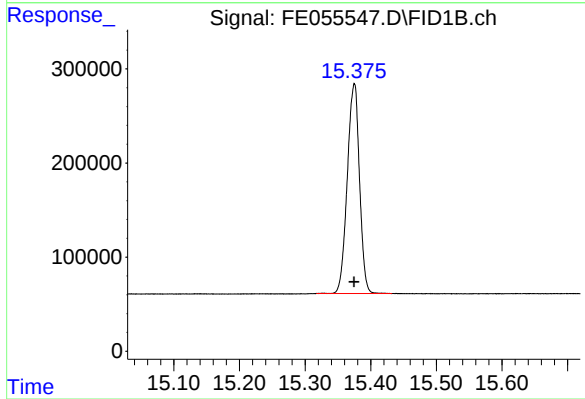
#12 1-chlorooctadecane (SURR)

R.T.: 13.513 min
Delta R.T.: 0.000 min
Response: 2498820
Conc: 20.00 ug/ml



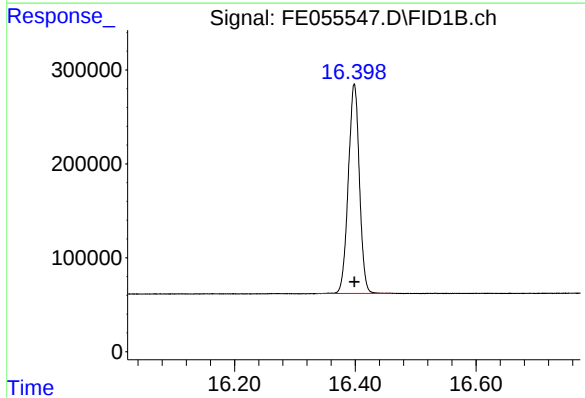
#13 n-Docosane (C22)

R.T.: 14.267 min
Delta R.T.: 0.000 min
Response: 2853950
Conc: 20.00 ug/ml



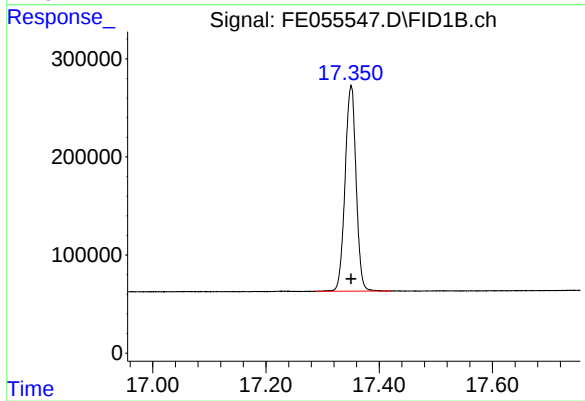
#14 n-Tetracosane (C24)

R.T.: 15.375 min
Delta R.T.: 0.000 min
Response: 2887260
Conc: 20.00 ug/ml



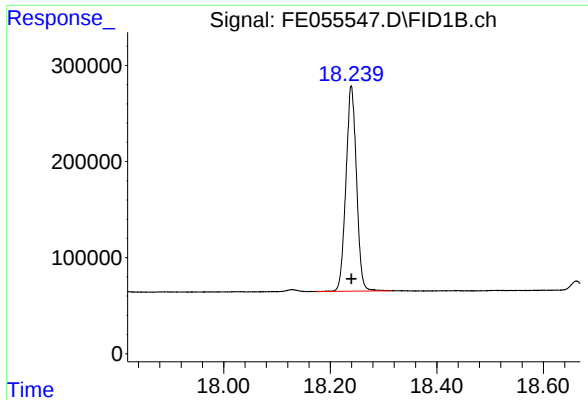
#15 n-Hexacosane (C26)

R.T.: 16.398 min
Delta R.T.: 0.000 min
Response: 2849191
Conc: 20.00 ug/ml



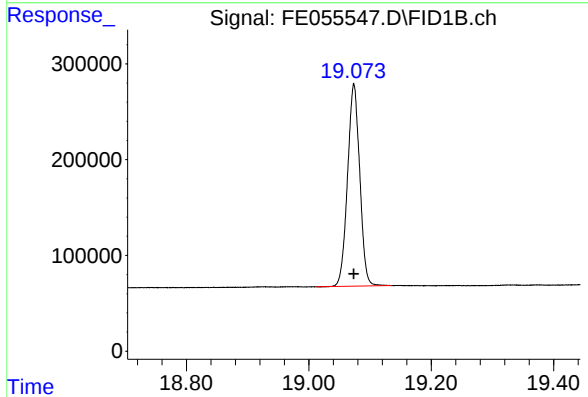
#16 n-Octacosane (C28)

R.T.: 17.350 min
Delta R.T.: 0.000 min
Response: 2827205
Conc: 20.00 ug/ml



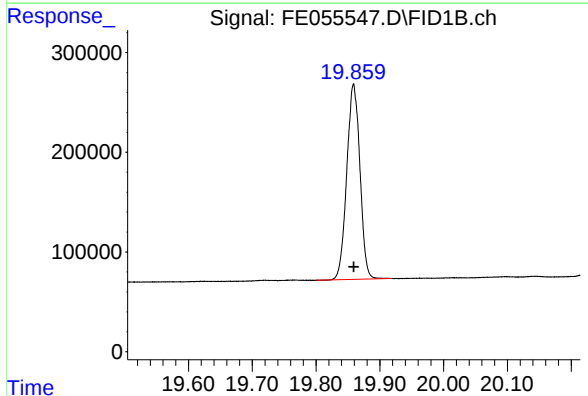
#17 n-Tricontane (C30)

R.T.: 18.240 min
Delta R.T.: 0.000 min
Response: 2934030
Conc: 20.00 ug/ml



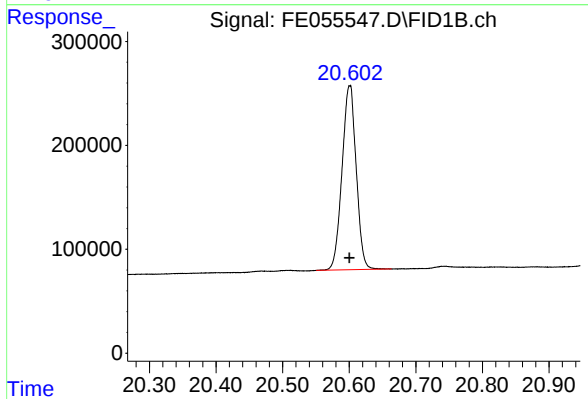
#18 n-Dotriacontane (C32)

R.T.: 19.074 min
Delta R.T.: 0.000 min
Response: 2920846
Conc: 20.00 ug/ml



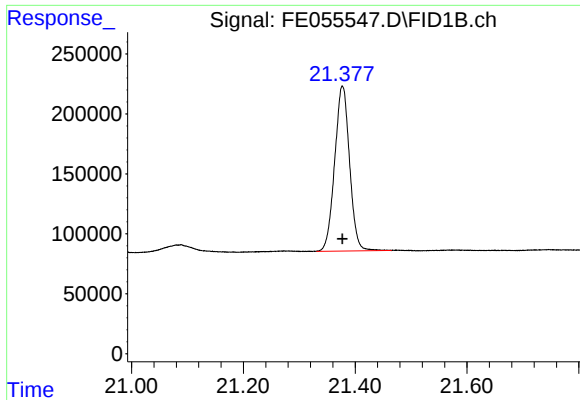
#19 n-Tetratriacontane (C34)

R.T.: 19.859 min
Delta R.T.: 0.000 min
Response: 2809431
Conc: 20.00 ug/ml



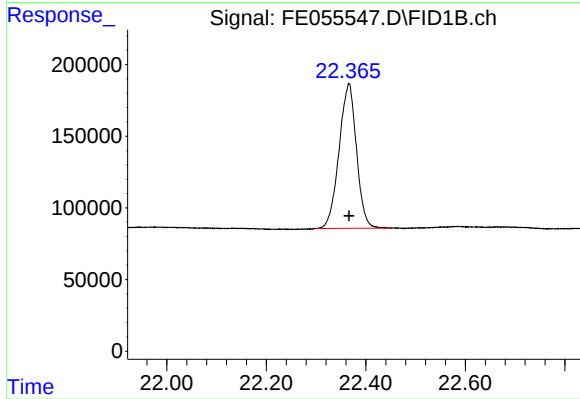
#20 n-Hexatriacontane (C36)

R.T.: 20.601 min
Delta R.T.: 0.000 min
Response: 2620265
Conc: 20.00 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.377 min
Delta R.T.: 0.000 min
Response: 2539543
Conc: 20.00 ug/ml



#22 n-Tetracontane (C40)

R.T.: 22.366 min
Delta R.T.: 0.000 min
Response: 2453185
Conc: 20.00 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
 Data File : FE055547.D
 Signal(s) : FID1B.ch
 Acq On : 28 Aug 2025 10:34
 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 082925.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	3.414	3.375	3.464	BB	255465	2530579	77.22%	4.155%
2	4.673	4.639	4.719	BB	260252	2551497	77.86%	4.189%
3	6.392	6.359	6.469	BB	303022	2925404	89.27%	4.803%
4	6.849	6.815	6.895	BB	266425	2601682	79.39%	4.272%
5	7.493	7.452	7.564	BB	289142	2831487	86.40%	4.649%
6	8.685	8.650	8.747	BB	250558	2624050	80.07%	4.308%
7	10.300	10.245	10.345	BB	258692	2753193	84.01%	4.520%
8	11.750	11.705	11.809	BB	253983	2904925	88.64%	4.770%
9	12.077	12.037	12.130	BB	304941	3277094	100.00%	5.381%
10	13.064	13.007	13.117	BB	246936	2864643	87.41%	4.703%
11	13.513	13.455	13.567	BB	215156	2498820	76.25%	4.103%
12	13.679	13.624	13.737	BB	238940	2846445	86.86%	4.674%
13	14.267	14.204	14.329	BB	240835	2853950	87.09%	4.686%
14	15.375	15.317	15.432	BB	223855	2887260	88.10%	4.741%
15	16.398	16.335	16.460	BB	223081	2849191	86.94%	4.678%
16	17.350	17.289	17.422	BB	209651	2827205	86.27%	4.642%
17	18.240	18.174	18.315	BB	213168	2934030	89.53%	4.817%
18	19.074	19.012	19.135	BB	211575	2920846	89.13%	4.796%
19	19.859	19.800	19.919	BB	195432	2809431	85.73%	4.613%
20	20.601	20.550	20.664	BB	177486	2620265	79.96%	4.302%
21	21.377	21.330	21.465	BB	137550	2539543	77.49%	4.170%
22	22.366	22.300	22.452	BB	101248	2453185	74.86%	4.028%
Sum of corrected areas:						60904726		

Aliphatic EPH 082925.M Fri Aug 29 08:20:23 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
 Data File : FE055548.D
 Signal(s) : FID1B.ch
 Acq On : 28 Aug 2025 11:04
 Operator : YP\AJ
 Sample : 10 PPM ALIPHATIC HC STD4
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
 Quant Time: Aug 29 08:05:53 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
 Quant Title : GC Extractables
 Qlast Update : Fri Aug 29 08:03:47 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)	12.075	1683791	10.276 ug/ml
Spiked Amount 50.000		Recovery =	20.55%
12) S 1-chlorooctadecane (S...	13.512	1275820	10.211 ug/ml
Spiked Amount 50.000		Recovery =	20.42%
Target Compounds			
1) T n-Nonane (C9)	3.414	1297407	10.254 ug/ml
2) T n-Decane (C10)	4.672	1304028	10.222 ug/ml
3) T A~Naphthalene (C11.7)	6.392	1470302	10.052 ug/ml
4) T n-Dodecane (C12)	6.848	1321327	10.157 ug/ml
5) T A~2-methylnaphthalene...	7.493	1415527	9.998 ug/ml
6) T n-Tetradecane (C14)	8.685	1343455	10.240 ug/ml
7) T n-Hexadecane (C16)	10.300	1408614	10.233 ug/ml
8) T n-Octadecane (C18)	11.749	1496127	10.301 ug/ml
10) T n-Eicosane (C20)	13.064	1475555	10.302 ug/ml
11) T n-Heneicosane (C21)	13.678	1469033	10.322 ug/ml
13) T n-Docosane (C22)	14.266	1474035	10.330 ug/ml
14) T n-Tetracosane (C24)	15.373	1491136	10.329 ug/ml
15) T n-Hexacosane (C26)	16.397	1473454	10.343 ug/ml
16) T n-Octacosane (C28)	17.349	1471739	10.411 ug/ml
17) T n-Tricontane (C30)	18.239	1533792	10.455 ug/ml
18) T n-Dotriacontane (C32)	19.073	1522069	10.422 ug/ml
19) T n-Tetratriacontane (C34)	19.859	1463167	10.416 ug/ml
20) T n-Hexatriacontane (C36)	20.600	1373755	10.486 ug/ml
21) T n-Octatriacontane (C38)	21.377	1388003	10.931 ug/ml
22) T n-Tetracontane (C40)	22.361	1365028	11.129 ug/ml

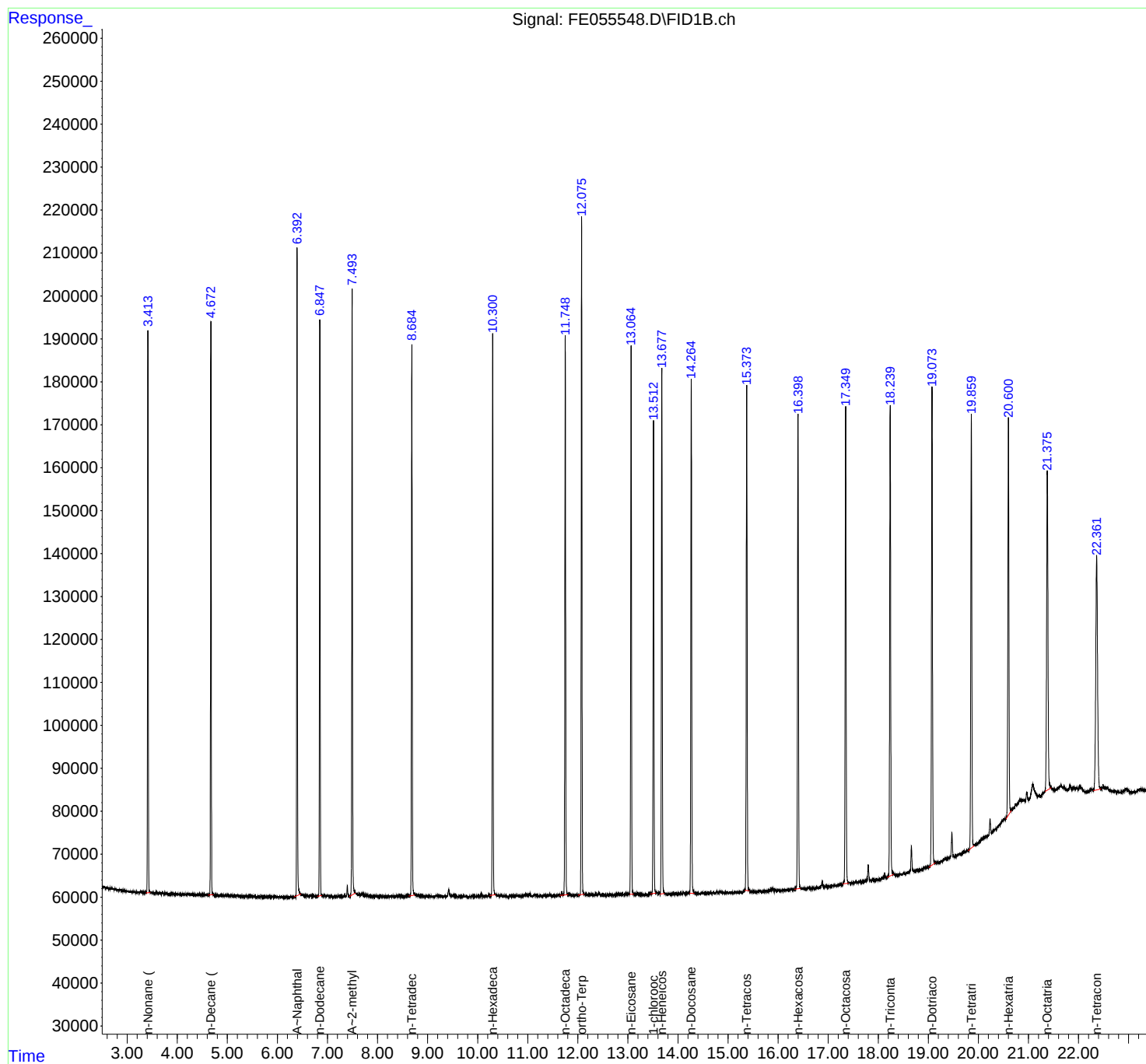
(f)=RT Delta > 1/2 Window

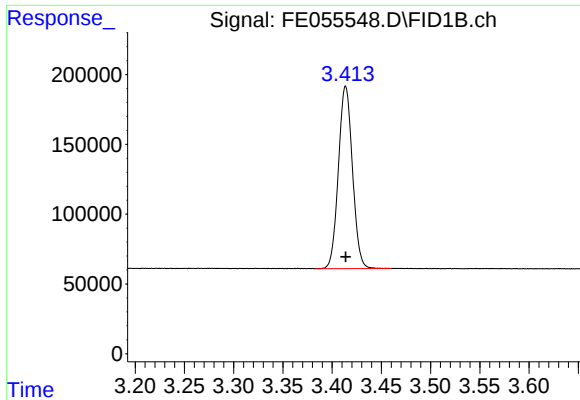
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
Data File : FE055548.D
Signal(s) : FID1B.ch
Acq On : 28 Aug 2025 11:04
Operator : YP\AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 08:05:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
Quant Title : GC Extractables
QLast Update : Fri Aug 29 08:03:47 2025
Response via : Initial Calibration
Integrator: ChemStation

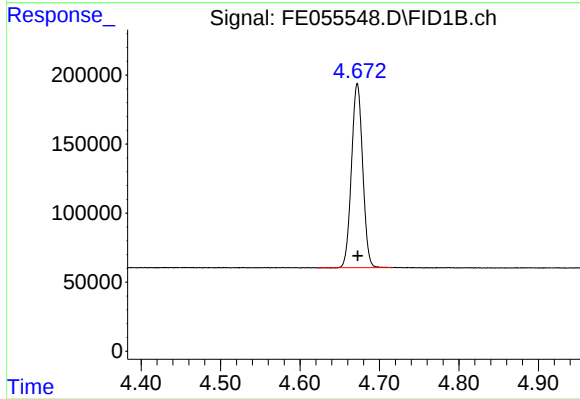
Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um





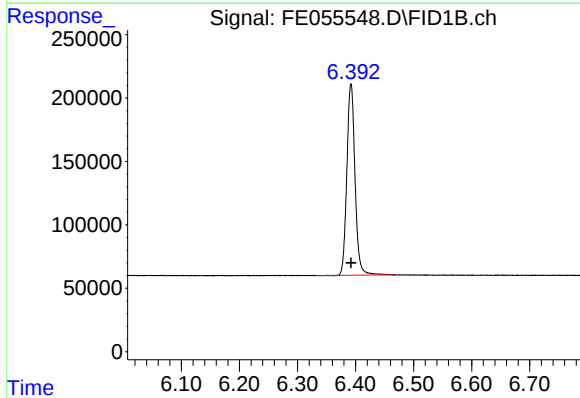
#1 n-Nonane (C9)

R.T.: 3.414 min
Delta R.T.: 0.000 min
Response: 1297407
Conc: 10.25 ug/ml



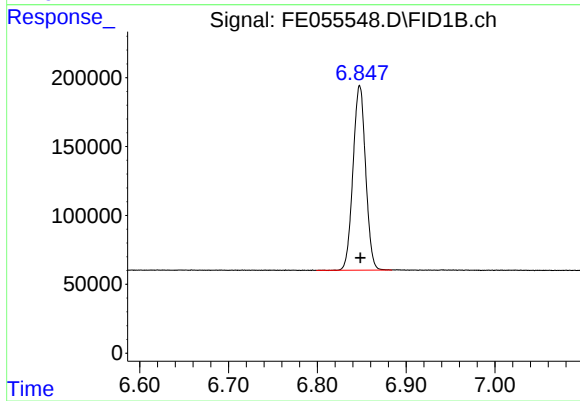
#2 n-Decane (C10)

R.T.: 4.672 min
Delta R.T.: 0.000 min
Response: 1304028
Conc: 10.22 ug/ml



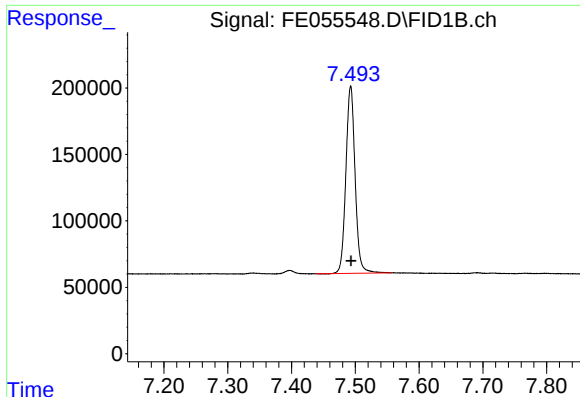
#3 A~Naphthalene (C11.7)

R.T.: 6.392 min
Delta R.T.: 0.000 min
Response: 1470302
Conc: 10.05 ug/ml



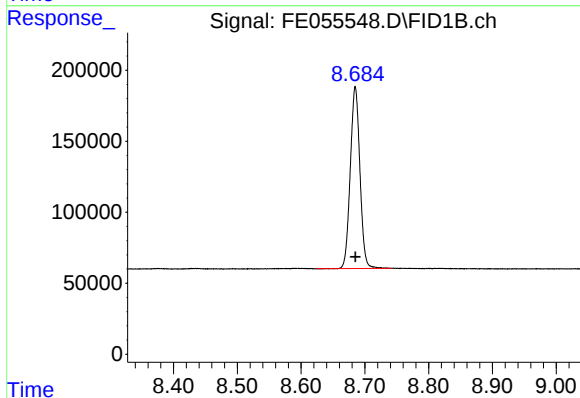
#4 n-Dodecane (C12)

R.T.: 6.848 min
Delta R.T.: 0.000 min
Response: 1321327
Conc: 10.16 ug/ml



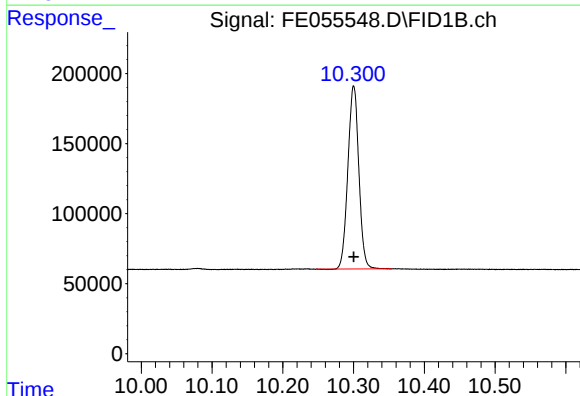
#5 A~2-methylnaphthalene (C12.89)

R.T.: 7.493 min
Delta R.T.: 0.000 min
Response: 1415527
Conc: 10.00 ug/ml



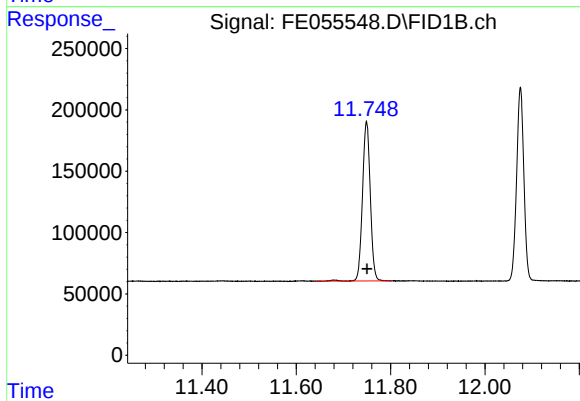
#6 n-Tetradecane (C14)

R.T.: 8.685 min
Delta R.T.: 0.000 min
Response: 1343455
Conc: 10.24 ug/ml



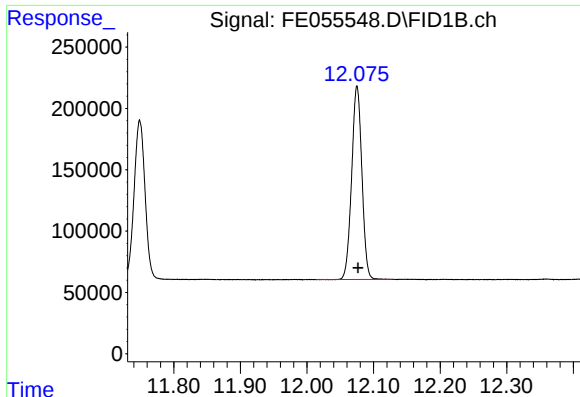
#7 n-Hexadecane (C16)

R.T.: 10.300 min
Delta R.T.: 0.000 min
Response: 1408614
Conc: 10.23 ug/ml



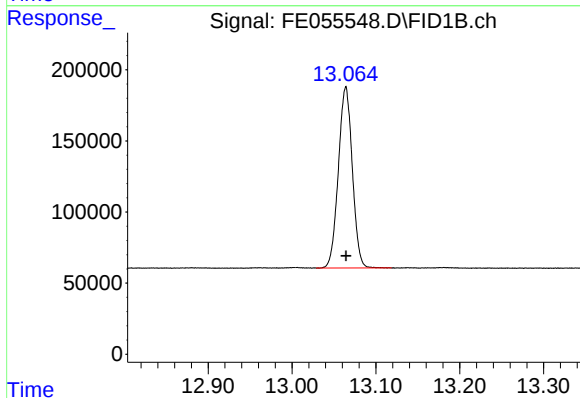
#8 n-Octadecane (C18)

R.T.: 11.749 min
Delta R.T.: -0.001 min
Response: 1496127
Conc: 10.30 ug/ml



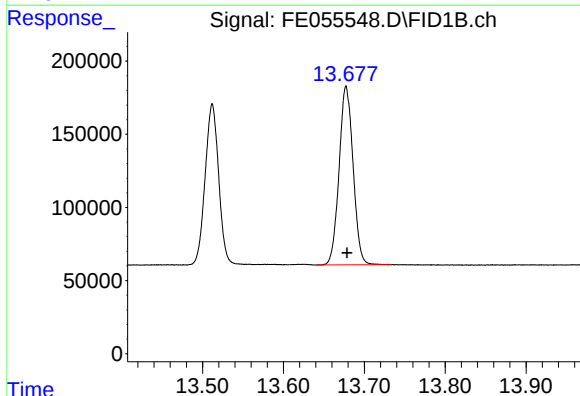
#9 ortho-Terphenyl (SURR)

R.T.: 12.075 min
Delta R.T.: -0.001 min
Response: 1683791
Conc: 10.28 ug/ml



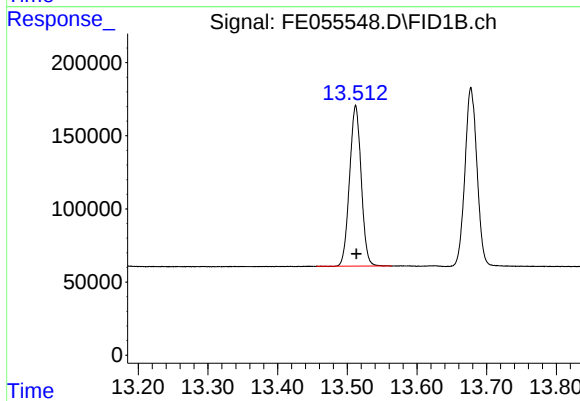
#10 n-Eicosane (C20)

R.T.: 13.064 min
Delta R.T.: 0.000 min
Response: 1475555
Conc: 10.30 ug/ml



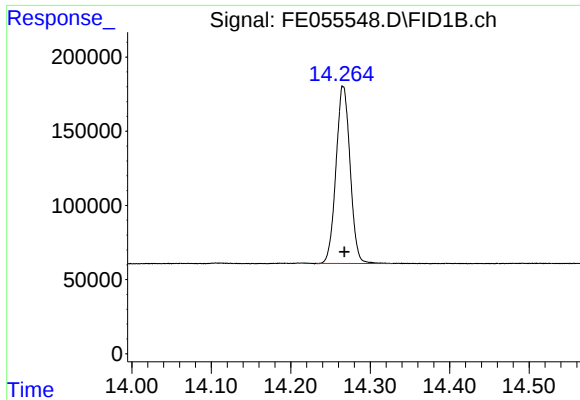
#11 n-Heneicosane (C21)

R.T.: 13.678 min
Delta R.T.: -0.001 min
Response: 1469033
Conc: 10.32 ug/ml



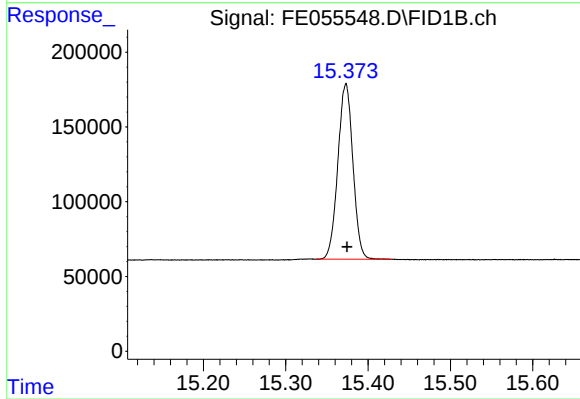
#12 1-chlorooctadecane (SURR)

R.T.: 13.512 min
Delta R.T.: 0.000 min
Response: 1275820
Conc: 10.21 ug/ml



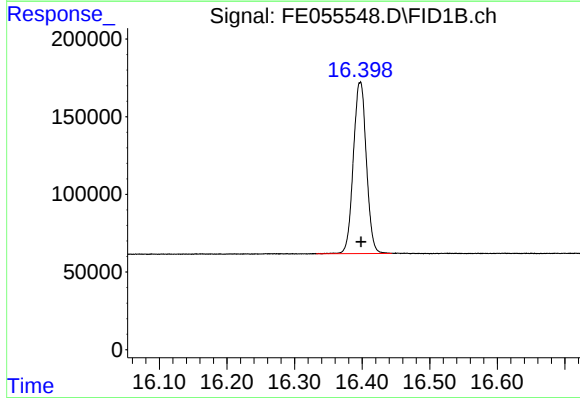
#13 n-Docosane (C22)

R.T.: 14.266 min
Delta R.T.: -0.001 min
Response: 1474035
Conc: 10.33 ug/ml



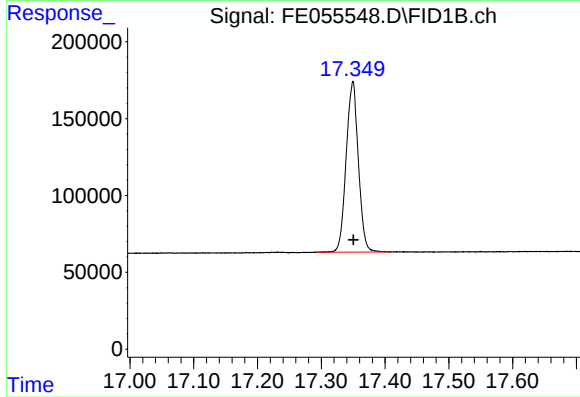
#14 n-Tetracosane (C24)

R.T.: 15.373 min
Delta R.T.: -0.002 min
Response: 1491136
Conc: 10.33 ug/ml



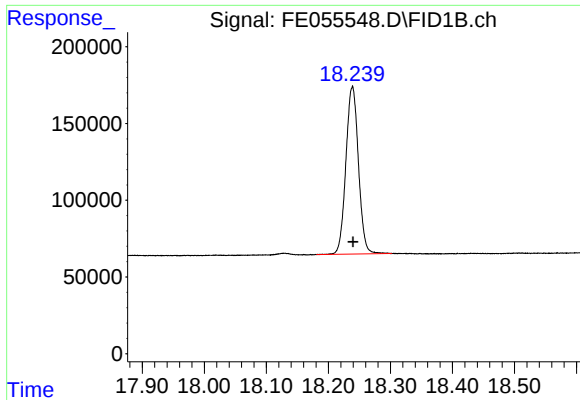
#15 n-Hexacosane (C26)

R.T.: 16.397 min
Delta R.T.: -0.001 min
Response: 1473454
Conc: 10.34 ug/ml



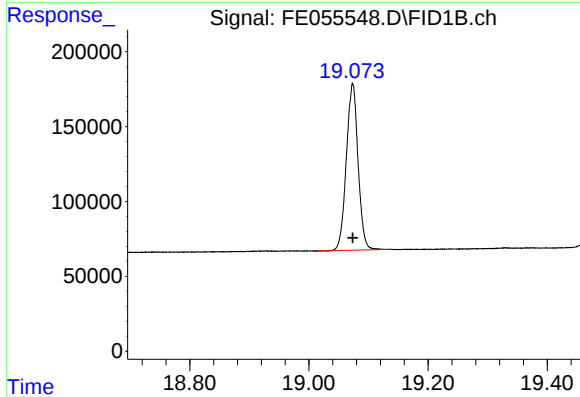
#16 n-Octacosane (C28)

R.T.: 17.349 min
Delta R.T.: -0.001 min
Response: 1471739
Conc: 10.41 ug/ml



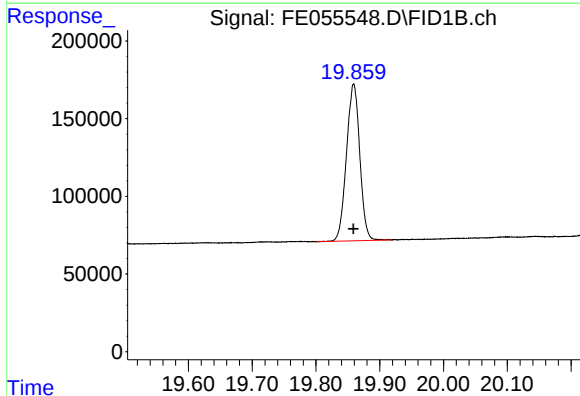
#17 n-Tricontane (C30)

R.T.: 18.239 min
Delta R.T.: 0.000 min
Response: 1533792
Conc: 10.46 ug/ml



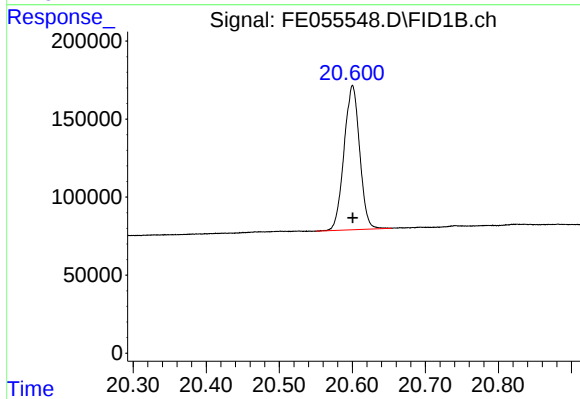
#18 n-Dotriacontane (C32)

R.T.: 19.073 min
Delta R.T.: 0.000 min
Response: 1522069
Conc: 10.42 ug/ml



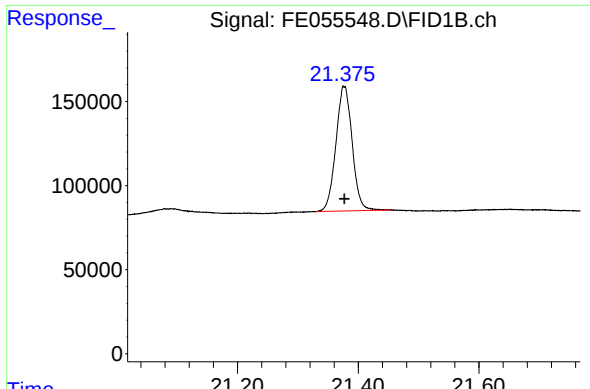
#19 n-Tetratriacontane (C34)

R.T.: 19.859 min
Delta R.T.: 0.000 min
Response: 1463167
Conc: 10.42 ug/ml



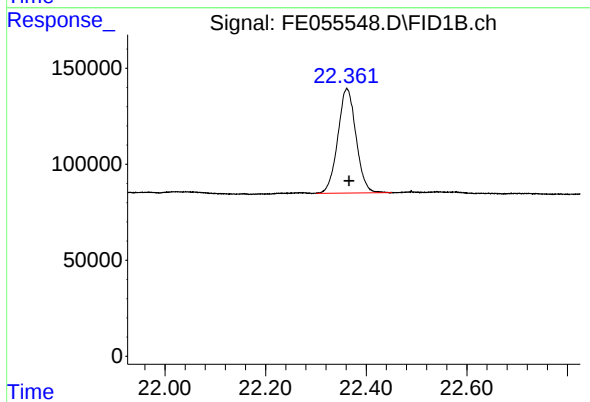
#20 n-Hexatriacontane (C36)

R.T.: 20.600 min
Delta R.T.: 0.000 min
Response: 1373755
Conc: 10.49 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.377 min
Delta R.T.: 0.000 min
Response: 1388003
Conc: 10.93 ug/ml



#22 n-Tetracontane (C40)

R.T.: 22.361 min
Delta R.T.: -0.004 min
Response: 1365028
Conc: 11.13 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
 Data File : FE055548.D
 Signal(s) : FID1B.ch
 Acq On : 28 Aug 2025 11:04
 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 082925.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	3.414	3.384	3.460	BB	130798	1297407	77.05%	4.117%
2	4.672	4.620	4.715	BB	133425	1304028	77.45%	4.138%
3	6.392	6.332	6.462	BB	150789	1470302	87.32%	4.665%
4	6.848	6.799	6.884	BB	134252	1321327	78.47%	4.192%
5	7.493	7.439	7.557	BB	140806	1415527	84.07%	4.491%
6	8.685	8.624	8.742	BB	128024	1343455	79.79%	4.263%
7	10.300	10.247	10.354	BB	130902	1408614	83.66%	4.469%
8	11.749	11.642	11.802	BB	129971	1496127	88.85%	4.747%
9	12.075	12.014	12.127	BB	157783	1683791	100.00%	5.342%
10	13.064	13.029	13.119	BB	127073	1475555	87.63%	4.682%
11	13.512	13.455	13.564	BB	110048	1275820	75.77%	4.048%
12	13.678	13.640	13.734	BB	121902	1469033	87.25%	4.661%
13	14.266	14.232	14.327	BB	119744	1474035	87.54%	4.677%
14	15.373	15.337	15.429	BB	117960	1491136	88.56%	4.731%
15	16.397	16.332	16.444	BB	109997	1473454	87.51%	4.675%
16	17.349	17.292	17.410	BB	110557	1471739	87.41%	4.670%
17	18.239	18.180	18.302	BB	109085	1533792	91.09%	4.867%
18	19.073	19.012	19.139	BB	111079	1522069	90.40%	4.829%
19	19.859	19.800	19.919	BB	100910	1463167	86.90%	4.642%
20	20.600	20.550	20.654	BB	92570	1373755	81.59%	4.359%
21	21.377	21.330	21.455	BB	73527	1388003	82.43%	4.404%
22	22.361	22.300	22.450	BB	54391	1365028	81.07%	4.331%
Sum of corrected areas:							31517164	

Aliphatic EPH 082925.M Fri Aug 29 08:20:39 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
 Data File : FE055549.D
 Signal(s) : FID1B.ch
 Acq On : 28 Aug 2025 11:35
 Operator : YP\AJ
 Sample : 5 PPM ALIPHATIC HC STD5
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
 Quant Time: Aug 29 08:06:09 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
 Quant Title : GC Extractables
 Qlast Update : Fri Aug 29 08:03:47 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)	12.075	886867	5.413 ug/ml
Spiked Amount 50.000		Recovery =	10.83%
12) S 1-chlorooctadecane (S...	13.512	664532	5.319 ug/ml
Spiked Amount 50.000		Recovery =	10.64%
Target Compounds			
1) T n-Nonane (C9)	3.414	682963	5.398 ug/ml
2) T n-Decane (C10)	4.672	684967	5.369 ug/ml
3) T A~Naphthalene (C11.7)	6.393	756034	5.169 ug/ml
4) T n-Dodecane (C12)	6.848	694116	5.336 ug/ml
5) T A~2-methylnaphthalene...	7.493	725045	5.121 ug/ml
6) T n-Tetradecane (C14)	8.685	706684	5.386 ug/ml
7) T n-Hexadecane (C16)	10.300	740047	5.376 ug/ml
8) T n-Octadecane (C18)	11.747	784075	5.398 ug/mlm
10) T n-Eicosane (C20)	13.063	774768	5.409 ug/ml
11) T n-Heneicosane (C21)	13.678	763149	5.362 ug/ml
13) T n-Docosane (C22)	14.267	764471	5.357 ug/ml
14) T n-Tetracosane (C24)	15.372	780260	5.405 ug/ml
15) T n-Hexacosane (C26)	16.397	772166	5.420 ug/ml
16) T n-Octacosane (C28)	17.349	781247	5.527 ug/ml
17) T n-Tricontane (C30)	18.239	832675	5.676 ug/ml
18) T n-Dotriacontane (C32)	19.073	833273	5.706 ug/ml
19) T n-Tetratriacontane (C34)	19.859	790611	5.628 ug/ml
20) T n-Hexatriacontane (C36)	20.600	718429	5.484 ug/ml
21) T n-Octatriacontane (C38)	21.377	710550	5.596 ug/ml
22) T n-Tetracontane (C40)	22.366	716186	5.839 ug/ml

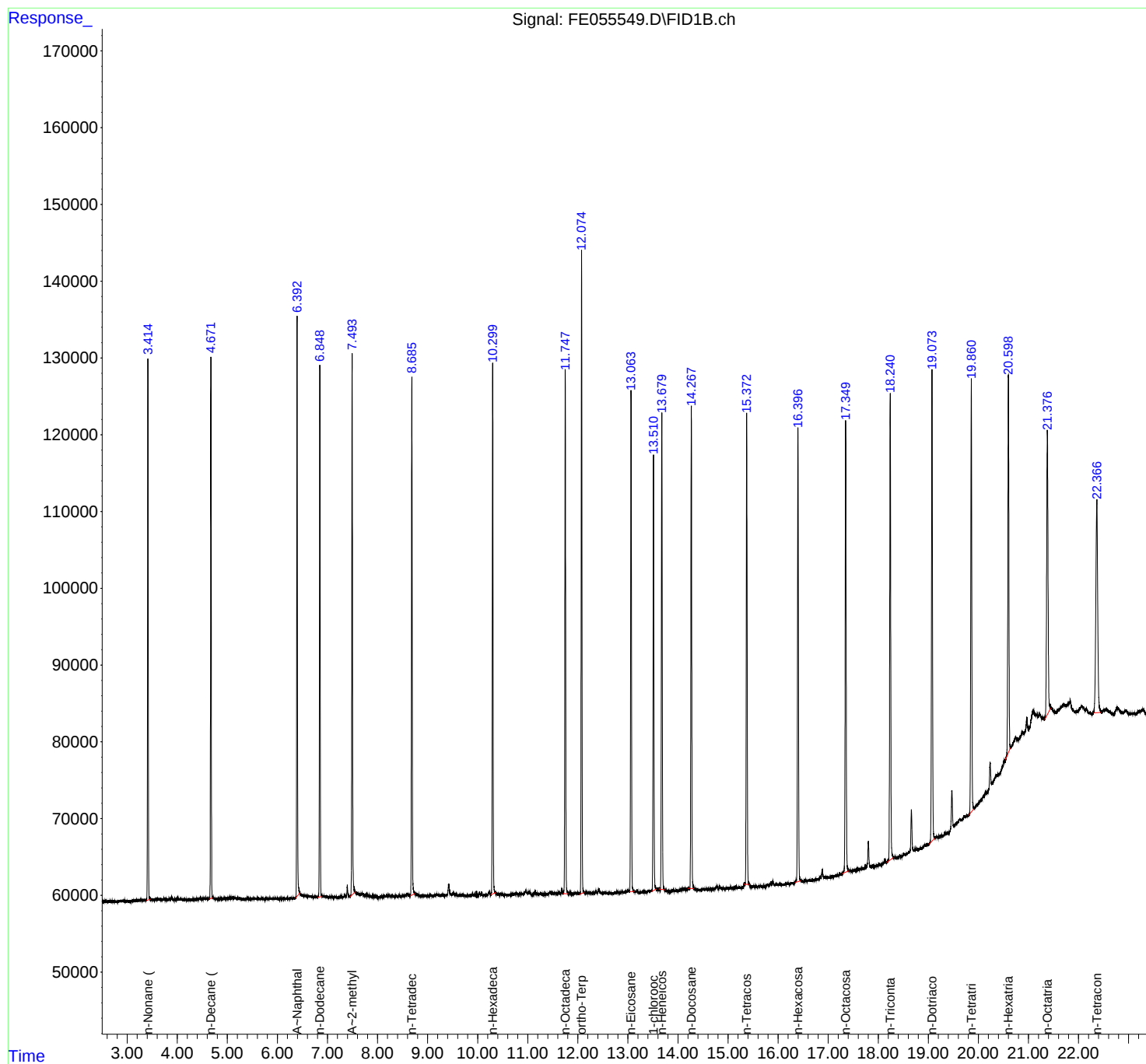
(f)=RT Delta > 1/2 Window

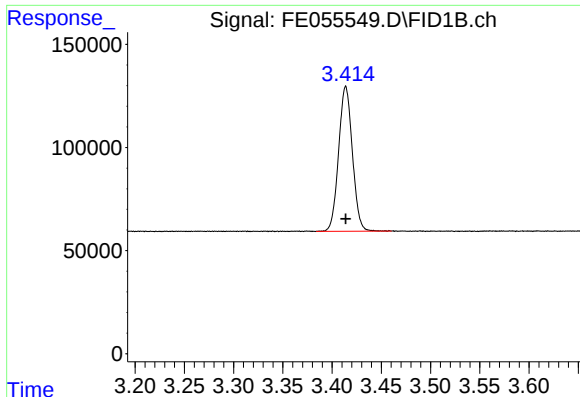
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
Data File : FE055549.D
Signal(s) : FID1B.ch
Acq On : 28 Aug 2025 11:35
Operator : YP\AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 08:06:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
Quant Title : GC Extractables
QLast Update : Fri Aug 29 08:03:47 2025
Response via : Initial Calibration
Integrator: ChemStation

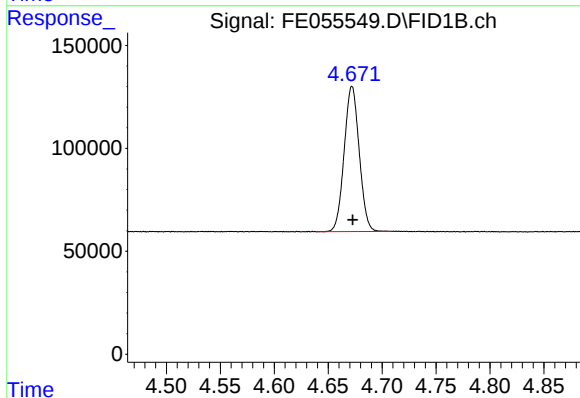
Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um





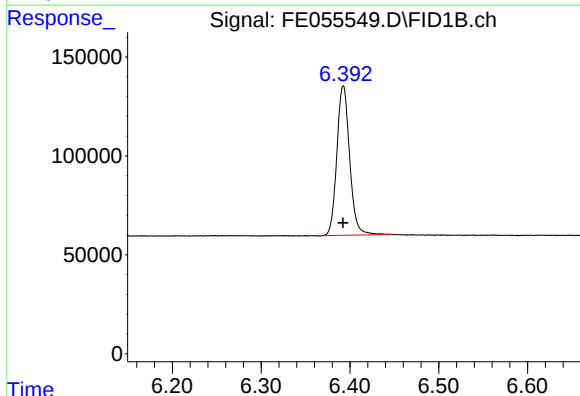
#1 n-Nonane (C9)

R.T.: 3.414 min
Delta R.T.: 0.000 min
Response: 682963
Conc: 5.40 ug/ml



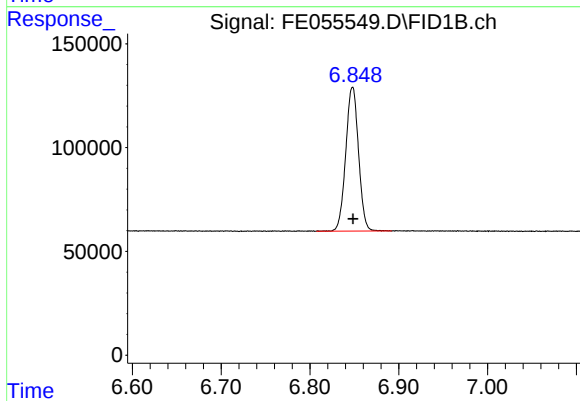
#2 n-Decane (C10)

R.T.: 4.672 min
Delta R.T.: 0.000 min
Response: 684967
Conc: 5.37 ug/ml



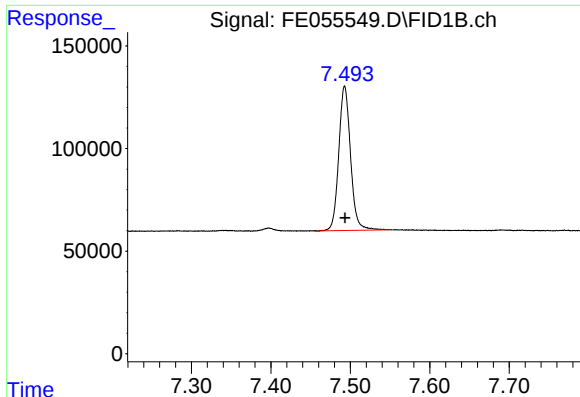
#3 A~Naphthalene (C11.7)

R.T.: 6.393 min
Delta R.T.: 0.000 min
Response: 756034
Conc: 5.17 ug/ml



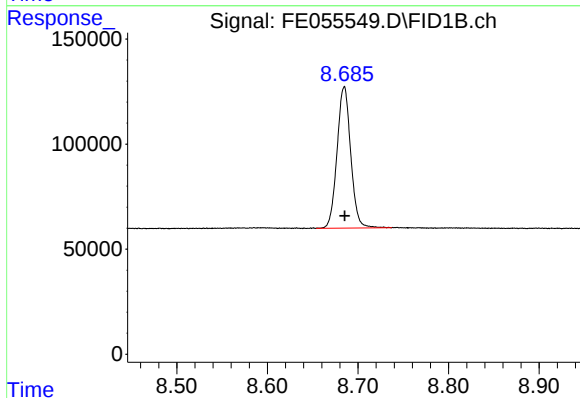
#4 n-Dodecane (C12)

R.T.: 6.848 min
Delta R.T.: 0.000 min
Response: 694116
Conc: 5.34 ug/ml



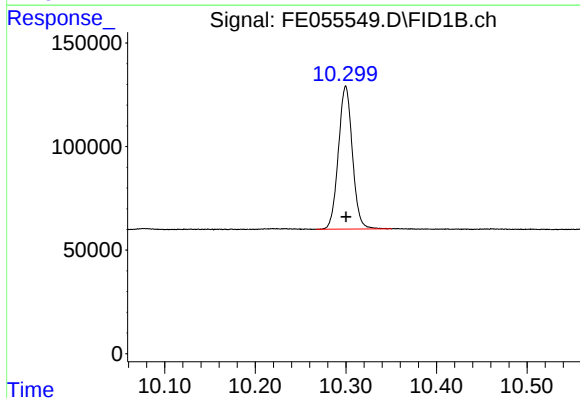
#5 A~2-methylnaphthalene (C12.89)

R.T.: 7.493 min
Delta R.T.: 0.000 min
Response: 725045
Conc: 5.12 ug/ml



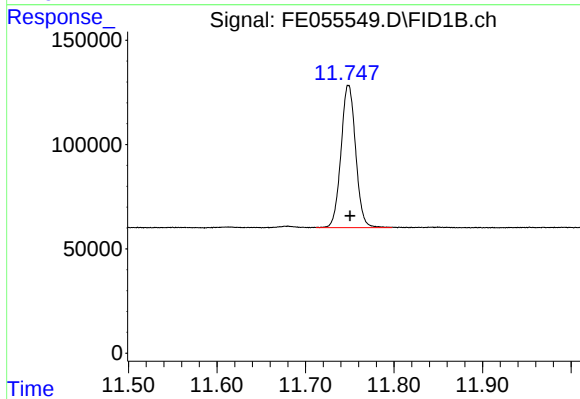
#6 n-Tetradecane (C14)

R.T.: 8.685 min
Delta R.T.: 0.000 min
Response: 706684
Conc: 5.39 ug/ml



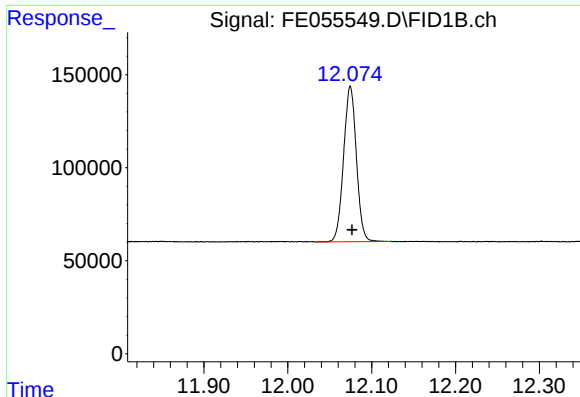
#7 n-Hexadecane (C16)

R.T.: 10.300 min
Delta R.T.: 0.000 min
Response: 740047
Conc: 5.38 ug/ml



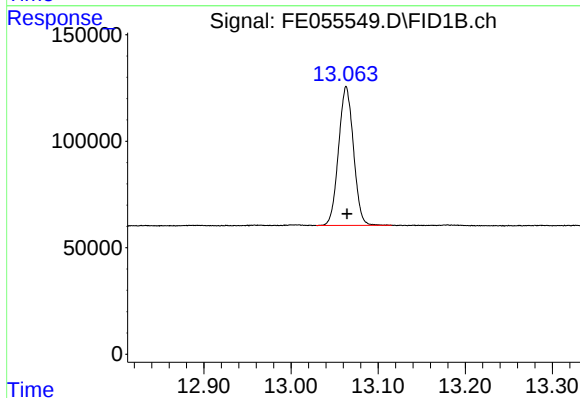
#8 n-Octadecane (C18)

R.T.: 11.747 min
Delta R.T.: -0.003 min
Response: 784075
Conc: 5.40 ug/ml m



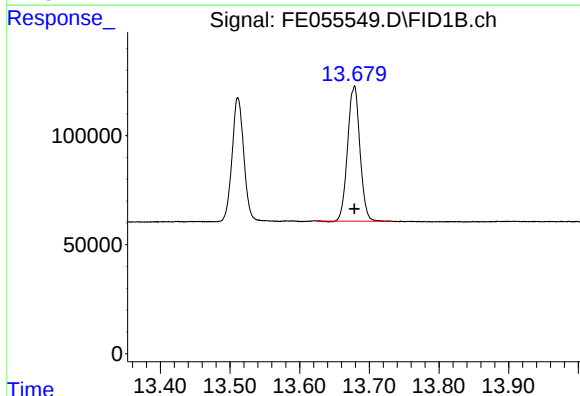
#9 ortho-Terphenyl (SURR)

R.T.: 12.075 min
Delta R.T.: -0.002 min
Response: 886867
Conc: 5.41 ug/ml



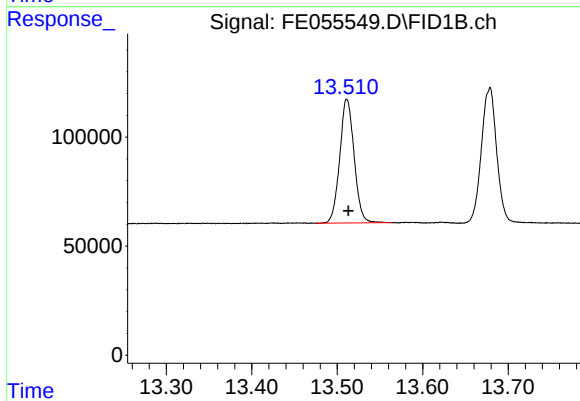
#10 n-Eicosane (C20)

R.T.: 13.063 min
Delta R.T.: 0.000 min
Response: 774768
Conc: 5.41 ug/ml



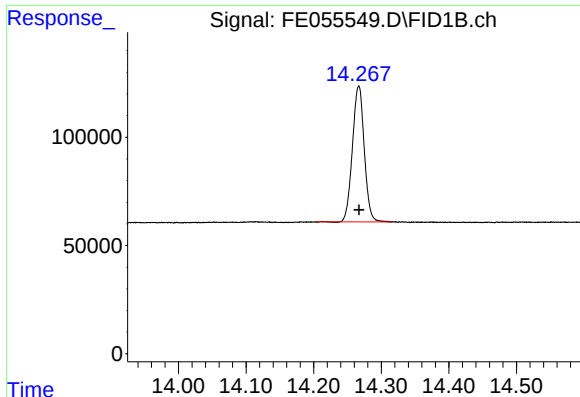
#11 n-Heneicosane (C21)

R.T.: 13.678 min
Delta R.T.: 0.000 min
Response: 763149
Conc: 5.36 ug/ml



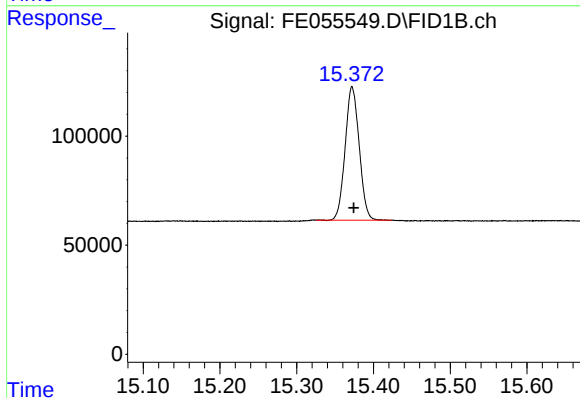
#12 1-chlorooctadecane (SURR)

R.T.: 13.512 min
Delta R.T.: -0.001 min
Response: 664532
Conc: 5.32 ug/ml



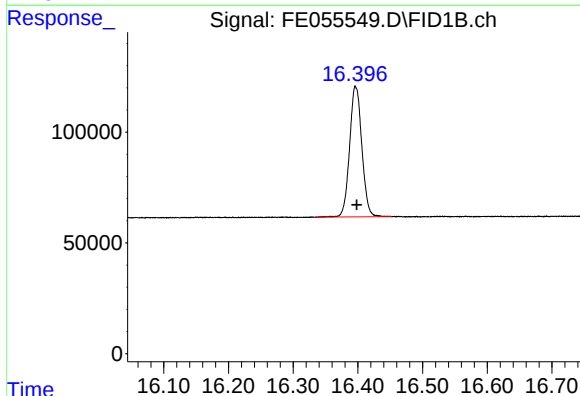
#13 n-Docosane (C22)

R.T.: 14.267 min
Delta R.T.: 0.000 min
Response: 764471
Conc: 5.36 ug/ml



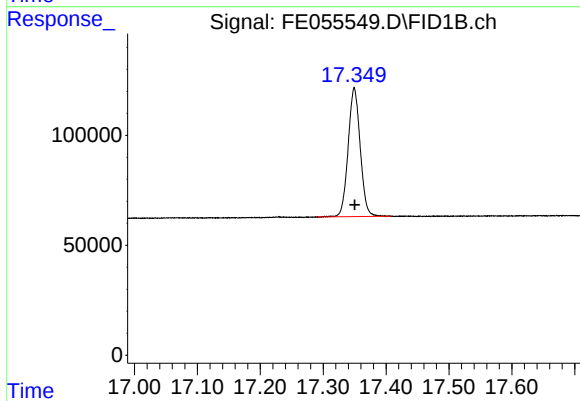
#14 n-Tetracosane (C24)

R.T.: 15.372 min
Delta R.T.: -0.002 min
Response: 780260
Conc: 5.40 ug/ml



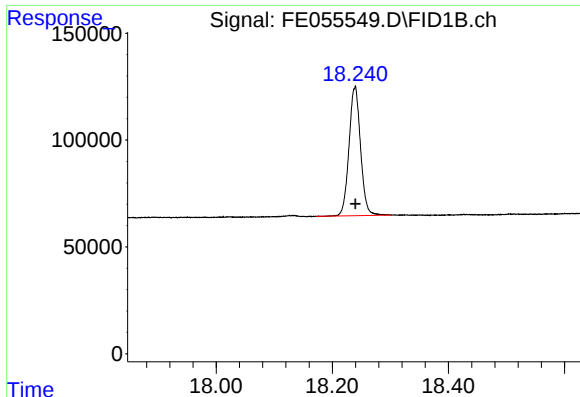
#15 n-Hexacosane (C26)

R.T.: 16.397 min
Delta R.T.: -0.002 min
Response: 772166
Conc: 5.42 ug/ml



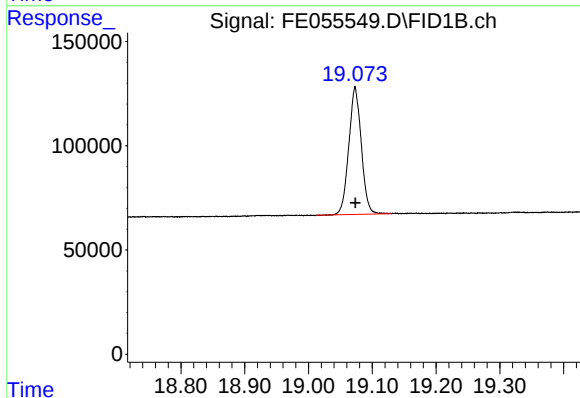
#16 n-Octacosane (C28)

R.T.: 17.349 min
Delta R.T.: 0.000 min
Response: 781247
Conc: 5.53 ug/ml



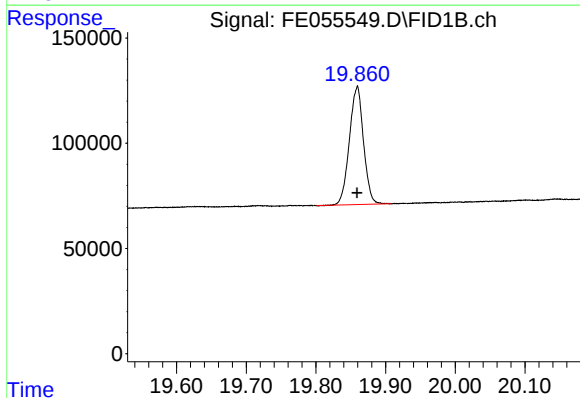
#17 n-Tricontane (C30)

R.T.: 18.239 min
Delta R.T.: 0.000 min
Response: 832675
Conc: 5.68 ug/ml



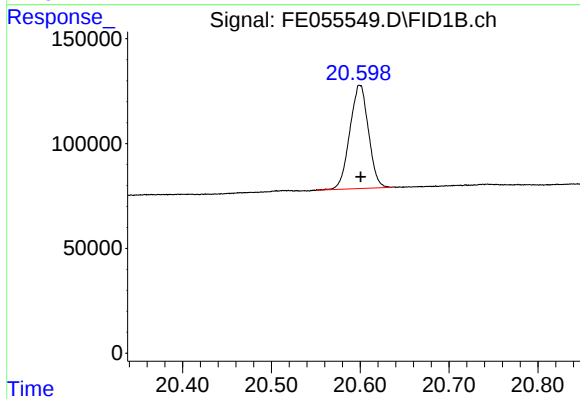
#18 n-Dotriacontane (C32)

R.T.: 19.073 min
Delta R.T.: 0.000 min
Response: 833273
Conc: 5.71 ug/ml



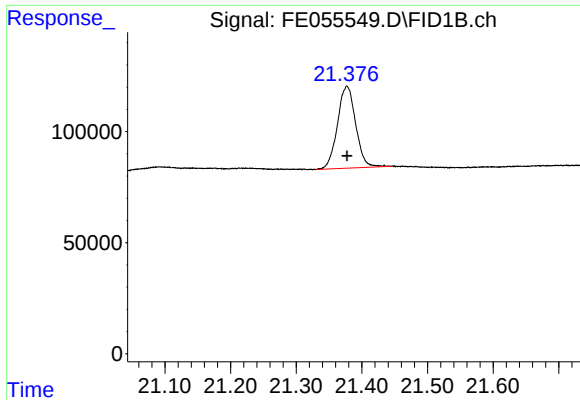
#19 n-Tetratriacontane (C34)

R.T.: 19.859 min
Delta R.T.: 0.000 min
Response: 790611
Conc: 5.63 ug/ml



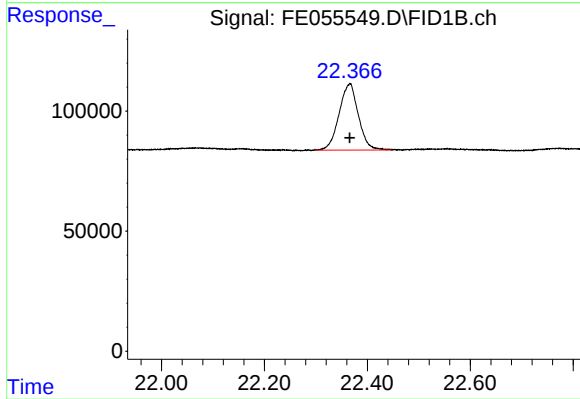
#20 n-Hexatriacontane (C36)

R.T.: 20.600 min
Delta R.T.: 0.000 min
Response: 718429
Conc: 5.48 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.377 min
Delta R.T.: 0.000 min
Response: 710550
Conc: 5.60 ug/ml



#22 n-Tetracontane (C40)

R.T.: 22.366 min
Delta R.T.: 0.000 min
Response: 716186
Conc: 5.84 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
 Data File : FE055549.D
 Signal(s) : FID1B.ch
 Acq On : 28 Aug 2025 11:35
 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 082925.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	3.414	3.384	3.460	BB	70259	682963	77.01%	4.122%
2	4.672	4.639	4.709	BB	70608	684967	77.23%	4.134%
3	6.393	6.362	6.447	BB	75611	756034	85.25%	4.563%
4	6.848	6.807	6.892	BB	69651	694116	78.27%	4.190%
5	7.493	7.457	7.552	BB	70352	725045	81.75%	4.376%
6	8.685	8.654	8.737	BB	67688	706684	79.68%	4.266%
7	10.300	10.267	10.350	BB	69252	740047	83.45%	4.467%
8	11.749	11.650	11.795	BB	68020	788112	88.86%	4.757%
9	12.075	12.034	12.124	BB	83581	886867	100.00%	5.353%
10	13.063	13.029	13.115	BB	65247	774768	87.36%	4.677%
11	13.512	13.475	13.564	BB	56510	664532	74.93%	4.011%
12	13.678	13.624	13.732	BB	62212	763149	86.05%	4.606%
13	14.267	14.204	14.315	BB	62912	764471	86.20%	4.614%
14	15.372	15.325	15.424	BB	61236	780260	87.98%	4.710%
15	16.397	16.335	16.452	BB	58389	772166	87.07%	4.661%
16	17.349	17.289	17.409	BB	58577	781247	88.09%	4.716%
17	18.239	18.172	18.302	BB	59961	832675	93.89%	5.026%
18	19.073	19.012	19.130	BB	61228	833273	93.96%	5.030%
19	19.859	19.800	19.909	BB	55777	790611	89.15%	4.772%
20	20.600	20.550	20.635	BB	49396	718429	81.01%	4.336%
21	21.377	21.330	21.445	BB	37049	710550	80.12%	4.289%
22	22.366	22.300	22.447	BB	27611	716186	80.75%	4.323%
Sum of corrected areas:							16567149	

Aliphatic EPH 082925.M Fri Aug 29 08:20:52 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
 Data File : FE055550.D
 Signal(s) : FID1B.ch
 Acq On : 28 Aug 2025 12:05
 Operator : YP\AJ
 Sample : 20 PPM ALIPHATIC HC STD ICV
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
 Quant Time: Aug 29 08:12:52 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
 Quant Title : GC Extractables
 Qlast Update : Fri Aug 29 08:12:09 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)	12.076	3229983	19.661 ug/ml
Spiked Amount 50.000		Recovery =	39.32%
12) S 1-chlorooctadecane (S...	13.513	2465273	19.715 ug/ml
Spiked Amount 50.000		Recovery =	39.43%
Target Compounds			
1) T n-Nonane (C9)	3.414	2507578	19.760 ug/ml
2) T n-Decane (C10)	4.672	2532591	19.771 ug/ml
3) T A~Naphthalene (C11.7)	6.392	2890578	19.895 ug/ml
4) T n-Dodecane (C12)	6.848	2567645	19.719 ug/ml
5) T A~2-methylnaphthalene...	7.493	2786377	19.811 ug/ml
6) T n-Tetradecane (C14)	8.685	2590138	19.668 ug/ml
7) T n-Hexadecane (C16)	10.300	2724449	19.672 ug/ml
8) T n-Octadecane (C18)	11.750	2861977	19.621 ug/ml
10) T n-Eicosane (C20)	13.065	2831312	19.669 ug/ml
11) T n-Heneicosane (C21)	13.679	2814220	19.701 ug/ml
13) T n-Docosane (C22)	14.267	2821284	19.709 ug/ml
14) T n-Tetracosane (C24)	15.374	2844427	19.658 ug/ml
15) T n-Hexacosane (C26)	16.398	2808359	19.658 ug/ml
16) T n-Octacosane (C28)	17.350	2785687	19.585 ug/ml
17) T n-Tricontane (C30)	18.239	2862102	19.362 ug/ml
18) T n-Dotriacontane (C32)	19.074	2802761	19.096 ug/ml
19) T n-Tetratriacontane (C34)	19.859	2710350	19.184 ug/ml
20) T n-Hexatriacontane (C36)	20.600	2544869	19.286 ug/ml
21) T n-Octatriacontane (C38)	21.378	2554442	19.613 ug/ml
22) T n-Tetracontane (C40)	22.365	2529947	19.728 ug/ml

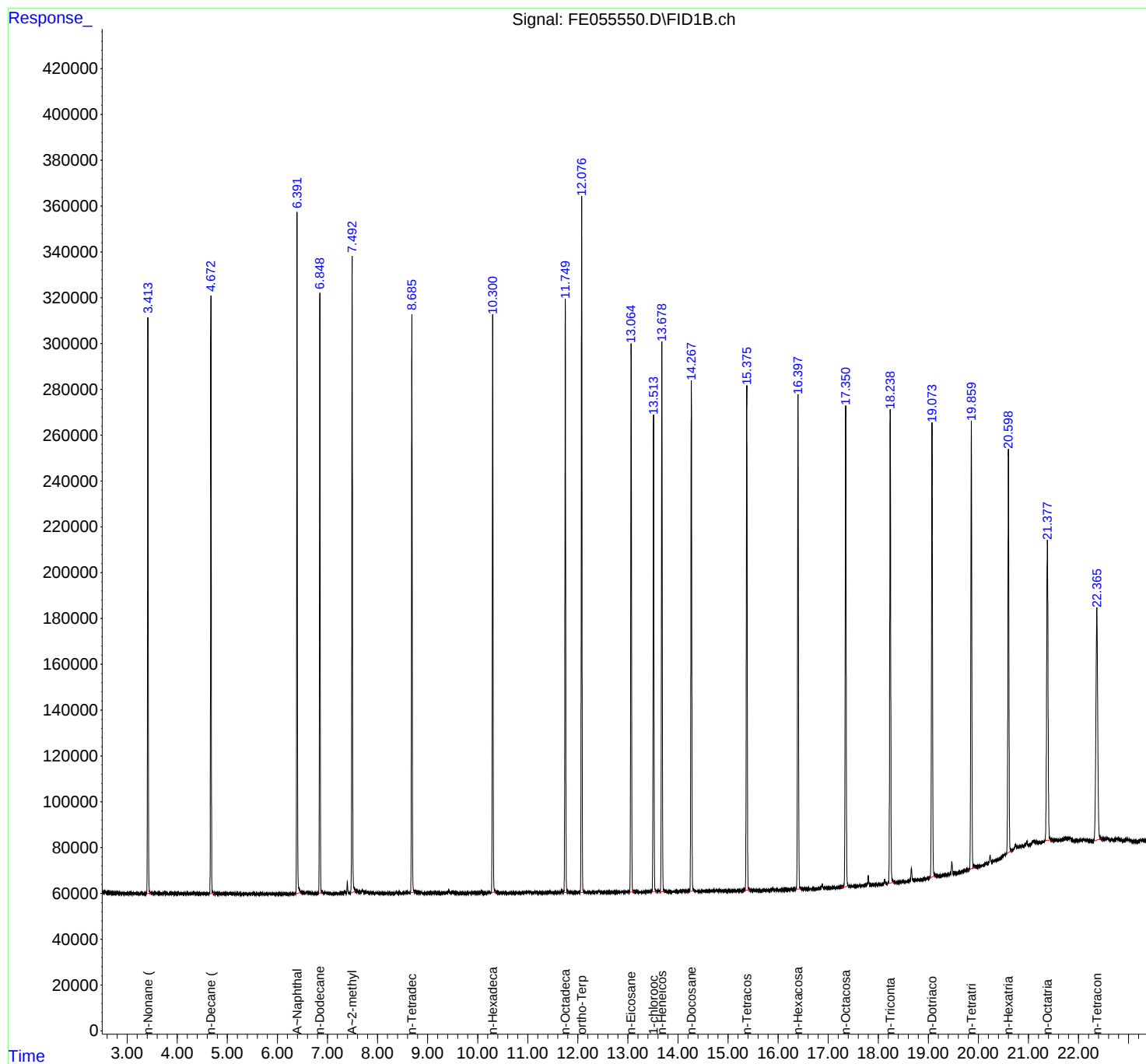
(f)=RT Delta > 1/2 Window

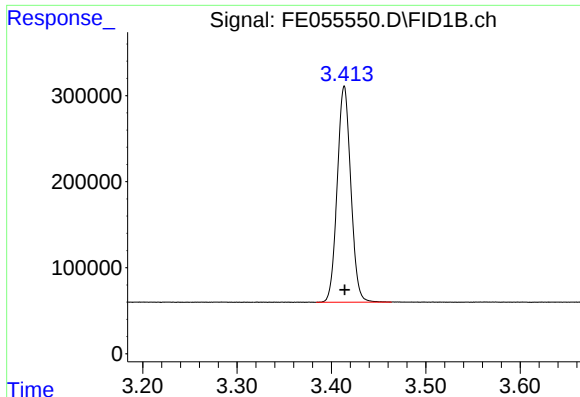
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
Data File : FE055550.D
Signal(s) : FID1B.ch
Acq On : 28 Aug 2025 12:05
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 08:12:52 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
Quant Title : GC Extractables
QLast Update : Fri Aug 29 08:12:09 2025
Response via : Initial Calibration
Integrator: ChemStation

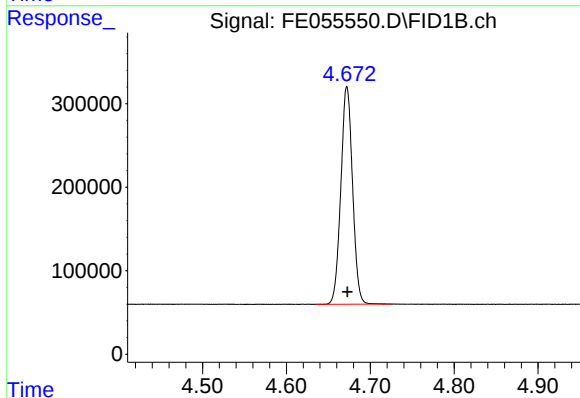
Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um





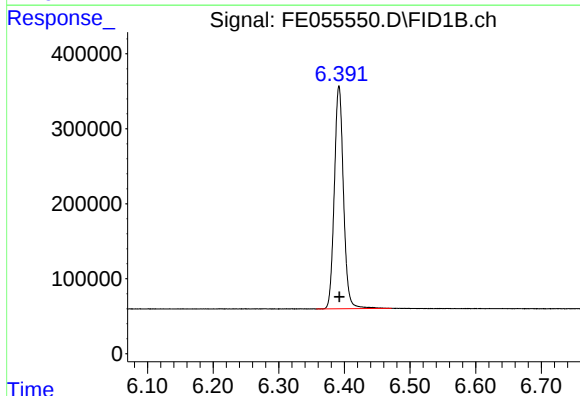
#1 n-Nonane (C9)

R.T.: 3.414 min
Delta R.T.: 0.000 min
Response: 2507578
Conc: 19.76 ug/ml



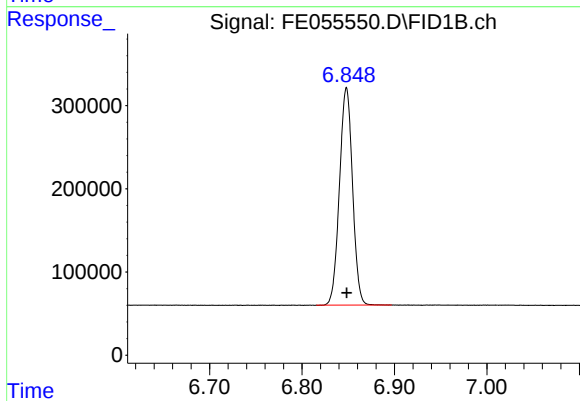
#2 n-Decane (C10)

R.T.: 4.672 min
Delta R.T.: 0.000 min
Response: 2532591
Conc: 19.77 ug/ml



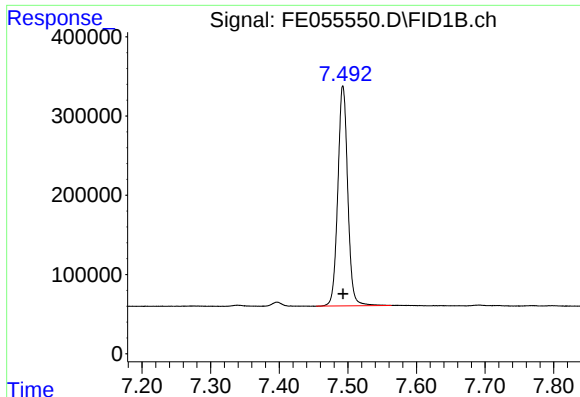
#3 A~Naphthalene (C11.7)

R.T.: 6.392 min
Delta R.T.: 0.000 min
Response: 2890578
Conc: 19.90 ug/ml



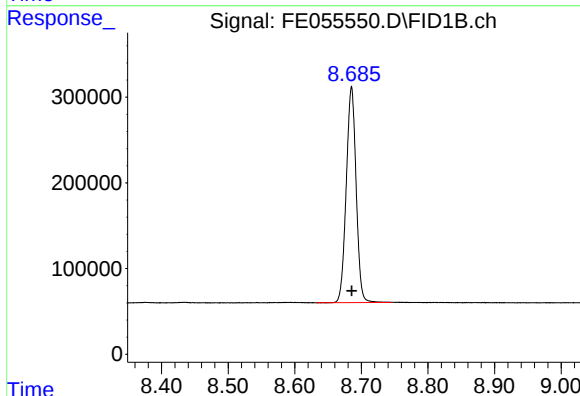
#4 n-Dodecane (C12)

R.T.: 6.848 min
Delta R.T.: 0.000 min
Response: 2567645
Conc: 19.72 ug/ml



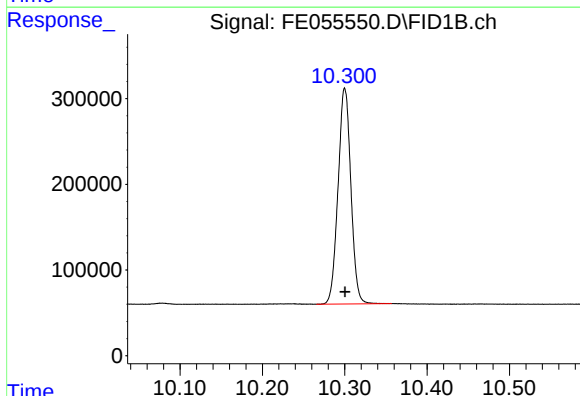
#5 A~2-methylnaphthalene (C12.89)

R.T.: 7.493 min
Delta R.T.: 0.000 min
Response: 2786377
Conc: 19.81 ug/ml



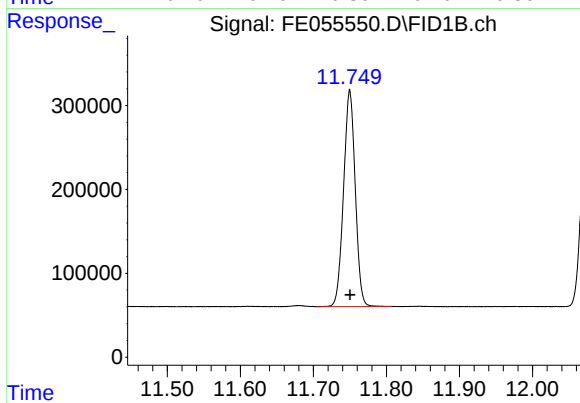
#6 n-Tetradecane (C14)

R.T.: 8.685 min
Delta R.T.: 0.000 min
Response: 2590138
Conc: 19.67 ug/ml



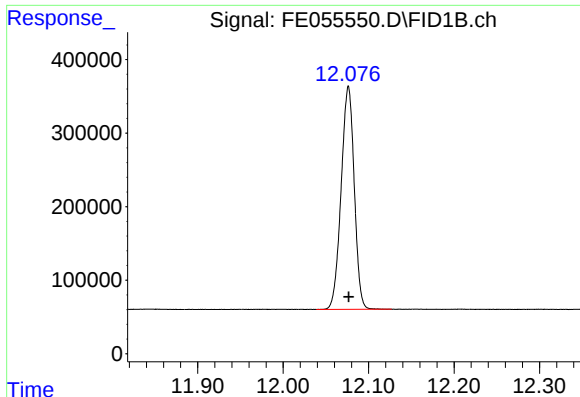
#7 n-Hexadecane (C16)

R.T.: 10.300 min
Delta R.T.: 0.000 min
Response: 2724449
Conc: 19.67 ug/ml



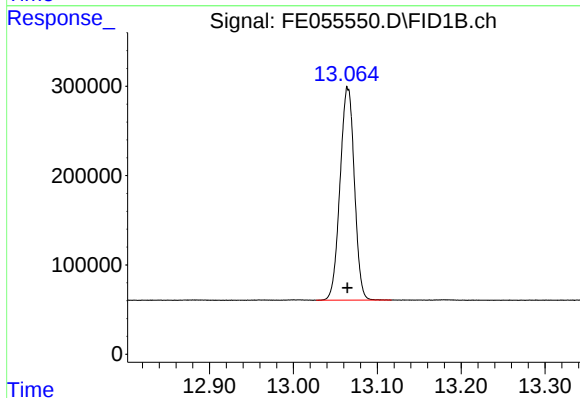
#8 n-Octadecane (C18)

R.T.: 11.750 min
Delta R.T.: 0.000 min
Response: 2861977
Conc: 19.62 ug/ml



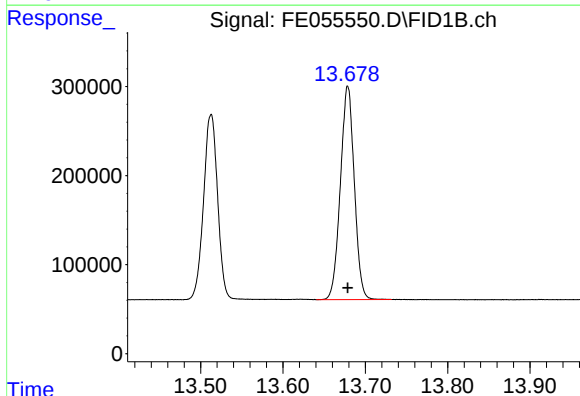
#9 ortho-Terphenyl (SURR)

R.T.: 12.076 min
Delta R.T.: 0.000 min
Response: 3229983
Conc: 19.66 ug/ml



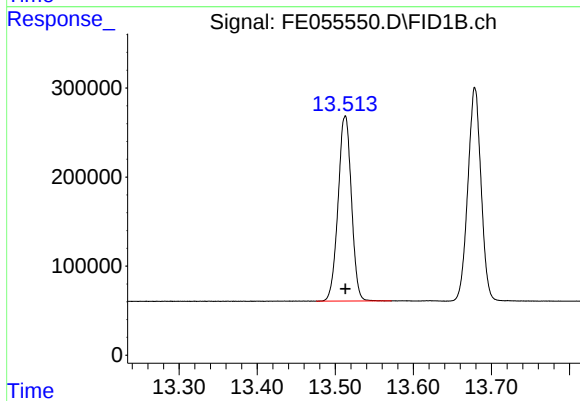
#10 n-Eicosane (C20)

R.T.: 13.065 min
Delta R.T.: 0.000 min
Response: 2831312
Conc: 19.67 ug/ml



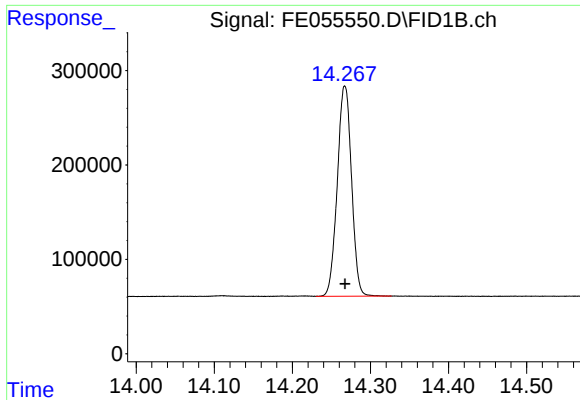
#11 n-Heneicosane (C21)

R.T.: 13.679 min
Delta R.T.: 0.000 min
Response: 2814220
Conc: 19.70 ug/ml



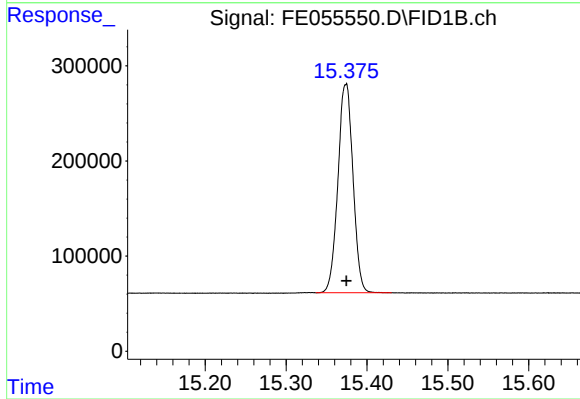
#12 1-chlorooctadecane (SURR)

R.T.: 13.513 min
Delta R.T.: 0.000 min
Response: 2465273
Conc: 19.72 ug/ml



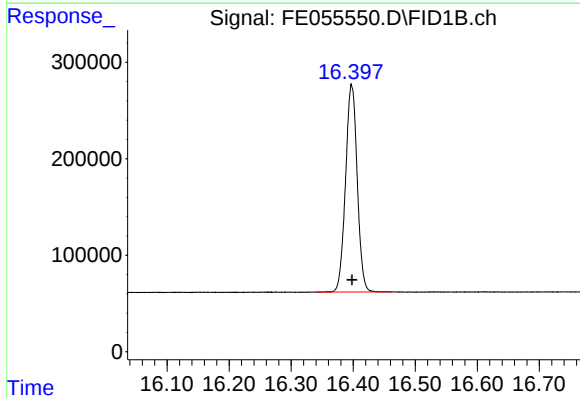
#13 n-Docosane (C22)

R.T.: 14.267 min
Delta R.T.: 0.000 min
Response: 2821284
Conc: 19.71 ug/ml



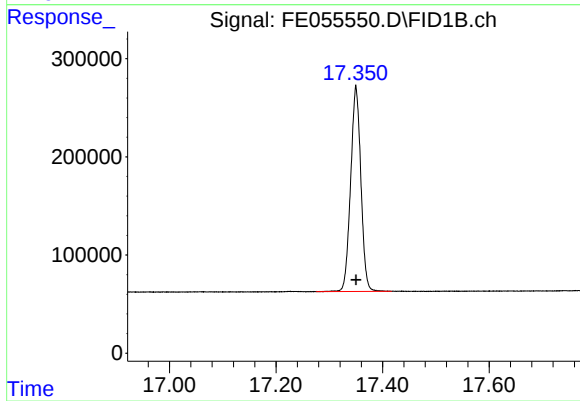
#14 n-Tetracosane (C24)

R.T.: 15.374 min
Delta R.T.: 0.000 min
Response: 2844427
Conc: 19.66 ug/ml



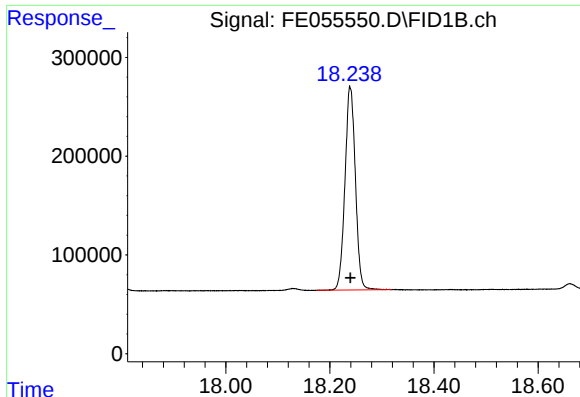
#15 n-Hexacosane (C26)

R.T.: 16.398 min
Delta R.T.: 0.000 min
Response: 2808359
Conc: 19.66 ug/ml



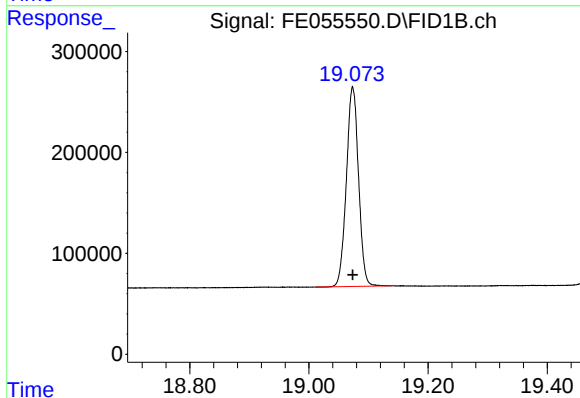
#16 n-Octacosane (C28)

R.T.: 17.350 min
Delta R.T.: 0.000 min
Response: 2785687
Conc: 19.58 ug/ml



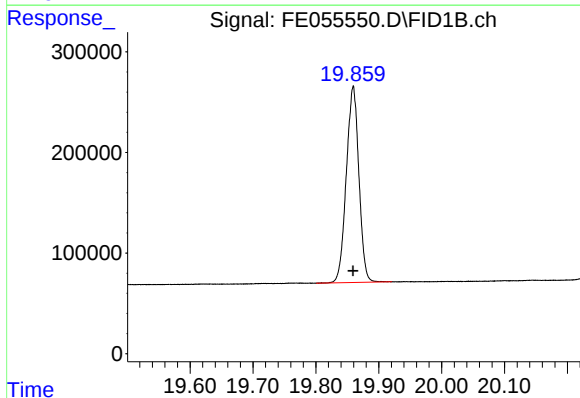
#17 n-Tricontane (C30)

R.T.: 18.239 min
Delta R.T.: 0.000 min
Response: 2862102
Conc: 19.36 ug/ml



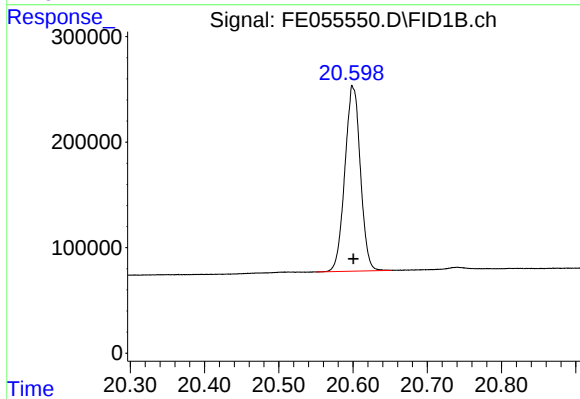
#18 n-Dotriacontane (C32)

R.T.: 19.074 min
Delta R.T.: 0.000 min
Response: 2802761
Conc: 19.10 ug/ml



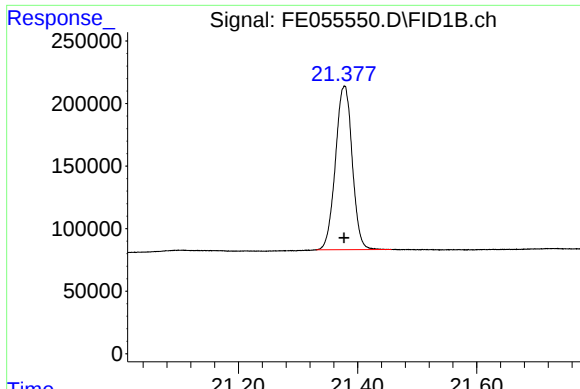
#19 n-Tetratriacontane (C34)

R.T.: 19.859 min
Delta R.T.: 0.000 min
Response: 2710350
Conc: 19.18 ug/ml



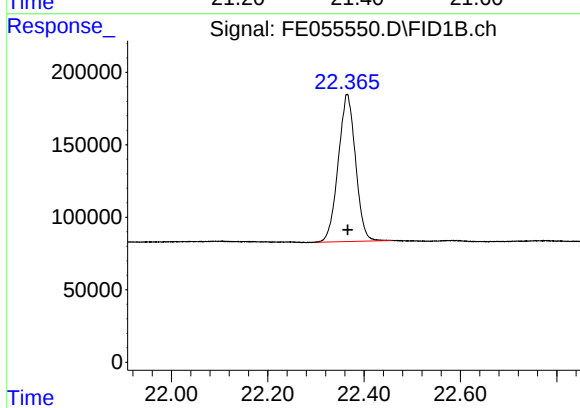
#20 n-Hexatriacontane (C36)

R.T.: 20.600 min
Delta R.T.: 0.000 min
Response: 2544869
Conc: 19.29 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.378 min
Delta R.T.: 0.000 min
Response: 2554442
Conc: 19.61 ug/ml



#22 n-Tetracontane (C40)

R.T.: 22.365 min
Delta R.T.: 0.000 min
Response: 2529947
Conc: 19.73 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE082925AL\
 Data File : FE055550.D
 Signal(s) : FID1B.ch
 Acq On : 28 Aug 2025 12:05
 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 082925.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	3.414	3.384	3.464	BB	251357	2507578	77.63%	4.175%
2	4.672	4.635	4.725	BB	260573	2532591	78.41%	4.216%
3	6.392	6.357	6.472	BB	297481	2890578	89.49%	4.812%
4	6.848	6.815	6.897	BB	262238	2567645	79.49%	4.275%
5	7.493	7.454	7.564	BB	277244	2786377	86.27%	4.639%
6	8.685	8.632	8.745	BB	252357	2590138	80.19%	4.312%
7	10.300	10.265	10.357	BB	251404	2724449	84.35%	4.536%
8	11.750	11.704	11.807	BB	257841	2861977	88.61%	4.765%
9	12.076	12.039	12.127	BB	304411	3229983	100.00%	5.377%
10	13.065	13.027	13.117	BB	236143	2831312	87.66%	4.714%
11	13.513	13.475	13.572	BB	207421	2465273	76.32%	4.104%
12	13.679	13.640	13.732	BB	240042	2814220	87.13%	4.685%
13	14.267	14.230	14.327	BB	222895	2821284	87.35%	4.697%
14	15.374	15.337	15.430	BB	219174	2844427	88.06%	4.735%
15	16.398	16.340	16.462	BB	215209	2808359	86.95%	4.675%
16	17.350	17.275	17.417	BB	208676	2785687	86.24%	4.638%
17	18.239	18.174	18.319	BB	205539	2862102	88.61%	4.765%
18	19.074	19.012	19.139	BB	197740	2802761	86.77%	4.666%
19	19.859	19.800	19.920	BB	194612	2710350	83.91%	4.512%
20	20.600	20.550	20.652	BB	173023	2544869	78.79%	4.237%
21	21.378	21.330	21.457	BB	130696	2554442	79.09%	4.253%
22	22.365	22.300	22.457	BB	101395	2529947	78.33%	4.212%
Sum of corrected areas:							60066348	

Aliphatic EPH 082925.M Fri Aug 29 08:21:09 2025

Continuing Calibration Report for SequenceID : FD092225AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FD049737.D

Aromatic C12-C16	7916565.000	60.000	6.132	8.759	131942.750	135865.661	2.887
Aromatic C16-C21	10200765.000	80.000	8.760	13.050	127509.563	135770.533	6.085
Aromatic C10-C12	4502846.000	40.000	4.389	6.131	112571.150	116056.185	3.003
Aromatic C21-C36	19572572.000	180.000	13.051	18.469	108736.511	118321.901	8.101
Aromatic EPH	42192748.000	360.000	4.389	18.469	117202.078	124871.589	6.142

Lab Sample ID:	20 PPM AROMATIC HC	Acq On:	22 Sep 2025 11:01
Client Sample ID:		Operator:	YP/AJ
Data file:	FD049737.D	Misc:	
Instrument:	FID_D	ALS Vial:	52
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.389	6.131	4502846.000	40.000	ug/ml
Aromatic C12-C16	6.132	8.759	7916565.000	60.000	ug/ml
Aromatic C16-C21	8.760	13.050	10200765.000	80.000	ug/ml
Aromatic C21-C36	13.051	18.469	19572572.000	180.000	ug/ml
Aromatic EPH	4.389	18.469	42192748.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
 Data File : FD049737.D
 Signal(s) : FID2B.ch
 Acq On : 22 Sep 2025 11:01
 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: Sep 23 02:02:10 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
 Quant Title : GC Extractables
 QLast Update : Fri Sep 05 06:31:58 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...	7.696	2191772	19.489 ug/ml
Spiked Amount 50.000		Recovery =	38.98%
6) S 2-Fluorobiphenyl (SURR)	8.560	1534216	19.113 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	38.23%
11) S ortho-Terphenyl (SURR)	11.607	2730527	19.300 ug/ml
Spiked Amount 50.000		Recovery =	38.60%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.489	2075080	19.258 ug/ml
2) T Naphthalene (C11.7)	6.031	2427766	19.522 ug/ml
3) T 2-Methylnaphthalene (...)	7.085	2546725	19.540 ug/ml
5) T Acenaphthylene (C15.06)	8.363	2688156	19.389 ug/ml
7) T Acenaphthene (C15.5)	8.659	2681684	19.345 ug/ml
8) T Flouorene (C16.55)	9.440	2643064	19.054 ug/ml
9) T Phenanthrene (C19.36)	10.838	2606873	18.714 ug/ml
10) T Anthracene (C19.43)	10.913	2456547	18.604 ug/ml
12) T Fluoranthene (C21.85)	12.652	2512669	18.658 ug/ml
13) T Pyrene (C20.8)	12.950	2494281	18.751 ug/ml
14) T Benzo[a]anthracene (C...	14.822	2211962	18.497 ug/ml
15) T Chrysene (C27.41)	14.864	2251361	18.506 ug/ml
16) T benzo[b]fluoranthene ...	16.371	2245656	18.734 ug/ml
17) T Bnezo[k]fluoranthene ...	16.403	2104429	18.677 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.750	2186709	18.635 ug/ml
19) T Indeno[1,2,3-cd]pyren...	18.114	1946459	17.892 ug/ml
20) T Dibenz[a,h]anthracene...	18.154	1986778	17.436 ug/ml
21) T Benzo[g,h,i]perylene ...	18.369	2126549	18.276 ug/ml

(f)=RT Delta > 1/2 Window

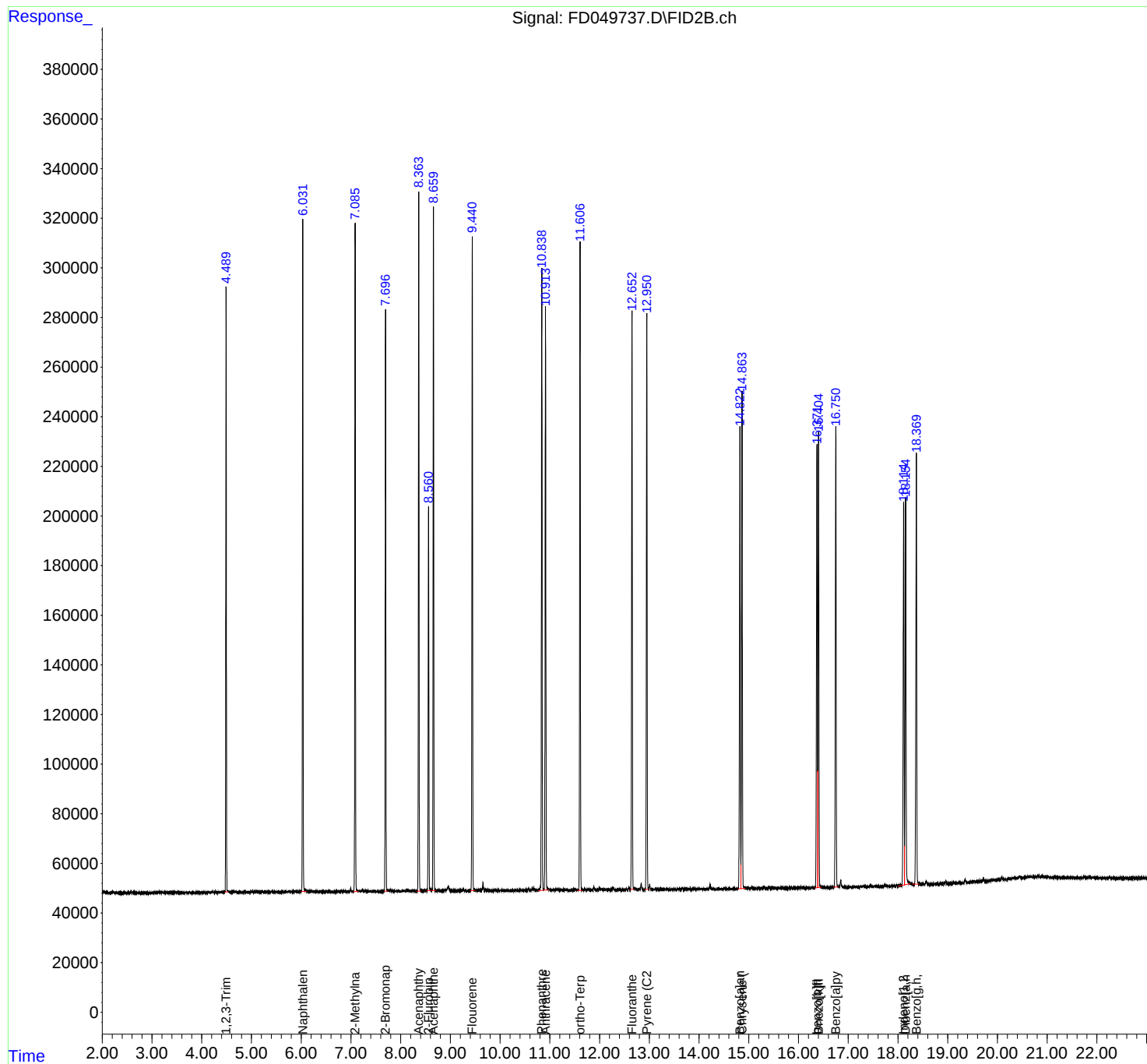
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
Data File : FD049737.D
Signal(s) : FID2B.ch
Acq On : 22 Sep 2025 11:01
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: Sep 23 02:02:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
Quant Title : GC Extractables
QLast Update : Fri Sep 05 06:31:58 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\FD092225AR\
Data File : FD049737.D
Signal(s) : FID2B.ch
Acq On : 22 Sep 2025 11:01
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 090425.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	4.489	4.458	4.534	BB	241016	2075080	76.00%	4.265%
2	6.031	6.001	6.104	BB	269344	2427766	88.91%	4.990%
3	7.085	7.041	7.148	BB	269910	2546725	93.27%	5.235%
4	7.696	7.664	7.744	BB	230806	2191772	80.27%	4.505%
5	8.363	8.321	8.411	BB	281207	2688156	98.45%	5.526%
6	8.560	8.528	8.624	BB	155254	1534216	56.19%	3.154%
7	8.659	8.628	8.708	BB	274941	2681684	98.21%	5.512%
8	9.440	9.404	9.501	BB	264065	2643064	96.80%	5.433%
9	10.838	10.764	10.881	BV	249887	2606873	95.47%	5.359%
10	10.913	10.881	10.984	VB	235581	2456547	89.97%	5.050%
11	11.607	11.551	11.658	BB	261465	2730527	100.00%	5.613%
12	12.652	12.614	12.691	BB	231449	2512669	92.02%	5.165%
13	12.950	12.908	12.985	BV	233595	2494281	91.35%	5.127%
14	14.822	14.778	14.841	BV	186172	2211962	81.01%	4.547%
15	14.864	14.841	14.934	VB	201425	2251361	82.45%	4.628%
16	16.371	16.321	16.387	BV	178662	2245656	82.24%	4.616%
17	16.403	16.387	16.464	VB	185303	2104429	77.07%	4.326%
18	16.750	16.704	16.801	BB	185926	2186709	80.08%	4.495%
19	18.114	17.998	18.132	BV	155050	1946459	71.29%	4.001%
20	18.154	18.132	18.244	VB	156400	1986778	72.76%	4.084%
21	18.369	18.284	18.420	BB	171034	2126549	77.88%	4.371%
Sum of corrected areas:							48649261	

Aromatic EPH 090425.M Tue Sep 23 08:02:04 2025

Continuing Calibration Report for SequenceID : FD092225AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FD049746.D

Aromatic C12-C16	8102983.000	60.000	6.132	8.759	135049.717	135865.661	0.601
Aromatic C16-C21	10726454.000	80.000	8.760	13.050	134080.675	135770.533	1.245
Aromatic C10-C12	4630056.000	40.000	4.389	6.131	115751.400	116056.185	0.263
Aromatic C21-C36	20745012.000	180.000	13.051	18.469	115250.067	118321.901	2.596
Aromatic EPH	44204505.000	360.000	4.389	18.469	122790.292	124871.589	1.667

Lab Sample ID:	20 PPM AROMATIC HC	Acq On:	22 Sep 2025 21:30
Client Sample ID:		Operator:	YP/AJ
Data file:	FD049746.D	Misc:	
Instrument:	FID_D	ALS Vial:	52
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.389	6.131	4630056.000	40.000	ug/ml
Aromatic C12-C16	6.132	8.759	8102983.000	60.000	ug/ml
Aromatic C16-C21	8.760	13.050	10726454.000	80.000	ug/ml
Aromatic C21-C36	13.051	18.469	20745012.000	180.000	ug/ml
Aromatic EPH	4.389	18.469	44204505.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
 Data File : FD049746.D
 Signal(s) : FID2B.ch
 Acq On : 22 Sep 2025 21:30
 Operator : YP/AJ
 Sample : 20 PPM AROMATIC HC STD
 Misc :
 ALS Vial : 52 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 20 PPM AROMATIC HC STD

Integration File: autoint1.e
 Quant Time: Sep 23 07:31:35 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
 Quant Title : GC Extractables
 QLast Update : Fri Sep 05 06:31:58 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...	7.696	2253277	20.036 ug/ml
Spiked Amount 50.000		Recovery =	40.07%
6) S 2-Fluorobiphenyl (SURR)	8.560	1590405	19.813 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	39.63%
11) S ortho-Terphenyl (SURR)	11.607	2815502	19.900 ug/ml
Spiked Amount 50.000		Recovery =	39.80%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.488	2137040	19.833 ug/ml
2) T Naphthalene (C11.7)	6.031	2493016	20.047 ug/ml
3) T 2-Methylnaphthalene (...)	7.085	2615376	20.067 ug/ml
5) T Acenaphthylene (C15.06)	8.364	2743676	19.790 ug/ml
7) T Acenaphthene (C15.5)	8.660	2743931	19.794 ug/ml
8) T Flouorene (C16.55)	9.441	2742153	19.768 ug/ml
9) T Phenanthrene (C19.36)	10.839	2738884	19.661 ug/ml
10) T Anthracene (C19.43)	10.913	2593111	19.639 ug/ml
12) T Fluoranthene (C21.85)	12.653	2676970	19.878 ug/ml
13) T Pyrene (C20.8)	12.950	2652306	19.939 ug/ml
14) T Benzo[a]anthracene (C...	14.822	2356429	19.705 ug/ml
15) T Chrysene (C27.41)	14.864	2395460	19.691 ug/ml
16) T benzo[b]fluoranthene ...	16.373	2334140	19.472 ug/ml
17) T Bnezo[k]fluoranthene ...	16.404	2194499	19.476 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.751	2267752	19.325 ug/ml
19) T Indeno[1,2,3-cd]pyren...	18.115	2089570	19.207 ug/ml
20) T Dibenz[a,h]anthracene...	18.157	2198827	19.297 ug/ml
21) T Benzo[g,h,i]perylene ...	18.371	2231365	19.177 ug/ml

(f)=RT Delta > 1/2 Window

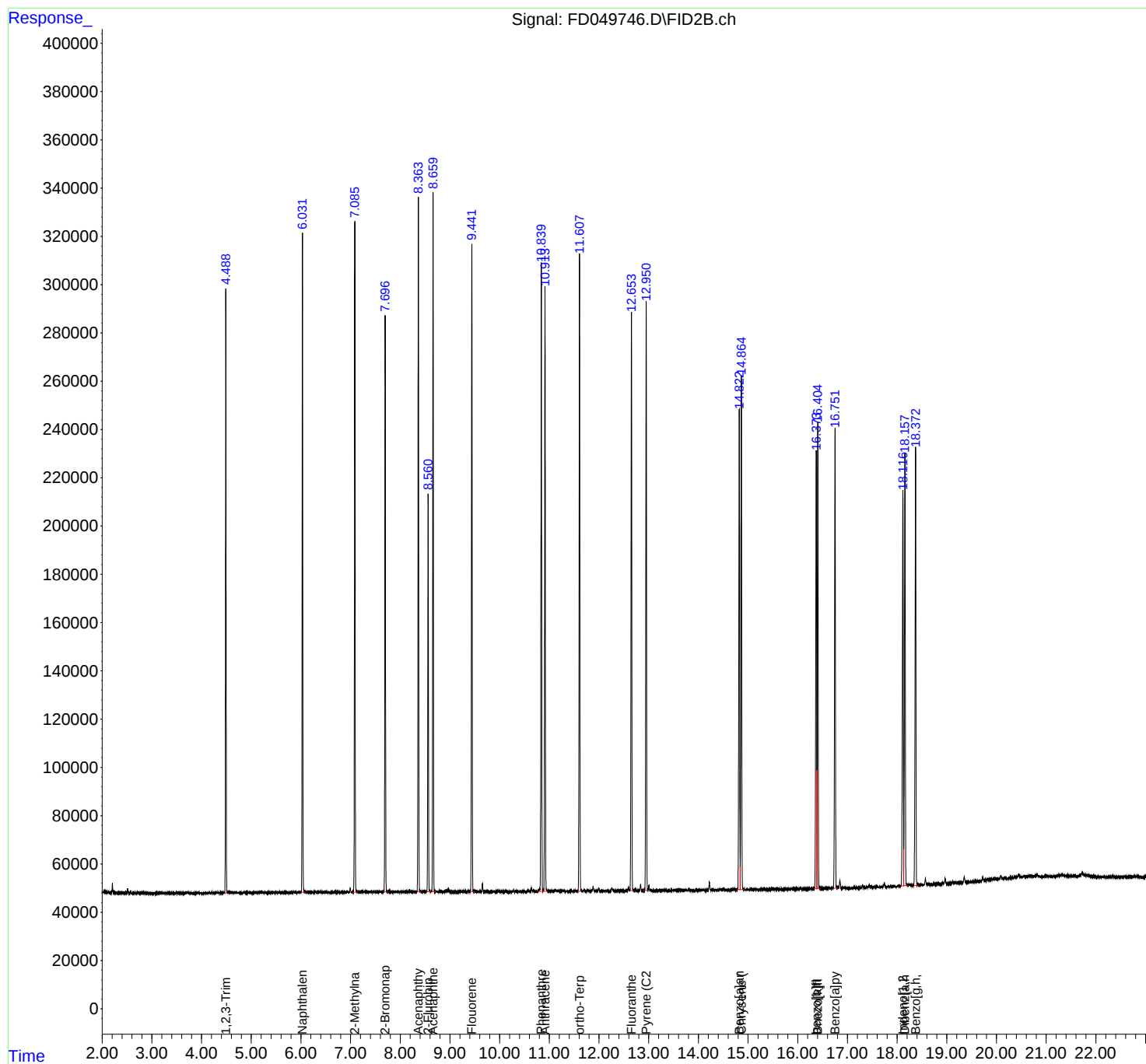
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
Data File : FD049746.D
Signal(s) : FID2B.ch
Acq On : 22 Sep 2025 21:30
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Sep 23 07:31:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
Quant Title : GC Extractables
QLast Update : Fri Sep 05 06:31:58 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\FD092225AR\
 Data File : FD049746.D
 Signal(s) : FID2B.ch
 Acq On : 22 Sep 2025 21:30
 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 090425.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	4.488	4.458	4.534	BB	250024	2137040	75.90%	4.202%
2	6.031	6.001	6.094	BB	272420	2493016	88.55%	4.901%
3	7.085	7.048	7.148	BB	276743	2615376	92.89%	5.142%
4	7.696	7.668	7.758	BB	240006	2253277	80.03%	4.430%
5	8.364	8.334	8.411	BB	287924	2743676	97.45%	5.394%
6	8.560	8.528	8.614	BB	164602	1590405	56.49%	3.127%
7	8.660	8.628	8.714	BB	288415	2743931	97.46%	5.395%
8	9.441	9.404	9.501	BB	269550	2742153	97.39%	5.391%
9	10.839	10.758	10.878	BV	258583	2738884	97.28%	5.385%
10	10.913	10.878	10.974	VB	252007	2593111	92.10%	5.098%
11	11.607	11.574	11.654	BB	265355	2815502	100.00%	5.535%
12	12.653	12.618	12.698	VB	241434	2676970	95.08%	5.263%
13	12.950	12.901	12.983	BV	244873	2652306	94.20%	5.215%
14	14.822	14.774	14.842	BV	198021	2356429	83.69%	4.633%
15	14.864	14.842	14.928	VB	213474	2395460	85.08%	4.710%
16	16.373	16.328	16.388	BV	180722	2334140	82.90%	4.589%
17	16.404	16.388	16.458	VB	193245	2194499	77.94%	4.314%
18	16.751	16.701	16.804	BB	190594	2267752	80.55%	4.458%
19	18.115	18.074	18.134	BV	163532	2089570	74.22%	4.108%
20	18.157	18.134	18.209	VB	179721	2198827	78.10%	4.323%
21	18.371	18.328	18.441	BB	180575	2231365	79.25%	4.387%
Sum of corrected areas:							50863688	

Aromatic EPH 090425.M Tue Sep 23 07:36:42 2025

Continuing Calibration Report for SequenceID : FE092225AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FE055922.D

Aliphatic C9-C12	7414182.000	60.000	3.312	6.947	123569.700	128403.808	3.765
Aliphatic C12-C16	5562106.000	40.000	6.948	10.400	139052.650	135095.243	-2.929
Aliphatic C16-C21	9150491.000	60.000	10.401	13.780	152508.183	144217.196	-5.749
Aliphatic C21-C28	11352142.000	80.000	13.781	17.452	141901.775	143235.734	0.931
Aliphatic C28-C40	15331755.000	120.000	17.453	22.472	127764.625	137719.667	7.228
Aliphatic EPH	48810676.000	360.000	3.312	22.472	135585.211	138184.135	1.881

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	22 Sep 2025 14:01
Client Sample ID:		Operator:	YPVAJ
Data file:	FE055922.D	Misc:	
Instrument:	FID_E	ALS Vial:	4
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.312	6.947	7414182.000	60.000	ug/ml
Aliphatic C12-C16	6.948	10.400	5562106.000	40.000	ug/ml
Aliphatic C16-C21	10.401	13.780	9150491.000	60.000	ug/ml
Aliphatic C21-C28	13.781	17.452	11352142.000	80.000	ug/ml
Aliphatic C28-C40	17.453	22.472	15331755.000	120.000	ug/ml
Aliphatic EPH	3.312	22.472	48810676.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
 Data File : FE055922.D
 Signal(s) : FID1B.ch
 Acq On : 22 Sep 2025 14:01
 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: sample.E
 Quant Time: Sep 23 04:29:56 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
 Quant Title : GC Extractables
 QLast Update : Fri Aug 29 08:12:09 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)	12.074	3451524	21.009 ug/ml
Spiked Amount 50.000		Recovery =	42.02%
12) S 1-chlorooctadecane (S...	13.512	2586675	20.686 ug/ml
Spiked Amount 50.000		Recovery =	41.37%
Target Compounds			
1) T n-Nonane (C9)	3.411	2389677	18.831 ug/ml
2) T n-Decane (C10)	4.670	2464839	19.242 ug/ml
3) T A~Naphthalene (C11.7)	6.390	2878038	19.809 ug/ml
4) T n-Dodecane (C12)	6.845	2559666	19.658 ug/ml
5) T A~2-methylnaphthalene...	7.491	2830003	20.121 ug/ml
6) T n-Tetradecane (C14)	8.683	2663367	20.224 ug/ml
7) T n-Hexadecane (C16)	10.298	2898739	20.930 ug/ml
8) T n-Octadecane (C18)	11.748	3102350	21.269 ug/ml
10) T n-Eicosane (C20)	13.063	3055978	21.230 ug/ml
11) T n-Heneicosane (C21)	13.677	2992163	20.947 ug/ml
13) T n-Docosane (C22)	14.267	2981345	20.828 ug/ml
14) T n-Tetracosane (C24)	15.373	2935627	20.288 ug/ml
15) T n-Hexacosane (C26)	16.396	2740405	19.182 ug/ml
16) T n-Octacosane (C28)	17.349	2694765	18.946 ug/ml
17) T n-Tricontane (C30)	18.240	2880537	19.487 ug/ml
18) T n-Dotriacontane (C32)	19.074	2914190	19.855 ug/ml
19) T n-Tetratriacontane (C34)	19.860	2730740	19.328 ug/ml
20) T n-Hexatriacontane (C36)	20.602	2415133	18.302 ug/ml
21) T n-Octatriacontane (C38)	21.379	2251492	17.287 ug/ml
22) T n-Tetracontane (C40)	22.366	2139663	16.685 ug/ml

(f)=RT Delta > 1/2 Window

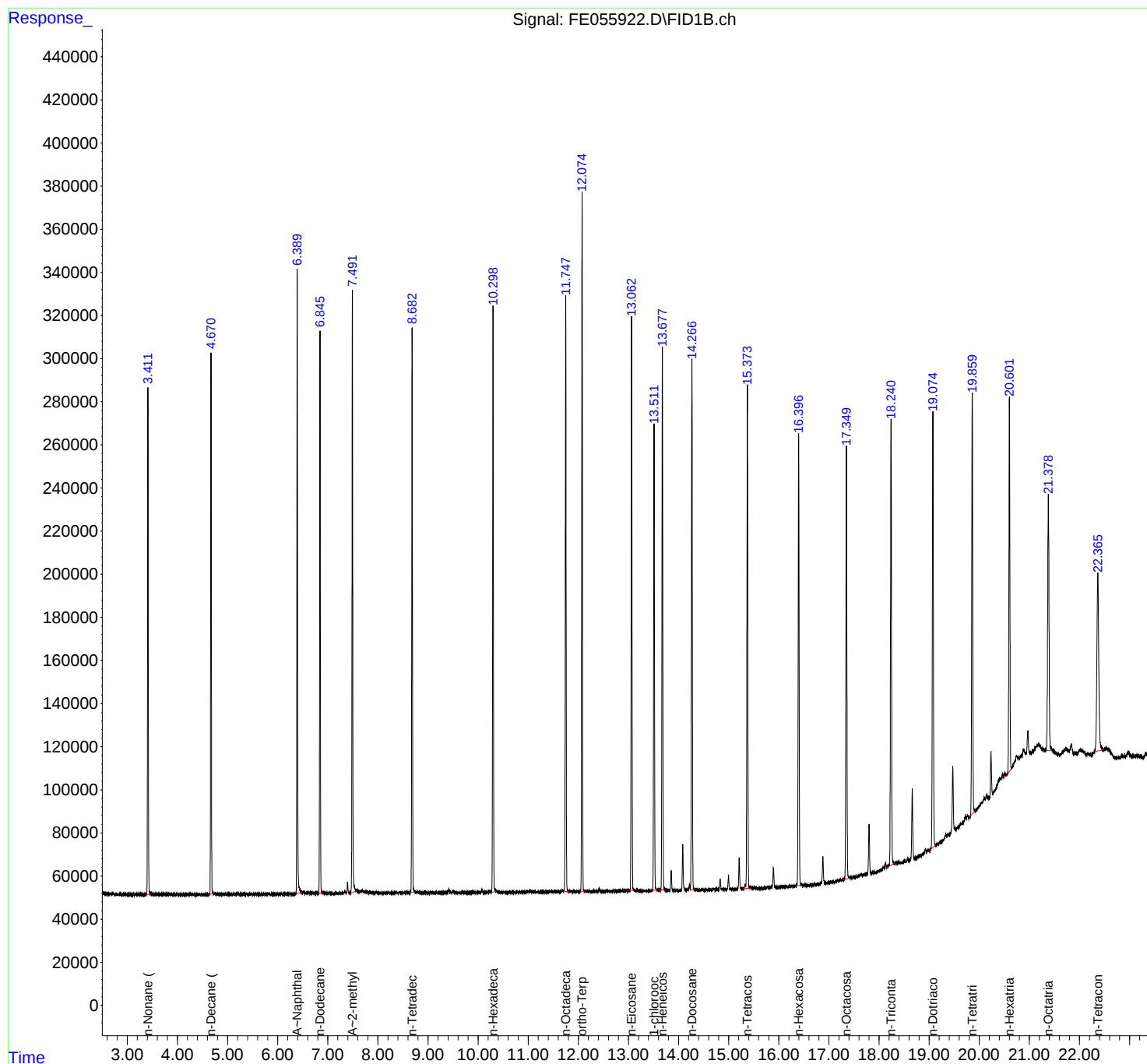
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
Data File : FE055922.D
Signal(s) : FID1B.ch
Acq On : 22 Sep 2025 14:01
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: sample.E
Quant Time: Sep 23 04:29:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
Quant Title : GC Extractables
QLast Update : Fri Aug 29 08:12:09 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\FE092225AL\
 Data File : FE055922.D
 Signal(s) : FID1B.ch
 Acq On : 22 Sep 2025 14:01
 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 082925.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	3.411	3.377	3.465	BB	234678	2389677	69.24%	3.946%
2	4.670	4.633	4.717	BB	251151	2464839	71.41%	4.070%
3	6.390	6.358	6.480	BB	288849	2878038	83.38%	4.753%
4	6.845	6.812	6.893	BB	259890	2559666	74.16%	4.227%
5	7.491	7.448	7.575	BB	279407	2830003	81.99%	4.673%
6	8.683	8.647	8.745	BB	262044	2663367	77.16%	4.398%
7	10.298	10.260	10.355	BB	271647	2898739	83.98%	4.787%
8	11.748	11.702	11.808	BB	275731	3102350	89.88%	5.123%
9	12.074	12.025	12.127	BB	324333	3451524	100.00%	5.700%
10	13.063	12.997	13.113	BB	266200	3055978	88.54%	5.046%
11	13.512	13.468	13.560	BB	215810	2586675	74.94%	4.271%
12	13.677	13.610	13.732	BB	251466	2992163	86.69%	4.941%
13	14.267	14.234	14.328	VB	245725	2981345	86.38%	4.923%
14	15.373	15.282	15.437	BB	233433	2935627	85.05%	4.848%
15	16.396	16.335	16.455	BB	209691	2740405	79.40%	4.525%
16	17.349	17.275	17.413	BB	200092	2694765	78.07%	4.450%
17	18.240	18.162	18.303	BB	207459	2880537	83.46%	4.757%
18	19.074	19.000	19.128	BB	202079	2914190	84.43%	4.812%
19	19.860	19.800	19.920	BB	195333	2730740	79.12%	4.509%
20	20.602	20.550	20.642	BV	173240	2415133	69.97%	3.988%
21	21.379	21.330	21.467	BB	118849	2251492	65.23%	3.718%
22	22.366	22.300	22.487	BB	82483	2139663	61.99%	3.533%
Sum of corrected areas:							60556913	

Aliphatic EPH 082925.M Tue Sep 23 06:19:27 2025

Continuing Calibration Report for SequenceID : FE092225AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FE055936.D

Aliphatic C9-C12	7098999.000	60.000	3.312	6.947	118316.650	128403.808	7.856
Aliphatic C12-C16	5339613.000	40.000	6.948	10.400	133490.325	135095.243	1.188
Aliphatic C16-C21	9091973.000	60.000	10.401	13.780	151532.883	144217.196	-5.073
Aliphatic C21-C28	11517194.000	80.000	13.781	17.452	143964.925	143235.734	-0.509
Aliphatic C28-C40	15290129.000	120.000	17.453	22.472	127417.742	137719.667	7.480
Aliphatic EPH	48337908.000	360.000	3.312	22.472	134271.967	138184.135	2.831

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	22 Sep 2025 21:59
Client Sample ID:		Operator:	YPVJ
Data file:	FE055936.D	Misc:	
Instrument:	FID_E	ALS Vial:	4
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.312	6.947	7098999.000	60.000	ug/ml
Aliphatic C12-C16	6.948	10.400	5339613.000	40.000	ug/ml
Aliphatic C16-C21	10.401	13.780	9091973.000	60.000	ug/ml
Aliphatic C21-C28	13.781	17.452	11517194.000	80.000	ug/ml
Aliphatic C28-C40	17.453	22.472	15290129.000	120.000	ug/ml
Aliphatic EPH	3.312	22.472	48337908.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
 Data File : FE055936.D
 Signal(s) : FID1B.ch
 Acq On : 22 Sep 2025 21:59
 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: sample.E
 Quant Time: Sep 23 04:37:02 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
 Quant Title : GC Extractables
 QLast Update : Fri Aug 29 08:12:09 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)	12.071	3447872	20.987 ug/ml
Spiked Amount 50.000		Recovery =	41.97%
12) S 1-chlorooctadecane (S...	13.508	2606193	20.842 ug/ml
Spiked Amount 50.000		Recovery =	41.68%
Target Compounds			
1) T n-Nonane (C9)	3.408	2292192	18.063 ug/ml
2) T n-Decane (C10)	4.667	2362440	18.442 ug/ml
3) T A~Naphthalene (C11.7)	6.387	2776214	19.108 ug/ml
4) T n-Dodecane (C12)	6.843	2444367	18.772 ug/ml
5) T A~2-methylnaphthalene...	7.488	2742223	19.497 ug/ml
6) T n-Tetradecane (C14)	8.680	2548750	19.354 ug/ml
7) T n-Hexadecane (C16)	10.295	2790863	20.151 ug/ml
8) T n-Octadecane (C18)	11.745	3033023	20.794 ug/ml
10) T n-Eicosane (C20)	13.060	3048438	21.178 ug/ml
11) T n-Heneicosane (C21)	13.674	3010512	21.075 ug/ml
13) T n-Docosane (C22)	14.263	3009973	21.028 ug/ml
14) T n-Tetracosane (C24)	15.370	2990512	20.667 ug/ml
15) T n-Hexacosane (C26)	16.394	2788644	19.520 ug/ml
16) T n-Octacosane (C28)	17.346	2728065	19.180 ug/ml
17) T n-Tricontane (C30)	18.236	2882725	19.502 ug/ml
18) T n-Dotriacontane (C32)	19.071	2947453	20.081 ug/ml
19) T n-Tetratriacontane (C34)	19.856	2743257	19.416 ug/ml
20) T n-Hexatriacontane (C36)	20.597	2423328	18.365 ug/ml
21) T n-Octatriacontane (C38)	21.374	2238912	17.191 ug/ml
22) T n-Tetracontane (C40)	22.357	2054454	16.020 ug/ml

(f)=RT Delta > 1/2 Window

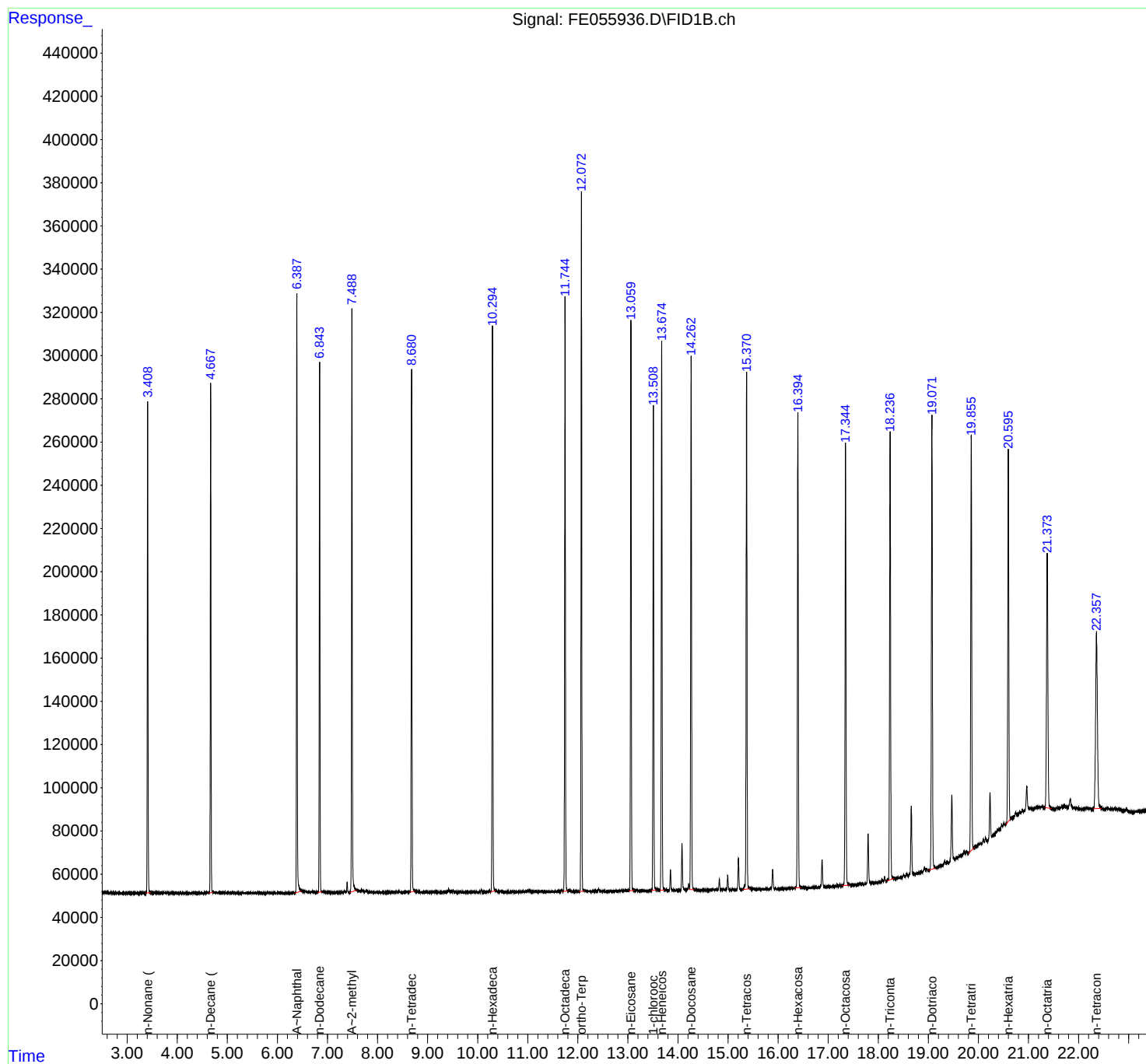
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
Data File : FE055936.D
Signal(s) : FID1B.ch
Acq On : 22 Sep 2025 21:59
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: sample.E
Quant Time: Sep 23 04:37:02 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
Quant Title : GC Extractables
QLast Update : Fri Aug 29 08:12:09 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\FE092225AL\
 Data File : FE055936.D
 Signal(s) : FID1B.ch
 Acq On : 22 Sep 2025 21:59
 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 082925.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	3.408	3.374	3.462	BB	227192	2292192	66.48%	3.826%
2	4.667	4.627	4.714	BB	235745	2362440	68.52%	3.943%
3	6.387	6.354	6.479	BB	277157	2776214	80.52%	4.634%
4	6.843	6.809	6.890	BB	245228	2444367	70.89%	4.080%
5	7.488	7.449	7.582	BB	269903	2742223	79.53%	4.577%
6	8.680	8.647	8.744	BB	241828	2548750	73.92%	4.254%
7	10.295	10.260	10.352	BB	261120	2790863	80.94%	4.658%
8	11.745	11.699	11.802	BB	275573	3033023	87.97%	5.063%
9	12.071	12.024	12.125	BB	325262	3447872	100.00%	5.755%
10	13.060	13.022	13.117	BB	264443	3048438	88.42%	5.088%
11	13.508	13.467	13.567	BB	224121	2606193	75.59%	4.350%
12	13.674	13.639	13.734	BB	253676	3010512	87.32%	5.025%
13	14.263	14.230	14.327	VB	246557	3009973	87.30%	5.024%
14	15.370	15.290	15.429	BB	240074	2990512	86.74%	4.992%
15	16.394	16.334	16.459	BB	218600	2788644	80.88%	4.655%
16	17.346	17.275	17.417	BB	203601	2728065	79.12%	4.554%
17	18.236	18.172	18.307	BB	207711	2882725	83.61%	4.812%
18	19.071	19.000	19.142	BB	209806	2947453	85.49%	4.920%
19	19.856	19.800	19.914	BB	192506	2743257	79.56%	4.579%
20	20.597	20.550	20.637	BB	169810	2423328	70.28%	4.045%
21	21.374	21.330	21.462	BB	117814	2238912	64.94%	3.737%
22	22.357	22.300	22.459	BB	81763	2054454	59.59%	3.429%
Sum of corrected areas:							59910411	

Aliphatic EPH 082925.M Tue Sep 23 06:29:38 2025



QC SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	Con Edison FOPL2	Date Received:	
Client Sample ID:	PB169768BL	SDG No.:	Q3123
Lab Sample ID:	PB169768BL	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
09/22/25 08:35	09/22/25 14:52	PB169768

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.14	U	1	0.14	1.00	mg/kg	FE055923.D
Aliphatic C12-C16	Aliphatic C12-C16	0.11	U	1	0.11	0.67	mg/kg	FE055923.D
Aliphatic C16-C21	Aliphatic C16-C21	0.13	U	1	0.13	1.00	mg/kg	FE055923.D
Aliphatic C21-C28	Aliphatic C21-C28	0.53	U	1	0.53	1.33	mg/kg	FE055923.D
Aliphatic C28-C40	Aliphatic C28-C40	1.18	U	1	1.18	2.00	mg/kg	FE055923.D
Aromatic C10-C12	Aromatic C10-C12	0.12	U	1	0.12	0.67	mg/kg	FD049738.D
Aromatic C12-C16	Aromatic C12-C16	0.23	U	1	0.23	1.00	mg/kg	FD049738.D
Aromatic C16-C21	Aromatic C16-C21	0.40	U	1	0.40	1.67	mg/kg	FD049738.D
Aromatic C21-C36	Aromatic C21-C36	1.19	U	1	1.19	2.66	mg/kg	FD049738.D
Total AliphaticEPH	Total AliphaticEPH	2.09	U		2.09	5.99	mg/kg	
Total AromaticEPH	Total AromaticEPH	1.94	U		1.94	6.00	mg/kg	
Total EPH	Total EPH	4.03	U		4.03	12.0	mg/kg	

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	Con Edison FOPL2	Date Received:	
Client Sample ID:	PB169768BL	SDG No.:	Q3123
Lab Sample ID:	PB169768BL	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
FD049738.D	1	09/22/25	09/22/25	PB169768

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.12	U	0.12	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.23	U	0.23	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	0.40	U	0.40	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	1.19	U	1.19	2.66	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	34.6		40 - 140	69%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	34.3		40 - 140	69%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	38.0		40 - 140	76%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB169768BL	Acq On:	22 Sep 2025 14:45
Client Sample ID:	PB169768BL	Operator:	YP/AJ
Data file:	FD049738.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	4.389	6.131	0	0	200	ug/ml
Aromatic C12-C16	6.132	8.759	0	0	300	ug/ml
Aromatic C16-C21	8.760	13.050	0	0	500	ug/ml
Aromatic C21-C36	13.051	18.469	0	0	800	ug/ml
Aromatic EPH	4.389	18.469	0	0		ug/ml
2-Bromonaphthalene (SURRE)	7.698	7.698	3888239	34.57		ug/ml
2-Fluorobiphenyl (SURRE)	8.561	8.561	2756370	34.34		ug/ml
ortho-Terphenyl (SURRE)	11.610	11.610	5382097	38.04		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
 Data File : FD049738.D
 Signal(s) : FID2B.ch
 Acq On : 22 Sep 2025 14:45
 Operator : YP/AJ
 Sample : PB169768BL
 Misc :
 ALS Vial : 61 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 PB169768BL

Integration File: autoint1.e
 Quant Time: Sep 23 02:02:34 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
 Quant Title : GC Extractables
 QLast Update : Fri Sep 05 06:31:58 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...	7.698	3888239	34.573 ug/ml
Spiked Amount 50.000		Recovery =	69.15%
6) S 2-Fluorobiphenyl (SURR)	8.561	2756370	34.338 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	68.68%
11) S ortho-Terphenyl (SURR)	11.610	5382097	38.041 ug/ml
Spiked Amount 50.000		Recovery =	76.08%

Target Compounds

(f)=RT Delta > 1/2 Window

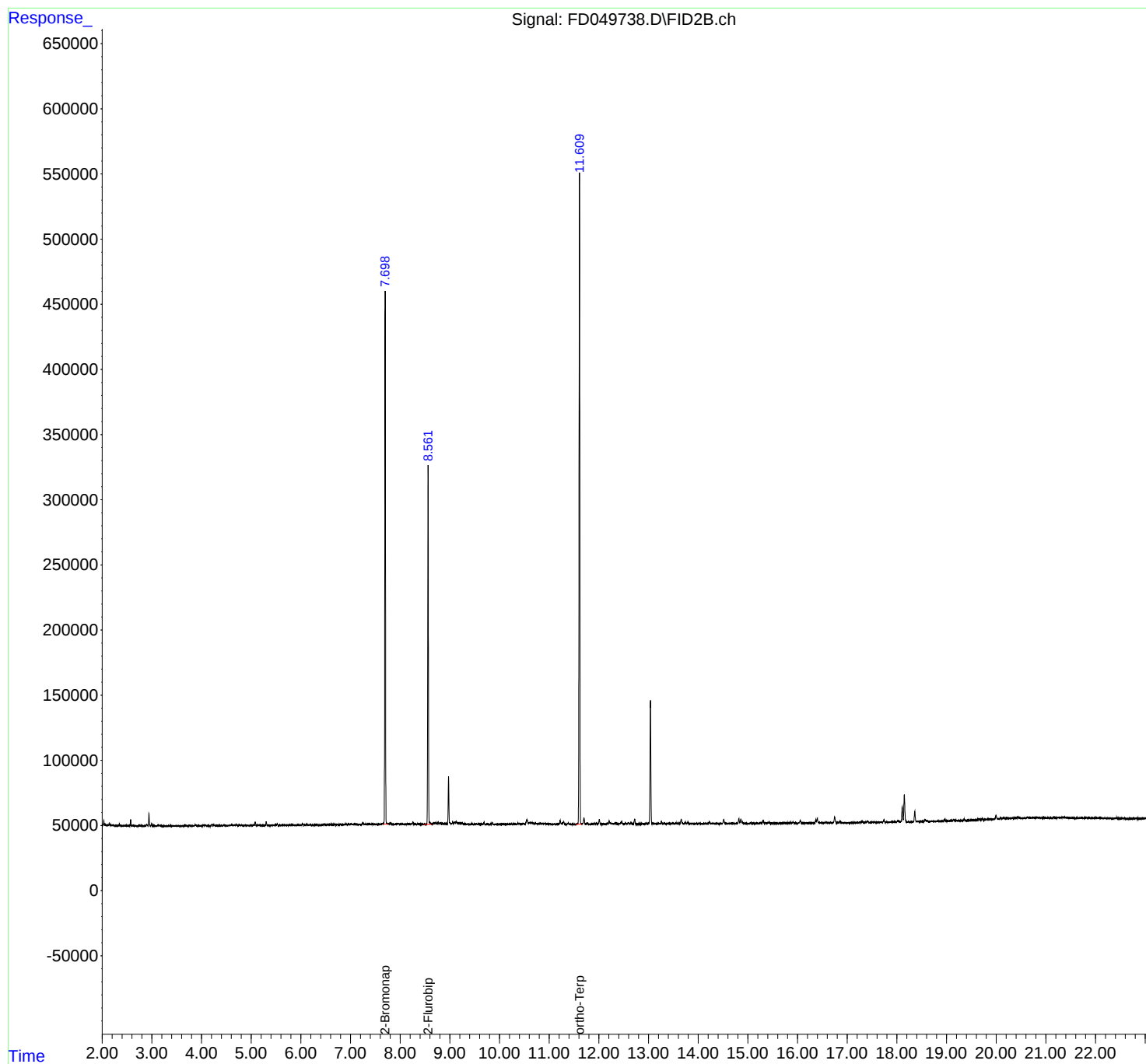
(m)=manual int.

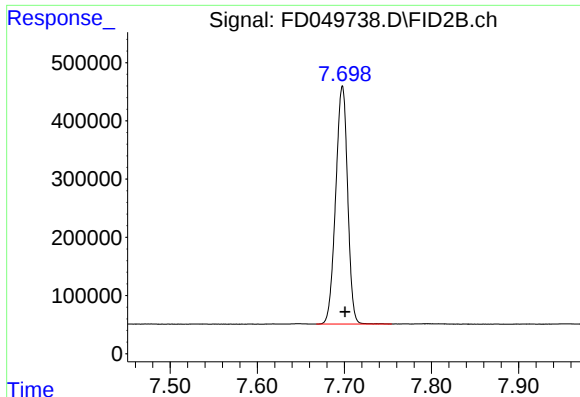
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
Data File : FD049738.D
Signal(s) : FID2B.ch
Acq On : 22 Sep 2025 14:45
Operator : YP/AJ
Sample : PB169768BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB169768BL

Integration File: autoint1.e
Quant Time: Sep 23 02:02:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
Quant Title : GC Extractables
QLast Update : Fri Sep 05 06:31:58 2025
Response via : Initial Calibration
Integrator: ChemStation

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

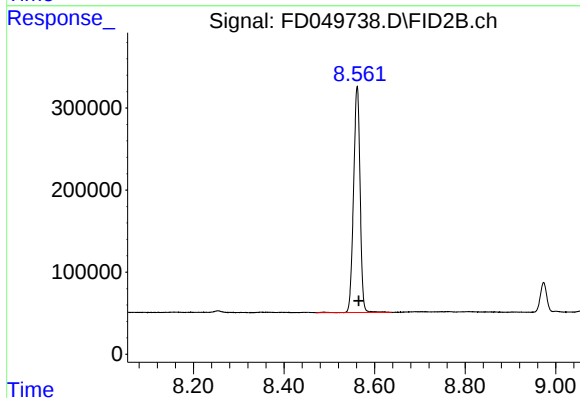




#4 2-Bromonaphthalene (SURR)

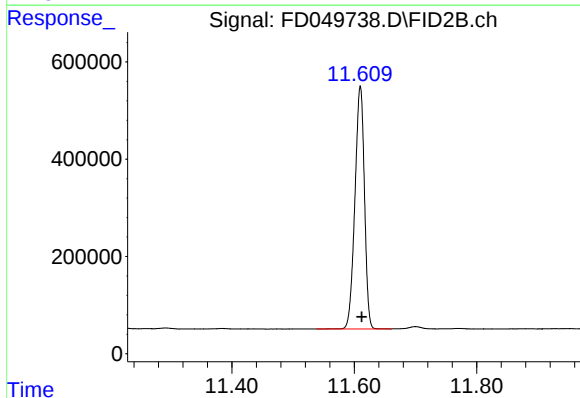
R.T.: 7.698 min
Delta R.T.: -0.003 min
Response: 3888239
Conc: 34.57 ug/ml

Instrument :
FID_D
ClientSampleId :
PB169768BL



#6 2-Fluorobiphenyl (SURR)

R.T.: 8.561 min
Delta R.T.: -0.004 min
Response: 2756370
Conc: 34.34 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.610 min
Delta R.T.: -0.003 min
Response: 5382097
Conc: 38.04 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
Data File : FD049738.D
Signal(s) : FID2B.ch
Acq On : 22 Sep 2025 14:45
Sample : PB169768BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.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	7.698	7.668	7.754	BB	409464	3888239	72.24%	32.330%
2	8.561	8.471	8.638	BB	275577	2756370	51.21%	22.919%
3	11.610	11.538	11.661	BB	502164	5382097	100.00%	44.751%
Sum of corrected areas:							12026706	

Aromatic EPH 090425.M Tue Sep 23 08:02:33 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	Con Edison FOPL2	Date Received:	
Client Sample ID:	PB169768BL	SDG No.:	Q3123
Lab Sample ID:	PB169768BL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:		Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE055923.D	1	09/22/25	09/22/25	PB169768

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	0.14	U	0.14	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	0.11	U	0.11	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	0.13	U	0.13	1.00	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	0.53	U	0.53	1.33	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	1.18	U	1.18	2.00	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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB169768BL	Acq On:	22 Sep 2025 14:52
Client Sample ID:	PB169768BL	Operator:	YP\AJ
Data file:	FE055923.D	Misc:	
Instrument:	FID_E	ALS Vial:	11
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.312	6.947	0	0	300	ug/ml
Aliphatic C12-C16	6.948	10.400	0	0	200	ug/ml
Aliphatic C16-C21	10.401	13.780	0	0	300	ug/ml
Aliphatic C21-C28	13.781	17.452	0	0	400	ug/ml
Aliphatic C28-C40	17.453	22.472	0	0	600	ug/ml
Aliphatic EPH	3.312	22.472	0	0		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.516	13.516	4558130	36.45		ug/ml
Aliphatic C9-C28	3.312	17.452	0	0	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
Data File : FE055923.D
Signal(s) : FID1B.ch
Acq On : 22 Sep 2025 14:52
Operator : YP\AJ
Sample : PB169768BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB169768BL

Integration File: sample.E
Quant Time: Sep 23 04:30:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
Quant Title : GC Extractables
QLast Update : Fri Aug 29 08:12:09 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...	13.516	4558130	36.452 ug/ml
Spiked Amount 50.000		Recovery =	72.90%

Target Compounds

(f)=RT Delta > 1/2 Window

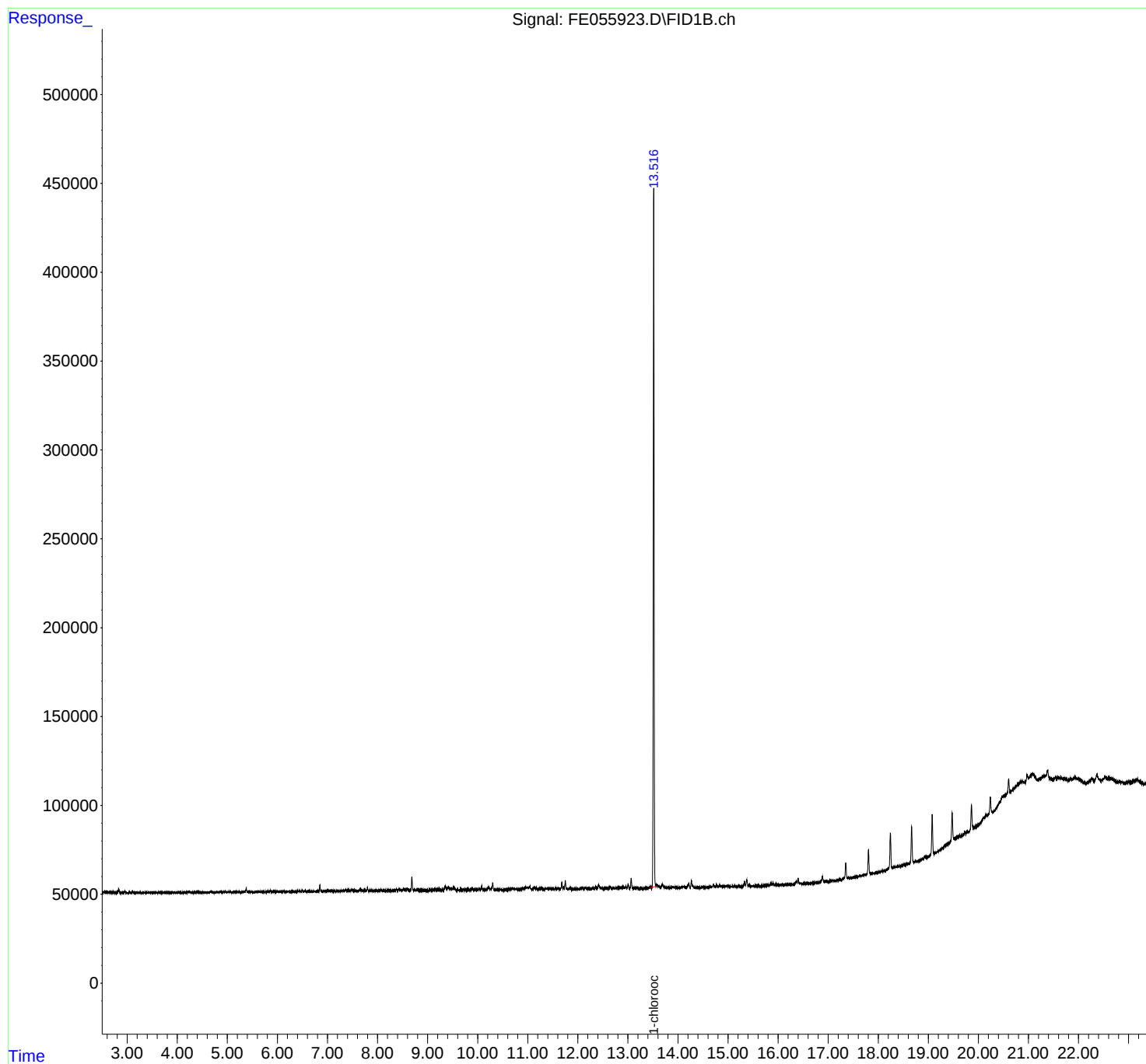
(m)=manual int.

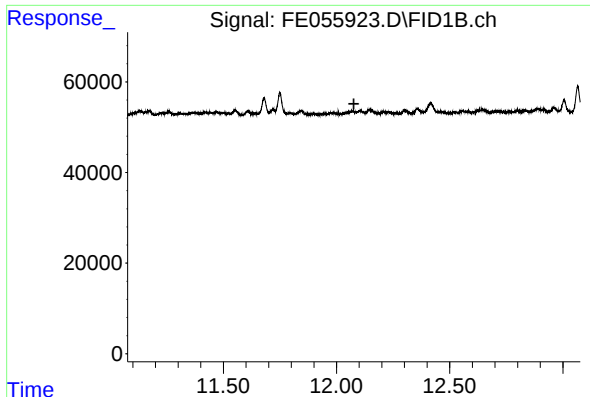
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
Data File : FE055923.D
Signal(s) : FID1B.ch
Acq On : 22 Sep 2025 14:52
Operator : YP\AJ
Sample : PB169768BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB169768BL

Integration File: sample.E
Quant Time: Sep 23 04:30:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
Quant Title : GC Extractables
QLast Update : Fri Aug 29 08:12:09 2025
Response via : Initial Calibration
Integrator: ChemStation

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

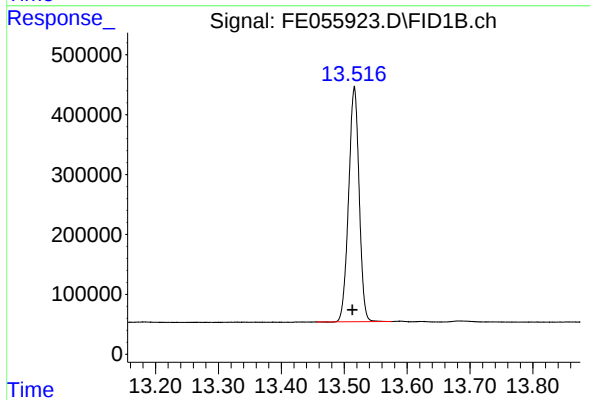




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T.: 12.077 min
Response: 0
Conc: N.D.

Instrument :
FID_E
ClientSampleId :
PB169768BL



#12 1-chlorooctadecane (SURR)

R.T.: 13.516 min
Delta R.T.: 0.003 min
Response: 4558130
Conc: 36.45 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
Data File : FE055923.D
Signal(s) : FID1B.ch
Acq On : 22 Sep 2025 14:52
Sample : PB169768BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.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	13.516	13.455	13.575	BV	390394	4558130	100.00%	100.000%
Sum of corrected areas:							4558130	

Aliphatic EPH 082925.M Tue Sep 23 06:19:50 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	Con Edison FOPL2	Date Received:	
Client Sample ID:	PB169768BS	SDG No.:	Q3123
Lab Sample ID:	PB169768BS	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
09/22/25 08:35	09/22/25 15:23	PB169768

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12	5.51		1	0.14	1.00	mg/kg FE055924.D
Aliphatic C12-C16	Aliphatic C12-C16	5.08		1	0.11	0.67	mg/kg FE055924.D
Aliphatic C16-C21	Aliphatic C16-C21	9.26		1	0.13	1.00	mg/kg FE055924.D
Aliphatic C21-C28	Aliphatic C21-C28	11.5		1	0.53	1.33	mg/kg FE055924.D
Aliphatic C28-C40	Aliphatic C28-C40	17.1		1	1.18	2.00	mg/kg FE055924.D
Aromatic C10-C12	Aromatic C10-C12	4.24		1	0.12	0.67	mg/kg FD049739.D
Aromatic C12-C16	Aromatic C12-C16	6.86		1	0.23	1.00	mg/kg FD049739.D
Aromatic C16-C21	Aromatic C16-C21	13.7		1	0.40	1.67	mg/kg FD049739.D
Aromatic C21-C36	Aromatic C21-C36	23.0		1	1.19	2.67	mg/kg FD049739.D
Total AliphaticEPH	Total AliphaticEPH	48.5			2.09	6.00	mg/kg
Total AromaticEPH	Total AromaticEPH	47.8			1.94	6.01	mg/kg
Total EPH	Total EPH	96.3			4.03	12.0	mg/kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	Con Edison FOPL2	Date Received:	
Client Sample ID:	PB169768BS	SDG No.:	Q3123
Lab Sample ID:	PB169768BS	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
FD049739.D	1	09/22/25	09/22/25	PB169768

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	4.24		0.12	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	6.86		0.23	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	13.7		0.40	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	23.0		1.19	2.67	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	36.6		40 - 140	73%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	36.2		40 - 140	72%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	40.9		40 - 140	82%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB169768BS	Acq On:	22 Sep 2025 15:29
Client Sample ID:	PB169768BS	Operator:	YP/AJ
Data file:	FD049739.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	4.389	6.131	7386464	63.646	200	ug/ml
Aromatic C12-C16	6.132	8.759	13984386	102.928	300	ug/ml
Aromatic C16-C21	8.760	13.050	27944744	205.823	500	ug/ml
Aromatic C21-C36	13.051	18.469	40819464	344.987	800	ug/ml
Aromatic EPH	4.389	18.469	90135058	717.384		ug/ml
2-Bromonaphthalene (SURRE)	7.697	7.697	4120394	36.64		ug/ml
2-Fluorobiphenyl (SURRE)	8.562	8.562	2903364	36.17		ug/ml
ortho-Terphenyl (SURRE)	11.610	11.610	5789573	40.92		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
 Data File : FD049739.D
 Signal(s) : FID2B.ch
 Acq On : 22 Sep 2025 15:29
 Operator : YP/AJ
 Sample : PB169768BS
 Misc :
 ALS Vial : 62 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 PB169768BS

Integration File: autoint1.e
 Quant Time: Sep 23 02:02:52 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
 Quant Title : GC Extractables
 QLast Update : Fri Sep 05 06:31:58 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...	7.697	4120394	36.638 ug/ml
Spiked Amount 50.000		Recovery =	73.28%
6) S 2-Fluorobiphenyl (SURR)	8.562	2903364	36.169 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	72.34%
11) S ortho-Terphenyl (SURR)	11.610	5789573	40.921 ug/ml
Spiked Amount 50.000		Recovery =	81.84%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.489	3306689	30.688 ug/ml
2) T Naphthalene (C11.7)	6.032	4079775	32.806 ug/ml
3) T 2-Methylnaphthalene (...)	7.086	4076043	31.274 ug/ml
5) T Acenaphthylene (C15.06)	8.365	4917923	35.472 ug/ml
7) T Acenaphthene (C15.5)	8.662	4990420	36.000 ug/ml
8) T Flouorene (C16.55)	9.443	5333752	38.452 ug/ml
9) T Phenanthrene (C19.36)	10.842	5629906	40.415 ug/ml
10) T Anthracene (C19.43)	10.918	5337300	40.422 ug/ml
12) T Fluoranthene (C21.85)	12.657	5801207	43.077 ug/ml
13) T Pyrene (C20.8)	12.956	5842579	43.921 ug/ml
14) T Benzo[a]anthracene (C...	14.828	5334412	44.608 ug/ml
15) T Chrysene (C27.41)	14.873	5869388	48.247 ug/ml
16) T benzo[b]fluoranthene ...	16.380	5256946	43.856 ug/ml
17) T Bnezo[k]fluoranthene ...	16.415	5182647	45.996 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.760	5034888	42.906 ug/ml
19) T Indeno[1,2,3-cd]pyren...	18.126	5059706	46.508 ug/ml
20) T Dibenz[a,h]anthracene...	18.164	4503610	39.523 ug/ml
21) T Benzo[g,h,i]perylene ...	18.381	4577867	39.343 ug/ml

(f)=RT Delta > 1/2 Window

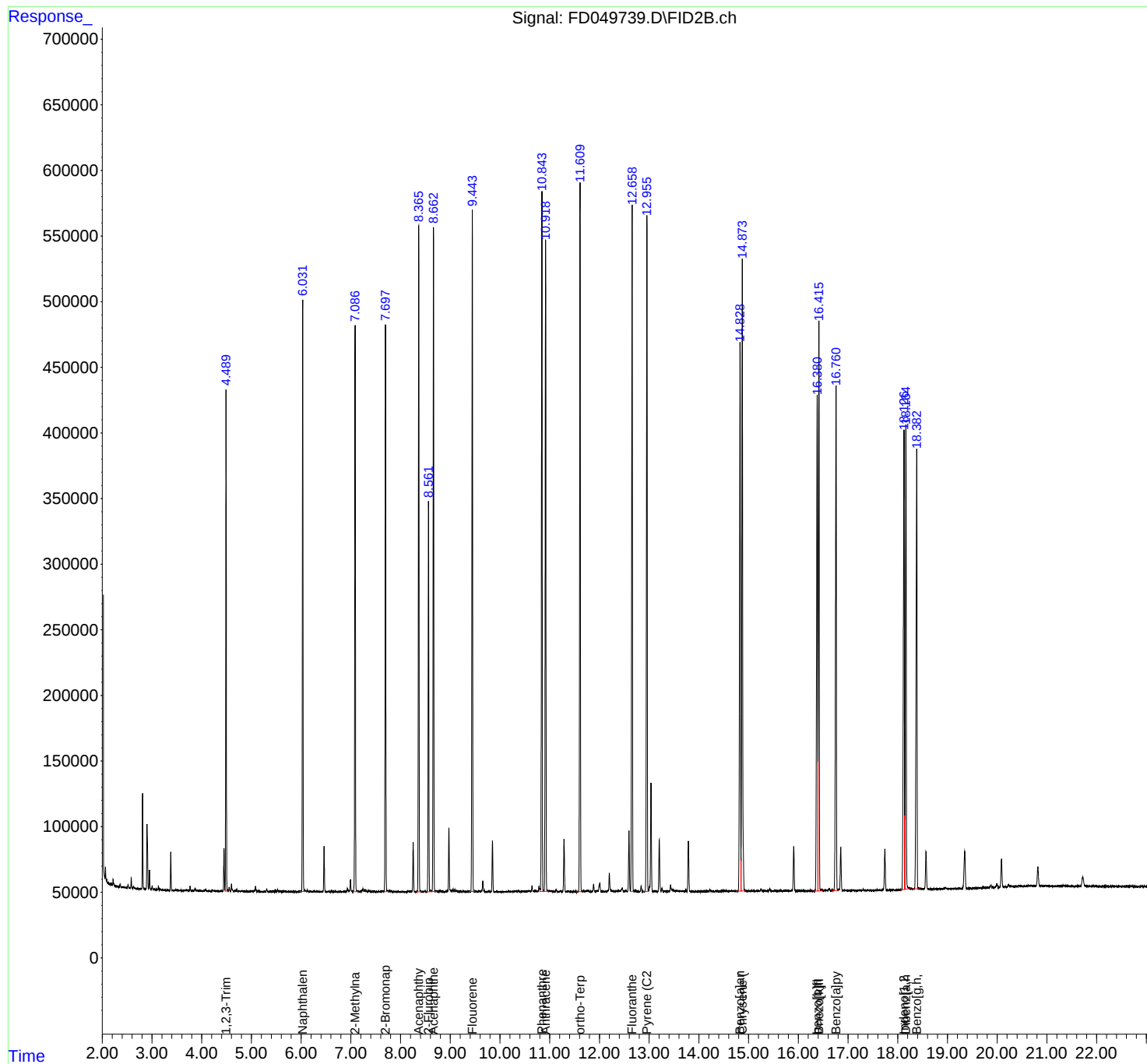
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
Data File : FD049739.D
Signal(s) : FID2B.ch
Acq On : 22 Sep 2025 15:29
Operator : YP/AJ
Sample : PB169768BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB169768BS

Integration File: autoint1.e
Quant Time: Sep 23 02:02:52 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
Quant Title : GC Extractables
QLast Update : Fri Sep 05 06:31:58 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\FD092225AR\
Data File : FD049739.D
Signal(s) : FID2B.ch
Acq On : 22 Sep 2025 15:29
Sample : PB169768BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.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	4.489	4.467	4.536	VV	381140	3306689	56.34%	3.212%
2	6.032	5.968	6.104	BV	448833	4079775	69.51%	3.963%
3	7.086	7.044	7.148	PB	424705	4076043	69.45%	3.959%
4	7.697	7.668	7.758	PB	434264	4120394	70.20%	4.002%
5	8.365	8.314	8.431	BB	507112	4917923	83.79%	4.777%
6	8.562	8.518	8.631	BV	295194	2903364	49.47%	2.820%
7	8.662	8.631	8.724	VB	503660	4990420	85.02%	4.847%
8	9.443	9.378	9.504	BB	522846	5333752	90.87%	5.181%
9	10.842	10.798	10.881	VV	529630	5629906	95.92%	5.469%
10	10.918	10.881	10.971	VB	496815	5337300	90.93%	5.184%
11	11.610	11.534	11.658	BV	541810	5789573	98.64%	5.624%
12	12.657	12.622	12.691	VB	523932	5801207	98.84%	5.635%
13	12.956	12.874	12.984	BV	510961	5842579	99.54%	5.675%
14	14.828	14.748	14.848	BV	416706	5334412	90.89%	5.182%
15	14.873	14.848	14.934	VB	473264	5869388	100.00%	5.701%
16	16.380	16.304	16.395	BV	381339	5256946	89.57%	5.106%
17	16.415	16.395	16.498	VB	432907	5182647	88.30%	5.034%
18	16.760	16.681	16.796	BV	390399	5034888	85.78%	4.891%
19	18.126	18.048	18.142	BV	344295	5059706	86.20%	4.915%
20	18.164	18.142	18.248	VB	354460	4503610	76.73%	4.375%
21	18.381	18.298	18.444	BB	331477	4577867	78.00%	4.447%
Sum of corrected areas:						102948392		

Aromatic EPH 090425.M Tue Sep 23 02:43:38 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	Con Edison FOPL2	Date Received:	
Client Sample ID:	PB169768BS	SDG No.:	Q3123
Lab Sample ID:	PB169768BS	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
FE055924.D	1	09/22/25	09/22/25	PB169768

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	5.51		0.14	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	5.08		0.11	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	9.26		0.13	1.00	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	11.5		0.53	1.33	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	17.1		1.18	2.00	mg/kg
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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB169768BS	Acq On:	22 Sep 2025 15:23
Client Sample ID:	PB169768BS	Operator:	YP\AJ
Data file:	FE055924.D	Misc:	
Instrument:	FID_E	ALS Vial:	12
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.312	6.947	10609280	82.624	300	ug/ml
Aliphatic C12-C16	6.948	10.400	10305489	76.283	200	ug/ml
Aliphatic C16-C21	10.401	13.780	20033147	138.91	300	ug/ml
Aliphatic C21-C28	13.781	17.452	24651770	172.106	400	ug/ml
Aliphatic C28-C40	17.453	22.472	35284248	256.203	600	ug/ml
Aliphatic EPH	3.312	22.472	100883934	726.127		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.513	13.513	4998928	39.98		ug/ml
Aliphatic C9-C28	3.312	17.452	65599686	469.923	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
 Data File : FE055924.D
 Signal(s) : FID1B.ch
 Acq On : 22 Sep 2025 15:23
 Operator : YP\AJ
 Sample : PB169768BS
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 PB169768BS

Integration File: sample.E
 Quant Time: Sep 23 04:30:53 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
 Quant Title : GC Extractables
 Qlast Update : Fri Aug 29 08:12:09 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...	13.513	4998928	39.977 ug/ml
Spiked Amount 50.000		Recovery =	79.95%
Target Compounds			
1) T n-Nonane (C9)	3.411	2913317	22.957 ug/ml
2) T n-Decane (C10)	4.670	3538795	27.626 ug/ml
4) T n-Dodecane (C12)	6.846	4157168	31.926 ug/ml
6) T n-Tetradecane (C14)	8.683	4759776	36.143 ug/ml
7) T n-Hexadecane (C16)	10.299	5545713	40.042 ug/ml
8) T n-Octadecane (C18)	11.749	6312367	43.277 ug/ml
10) T n-Eicosane (C20)	13.066	6975488	48.459 ug/ml
11) T n-Heneicosane (C21)	13.680	6745292	47.221 ug/ml
13) T n-Docosane (C22)	14.269	6665955	46.568 ug/ml
14) T n-Tetracosane (C24)	15.376	6426756	44.415 ug/ml
15) T n-Hexacosane (C26)	16.400	5909434	41.364 ug/ml
16) T n-Octacosane (C28)	17.352	5649625	39.720 ug/ml
17) T n-Tricontane (C30)	18.242	5754541	38.930 ug/ml
18) T n-Dotriacontane (C32)	19.077	5855816	39.896 ug/ml
19) T n-Tetratriacontane (C34)	19.864	5997168	42.447 ug/ml
20) T n-Hexatriacontane (C36)	20.605	6039427	45.768 ug/ml
21) T n-Octatriacontane (C38)	21.384	6035692	46.343 ug/ml
22) T n-Tetracontane (C40)	22.369	5601604	43.680 ug/ml

(f)=RT Delta > 1/2 Window

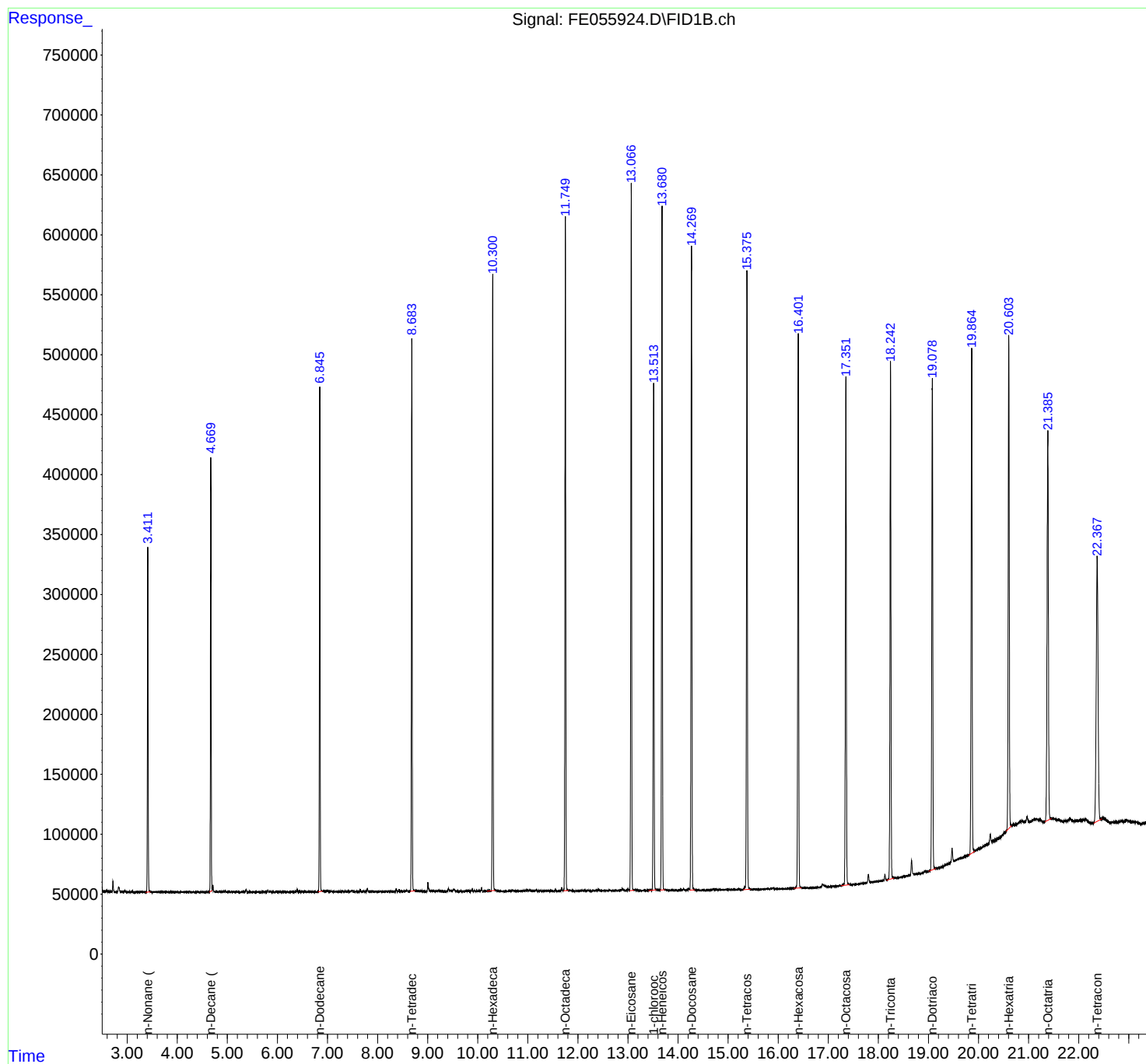
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
Data File : FE055924.D
Signal(s) : FID1B.ch
Acq On : 22 Sep 2025 15:23
Operator : YP\AJ
Sample : PB169768BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB169768BS

Integration File: sample.E
Quant Time: Sep 23 04:30:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
Quant Title : GC Extractables
QLast Update : Fri Aug 29 08:12:09 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\FE092225AL\
Data File : FE055924.D
Signal(s) : FID1B.ch
Acq On : 22 Sep 2025 15:23
Sample : PB169768BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.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	3.411	3.372	3.467	BB	287549	2913317	41.77%	2.751%
2	4.670	4.637	4.698	BV	360631	3538795	50.73%	3.342%
3	6.846	6.812	6.899	BB	421951	4157168	59.60%	3.926%
4	8.683	8.650	8.750	BB	460718	4759776	68.24%	4.495%
5	10.299	10.182	10.350	BB	510069	5545713	79.50%	5.238%
6	11.749	11.709	11.810	BB	558518	6312367	90.49%	5.962%
7	13.066	13.027	13.120	PB	585259	6975488	100.00%	6.588%
8	13.513	13.410	13.567	BB	423811	4998928	71.66%	4.721%
9	13.680	13.640	13.739	BB	570588	6745292	96.70%	6.371%
10	14.269	14.231	14.335	PB	534147	6665955	95.56%	6.296%
11	15.376	15.294	15.444	BB	516118	6426756	92.13%	6.070%
12	16.400	16.309	16.469	BB	456677	5909434	84.72%	5.581%
13	17.352	17.250	17.427	BB	423071	5649625	80.99%	5.336%
14	18.242	18.167	18.314	BB	431739	5754541	82.50%	5.435%
15	19.077	19.000	19.144	BB	405703	5855816	83.95%	5.530%
16	19.864	19.800	19.930	BB	419427	5997168	85.97%	5.664%
17	20.605	20.550	20.660	BB	410250	6039427	86.58%	5.704%
18	21.384	21.330	21.452	BB	318988	6035692	86.53%	5.700%
19	22.369	22.300	22.459	BB	220493	5601604	80.30%	5.290%
Sum of corrected areas:						105882860		

Aliphatic EPH 082925.M Tue Sep 23 06:20:21 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	Con Edison FOPL2	Date Received:	
Client Sample ID:	PB169768BSD	SDG No.:	Q3123
Lab Sample ID:	PB169768BSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
09/22/25 08:35	09/22/25 15:53	PB169768

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12	5.71		1	0.14	1.00	mg/kg FE055925.D
Aliphatic C12-C16	Aliphatic C12-C16	5.27		1	0.11	0.67	mg/kg FE055925.D
Aliphatic C16-C21	Aliphatic C16-C21	9.38		1	0.13	1.00	mg/kg FE055925.D
Aliphatic C21-C28	Aliphatic C21-C28	11.4		1	0.53	1.33	mg/kg FE055925.D
Aliphatic C28-C40	Aliphatic C28-C40	17.1		1	1.18	2.00	mg/kg FE055925.D
Aromatic C10-C12	Aromatic C10-C12	4.18		1	0.12	0.67	mg/kg FD049740.D
Aromatic C12-C16	Aromatic C12-C16	6.76		1	0.23	1.00	mg/kg FD049740.D
Aromatic C16-C21	Aromatic C16-C21	13.6		1	0.40	1.67	mg/kg FD049740.D
Aromatic C21-C36	Aromatic C21-C36	23.2		1	1.19	2.66	mg/kg FD049740.D
Total AliphaticEPH	Total AliphaticEPH	48.9			2.09	5.99	mg/kg
Total AromaticEPH	Total AromaticEPH	47.7			1.94	6.00	mg/kg
Total EPH	Total EPH	96.6			4.03	12.0	mg/kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	Con Edison FOPL2	Date Received:	
Client Sample ID:	PB169768BSD	SDG No.:	Q3123
Lab Sample ID:	PB169768BSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD049740.D	1	09/22/25	09/22/25	PB169768

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	4.18		0.12	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	6.76		0.23	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	13.6		0.40	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	23.2		1.19	2.66	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	36.0		40 - 140	72%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	35.4		40 - 140	71%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	40.4		40 - 140	81%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB169768BSD	Acq On:	22 Sep 2025 16:13
Client Sample ID:	PB169768BSD	Operator:	YP/AJ
Data file:	FD049740.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	4.389	6.131	7279103	62.721	200	ug/ml
Aromatic C12-C16	6.132	8.759	13782195	101.44	300	ug/ml
Aromatic C16-C21	8.760	13.050	27733201	204.265	500	ug/ml
Aromatic C21-C36	13.051	18.469	41167403	347.927	800	ug/ml
Aromatic EPH	4.389	18.469	89961902	716.353		ug/ml
2-Bromonaphthalene (SURRE)	7.697	7.697	4054319	36.05		ug/ml
2-Fluorobiphenyl (SURRE)	8.561	8.561	2837945	35.35		ug/ml
ortho-Terphenyl (SURRE)	11.610	11.610	5708857	40.35		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
 Data File : FD049740.D
 Signal(s) : FID2B.ch
 Acq On : 22 Sep 2025 16:13
 Operator : YP/AJ
 Sample : PB169768BSD
 Misc :
 ALS Vial : 63 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 PB169768BSD

Integration File: autoint1.e
 Quant Time: Sep 23 02:03:18 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
 Quant Title : GC Extractables
 QLast Update : Fri Sep 05 06:31:58 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...	7.697	4054319	36.050 ug/ml
Spiked Amount 50.000		Recovery =	72.10%
6) S 2-Fluorobiphenyl (SURR)	8.561	2837945	35.354 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	70.71%
11) S ortho-Terphenyl (SURR)	11.610	5708857	40.351 ug/ml
Spiked Amount 50.000		Recovery =	80.70%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.488	3255187	30.210 ug/ml
2) T Naphthalene (C11.7)	6.031	4023916	32.357 ug/ml
3) T 2-Methylnaphthalene (...)	7.086	4019883	30.843 ug/ml
5) T Acenaphthylene (C15.06)	8.365	4850159	34.984 ug/ml
7) T Acenaphthene (C15.5)	8.662	4912153	35.435 ug/ml
8) T Flouorene (C16.55)	9.444	5279710	38.062 ug/ml
9) T Phenanthrene (C19.36)	10.842	5589402	40.124 ug/ml
10) T Anthracene (C19.43)	10.918	5307767	40.198 ug/ml
12) T Fluoranthene (C21.85)	12.658	5757029	42.749 ug/ml
13) T Pyrene (C20.8)	12.956	5799293	43.596 ug/ml
14) T Benzo[a]anthracene (C...	14.828	5341348	44.666 ug/ml
15) T Chrysene (C27.41)	14.873	5854184	48.122 ug/ml
16) T benzo[b]fluoranthene ...	16.380	5228037	43.615 ug/ml
17) T Bnezo[k]fluoranthene ...	16.416	5164032	45.831 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.760	5030027	42.865 ug/ml
19) T Indeno[1,2,3-cd]pyren...	18.126	5170476	47.527 ug/ml
20) T Dibenz[a,h]anthracene...	18.165	4752615	41.708 ug/ml
21) T Benzo[g,h,i]perylene ...	18.382	4626684	39.763 ug/ml

(f)=RT Delta > 1/2 Window

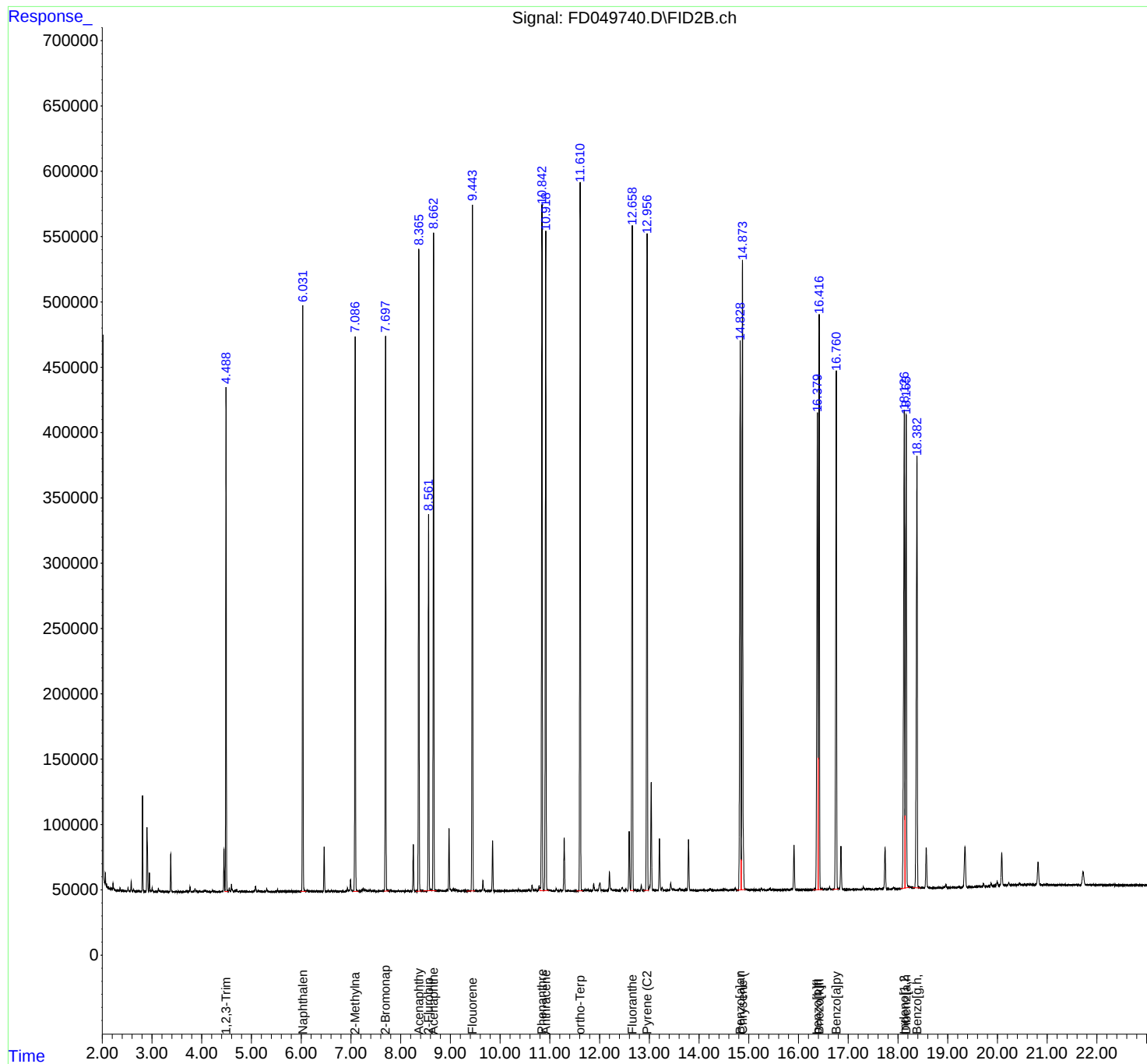
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
Data File : FD049740.D
Signal(s) : FID2B.ch
Acq On : 22 Sep 2025 16:13
Operator : YP/AJ
Sample : PB169768BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB169768BSD

Integration File: autoint1.e
Quant Time: Sep 23 02:03:18 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
Quant Title : GC Extractables
QLast Update : Fri Sep 05 06:31:58 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\FD092225AR\
Data File : FD049740.D
Signal(s) : FID2B.ch
Acq On : 22 Sep 2025 16:13
Sample : PB169768BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.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	4.488	4.466	4.535	VV	384014	3255187	55.60%	3.174%
2	6.031	5.978	6.105	BB	447093	4023916	68.74%	3.923%
3	7.086	7.041	7.151	PB	419670	4019883	68.67%	3.919%
4	7.697	7.665	7.761	PB	425173	4054319	69.26%	3.953%
5	8.365	8.315	8.421	BB	491255	4850159	82.85%	4.729%
6	8.561	8.445	8.628	BB	287832	2837945	48.48%	2.767%
7	8.662	8.628	8.725	BB	501889	4912153	83.91%	4.789%
8	9.444	9.331	9.498	BB	527778	5279710	90.19%	5.148%
9	10.842	10.798	10.885	VV	520130	5589402	95.48%	5.450%
10	10.918	10.885	10.975	VB	505048	5307767	90.67%	5.175%
11	11.610	11.535	11.665	BV	545992	5708857	97.52%	5.566%
12	12.658	12.621	12.689	VB	510812	5757029	98.34%	5.613%
13	12.956	12.885	12.985	BV	495167	5799293	99.06%	5.654%
14	14.828	14.758	14.848	BV	418979	5341348	91.24%	5.208%
15	14.873	14.848	14.938	VB	476058	5854184	100.00%	5.708%
16	16.380	16.291	16.396	BV	364467	5228037	89.30%	5.097%
17	16.416	16.396	16.488	VB	435608	5164032	88.21%	5.035%
18	16.760	16.678	16.802	BB	402665	5030027	85.92%	4.904%
19	18.126	18.045	18.142	BV	361402	5170476	88.32%	5.041%
20	18.165	18.142	18.245	VB	362623	4752615	81.18%	4.634%
21	18.382	18.295	18.451	BB	327470	4626684	79.03%	4.511%
Sum of corrected areas:						102563020		

Aromatic EPH 090425.M Tue Sep 23 02:44:49 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	Con Edison FOPL2	Date Received:	
Client Sample ID:	PB169768BSD	SDG No.:	Q3123
Lab Sample ID:	PB169768BSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:		Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE055925.D	1	09/22/25	09/22/25	PB169768

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	5.71		0.14	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	5.27		0.11	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	9.38		0.13	1.00	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	11.4		0.53	1.33	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	17.1		1.18	2.00	mg/kg
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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB169768BSD	Acq On:	22 Sep 2025 15:53
Client Sample ID:	PB169768BSD	Operator:	YP\AJ
Data file:	FE055925.D	Misc:	
Instrument:	FID_E	ALS Vial:	13
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.312	6.947	11008413	85.733	300	ug/ml
Aliphatic C12-C16	6.948	10.400	10696938	79.181	200	ug/ml
Aliphatic C16-C21	10.401	13.780	20321484	140.909	300	ug/ml
Aliphatic C21-C28	13.781	17.452	24505938	171.088	400	ug/ml
Aliphatic C28-C40	17.453	22.472	35433303	257.286	600	ug/ml
Aliphatic EPH	3.312	22.472	101966076	734.196		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.512	13.512	4999351	39.98		ug/ml
Aliphatic C9-C28	3.312	17.452	66532773	476.911	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
 Data File : FE055925.D
 Signal(s) : FID1B.ch
 Acq On : 22 Sep 2025 15:53
 Operator : YP\AJ
 Sample : PB169768BSD
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 PB169768BSD

Integration File: sample.E
 Quant Time: Sep 23 04:31:23 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
 Quant Title : GC Extractables
 QLast Update : Fri Aug 29 08:12:09 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...	13.512	4999351	39.980 ug/ml
Spiked Amount 50.000		Recovery =	79.96%
Target Compounds			
1) T n-Nonane (C9)	3.411	3015250	23.761 ug/ml
2) T n-Decane (C10)	4.670	3667537	28.631 ug/ml
4) T n-Dodecane (C12)	6.846	4325626	33.220 ug/ml
6) T n-Tetradecane (C14)	8.683	4946838	37.563 ug/ml
7) T n-Hexadecane (C16)	10.299	5750100	41.518 ug/ml
8) T n-Octadecane (C18)	11.749	6475569	44.396 ug/ml
10) T n-Eicosane (C20)	13.065	7062719	49.065 ug/ml
11) T n-Heneicosane (C21)	13.679	6783196	47.487 ug/ml
13) T n-Docosane (C22)	14.266	6659875	46.526 ug/ml
14) T n-Tetracosane (C24)	15.375	6370914	44.029 ug/ml
15) T n-Hexacosane (C26)	16.398	5852380	40.965 ug/ml
16) T n-Octacosane (C28)	17.351	5622769	39.531 ug/ml
17) T n-Tricontane (C30)	18.241	5749034	38.892 ug/ml
18) T n-Dotriacontane (C32)	19.075	5866944	39.972 ug/ml
19) T n-Tetratriacontane (C34)	19.862	5976616	42.302 ug/ml
20) T n-Hexatriacontane (C36)	20.603	5986875	45.370 ug/ml
21) T n-Octatriacontane (C38)	21.382	6099367	46.832 ug/ml
22) T n-Tetracontane (C40)	22.368	5754467	44.872 ug/ml

(f)=RT Delta > 1/2 Window

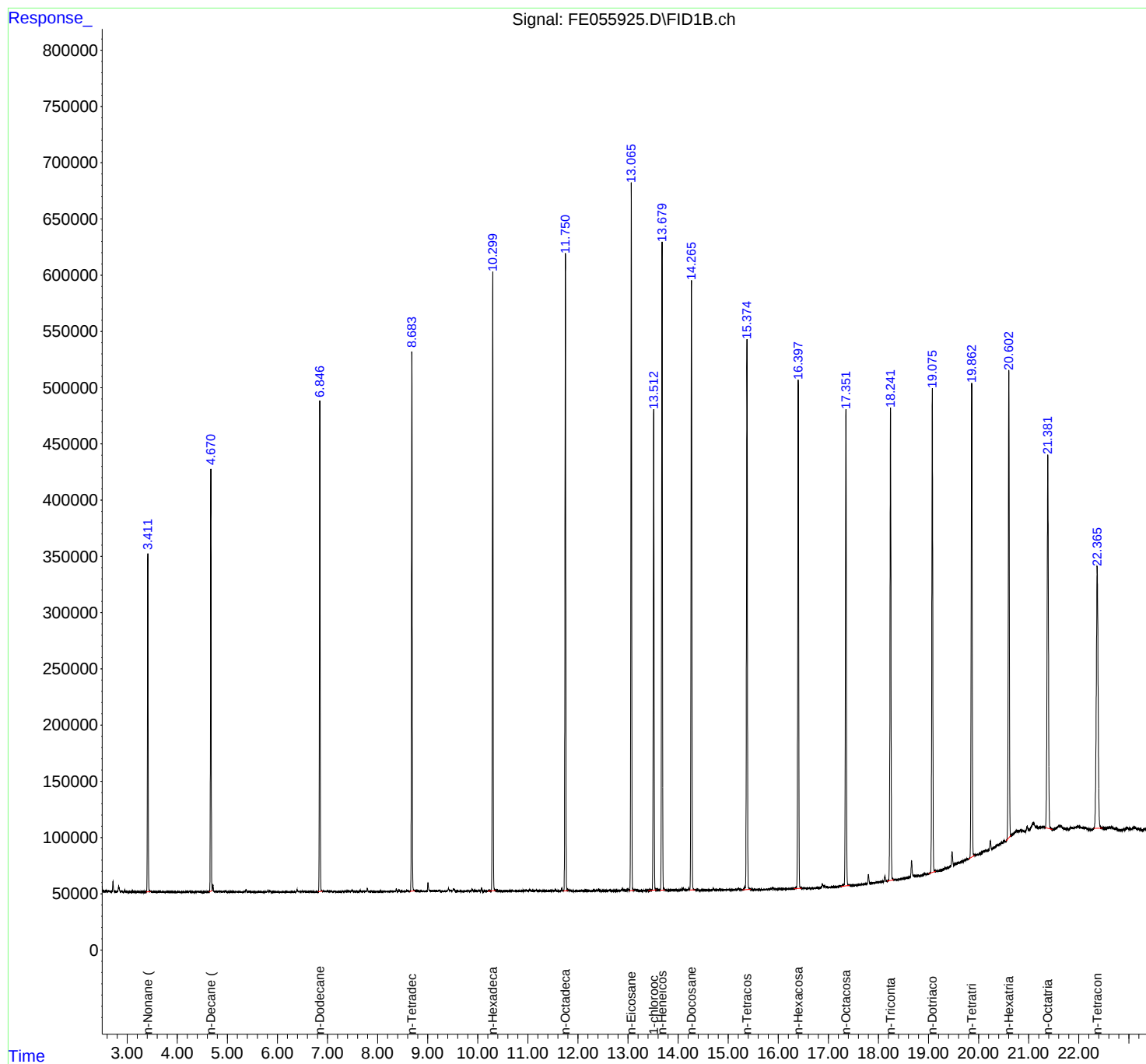
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
Data File : FE055925.D
Signal(s) : FID1B.ch
Acq On : 22 Sep 2025 15:53
Operator : YP\AJ
Sample : PB169768BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB169768BSD

Integration File: sample.E
Quant Time: Sep 23 04:31:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
Quant Title : GC Extractables
QLast Update : Fri Aug 29 08:12:09 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\FE092225AL\
Data File : FE055925.D
Signal(s) : FID1B.ch
Acq On : 22 Sep 2025 15:53
Sample : PB169768BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.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	3.411	3.377	3.462	BB	300224	3015250	42.69%	2.819%
2	4.670	4.637	4.697	BV	376314	3667537	51.93%	3.429%
3	6.846	6.812	6.902	BB	435782	4325626	61.25%	4.044%
4	8.683	8.647	8.747	BB	479448	4946838	70.04%	4.625%
5	10.299	10.197	10.352	BB	548392	5750100	81.41%	5.376%
6	11.749	11.712	11.807	BB	561863	6475569	91.69%	6.054%
7	13.065	13.027	13.120	PB	630833	7062719	100.00%	6.603%
8	13.512	13.409	13.567	BB	428213	4999351	70.79%	4.674%
9	13.679	13.639	13.735	BB	573291	6783196	96.04%	6.341%
10	14.266	14.230	14.335	PB	532785	6659875	94.30%	6.226%
11	15.375	15.284	15.449	BB	486485	6370914	90.20%	5.956%
12	16.398	16.309	16.469	BB	449369	5852380	82.86%	5.471%
13	17.351	17.250	17.424	BB	423133	5622769	79.61%	5.257%
14	18.241	18.169	18.307	BB	419690	5749034	81.40%	5.375%
15	19.075	19.000	19.144	BB	430218	5866944	83.07%	5.485%
16	19.862	19.800	19.920	BB	417945	5976616	84.62%	5.587%
17	20.603	20.550	20.645	BB	416100	5986875	84.77%	5.597%
18	21.382	21.330	21.474	BB	331462	6099367	86.36%	5.702%
19	22.368	22.300	22.477	BB	232702	5754467	81.48%	5.380%
Sum of corrected areas:						106965424		

Aliphatic EPH 082925.M Tue Sep 23 06:21:02 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	Con Edison FOPL2	Date Received:	
Client Sample ID:	TP-2MS	SDG No.:	Q3123
Lab Sample ID:	Q3123-01MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.5
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
09/22/25 08:35	09/22/25 18:56	PB169768

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12	8.10		1	0.15	1.10	mg/kg FE055931.D
Aliphatic C12-C16	Aliphatic C12-C16	8.23		1	0.12	0.74	mg/kg FE055931.D
Aliphatic C16-C21	Aliphatic C16-C21	12.4		1	0.14	1.10	mg/kg FE055931.D
Aliphatic C21-C28	Aliphatic C21-C28	14.8		1	0.58	1.47	mg/kg FE055931.D
Aliphatic C28-C40	Aliphatic C28-C40	28.5		1	1.30	2.20	mg/kg FE055931.D
Aromatic C10-C12	Aromatic C10-C12	5.42		1	0.13	0.74	mg/kg FD049743.D
Aromatic C12-C16	Aromatic C12-C16	12.2		1	0.25	1.10	mg/kg FD049743.D
Aromatic C16-C21	Aromatic C16-C21	35.9		1	0.44	1.84	mg/kg FD049743.D
Aromatic C21-C36	Aromatic C21-C36	54.4		1	1.31	2.94	mg/kg FD049743.D
Total AliphaticEPH	Total AliphaticEPH	72.0			2.30	6.61	mg/kg
Total AromaticEPH	Total AromaticEPH	108			2.14	6.62	mg/kg
Total EPH	Total EPH	180			4.44	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

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	Con Edison FOPL2	Date Received:	
Client Sample ID:	TP-2MS	SDG No.:	Q3123
Lab Sample ID:	Q3123-01MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.5
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
FD049743.D	1	09/22/25	09/22/25	PB169768

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	5.42		0.13	0.74	mg/kg
Aromatic C12-C16	Aromatic C12-C16	12.2		0.25	1.10	mg/kg
Aromatic C16-C21	Aromatic C16-C21	35.9		0.44	1.84	mg/kg
Aromatic C21-C36	Aromatic C21-C36	54.4		1.31	2.94	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	46.3		40 - 140	93%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	39.9		40 - 140	80%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	31.8		40 - 140	64%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	Q3123-01MS	Acq On:	22 Sep 2025 18:30
Client Sample ID:	Q3123-01MS	Operator:	YP/AJ
Data file:	FD049743.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	4.389	6.131	8552537	73.693	200	ug/ml
Aromatic C12-C16	6.132	8.759	22639789	166.634	300	ug/ml
Aromatic C16-C21	8.760	13.050	66254454	487.988	500	ug/ml
Aromatic C21-C36	13.051	18.469	87616130	740.49	800	ug/ml
Aromatic EPH	4.389	18.469	185062910	1470		ug/ml
2-Bromonaphthalene (SURRE)	7.698	7.698	5202975	46.26		ug/ml
2-Fluorobiphenyl (SURRE)	8.562	8.562	3201079	39.88		ug/ml
ortho-Terphenyl (SURRE)	11.610	11.610	4497026	31.79		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
 Data File : FD049743.D
 Signal(s) : FID2B.ch
 Acq On : 22 Sep 2025 18:30
 Operator : YP/AJ
 Sample : Q3123-01MS
 Misc :
 ALS Vial : 66 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 TP-2MS

Integration File: autoint1.e
 Quant Time: Sep 23 07:30:29 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
 Quant Title : GC Extractables
 QLast Update : Fri Sep 05 06:31:58 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...	7.698	5202975	46.264 ug/ml
Spiked Amount 50.000		Recovery =	92.53%
6) S 2-Fluorobiphenyl (SURR)	8.562	3201079	39.878 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	79.76%
11) S ortho-Terphenyl (SURR)	11.610	4497026	31.785 ug/ml
Spiked Amount 50.000		Recovery =	63.57%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.488	3268463	30.333 ug/ml
2) T Naphthalene (C11.7)	6.032	4490702	36.111 ug/ml
3) T 2-Methylnaphthalene (...)	7.086	4817168	36.961 ug/ml
5) T Acenaphthylene (C15.06)	8.367	6214759	44.826 ug/ml
7) T Acenaphthene (C15.5)	8.664	6443072	46.479 ug/ml
8) T Flouorene (C16.55)	9.445	6911621	49.827 ug/ml
9) T Phenanthrene (C19.36)	10.848	10555191	75.771 ug/ml
10) T Anthracene (C19.43)	10.922	7698248	58.302 ug/ml
12) T Fluoranthene (C21.85)	12.667	12432714	92.319 ug/ml
13) T Pyrene (C20.8)	12.966	11775919	88.525 ug/ml
14) T Benzo[a]anthracene (C...	14.836	8887598	74.320 ug/ml
15) T Chrysene (C27.41)	14.881	9208341	75.694 ug/ml
16) T benzo[b]fluoranthene ...	16.390	8542502	71.266 ug/ml
17) T Bnezo[k]fluoranthene ...	16.423	6458960	57.324 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.770	7641527	65.119 ug/ml
19) T Indeno[1,2,3-cd]pyren...	18.134	7014724	64.479 ug/ml
20) T Dibenz[a,h]anthracene...	18.171	5514194	48.392 ug/ml
21) T Benzo[g,h,i]perylene ...	18.390	6045715	51.958 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
Data File : FD049743.D
Signal(s) : FID2B.ch
Acq On : 22 Sep 2025 18:30
Sample : Q3123-01MS
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.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	4.304	4.262	4.329	BV	338	2564	0.02%	0.001%
2	4.340	4.329	4.364	PV	633	6483	0.05%	0.003%
3	4.401	4.378	4.423	VV	436	6528	0.05%	0.003%
4	4.447	4.423	4.466	PV	36501	323362	2.60%	0.166%
5	4.488	4.466	4.534	VV	382283	3276998	26.36%	1.683%
6	4.552	4.534	4.578	VV	2770	29847	0.24%	0.015%
7	4.596	4.578	4.637	VV	5855	69048	0.56%	0.035%
8	4.673	4.637	4.687	VV	1298	18374	0.15%	0.009%
9	4.701	4.687	4.721	VV	2234	21520	0.17%	0.011%
10	4.727	4.721	4.735	VV	271	1752	0.01%	0.001%
11	4.755	4.742	4.768	VV	707	6627	0.05%	0.003%
12	4.781	4.768	4.808	VV	939	12558	0.10%	0.006%
13	4.818	4.808	4.848	VV	477	5644	0.05%	0.003%
14	4.857	4.848	4.876	VV	261	1803	0.01%	0.001%
15	4.892	4.876	4.911	PV	445	5117	0.04%	0.003%
16	4.917	4.911	4.945	VV	215	3740	0.03%	0.002%
17	4.958	4.945	4.989	VV	301	5455	0.04%	0.003%
18	5.005	4.989	5.014	VV	374	4078	0.03%	0.002%
19	5.017	5.014	5.030	VV	276	1959	0.02%	0.001%
20	5.055	5.030	5.064	VV	899	9345	0.08%	0.005%
21	5.083	5.064	5.107	VV	3801	44668	0.36%	0.023%
22	5.113	5.107	5.120	VV	306	1860	0.01%	0.001%
23	5.141	5.120	5.162	VV	977	12665	0.10%	0.007%
24	5.172	5.162	5.179	VV	593	4856	0.04%	0.002%
25	5.182	5.179	5.209	VV	638	6978	0.06%	0.004%
26	5.224	5.218	5.229	VV	302	1073	0.01%	0.001%
27	5.234	5.229	5.244	VV	246	1430	0.01%	0.001%
28	5.271	5.244	5.286	VV	309	4129	0.03%	0.002%
29	5.304	5.286	5.342	VV	1846	21591	0.17%	0.011%
30	5.362	5.342	5.373	VV	404	3985	0.03%	0.002%
31	5.380	5.373	5.388	VV	376	2253	0.02%	0.001%
32	5.395	5.388	5.402	VV	249	1957	0.02%	0.001%
33	5.407	5.402	5.424	VV	275	2033	0.02%	0.001%
34	5.446	5.424	5.460	PV	325	4193	0.03%	0.002%
35	5.482	5.460	5.505	VV	810	10912	0.09%	0.006%
36	5.526	5.505	5.543	VV	1496	14635	0.12%	0.008%

					rteres			
37	5.548	5.543	5.560	VV	177	1752	0.01%	0.001%
38	5.566	5.560	5.571	VV	394	1826	0.01%	0.001%
39	5.584	5.571	5.610	VV	671	10871	0.09%	0.006%
40	5.614	5.610	5.636	VV	499	5092	0.04%	0.003%
41	5.646	5.636	5.662	VV	284	3549	0.03%	0.002%
42	5.671	5.662	5.702	VV	304	3378	0.03%	0.002%
43	5.709	5.702	5.719	VV	278	1664	0.01%	0.001%
44	5.729	5.719	5.738	VV	374	3034	0.02%	0.002%
45	5.742	5.738	5.747	VV	269	1321	0.01%	0.001%
46	5.753	5.747	5.758	VV	294	1745	0.01%	0.001%
47	5.776	5.758	5.793	VV	488	6947	0.06%	0.004%
48	5.815	5.793	5.825	VV	367	5243	0.04%	0.003%
49	5.835	5.825	5.859	VV	358	6053	0.05%	0.003%
50	5.864	5.859	5.885	VV	437	4246	0.03%	0.002%
51	5.890	5.885	5.896	VV	287	1453	0.01%	0.001%
52	5.910	5.896	5.924	VV	354	4256	0.03%	0.002%
53	5.935	5.924	5.957	VV	414	6663	0.05%	0.003%
54	5.971	5.957	6.005	VV	612	13022	0.10%	0.007%
55	6.032	6.005	6.070	VV	494478	4497205	36.18%	2.309%
56	6.080	6.070	6.100	VV	1079	13165	0.11%	0.007%
57	6.123	6.100	6.152	VV	1141	17079	0.14%	0.009%
58	6.157	6.152	6.162	VV	392	1773	0.01%	0.001%
59	6.185	6.162	6.227	VV	616	15260	0.12%	0.008%
60	6.255	6.227	6.284	VV	679	11934	0.10%	0.006%
61	6.291	6.284	6.295	VV	174	1002	0.01%	0.001%
62	6.312	6.295	6.337	VV	540	8261	0.07%	0.004%
63	6.342	6.337	6.376	VV	295	3583	0.03%	0.002%
64	6.387	6.376	6.437	PV	230	6814	0.05%	0.003%
65	6.462	6.437	6.490	VV	40669	394116	3.17%	0.202%
66	6.496	6.490	6.510	VV	335	2890	0.02%	0.001%
67	6.522	6.510	6.537	VV	419	4244	0.03%	0.002%
68	6.550	6.537	6.562	VV	625	6612	0.05%	0.003%
69	6.580	6.562	6.594	VV	597	7860	0.06%	0.004%
70	6.611	6.594	6.631	VV	1159	12645	0.10%	0.006%
71	6.635	6.631	6.650	VV	324	2761	0.02%	0.001%
72	6.654	6.650	6.667	VV	239	1374	0.01%	0.001%
73	6.685	6.667	6.695	VV	663	6384	0.05%	0.003%
74	6.698	6.695	6.706	VV	286	1336	0.01%	0.001%
75	6.719	6.706	6.730	VV	333	2290	0.02%	0.001%
76	6.753	6.730	6.766	PV	318	4071	0.03%	0.002%
77	6.786	6.766	6.820	VV	444	8583	0.07%	0.004%
78	6.824	6.820	6.828	VV	316	1230	0.01%	0.001%
79	6.842	6.828	6.882	VV	1070	15224	0.12%	0.008%
80	6.905	6.882	6.914	VV	769	8085	0.07%	0.004%
81	6.930	6.914	6.947	VV	4656	43251	0.35%	0.022%
82	6.958	6.947	6.971	VV	1082	10998	0.09%	0.006%
83	6.992	6.971	7.012	VV	10768	110573	0.89%	0.057%
84	7.019	7.012	7.050	VV	1047	14373	0.12%	0.007%
85	7.087	7.050	7.122	VV	506523	4828957	38.85%	2.480%
86	7.140	7.122	7.157	VV	799	12212	0.10%	0.006%
87	7.161	7.157	7.174	VV	505	4538	0.04%	0.002%
88	7.192	7.174	7.200	VV	422	5439	0.04%	0.003%
89	7.220	7.200	7.236	VV	7204	72723	0.59%	0.037%

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90	7.245	7.236	7.259	VV	2290	23670	0.19%	0.012%
91	7.278	7.259	7.292	VV	2235	27706	0.22%	0.014%
92	7.303	7.292	7.334	VV	1379	18039	0.15%	0.009%
93	7.353	7.334	7.367	VV	1345	14851	0.12%	0.008%
94	7.382	7.367	7.404	VV	1555	18894	0.15%	0.010%
95	7.409	7.404	7.427	VV	318	4098	0.03%	0.002%
96	7.431	7.427	7.434	VV	441	1435	0.01%	0.001%
97	7.448	7.434	7.463	VV	870	10619	0.09%	0.005%
98	7.475	7.463	7.513	VV	827	9864	0.08%	0.005%
99	7.526	7.513	7.532	VV	290	1897	0.02%	0.001%
100	7.559	7.532	7.577	VV	663	9151	0.07%	0.005%
101	7.599	7.577	7.605	VV	439	4439	0.04%	0.002%
102	7.614	7.605	7.629	VV	546	5220	0.04%	0.003%
103	7.647	7.629	7.663	VV	808	9387	0.08%	0.005%
104	7.698	7.663	7.765	VV	548682	5212299	41.93%	2.676%
105	7.808	7.765	7.834	VV	2024	31357	0.25%	0.016%
106	7.848	7.843	7.866	VV	115	1593	0.01%	0.001%
107	7.905	7.876	7.935	VV	374	7885	0.06%	0.004%
108	7.966	7.935	8.000	VV	2184	38551	0.31%	0.020%
109	8.009	8.000	8.025	VV	635	6978	0.06%	0.004%
110	8.061	8.025	8.069	VV	3364	41260	0.33%	0.021%
111	8.075	8.069	8.101	VV	3146	29071	0.23%	0.015%
112	8.105	8.101	8.125	VV	356	3969	0.03%	0.002%
113	8.179	8.125	8.195	VV	10133	118796	0.96%	0.061%
114	8.207	8.195	8.230	VV	5313	57037	0.46%	0.029%
115	8.255	8.230	8.299	VV	46269	475302	3.82%	0.244%
116	8.367	8.299	8.430	VV	619157	6224958	50.08%	3.196%
117	8.454	8.430	8.474	VV	3641	38748	0.31%	0.020%
118	8.501	8.474	8.524	VV	951	14720	0.12%	0.008%
119	8.563	8.524	8.590	VV	326879	3208096	25.81%	1.647%
120	8.611	8.590	8.631	VV	1750	29345	0.24%	0.015%
121	8.664	8.631	8.691	VV	641279	6471441	52.06%	3.323%
122	8.704	8.691	8.731	VV	2939	41788	0.34%	0.021%
123	8.738	8.731	8.747	VV	988	8228	0.07%	0.004%
124	8.772	8.747	8.802	VV	1589	33400	0.27%	0.017%
125	8.816	8.802	8.834	VV	949	14557	0.12%	0.007%
126	8.849	8.834	8.866	VV	1072	14543	0.12%	0.007%
127	8.899	8.866	8.914	VV	8493	103391	0.83%	0.053%
128	8.930	8.914	8.951	VV	11676	126020	1.01%	0.065%
129	8.973	8.951	9.010	VV	39407	420791	3.39%	0.216%
130	9.021	9.010	9.039	VV	2446	29594	0.24%	0.015%
131	9.066	9.039	9.082	VV	4963	66231	0.53%	0.034%
132	9.106	9.082	9.150	VV	6237	97656	0.79%	0.050%
133	9.165	9.150	9.190	VV	514	6128	0.05%	0.003%
134	9.222	9.190	9.239	PV	5941	66036	0.53%	0.034%
135	9.253	9.239	9.286	VV	5072	56853	0.46%	0.029%
136	9.305	9.286	9.319	VV	852	11001	0.09%	0.006%
137	9.358	9.319	9.381	VV	6315	94845	0.76%	0.049%
138	9.403	9.381	9.412	VV	1226	15562	0.13%	0.008%
139	9.446	9.412	9.495	VV	661338	6929842	55.75%	3.558%
140	9.519	9.495	9.545	VV	6361	93325	0.75%	0.048%
141	9.560	9.545	9.572	VV	5459	60668	0.49%	0.031%

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142	9.590	9.572	9.609	VV	12438	154899	1.25%	0.080%
143	9.619	9.609	9.632	VV	2976	31334	0.25%	0.016%
144	9.652	9.632	9.677	VV	17448	208380	1.68%	0.107%
145	9.687	9.677	9.695	VV	2068	19845	0.16%	0.010%
146	9.716	9.695	9.739	VV	35560	364876	2.94%	0.187%
147	9.761	9.739	9.800	VV	10763	146115	1.18%	0.075%
148	9.814	9.800	9.825	VV	2202	25638	0.21%	0.013%
149	9.851	9.825	9.905	VV	55246	723827	5.82%	0.372%
150	9.921	9.905	9.939	VV	3034	36696	0.30%	0.019%
151	9.958	9.939	9.979	VV	1958	27522	0.22%	0.014%
152	10.028	9.979	10.074	VV	2646	62744	0.50%	0.032%
153	10.080	10.074	10.097	VV	254	1525	0.01%	0.001%
154	10.128	10.097	10.150	PV	1355	18089	0.15%	0.009%
155	10.154	10.150	10.163	VV	527	3930	0.03%	0.002%
156	10.181	10.163	10.198	VV	2932	33140	0.27%	0.017%
157	10.207	10.198	10.218	VV	820	7308	0.06%	0.004%
158	10.238	10.218	10.252	VV	1691	22527	0.18%	0.012%
159	10.258	10.252	10.272	VV	1290	12203	0.10%	0.006%
160	10.291	10.272	10.300	VV	4966	55588	0.45%	0.029%
161	10.318	10.300	10.341	VV	12647	163485	1.32%	0.084%
162	10.359	10.341	10.397	VV	8702	115636	0.93%	0.059%
163	10.435	10.397	10.455	VV	9903	150994	1.21%	0.078%
164	10.459	10.455	10.468	VV	4386	30703	0.25%	0.016%
165	10.485	10.468	10.524	VV	14941	217578	1.75%	0.112%
166	10.531	10.524	10.547	VV	2507	24260	0.20%	0.012%
167	10.571	10.547	10.585	VV	3773	51860	0.42%	0.027%
168	10.607	10.585	10.619	VV	10590	127104	1.02%	0.065%
169	10.641	10.619	10.662	VV	22325	314122	2.53%	0.161%
170	10.670	10.662	10.683	VV	4166	42743	0.34%	0.022%
171	10.715	10.683	10.725	VV	3847	73961	0.59%	0.038%
172	10.740	10.725	10.759	VV	6433	83731	0.67%	0.043%
173	10.777	10.759	10.791	VV	2996	44352	0.36%	0.023%
174	10.808	10.791	10.813	VV	6753	63176	0.51%	0.032%
175	10.849	10.813	10.883	VV	918691	10499149	84.46%	5.391%
176	10.923	10.883	10.954	VV	717251	7702952	61.97%	3.955%
177	10.967	10.954	10.979	VV	2019	24231	0.19%	0.012%
178	10.993	10.979	11.003	VV	2185	25767	0.21%	0.013%
179	11.017	11.003	11.037	VV	2426	41782	0.34%	0.021%
180	11.049	11.037	11.068	VV	1709	21470	0.17%	0.011%
181	11.096	11.068	11.101	VV	1251	16035	0.13%	0.008%
182	11.123	11.101	11.166	VV	16994	229177	1.84%	0.118%
183	11.196	11.166	11.213	PV	3153	55760	0.45%	0.029%
184	11.232	11.213	11.257	VV	3819	76096	0.61%	0.039%
185	11.289	11.257	11.315	VV	51339	599174	4.82%	0.308%
186	11.375	11.315	11.404	VV	13159	307740	2.48%	0.158%
187	11.438	11.404	11.458	VV	8113	122953	0.99%	0.063%
188	11.489	11.458	11.510	VV	7150	105458	0.85%	0.054%
189	11.528	11.510	11.549	VV	6311	78106	0.63%	0.040%
190	11.566	11.549	11.578	VV	1829	24062	0.19%	0.012%
191	11.610	11.578	11.628	VV	411926	4460417	35.88%	2.290%
192	11.639	11.628	11.654	VV	56914	583345	4.69%	0.300%
193	11.670	11.654	11.694	VV	70542	774621	6.23%	0.398%
194	11.701	11.694	11.711	VV	1838	16514	0.13%	0.008%

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195	11.737	11.711	11.742	VV	32915	306848	2.47%	0.158%
196	11.754	11.742	11.771	VV	50975	573192	4.61%	0.294%
197	11.787	11.771	11.801	VV	38081	424325	3.41%	0.218%
198	11.818	11.801	11.847	VV	53734	632075	5.08%	0.325%
199	11.861	11.847	11.871	VV	1459	15706	0.13%	0.008%
200	11.892	11.871	11.910	VV	3298	42372	0.34%	0.022%
201	11.934	11.910	11.944	VV	2033	25856	0.21%	0.013%
202	11.957	11.944	11.968	VV	2941	34636	0.28%	0.018%
203	11.992	11.968	12.062	VV	23471	481875	3.88%	0.247%
204	12.071	12.062	12.085	VV	2287	28231	0.23%	0.014%
205	12.108	12.085	12.129	VV	37461	420156	3.38%	0.216%
206	12.136	12.129	12.149	VV	3954	42672	0.34%	0.022%
207	12.165	12.149	12.179	VV	4104	61688	0.50%	0.032%
208	12.202	12.179	12.232	VV	59460	687094	5.53%	0.353%
209	12.255	12.232	12.277	VV	9486	143190	1.15%	0.074%
210	12.284	12.277	12.300	VV	2263	25972	0.21%	0.013%
211	12.315	12.300	12.324	VV	2610	30416	0.24%	0.016%
212	12.357	12.324	12.371	VV	9682	161109	1.30%	0.083%
213	12.381	12.371	12.407	VV	7317	103385	0.83%	0.053%
214	12.427	12.407	12.467	VV	16576	311557	2.51%	0.160%
215	12.488	12.467	12.518	VV	23364	357579	2.88%	0.184%
216	12.539	12.518	12.559	VV	37420	491236	3.95%	0.252%
217	12.596	12.559	12.625	VV	65668	1112940	8.95%	0.571%
218	12.668	12.625	12.715	VV	977782	12430531	100.00%	6.383%
219	12.751	12.715	12.761	VV	3739	44790	0.36%	0.023%
220	12.782	12.761	12.795	VV	4760	80106	0.64%	0.041%
221	12.816	12.795	12.825	VV	11744	150523	1.21%	0.077%
222	12.840	12.825	12.855	VV	23883	295272	2.38%	0.152%
223	12.867	12.855	12.905	VV	13718	261647	2.10%	0.134%
224	12.966	12.905	12.987	VV	919220	11775221	94.73%	6.046%
225	13.008	12.987	13.021	VV	49012	560942	4.51%	0.288%
226	13.038	13.021	13.068	VV	96320	1136586	9.14%	0.584%
227	13.090	13.068	13.103	VV	5704	82507	0.66%	0.042%
228	13.122	13.103	13.143	VV	18733	222875	1.79%	0.114%
229	13.156	13.143	13.176	VV	5018	52843	0.43%	0.027%
230	13.208	13.176	13.238	PV	61088	894936	7.20%	0.460%
231	13.255	13.238	13.268	VV	8136	122844	0.99%	0.063%
232	13.284	13.268	13.316	VV	11438	168860	1.36%	0.087%
233	13.346	13.316	13.364	VV	17381	214211	1.72%	0.110%
234	13.374	13.364	13.384	VV	6491	70825	0.57%	0.036%
235	13.408	13.384	13.420	VV	35370	504990	4.06%	0.259%
236	13.427	13.420	13.477	VV	30531	431261	3.47%	0.221%
237	13.537	13.477	13.576	VV	68927	1205588	9.70%	0.619%
238	13.604	13.576	13.622	VV	9002	132081	1.06%	0.068%
239	13.644	13.622	13.664	VV	29674	403080	3.24%	0.207%
240	13.683	13.664	13.704	VV	42292	510383	4.11%	0.262%
241	13.726	13.704	13.754	VV	12005	229718	1.85%	0.118%
242	13.792	13.754	13.806	VV	61297	944640	7.60%	0.485%
243	13.812	13.806	13.834	VV	40081	427591	3.44%	0.220%
244	13.854	13.834	13.895	VV	33716	484978	3.90%	0.249%
245	13.924	13.895	13.945	VV	13336	213137	1.71%	0.109%
246	13.961	13.945	14.003	VV	5722	138382	1.11%	0.071%

					rteres			
247	14.021	14.003	14.030	VV	4526	60059	0.48%	0.031%
248	14.035	14.030	14.083	VV	4213	95016	0.76%	0.049%
249	14.094	14.083	14.100	VV	1236	9791	0.08%	0.005%
250	14.120	14.100	14.159	VV	4048	72289	0.58%	0.037%
251	14.176	14.159	14.189	VV	2966	35159	0.28%	0.018%
252	14.228	14.189	14.247	VV	15163	329209	2.65%	0.169%
253	14.268	14.247	14.301	VV	41258	561461	4.52%	0.288%
254	14.321	14.301	14.327	VV	4802	55522	0.45%	0.029%
255	14.371	14.327	14.404	VV	10622	282506	2.27%	0.145%
256	14.447	14.404	14.468	VV	29534	576034	4.63%	0.296%
257	14.477	14.468	14.487	VV	10483	110077	0.89%	0.057%
258	14.511	14.487	14.533	VV	67010	862714	6.94%	0.443%
259	14.571	14.533	14.607	VV	41241	678346	5.46%	0.348%
260	14.635	14.607	14.651	VV	7313	131960	1.06%	0.068%
261	14.694	14.651	14.713	VV	12094	313166	2.52%	0.161%
262	14.726	14.713	14.757	VV	8496	130561	1.05%	0.067%
263	14.771	14.757	14.786	VV	1793	24009	0.19%	0.012%
264	14.836	14.786	14.854	VV	612252	8906347	71.65%	4.573%
265	14.882	14.854	14.938	VV	742180	9265882	74.54%	4.758%
266	14.986	14.938	15.007	VV	40548	631762	5.08%	0.324%
267	15.016	15.007	15.037	VV	8005	113576	0.91%	0.058%
268	15.058	15.037	15.092	VV	15384	244935	1.97%	0.126%
269	15.119	15.092	15.144	VV	15075	279237	2.25%	0.143%
270	15.159	15.144	15.174	VV	14898	214886	1.73%	0.110%
271	15.179	15.174	15.219	VV	9113	133391	1.07%	0.068%
272	15.263	15.219	15.286	VV	27076	434489	3.50%	0.223%
273	15.297	15.286	15.325	VV	8665	147196	1.18%	0.076%
274	15.338	15.325	15.357	VV	2895	48919	0.39%	0.025%
275	15.361	15.357	15.366	VV	2456	13248	0.11%	0.007%
276	15.407	15.366	15.420	VV	6668	139832	1.12%	0.072%
277	15.449	15.420	15.468	VV	13682	231621	1.86%	0.119%
278	15.492	15.468	15.512	VV	51086	669090	5.38%	0.344%
279	15.529	15.512	15.550	VV	24195	328468	2.64%	0.169%
280	15.572	15.550	15.588	VV	10784	182917	1.47%	0.094%
281	15.604	15.588	15.610	VV	8158	97504	0.78%	0.050%
282	15.634	15.610	15.640	VV	21330	262572	2.11%	0.135%
283	15.652	15.640	15.687	VV	24933	446651	3.59%	0.229%
284	15.730	15.687	15.757	VV	13778	280210	2.25%	0.144%
285	15.770	15.757	15.791	VV	3971	65481	0.53%	0.034%
286	15.813	15.791	15.830	VV	11531	150697	1.21%	0.077%
287	15.847	15.830	15.868	VV	9674	130535	1.05%	0.067%
288	15.911	15.868	15.945	VV	47808	723963	5.82%	0.372%
289	15.961	15.945	15.972	VV	1891	25404	0.20%	0.013%
290	15.991	15.972	16.005	VV	2239	36491	0.29%	0.019%
291	16.019	16.005	16.032	VV	2311	27625	0.22%	0.014%
292	16.048	16.032	16.063	VV	2676	37774	0.30%	0.019%
293	16.103	16.063	16.120	VV	11464	242647	1.95%	0.125%
294	16.125	16.120	16.145	VV	5959	59048	0.48%	0.030%
295	16.164	16.145	16.175	VV	3997	57368	0.46%	0.029%
296	16.196	16.175	16.230	VV	6534	167452	1.35%	0.086%
297	16.311	16.230	16.338	VV	13297	419868	3.38%	0.216%
298	16.391	16.338	16.405	VV	508041	8515045	68.50%	4.372%
299	16.423	16.405	16.447	VV	554053	6506009	52.34%	3.341%

					rteres			
300	16.459	16.447	16.483	VV	4686	82769	0.67%	0.043%
301	16.508	16.483	16.529	VV	43630	523441	4.21%	0.269%
302	16.543	16.529	16.600	VV	9610	170889	1.37%	0.088%
303	16.627	16.600	16.645	PV	10187	139638	1.12%	0.072%
304	16.700	16.645	16.727	VV	112240	1763166	14.18%	0.905%
305	16.770	16.727	16.805	VV	535240	7645368	61.50%	3.926%
306	16.825	16.805	16.830	VV	4508	49315	0.40%	0.025%
307	16.856	16.830	16.884	VV	85793	1119155	9.00%	0.575%
308	16.904	16.884	16.935	VV	12573	230815	1.86%	0.119%
309	16.994	16.935	17.038	VV	13809	458446	3.69%	0.235%
310	17.055	17.038	17.075	VV	5997	85448	0.69%	0.044%
311	17.118	17.075	17.147	VV	21373	487213	3.92%	0.250%
312	17.153	17.147	17.183	VV	8289	100829	0.81%	0.052%
313	17.215	17.183	17.227	PV	6938	90146	0.73%	0.046%
314	17.250	17.227	17.263	VV	12721	200561	1.61%	0.103%
315	17.275	17.263	17.308	VV	11680	186143	1.50%	0.096%
316	17.334	17.308	17.351	VV	11431	187646	1.51%	0.096%
317	17.360	17.351	17.381	VV	7684	104801	0.84%	0.054%
318	17.406	17.381	17.432	VV	12993	227701	1.83%	0.117%
319	17.447	17.432	17.470	VV	6947	105257	0.85%	0.054%
320	17.474	17.470	17.487	VV	2405	18950	0.15%	0.010%
321	17.523	17.487	17.544	VV	4929	115281	0.93%	0.059%
322	17.551	17.544	17.571	VV	1909	24567	0.20%	0.013%
323	17.590	17.571	17.609	VV	2171	27714	0.22%	0.014%
324	17.622	17.609	17.640	VV	1222	12617	0.10%	0.006%
325	17.742	17.640	17.772	VV	42713	789652	6.35%	0.405%
326	17.805	17.772	17.817	VV	6887	116861	0.94%	0.060%
327	17.843	17.817	17.867	VV	10984	224657	1.81%	0.115%
328	17.894	17.867	17.936	VV	12805	313356	2.52%	0.161%
329	17.974	17.936	17.994	VV	5842	111959	0.90%	0.057%
330	18.026	17.994	18.074	VV	29045	550379	4.43%	0.283%
331	18.135	18.074	18.149	VV	420313	6917435	55.65%	3.552%
332	18.172	18.149	18.194	VV	415241	5521356	44.42%	2.835%
333	18.205	18.194	18.228	VV	12390	144527	1.16%	0.074%
334	18.253	18.228	18.269	VV	29481	371332	2.99%	0.191%
335	18.285	18.269	18.342	VV	23530	396597	3.19%	0.204%
336	18.391	18.342	18.435	PV	413495	5924897	47.66%	3.042%
337	18.455	18.435	18.471	PV	5365	53497	0.43%	0.027%
Sum of corrected areas:					194744675			

Aromatic EPH 090425.M Tue Sep 23 07:38:08 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	Con Edison FOPL2	Date Received:	
Client Sample ID:	TP-2MS	SDG No.:	Q3123
Lab Sample ID:	Q3123-01MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.5
Sample Wt/Vol:	30.07 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:		Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE055931.D	1	09/22/25	09/22/25	PB169768

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	8.10		0.15	1.10	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	8.23		0.12	0.74	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	12.4		0.14	1.10	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	14.8		0.58	1.47	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	28.5		1.30	2.20	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	54.0		40 - 140	108%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q3123-01MS	Acq On:	22 Sep 2025 18:56
Client Sample ID:	TP-2MS	Operator:	YP\AJ
Data file:	FE055931.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	3.312	6.947	14150886	110.206	300	ug/ml
Aliphatic C12-C16	6.948	10.400	15127774	111.979	200	ug/ml
Aliphatic C16-C21	10.401	13.780	24239985	168.08	300	ug/ml
Aliphatic C21-C28	13.781	17.452	28784191	200.957	400	ug/ml
Aliphatic C28-C40	17.453	22.472	53362221	387.47	600	ug/ml
Aliphatic EPH	3.312	22.472	135665057	978.691		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.512	13.512	6757456	54.04		ug/ml
Aliphatic C9-C28	3.312	17.452	82302836	591.222	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
 Data File : FE055931.D
 Signal(s) : FID1B.ch
 Acq On : 22 Sep 2025 18:56
 Operator : YP\AJ
 Sample : Q3123-01MS
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 TP-2MS

Integration File: sample.E
 Quant Time: Sep 23 04:34:05 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
 Quant Title : GC Extractables
 Qlast Update : Fri Aug 29 08:12:09 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...	13.512	6757456	54.040 ug/ml
Spiked Amount 50.000		Recovery =	108.08%
Target Compounds			
1) T n-Nonane (C9)	3.411	3479911	27.422 ug/ml
2) T n-Decane (C10)	4.670	4232958	33.045 ug/ml
4) T n-Dodecane (C12)	6.845	5133768	39.426 ug/ml
6) T n-Tetradecane (C14)	8.683	6094012	46.274 ug/ml
7) T n-Hexadecane (C16)	10.298	7029875	50.758 ug/ml
8) T n-Octadecane (C18)	11.748	7560963	51.837 ug/ml
10) T n-Eicosane (C20)	13.065	8002739	55.595 ug/ml
11) T n-Heneicosane (C21)	13.679	7667440	53.677 ug/ml
13) T n-Docosane (C22)	14.267	7563659	52.839 ug/ml
14) T n-Tetracosane (C24)	15.374	7226351	49.941 ug/ml
15) T n-Hexacosane (C26)	16.398	6706392	46.943 ug/ml
16) T n-Octacosane (C28)	17.350	6390791	44.930 ug/ml
17) T n-Tricontane (C30)	18.240	6469617	43.767 ug/ml
18) T n-Dotriacontane (C32)	19.075	6521892	44.434 ug/ml
19) T n-Tetratriacontane (C34)	19.860	6652561	47.086 ug/ml
20) T n-Hexatriacontane (C36)	20.603	6689788	50.697 ug/ml
21) T n-Octatriacontane (C38)	21.380	6808018	52.273 ug/ml
22) T n-Tetracontane (C40)	22.368	6295090	49.088 ug/ml

(f)=RT Delta > 1/2 Window

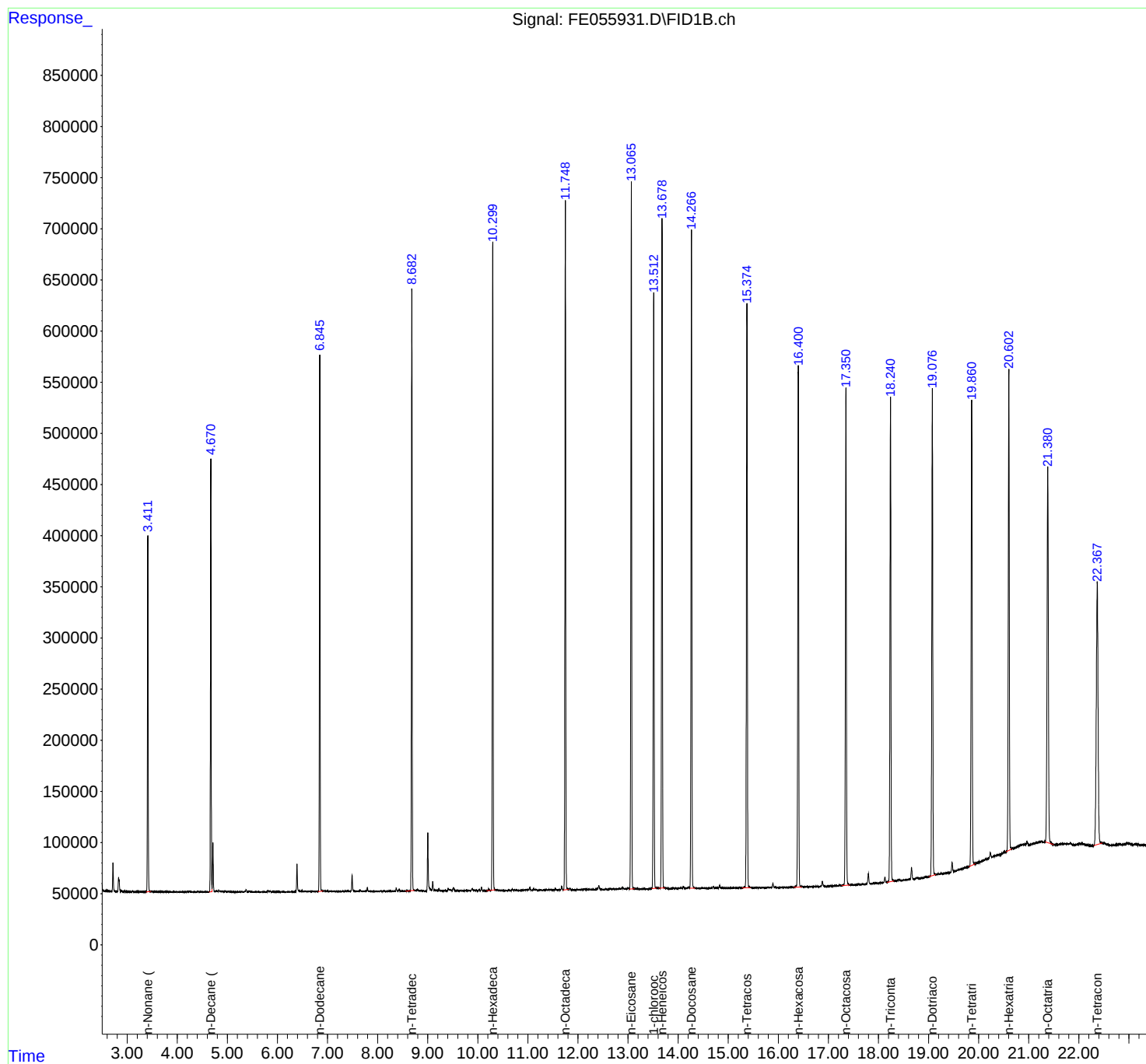
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
Data File : FE055931.D
Signal(s) : FID1B.ch
Acq On : 22 Sep 2025 18:56
Operator : YP\AJ
Sample : Q3123-01MS
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
TP-2MS

Integration File: sample.E
Quant Time: Sep 23 04:34:05 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
Quant Title : GC Extractables
QLast Update : Fri Aug 29 08:12:09 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\FE092225AL\
 Data File : FE055931.D
 Signal(s) : FID1B.ch
 Acq On : 22 Sep 2025 18:56
 Sample : Q3123-01MS
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.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	2.828	2.805	2.870	PV	13391	207913	2.51%	0.146%
2	2.885	2.870	2.927	PV	833	5920	0.07%	0.004%
3	2.950	2.927	3.034	PV	1014	12391	0.15%	0.009%
4	3.046	3.034	3.086	PV	187	2866	0.03%	0.002%
5	3.106	3.086	3.141	VV	975	10481	0.13%	0.007%
6	3.197	3.141	3.212	PV	292	4633	0.06%	0.003%
7	3.223	3.212	3.244	VV	118	1707	0.02%	0.001%
8	3.281	3.244	3.351	VV	191	6549	0.08%	0.005%
9	3.353	3.351	3.371	VV	147	1050	0.01%	0.001%
10	3.411	3.371	3.518	VV	347622	3500794	42.31%	2.453%
11	3.527	3.518	3.543	VV	294	3454	0.04%	0.002%
12	3.559	3.543	3.613	VV	393	9922	0.12%	0.007%
13	3.626	3.613	3.647	VV	295	4612	0.06%	0.003%
14	3.657	3.647	3.687	VV	341	4473	0.05%	0.003%
15	3.699	3.687	3.714	VV	243	2658	0.03%	0.002%
16	3.750	3.714	3.774	VV	353	8830	0.11%	0.006%
17	3.789	3.774	3.829	VV	377	7070	0.09%	0.005%
18	3.864	3.829	3.908	PV	189	5232	0.06%	0.004%
19	3.938	3.908	3.978	VV	170	4425	0.05%	0.003%
20	4.003	3.978	4.048	VV	202	4352	0.05%	0.003%
21	4.063	4.048	4.074	VV	146	1417	0.02%	0.001%
22	4.108	4.074	4.148	VV	183	4531	0.05%	0.003%
23	4.150	4.148	4.170	VV	106	570	0.01%	0.000%
24	4.184	4.170	4.193	PV	159	1320	0.02%	0.001%
25	4.209	4.193	4.226	VV	442	4583	0.06%	0.003%
26	4.242	4.226	4.268	VV	655	7636	0.09%	0.005%
27	4.278	4.268	4.305	VV	117	2120	0.03%	0.001%
28	4.321	4.305	4.333	VV	191	2296	0.03%	0.002%
29	4.338	4.333	4.347	VV	109	632	0.01%	0.000%
30	4.414	4.347	4.438	VV	509	11909	0.14%	0.008%
31	4.463	4.438	4.485	VV	165	3448	0.04%	0.002%
32	4.490	4.485	4.544	VV	193	3604	0.04%	0.003%
33	4.579	4.544	4.601	VV	216	4634	0.06%	0.003%
34	4.613	4.601	4.634	VV	174	2521	0.03%	0.002%
35	4.670	4.634	4.694	VV	426035	4239667	51.24%	2.970%
36	4.712	4.694	4.765	VV	47929	500012	6.04%	0.350%

					rteres			
37	4.783	4.765	4.815	VV	1713	23759	0.29%	0.017%
38	4.830	4.815	4.847	VV	1823	19970	0.24%	0.014%
39	4.858	4.847	4.878	VV	833	10340	0.12%	0.007%
40	4.892	4.878	4.908	VV	577	7375	0.09%	0.005%
41	4.921	4.908	4.937	VV	726	8503	0.10%	0.006%
42	4.955	4.937	4.999	VV	1299	18368	0.22%	0.013%
43	5.020	4.999	5.068	VV	344	8786	0.11%	0.006%
44	5.084	5.068	5.108	VV	294	5295	0.06%	0.004%
45	5.120	5.108	5.151	VV	246	4977	0.06%	0.003%
46	5.188	5.151	5.211	VV	244	5251	0.06%	0.004%
47	5.223	5.211	5.238	VV	103	919	0.01%	0.001%
48	5.258	5.238	5.267	VV	134	1820	0.02%	0.001%
49	5.285	5.267	5.331	VV	234	4720	0.06%	0.003%
50	5.373	5.331	5.405	VV	2220	31586	0.38%	0.022%
51	5.436	5.405	5.455	VV	558	6943	0.08%	0.005%
52	5.463	5.455	5.474	VV	139	1369	0.02%	0.001%
53	5.489	5.474	5.532	VV	207	3409	0.04%	0.002%
54	5.592	5.532	5.602	VV	151	3700	0.04%	0.003%
55	5.622	5.602	5.731	VV	139	6838	0.08%	0.005%
56	5.775	5.731	5.787	VV	138	3041	0.04%	0.002%
57	5.810	5.787	5.838	VV	1841	21355	0.26%	0.015%
58	5.854	5.838	5.880	VV	830	9845	0.12%	0.007%
59	5.913	5.880	5.931	VV	294	4130	0.05%	0.003%
60	5.935	5.931	5.983	VV	135	3392	0.04%	0.002%
61	6.003	5.983	6.028	VV	286	5155	0.06%	0.004%
62	6.109	6.028	6.155	VV	270	8599	0.10%	0.006%
63	6.162	6.155	6.191	VV	140	2195	0.03%	0.002%
64	6.205	6.191	6.215	VV	129	1241	0.01%	0.001%
65	6.242	6.215	6.278	PV	148	3168	0.04%	0.002%
66	6.300	6.278	6.318	VV	154	2814	0.03%	0.002%
67	6.390	6.318	6.470	VV	27220	312785	3.78%	0.219%
68	6.488	6.470	6.512	VV	996	14916	0.18%	0.010%
69	6.520	6.512	6.533	VV	378	4011	0.05%	0.003%
70	6.553	6.533	6.585	VV	632	12312	0.15%	0.009%
71	6.618	6.585	6.711	VV	434	25381	0.31%	0.018%
72	6.723	6.711	6.758	VV	324	6883	0.08%	0.005%
73	6.770	6.758	6.786	VV	329	4551	0.06%	0.003%
74	6.845	6.786	6.914	VV	520919	5165360	62.43%	3.619%
75	6.931	6.914	6.951	VV	958	18052	0.22%	0.013%
76	6.967	6.951	6.982	VV	760	12713	0.15%	0.009%
77	6.998	6.982	7.025	VV	1395	20531	0.25%	0.014%
78	7.034	7.025	7.058	VV	588	9003	0.11%	0.006%
79	7.074	7.058	7.101	VV	608	10277	0.12%	0.007%
80	7.115	7.101	7.147	VV	329	7362	0.09%	0.005%
81	7.176	7.147	7.208	VV	393	9805	0.12%	0.007%
82	7.220	7.208	7.245	VV	255	4554	0.06%	0.003%
83	7.255	7.245	7.281	VV	303	4129	0.05%	0.003%
84	7.300	7.281	7.328	VV	427	7079	0.09%	0.005%
85	7.357	7.328	7.375	VV	726	11704	0.14%	0.008%
86	7.396	7.375	7.450	VV	841	23465	0.28%	0.016%
87	7.491	7.450	7.552	VV	15932	196751	2.38%	0.138%
88	7.568	7.552	7.618	VV	582	15759	0.19%	0.011%
89	7.651	7.618	7.687	VV	1739	28045	0.34%	0.020%

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90	7.712	7.687	7.742	VV	342	9608	0.12%	0.007%
91	7.760	7.742	7.771	VV	459	5781	0.07%	0.004%
92	7.795	7.771	7.841	VV	3987	47565	0.57%	0.033%
93	7.859	7.841	7.868	VV	283	3896	0.05%	0.003%
94	7.887	7.868	7.907	VV	409	6348	0.08%	0.004%
95	7.925	7.907	7.935	VV	121	1366	0.02%	0.001%
96	7.974	7.935	8.041	VV	255	6721	0.08%	0.005%
97	8.061	8.041	8.079	PV	746	7592	0.09%	0.005%
98	8.117	8.079	8.176	VV	716	15334	0.19%	0.011%
99	8.226	8.176	8.271	VV	364	14375	0.17%	0.010%
100	8.284	8.271	8.301	VV	268	3495	0.04%	0.002%
101	8.327	8.301	8.348	VV	412	6026	0.07%	0.004%
102	8.371	8.348	8.400	VV	3243	37533	0.45%	0.026%
103	8.428	8.400	8.477	VV	2160	30570	0.37%	0.021%
104	8.500	8.477	8.518	VV	374	6112	0.07%	0.004%
105	8.537	8.518	8.557	VV	397	5985	0.07%	0.004%
106	8.587	8.557	8.651	VV	1406	29229	0.35%	0.020%
107	8.683	8.651	8.754	VV	587121	6130118	74.09%	4.295%
108	8.776	8.754	8.783	VV	944	14559	0.18%	0.010%
109	8.800	8.783	8.837	VV	1664	28631	0.35%	0.020%
110	8.872	8.837	8.898	VV	718	18525	0.22%	0.013%
111	8.913	8.898	8.975	VV	813	13977	0.17%	0.010%
112	9.001	8.975	9.078	VV	57057	693239	8.38%	0.486%
113	9.100	9.078	9.131	VV	9502	116565	1.41%	0.082%
114	9.150	9.131	9.165	VV	1210	20158	0.24%	0.014%
115	9.175	9.165	9.201	VV	874	15477	0.19%	0.011%
116	9.221	9.201	9.268	VV	1850	34826	0.42%	0.024%
117	9.284	9.268	9.320	VV	484	9474	0.11%	0.007%
118	9.342	9.320	9.364	VV	591	9089	0.11%	0.006%
119	9.413	9.364	9.434	VV	2167	42223	0.51%	0.030%
120	9.446	9.434	9.483	VV	1190	24732	0.30%	0.017%
121	9.512	9.483	9.585	VV	3132	67529	0.82%	0.047%
122	9.600	9.585	9.631	VV	596	7340	0.09%	0.005%
123	9.648	9.631	9.681	VV	416	5708	0.07%	0.004%
124	9.699	9.681	9.717	VV	214	3595	0.04%	0.003%
125	9.753	9.717	9.785	PV	370	8727	0.11%	0.006%
126	9.814	9.785	9.854	VV	762	15415	0.19%	0.011%
127	9.888	9.854	9.918	VV	2104	36269	0.44%	0.025%
128	9.933	9.918	9.961	VV	1080	15572	0.19%	0.011%
129	9.977	9.961	9.995	VV	439	6729	0.08%	0.005%
130	10.027	9.995	10.051	VV	972	18629	0.23%	0.013%
131	10.074	10.051	10.110	VV	3760	43634	0.53%	0.031%
132	10.123	10.110	10.157	VV	276	5194	0.06%	0.004%
133	10.168	10.157	10.178	VV	199	1451	0.02%	0.001%
134	10.216	10.178	10.258	VV	1084	23371	0.28%	0.016%
135	10.298	10.258	10.440	VV	636076	7098305	85.79%	4.973%
136	10.468	10.440	10.498	VV	344	7707	0.09%	0.005%
137	10.503	10.498	10.535	VV	140	1553	0.02%	0.001%
138	10.543	10.535	10.555	PV	95	854	0.01%	0.001%
139	10.576	10.555	10.595	VV	303	3640	0.04%	0.003%
140	10.618	10.595	10.631	VV	298	4921	0.06%	0.003%
141	10.644	10.631	10.655	VV	404	4207	0.05%	0.003%

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142	10.688	10.655	10.711	VV	1367	23147	0.28%	0.016%
143	10.735	10.711	10.754	VV	523	9442	0.11%	0.007%
144	10.779	10.754	10.814	VV	626	11952	0.14%	0.008%
145	10.831	10.814	10.866	VV	376	5965	0.07%	0.004%
146	10.901	10.866	10.913	VV	425	7431	0.09%	0.005%
147	10.968	10.913	11.008	VV	911	31763	0.38%	0.022%
148	11.039	11.008	11.078	VV	3119	47842	0.58%	0.034%
149	11.112	11.078	11.138	VV	1420	27398	0.33%	0.019%
150	11.166	11.138	11.201	VV	878	20344	0.25%	0.014%
151	11.257	11.201	11.283	VV	459	12998	0.16%	0.009%
152	11.296	11.283	11.312	VV	246	3341	0.04%	0.002%
153	11.325	11.312	11.335	VV	226	2600	0.03%	0.002%
154	11.367	11.335	11.398	VV	492	13036	0.16%	0.009%
155	11.413	11.398	11.425	VV	593	7615	0.09%	0.005%
156	11.434	11.425	11.448	VV	601	7131	0.09%	0.005%
157	11.463	11.448	11.481	VV	592	8680	0.10%	0.006%
158	11.495	11.481	11.515	VV	475	6705	0.08%	0.005%
159	11.549	11.515	11.586	VV	2074	24990	0.30%	0.018%
160	11.608	11.586	11.625	PV	421	4602	0.06%	0.003%
161	11.676	11.625	11.704	VV	3510	48472	0.59%	0.034%
162	11.748	11.704	11.814	VV	673445	7589480	91.72%	5.317%
163	11.839	11.814	11.891	VV	1759	35409	0.43%	0.025%
164	11.901	11.891	11.920	VV	227	2909	0.04%	0.002%
165	11.971	11.920	12.020	VV	249	9959	0.12%	0.007%
166	12.070	12.020	12.085	VV	562	15054	0.18%	0.011%
167	12.104	12.085	12.119	VV	486	7898	0.10%	0.006%
168	12.144	12.119	12.167	VV	965	16998	0.21%	0.012%
169	12.182	12.167	12.191	VV	465	5584	0.07%	0.004%
170	12.204	12.191	12.248	VV	767	15724	0.19%	0.011%
171	12.264	12.248	12.276	VV	349	4136	0.05%	0.003%
172	12.300	12.276	12.331	VV	536	10535	0.13%	0.007%
173	12.356	12.331	12.367	VV	572	9599	0.12%	0.007%
174	12.416	12.367	12.450	VV	4111	77254	0.93%	0.054%
175	12.464	12.450	12.501	VV	461	11588	0.14%	0.008%
176	12.523	12.501	12.534	VV	391	6296	0.08%	0.004%
177	12.554	12.534	12.600	VV	472	13818	0.17%	0.010%
178	12.641	12.600	12.671	VV	769	20562	0.25%	0.014%
179	12.704	12.671	12.741	VV	712	21652	0.26%	0.015%
180	12.757	12.741	12.771	VV	764	9719	0.12%	0.007%
181	12.796	12.771	12.812	VV	662	13017	0.16%	0.009%
182	12.832	12.812	12.856	VV	980	19193	0.23%	0.013%
183	12.885	12.856	12.902	VV	2421	39678	0.48%	0.028%
184	12.915	12.902	12.938	VV	1247	18769	0.23%	0.013%
185	12.954	12.938	12.972	VV	655	11308	0.14%	0.008%
186	13.000	12.972	13.024	VV	1953	31497	0.38%	0.022%
187	13.065	13.024	13.138	VV	683756	8035877	97.12%	5.630%
188	13.149	13.138	13.164	VV	681	9964	0.12%	0.007%
189	13.181	13.164	13.228	VV	741	17478	0.21%	0.012%
190	13.241	13.228	13.261	VV	340	4973	0.06%	0.003%
191	13.281	13.261	13.295	VV	241	3918	0.05%	0.003%
192	13.330	13.295	13.376	VV	529	17542	0.21%	0.012%
193	13.387	13.376	13.403	VV	365	4110	0.05%	0.003%
194	13.459	13.403	13.471	VV	756	19834	0.24%	0.014%

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195	13.512	13.471	13.602	VV	578201	6823837	82.47%	4.781%
196	13.618	13.602	13.641	VV	1061	18598	0.22%	0.013%
197	13.679	13.641	13.767	VV	647585	7741719	93.56%	5.424%
198	13.781	13.767	13.830	VV	713	16616	0.20%	0.012%
199	13.850	13.830	13.873	VV	434	9029	0.11%	0.006%
200	13.898	13.873	13.928	VV	663	17636	0.21%	0.012%
201	13.952	13.928	13.969	VV	711	14778	0.18%	0.010%
202	13.978	13.969	13.998	VV	536	7831	0.09%	0.005%
203	14.024	13.998	14.038	VV	738	11892	0.14%	0.008%
204	14.056	14.038	14.085	VV	1272	22191	0.27%	0.016%
205	14.106	14.085	14.145	VV	1973	37063	0.45%	0.026%
206	14.211	14.145	14.231	VV	1908	46071	0.56%	0.032%
207	14.267	14.231	14.375	VV	637124	7609809	91.97%	5.331%
208	14.397	14.375	14.434	VV	525	12440	0.15%	0.009%
209	14.494	14.434	14.542	VV	724	27098	0.33%	0.019%
210	14.555	14.542	14.581	VV	455	7657	0.09%	0.005%
211	14.598	14.581	14.615	VV	402	5745	0.07%	0.004%
212	14.629	14.615	14.641	VV	490	5933	0.07%	0.004%
213	14.701	14.641	14.725	VV	2047	43117	0.52%	0.030%
214	14.736	14.725	14.748	VV	474	6166	0.07%	0.004%
215	14.771	14.748	14.805	VV	758	20304	0.25%	0.014%
216	14.828	14.805	14.851	VV	3247	41795	0.51%	0.029%
217	14.864	14.851	14.881	VV	570	7994	0.10%	0.006%
218	14.899	14.881	14.941	VV	483	15085	0.18%	0.011%
219	14.956	14.941	14.965	VV	486	5933	0.07%	0.004%
220	14.971	14.965	15.004	VV	444	7212	0.09%	0.005%
221	15.028	15.004	15.067	VV	456	11902	0.14%	0.008%
222	15.109	15.067	15.126	VV	583	15471	0.19%	0.011%
223	15.144	15.126	15.160	VV	395	6718	0.08%	0.005%
224	15.224	15.160	15.251	VV	712	20349	0.25%	0.014%
225	15.262	15.251	15.288	VV	323	4834	0.06%	0.003%
226	15.324	15.288	15.338	VV	1653	25305	0.31%	0.018%
227	15.374	15.338	15.503	VV	575649	7245820	87.57%	5.076%
228	15.516	15.503	15.545	VV	233	4480	0.05%	0.003%
229	15.575	15.545	15.605	VV	289	7098	0.09%	0.005%
230	15.638	15.605	15.665	VV	194	4833	0.06%	0.003%
231	15.705	15.665	15.740	PV	386	8279	0.10%	0.006%
232	15.762	15.740	15.788	VV	322	6573	0.08%	0.005%
233	15.801	15.788	15.827	VV	330	5727	0.07%	0.004%
234	15.849	15.827	15.867	VV	679	10058	0.12%	0.007%
235	15.892	15.867	15.925	VV	4303	60053	0.73%	0.042%
236	15.942	15.925	16.021	VV	466	10523	0.13%	0.007%
237	16.071	16.021	16.088	PV	305	5718	0.07%	0.004%
238	16.156	16.088	16.177	VV	217	7667	0.09%	0.005%
239	16.220	16.177	16.243	VV	454	9930	0.12%	0.007%
240	16.282	16.243	16.304	VV	280	7879	0.10%	0.006%
241	16.398	16.304	16.510	VV	507270	6730790	81.35%	4.715%
242	16.524	16.510	16.543	VV	310	3705	0.04%	0.003%
243	16.578	16.543	16.604	VV	269	8093	0.10%	0.006%
244	16.616	16.604	16.665	VV	333	5710	0.07%	0.004%
245	16.710	16.665	16.731	PV	462	9778	0.12%	0.007%
246	16.755	16.731	16.808	VV	306	7275	0.09%	0.005%

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247	16.879	16.808	16.945	PV	5199	85768	1.04%	0.060%
248	16.951	16.945	16.968	VV	151	1336	0.02%	0.001%
249	17.044	16.968	17.086	PV	513	15838	0.19%	0.011%
250	17.108	17.086	17.154	VV	310	6608	0.08%	0.005%
251	17.175	17.154	17.205	VV	226	4619	0.06%	0.003%
252	17.229	17.205	17.255	VV	710	11392	0.14%	0.008%
253	17.350	17.255	17.454	PV	485119	6414667	77.52%	4.494%
254	17.467	17.454	17.481	VV	317	4280	0.05%	0.003%
255	17.504	17.481	17.515	VV	307	4385	0.05%	0.003%
256	17.611	17.515	17.657	VV	480	17222	0.21%	0.012%
257	17.685	17.657	17.717	VV	418	7940	0.10%	0.006%
258	17.798	17.717	17.869	PV	10167	161311	1.95%	0.113%
259	17.887	17.869	17.901	VV	440	5250	0.06%	0.004%
260	17.934	17.901	17.971	VV	602	12700	0.15%	0.009%
261	18.022	17.971	18.049	PV	383	7264	0.09%	0.005%
262	18.081	18.049	18.093	PV	189	2301	0.03%	0.002%
263	18.128	18.093	18.172	PV	5207	75057	0.91%	0.053%
264	18.240	18.172	18.316	PV	471587	6504796	78.61%	4.557%
265	18.325	18.316	18.353	VV	767	12877	0.16%	0.009%
266	18.403	18.353	18.464	VV	1455	45834	0.55%	0.032%
267	18.510	18.464	18.531	VV	565	11830	0.14%	0.008%
268	18.606	18.531	18.621	VV	567	18282	0.22%	0.013%
269	18.661	18.621	18.702	VV	11471	172292	2.08%	0.121%
270	18.770	18.702	18.819	VV	1477	33714	0.41%	0.024%
271	18.926	18.819	18.943	PV	653	7418	0.09%	0.005%
272	18.968	18.943	18.980	VV	303	4863	0.06%	0.003%
273	19.075	18.980	19.145	VV	472285	6567980	79.38%	4.601%
274	19.155	19.145	19.163	VV	1064	11094	0.13%	0.008%
275	19.196	19.163	19.218	VV	1377	32445	0.39%	0.023%
276	19.243	19.218	19.261	VV	1082	20070	0.24%	0.014%
277	19.331	19.261	19.353	VV	783	26341	0.32%	0.018%
278	19.376	19.353	19.395	VV	547	8701	0.11%	0.006%
279	19.470	19.395	19.500	VV	9692	150970	1.82%	0.106%
280	19.528	19.500	19.541	VV	1092	22974	0.28%	0.016%
281	19.721	19.541	19.737	VV	2346	180710	2.18%	0.127%
282	19.860	19.737	19.932	VV	449636	7007326	84.69%	4.909%
283	20.233	19.932	20.263	VV	12205	1263810	15.27%	0.885%
284	20.420	20.263	20.434	VV	8643	853961	10.32%	0.598%
285	20.510	20.434	20.531	VV	10573	555288	6.71%	0.389%
286	20.603	20.531	20.661	VV	476285	7553079	91.28%	5.291%
287	20.694	20.661	20.704	VV	12559	317904	3.84%	0.223%
288	20.966	20.704	21.031	VV	16292	2687534	32.48%	1.883%
289	21.243	21.031	21.304	VV	13771	2176911	26.31%	1.525%
290	21.380	21.304	21.536	VV	375038	8274354	100.00%	5.797%
291	21.592	21.536	21.603	VV	7876	319098	3.86%	0.224%
292	21.654	21.603	21.682	VV	7981	369202	4.46%	0.259%
293	21.744	21.682	21.795	VV	7108	475948	5.75%	0.333%
294	21.836	21.795	21.929	VV	7003	446924	5.40%	0.313%
295	22.016	21.929	22.039	VV	4484	288383	3.49%	0.202%
296	22.048	22.039	22.058	VV	4308	48635	0.59%	0.034%
297	22.068	22.058	22.241	VV	4101	250938	3.03%	0.176%
298	22.250	22.241	22.275	VV	689	10246	0.12%	0.007%
299	22.280	22.275	22.291	VV	235	1903	0.02%	0.001%

300 22.368 22.291 22.491 PV rteres
257586 6329876 76.50% 4.435%

Sum of corrected areas: 142741352

Aliphatic EPH 082925.M Tue Sep 23 06:49:52 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	Con Edison FOPL2	Date Received:	
Client Sample ID:	TP-2MSD	SDG No.:	Q3123
Lab Sample ID:	Q3123-01MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.5
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
09/22/25 08:35	09/22/25 19:27	PB169768

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12	7.35		1	0.16	1.10	mg/kg FE055932.D
Aliphatic C12-C16	Aliphatic C12-C16	7.72		1	0.12	0.74	mg/kg FE055932.D
Aliphatic C16-C21	Aliphatic C16-C21	12.1		1	0.14	1.10	mg/kg FE055932.D
Aliphatic C21-C28	Aliphatic C21-C28	15.0		1	0.59	1.47	mg/kg FE055932.D
Aliphatic C28-C40	Aliphatic C28-C40	29.1		1	1.30	2.21	mg/kg FE055932.D
Aromatic C10-C12	Aromatic C10-C12	5.45		1	0.13	0.74	mg/kg FD049744.D
Aromatic C12-C16	Aromatic C12-C16	10.6		1	0.25	1.10	mg/kg FD049744.D
Aromatic C16-C21	Aromatic C16-C21	36.2		1	0.44	1.84	mg/kg FD049744.D
Aromatic C21-C36	Aromatic C21-C36	54.9		1	1.31	2.94	mg/kg FD049744.D
Total AliphaticEPH	Total AliphaticEPH	71.3			2.31	6.62	mg/kg
Total AromaticEPH	Total AromaticEPH	107			2.14	6.62	mg/kg
Total EPH	Total EPH	178			4.44	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

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	Con Edison FOPL2	Date Received:	
Client Sample ID:	TP-2MSD	SDG No.:	Q3123
Lab Sample ID:	Q3123-01MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.5
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
FD049744.D	1	09/22/25	09/22/25	PB169768

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	5.45		0.13	0.74	mg/kg
Aromatic C12-C16	Aromatic C12-C16	10.6		0.25	1.10	mg/kg
Aromatic C16-C21	Aromatic C16-C21	36.2		0.44	1.84	mg/kg
Aromatic C21-C36	Aromatic C21-C36	54.9		1.31	2.94	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	46.6		40 - 140	93%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	40.0		40 - 140	80%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	31.8		40 - 140	64%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	Q3123-01MSD	Acq On:	22 Sep 2025 19:15
Client Sample ID:	Q3123-01MSD	Operator:	YP/AJ
Data file:	FD049744.D	Misc:	
Instrument:	FID_D	ALS Vial:	67
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.389	6.131	8588803	74.006	200	ug/ml
Aromatic C12-C16	6.132	8.759	19649423	144.624	300	ug/ml
Aromatic C16-C21	8.760	13.050	66677932	491.108	500	ug/ml
Aromatic C21-C36	13.051	18.469	88284067	746.135	800	ug/ml
Aromatic EPH	4.389	18.469	183200225	1460		ug/ml
2-Bromonaphthalene (SURRE)	7.698	7.698	5245254	46.64		ug/ml
2-Fluorobiphenyl (SURRE)	8.562	8.562	3213511	40.03		ug/ml
ortho-Terphenyl (SURRE)	11.610	11.610	4502339	31.82		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
 Data File : FD049744.D
 Signal(s) : FID2B.ch
 Acq On : 22 Sep 2025 19:15
 Operator : YP/AJ
 Sample : Q3123-01MSD
 Misc :
 ALS Vial : 67 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 TP-2MSD

Integration File: autoint1.e
 Quant Time: Sep 23 07:31:02 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
 Quant Title : GC Extractables
 QLast Update : Fri Sep 05 06:31:58 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...	7.698	5245254	46.640 ug/ml
Spiked Amount 50.000		Recovery =	93.28%
6) S 2-Fluorobiphenyl (SURR)	8.562	3213511	40.033 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	80.07%
11) S ortho-Terphenyl (SURR)	11.610	4502339	31.823 ug/ml
Spiked Amount 50.000		Recovery =	63.65%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.489	3281518	30.454 ug/ml
2) T Naphthalene (C11.7)	6.032	4523527	36.375 ug/ml
3) T 2-Methylnaphthalene (...)	7.086	4863338	37.315 ug/ml
5) T Acenaphthylene (C15.06)	8.367	6256977	45.131 ug/ml
7) T Acenaphthene (C15.5)	8.664	6485574	46.785 ug/ml
8) T Flouorene (C16.55)	9.445	6972358	50.264 ug/ml
9) T Phenanthrene (C19.36)	10.848	10619444	76.232 ug/ml
10) T Anthracene (C19.43)	10.922	7750202	58.696 ug/ml
12) T Fluoranthene (C21.85)	12.667	12495167	92.783 ug/ml
13) T Pyrene (C20.8)	12.966	11831887	88.946 ug/ml
14) T Benzo[a]anthracene (C...	14.835	8971282	75.020 ug/ml
15) T Chrysene (C27.41)	14.881	9294018	76.398 ug/ml
16) T benzo[b]fluoranthene ...	16.390	8530463	71.165 ug/ml
17) T Bnezo[k]fluoranthene ...	16.423	6504232	57.725 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.770	7706319	65.672 ug/ml
19) T Indeno[1,2,3-cd]pyren...	18.134	7075016	65.033 ug/ml
20) T Dibenz[a,h]anthracene...	18.171	5552196	48.725 ug/ml
21) T Benzo[g,h,i]perylene ...	18.391	6066519	52.137 ug/ml

(f)=RT Delta > 1/2 Window

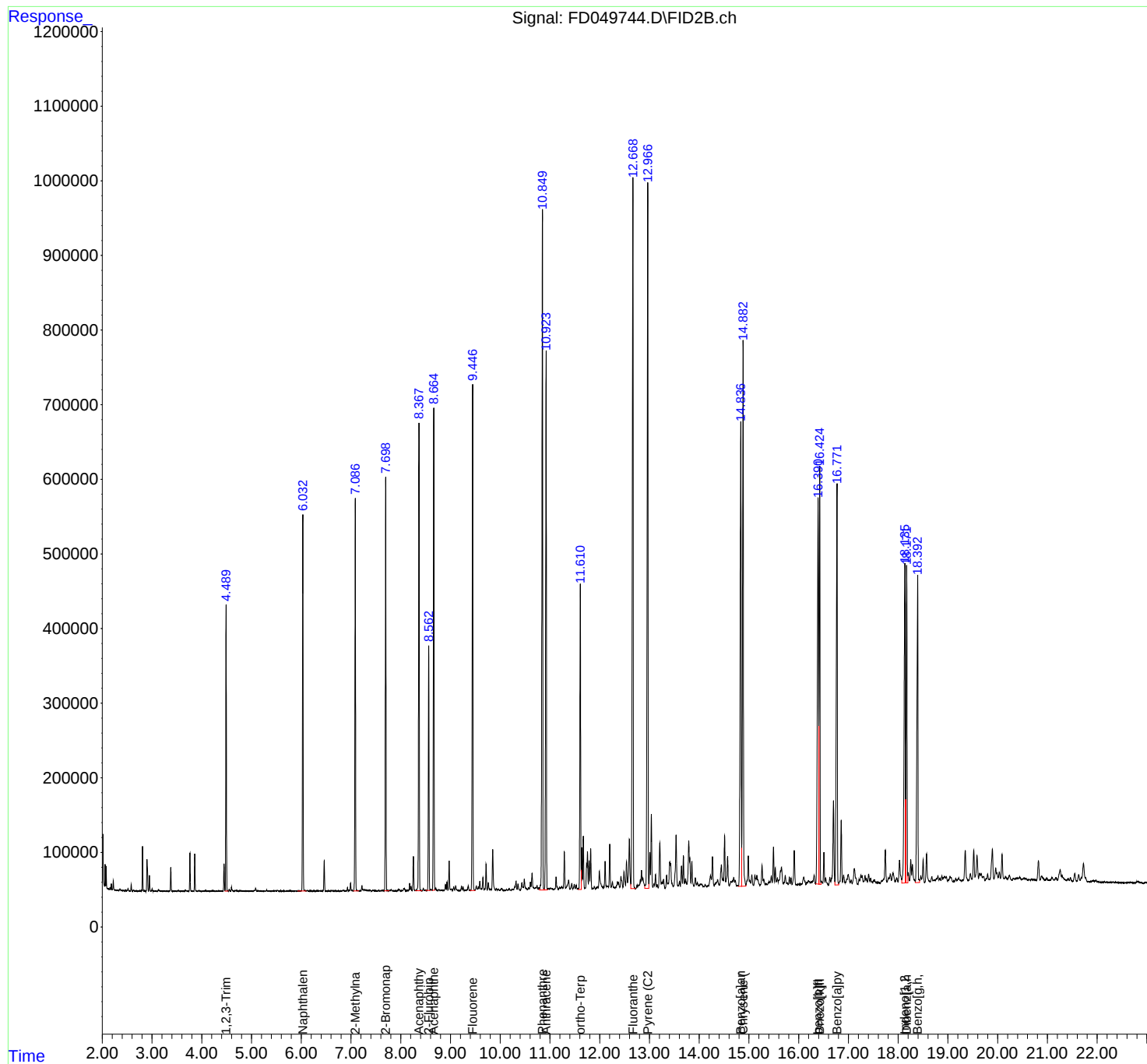
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD092225AR\
Data File : FD049744.D
Signal(s) : FID2B.ch
Acq On : 22 Sep 2025 19:15
Operator : YP/AJ
Sample : Q3123-01MSD
Misc :
ALS Vial : 67 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
TP-2MSD

Integration File: autoint1.e
Quant Time: Sep 23 07:31:02 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.M
Quant Title : GC Extractables
QLast Update : Fri Sep 05 06:31:58 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\FD092225AR\
Data File : FD049744.D
Signal(s) : FID2B.ch
Acq On : 22 Sep 2025 19:15
Sample : Q3123-01MSD
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 090425.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	4.341	4.307	4.387	PV	716	9984	0.08%	0.005%
2	4.403	4.387	4.425	VV	458	4648	0.04%	0.002%
3	4.449	4.425	4.467	VV	37033	324570	2.60%	0.165%
4	4.489	4.467	4.515	VV	384528	3286184	26.30%	1.675%
5	4.522	4.515	4.535	VV	904	7758	0.06%	0.004%
6	4.552	4.535	4.576	VV	2744	28739	0.23%	0.015%
7	4.597	4.576	4.640	VV	5650	65907	0.53%	0.034%
8	4.652	4.640	4.657	VV	419	2903	0.02%	0.001%
9	4.673	4.657	4.689	VV	1314	14380	0.12%	0.007%
10	4.703	4.689	4.720	VV	1966	17961	0.14%	0.009%
11	4.757	4.741	4.770	VV	840	7615	0.06%	0.004%
12	4.782	4.770	4.815	VV	1032	13695	0.11%	0.007%
13	4.822	4.815	4.834	VV	357	2852	0.02%	0.001%
14	4.890	4.850	4.919	VV	452	8316	0.07%	0.004%
15	4.949	4.935	4.957	VV	313	2240	0.02%	0.001%
16	4.961	4.957	4.985	VV	286	3536	0.03%	0.002%
17	5.005	4.985	5.034	VV	339	6637	0.05%	0.003%
18	5.055	5.034	5.066	VV	918	9775	0.08%	0.005%
19	5.083	5.066	5.117	VV	3927	44960	0.36%	0.023%
20	5.140	5.117	5.154	VV	916	10624	0.09%	0.005%
21	5.178	5.154	5.187	VV	562	7148	0.06%	0.004%
22	5.190	5.187	5.204	VV	478	3719	0.03%	0.002%
23	5.216	5.204	5.220	VV	255	1711	0.01%	0.001%
24	5.224	5.220	5.236	VV	261	1387	0.01%	0.001%
25	5.265	5.236	5.271	VV	241	3331	0.03%	0.002%
26	5.304	5.271	5.330	VV	1950	23791	0.19%	0.012%
27	5.336	5.330	5.341	VV	288	1360	0.01%	0.001%
28	5.354	5.347	5.359	VV	292	1496	0.01%	0.001%
29	5.373	5.359	5.382	VV	217	2335	0.02%	0.001%
30	5.397	5.390	5.402	VV	248	1230	0.01%	0.001%
31	5.409	5.402	5.415	VV	282	1466	0.01%	0.001%
32	5.453	5.415	5.470	VV	901	9179	0.07%	0.005%
33	5.484	5.470	5.505	VV	923	10230	0.08%	0.005%
34	5.526	5.505	5.546	VV	1398	17275	0.14%	0.009%
35	5.554	5.546	5.565	VV	332	2623	0.02%	0.001%
36	5.584	5.565	5.612	VV	804	10710	0.09%	0.005%

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37	5.631	5.612	5.635	VV	360	3951	0.03%	0.002%
38	5.644	5.635	5.664	VV	482	5428	0.04%	0.003%
39	5.669	5.664	5.683	VV	340	2814	0.02%	0.001%
40	5.727	5.683	5.744	VV	399	9319	0.07%	0.005%
41	5.773	5.744	5.786	VV	468	7309	0.06%	0.004%
42	5.794	5.786	5.821	VV	557	7101	0.06%	0.004%
43	5.832	5.821	5.840	VV	310	2528	0.02%	0.001%
44	5.849	5.840	5.869	VV	243	2382	0.02%	0.001%
45	5.876	5.869	5.889	VV	217	2091	0.02%	0.001%
46	5.896	5.889	5.904	VV	299	1393	0.01%	0.001%
47	5.937	5.904	5.960	VV	400	8887	0.07%	0.005%
48	5.973	5.960	6.004	VV	521	9711	0.08%	0.005%
49	6.032	6.004	6.069	VV	503924	4529783	36.25%	2.309%
50	6.078	6.069	6.097	VV	1041	12916	0.10%	0.007%
51	6.122	6.097	6.152	VV	1195	20899	0.17%	0.011%
52	6.171	6.152	6.175	VV	539	5252	0.04%	0.003%
53	6.182	6.175	6.214	VV	679	11217	0.09%	0.006%
54	6.222	6.214	6.237	VV	446	4432	0.04%	0.002%
55	6.253	6.237	6.287	VV	603	11276	0.09%	0.006%
56	6.311	6.287	6.342	VV	663	12432	0.10%	0.006%
57	6.347	6.342	6.366	VV	356	3617	0.03%	0.002%
58	6.379	6.366	6.387	VV	474	4297	0.03%	0.002%
59	6.390	6.387	6.403	VV	350	2763	0.02%	0.001%
60	6.431	6.403	6.438	VV	430	6368	0.05%	0.003%
61	6.462	6.438	6.492	VV	40987	397594	3.18%	0.203%
62	6.499	6.492	6.509	VV	357	2425	0.02%	0.001%
63	6.525	6.509	6.532	VV	434	3232	0.03%	0.002%
64	6.549	6.532	6.569	VV	685	7713	0.06%	0.004%
65	6.580	6.569	6.599	VV	511	5878	0.05%	0.003%
66	6.613	6.599	6.627	VV	1224	11888	0.10%	0.006%
67	6.646	6.627	6.672	VV	545	7896	0.06%	0.004%
68	6.686	6.672	6.732	VV	735	10724	0.09%	0.005%
69	6.747	6.732	6.767	PV	361	3982	0.03%	0.002%
70	6.786	6.767	6.815	VV	420	7018	0.06%	0.004%
71	6.842	6.815	6.887	VV	1249	21608	0.17%	0.011%
72	6.905	6.887	6.912	VV	770	7696	0.06%	0.004%
73	6.930	6.912	6.949	VV	4898	47555	0.38%	0.024%
74	6.958	6.949	6.971	VV	1036	10799	0.09%	0.006%
75	6.992	6.971	7.017	VV	10920	114982	0.92%	0.059%
76	7.022	7.017	7.048	VV	1076	11120	0.09%	0.006%
77	7.086	7.048	7.119	VV	525880	4866792	38.95%	2.480%
78	7.125	7.119	7.134	VV	806	6074	0.05%	0.003%
79	7.137	7.134	7.155	VV	682	6563	0.05%	0.003%
80	7.167	7.155	7.173	VV	497	4684	0.04%	0.002%
81	7.187	7.173	7.195	VV	586	6369	0.05%	0.003%
82	7.220	7.195	7.236	VV	7367	76933	0.62%	0.039%
83	7.245	7.236	7.261	VV	2357	27630	0.22%	0.014%
84	7.278	7.261	7.292	VV	2355	29026	0.23%	0.015%
85	7.302	7.292	7.336	VV	1619	25502	0.20%	0.013%
86	7.353	7.336	7.366	VV	1328	15442	0.12%	0.008%
87	7.382	7.366	7.405	VV	1613	20479	0.16%	0.010%
88	7.423	7.405	7.432	VV	601	7012	0.06%	0.004%
89	7.447	7.432	7.461	VV	856	11970	0.10%	0.006%

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90	7.477	7.461	7.502	VV	915	12604	0.10%	0.006%
91	7.558	7.502	7.575	VV	713	13927	0.11%	0.007%
92	7.614	7.575	7.632	VV	564	14184	0.11%	0.007%
93	7.647	7.632	7.665	VV	891	11232	0.09%	0.006%
94	7.698	7.665	7.765	VV	555344	5264170	42.13%	2.683%
95	7.808	7.765	7.828	VV	2070	33883	0.27%	0.017%
96	7.834	7.828	7.852	VV	414	3526	0.03%	0.002%
97	7.880	7.852	7.892	VV	269	3324	0.03%	0.002%
98	7.911	7.892	7.931	PV	326	5058	0.04%	0.003%
99	7.965	7.931	8.000	VV	2303	41727	0.33%	0.021%
100	8.008	8.000	8.022	VV	593	6403	0.05%	0.003%
101	8.033	8.022	8.044	VV	844	8546	0.07%	0.004%
102	8.060	8.044	8.068	VV	3341	33047	0.26%	0.017%
103	8.075	8.068	8.095	VV	3102	31005	0.25%	0.016%
104	8.104	8.095	8.122	VV	277	3983	0.03%	0.002%
105	8.134	8.122	8.145	VV	361	3787	0.03%	0.002%
106	8.179	8.145	8.195	VV	10098	113712	0.91%	0.058%
107	8.207	8.195	8.229	VV	5539	57138	0.46%	0.029%
108	8.254	8.229	8.303	VV	46398	484382	3.88%	0.247%
109	8.367	8.303	8.432	VV	627244	6273869	50.21%	3.198%
110	8.454	8.432	8.473	VV	3643	40298	0.32%	0.021%
111	8.499	8.473	8.523	VV	927	17783	0.14%	0.009%
112	8.562	8.523	8.592	VV	327815	3240135	25.93%	1.651%
113	8.613	8.592	8.631	VV	1856	31546	0.25%	0.016%
114	8.664	8.631	8.689	VV	646217	6515720	52.14%	3.321%
115	8.704	8.689	8.733	VV	2915	43425	0.35%	0.022%
116	8.739	8.733	8.748	VV	907	7074	0.06%	0.004%
117	8.771	8.748	8.797	VV	1625	31005	0.25%	0.016%
118	8.812	8.797	8.837	VV	1131	17791	0.14%	0.009%
119	8.848	8.837	8.862	VV	925	10194	0.08%	0.005%
120	8.899	8.862	8.914	VV	8601	105686	0.85%	0.054%
121	8.930	8.914	8.950	VV	11866	125951	1.01%	0.064%
122	8.973	8.950	8.996	VV	40381	413303	3.31%	0.211%
123	9.002	8.996	9.009	VV	1723	12135	0.10%	0.006%
124	9.021	9.009	9.040	VV	2588	33247	0.27%	0.017%
125	9.066	9.040	9.084	VV	5162	68070	0.54%	0.035%
126	9.105	9.084	9.155	VV	6543	98434	0.79%	0.050%
127	9.167	9.155	9.185	VV	547	5397	0.04%	0.003%
128	9.222	9.194	9.238	VV	6142	67734	0.54%	0.035%
129	9.254	9.238	9.282	VV	5189	57783	0.46%	0.029%
130	9.302	9.282	9.322	VV	1003	14440	0.12%	0.007%
131	9.358	9.322	9.384	VV	6508	96683	0.77%	0.049%
132	9.400	9.384	9.411	VV	1109	12888	0.10%	0.007%
133	9.446	9.411	9.497	VV	676549	6979124	55.85%	3.557%
134	9.519	9.497	9.546	VV	6227	93376	0.75%	0.048%
135	9.560	9.546	9.572	VV	5449	57919	0.46%	0.030%
136	9.590	9.572	9.609	VV	12557	158004	1.26%	0.081%
137	9.619	9.609	9.631	VV	2904	30660	0.25%	0.016%
138	9.652	9.631	9.675	VV	17716	208670	1.67%	0.106%
139	9.687	9.675	9.694	VV	1984	20740	0.17%	0.011%
140	9.716	9.694	9.740	VV	35681	369220	2.95%	0.188%
141	9.761	9.740	9.799	VV	10549	146229	1.17%	0.075%

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142	9.812	9.799	9.825	VV	1907	25119	0.20%	0.013%
143	9.850	9.825	9.903	VV	54909	724303	5.80%	0.369%
144	9.922	9.903	9.940	VV	3099	38185	0.31%	0.019%
145	9.958	9.940	9.982	VV	2073	28962	0.23%	0.015%
146	10.027	9.982	10.105	VV	2543	64609	0.52%	0.033%
147	10.126	10.105	10.145	PV	1265	15717	0.13%	0.008%
148	10.181	10.145	10.200	VV	2998	42016	0.34%	0.021%
149	10.210	10.200	10.220	VV	697	6522	0.05%	0.003%
150	10.238	10.220	10.250	VV	1681	20954	0.17%	0.011%
151	10.259	10.250	10.268	VV	1251	12722	0.10%	0.006%
152	10.292	10.268	10.300	VV	5007	62079	0.50%	0.032%
153	10.318	10.300	10.340	VV	12442	162855	1.30%	0.083%
154	10.358	10.340	10.395	VV	8763	117489	0.94%	0.060%
155	10.435	10.395	10.452	VV	10068	145329	1.16%	0.074%
156	10.459	10.452	10.468	VV	4523	39105	0.31%	0.020%
157	10.485	10.468	10.524	VV	15091	221096	1.77%	0.113%
158	10.530	10.524	10.547	VV	2313	24538	0.20%	0.013%
159	10.572	10.547	10.586	VV	3900	54026	0.43%	0.028%
160	10.606	10.586	10.619	VV	10948	128726	1.03%	0.066%
161	10.641	10.619	10.662	VV	22785	317311	2.54%	0.162%
162	10.669	10.662	10.684	VV	3977	41118	0.33%	0.021%
163	10.694	10.684	10.698	VV	2640	21373	0.17%	0.011%
164	10.715	10.698	10.725	VV	3810	51684	0.41%	0.026%
165	10.741	10.725	10.760	VV	6384	84651	0.68%	0.043%
166	10.775	10.760	10.790	VV	2759	40301	0.32%	0.021%
167	10.808	10.790	10.813	VV	6454	62158	0.50%	0.032%
168	10.849	10.813	10.884	VV	910544	10566614	84.56%	5.385%
169	10.923	10.884	10.952	VV	721343	7756605	62.07%	3.953%
170	10.967	10.952	10.980	VV	2110	26940	0.22%	0.014%
171	10.993	10.980	11.002	VV	2234	24019	0.19%	0.012%
172	11.015	11.002	11.037	VV	2331	40684	0.33%	0.021%
173	11.048	11.037	11.071	VV	1749	22637	0.18%	0.012%
174	11.122	11.071	11.167	VV	17242	247168	1.98%	0.126%
175	11.197	11.167	11.213	PV	3121	54241	0.43%	0.028%
176	11.234	11.213	11.256	VV	3908	75035	0.60%	0.038%
177	11.289	11.256	11.314	VV	50695	604954	4.84%	0.308%
178	11.375	11.314	11.403	VV	12972	306899	2.46%	0.156%
179	11.438	11.403	11.460	VV	8186	121055	0.97%	0.062%
180	11.490	11.460	11.510	VV	6986	104177	0.83%	0.053%
181	11.527	11.510	11.550	VV	6063	77151	0.62%	0.039%
182	11.565	11.550	11.576	VV	1778	21221	0.17%	0.011%
183	11.610	11.576	11.628	VV	410272	4490473	35.93%	2.289%
184	11.640	11.628	11.654	VV	56600	585508	4.69%	0.298%
185	11.670	11.654	11.694	VV	71434	778932	6.23%	0.397%
186	11.700	11.694	11.710	VV	1911	16829	0.13%	0.009%
187	11.737	11.710	11.742	VV	33691	312144	2.50%	0.159%
188	11.754	11.742	11.771	VV	50787	571759	4.58%	0.291%
189	11.788	11.771	11.801	VV	38619	426511	3.41%	0.217%
190	11.819	11.801	11.847	VV	54527	636528	5.09%	0.324%
191	11.857	11.847	11.871	VV	1588	16690	0.13%	0.009%
192	11.892	11.871	11.913	VV	3364	44795	0.36%	0.023%
193	11.934	11.913	11.942	VV	2183	23913	0.19%	0.012%
194	11.956	11.942	11.968	VV	3106	38534	0.31%	0.020%

					rteres			
195	11.993	11.968	12.065	VV	23830	493704	3.95%	0.252%
196	12.077	12.065	12.084	VV	2586	24165	0.19%	0.012%
197	12.108	12.084	12.130	VV	37251	427066	3.42%	0.218%
198	12.137	12.130	12.151	VV	4092	45096	0.36%	0.023%
199	12.167	12.151	12.180	VV	4081	59894	0.48%	0.031%
200	12.202	12.180	12.230	VV	60361	687787	5.50%	0.351%
201	12.256	12.230	12.277	VV	9375	147751	1.18%	0.075%
202	12.286	12.277	12.300	VV	2230	25758	0.21%	0.013%
203	12.315	12.300	12.324	VV	2552	29245	0.23%	0.015%
204	12.358	12.324	12.371	VV	9574	166121	1.33%	0.085%
205	12.381	12.371	12.406	VV	7710	106111	0.85%	0.054%
206	12.427	12.406	12.467	VV	16911	318003	2.54%	0.162%
207	12.488	12.467	12.518	VV	22953	360311	2.88%	0.184%
208	12.540	12.518	12.560	VV	36715	497238	3.98%	0.253%
209	12.596	12.560	12.626	VV	66691	1115017	8.92%	0.568%
210	12.668	12.626	12.716	VV	957642	12496271	100.00%	6.369%
211	12.751	12.726	12.763	PV	3906	47164	0.38%	0.024%
212	12.783	12.763	12.797	VV	5095	82914	0.66%	0.042%
213	12.817	12.797	12.826	VV	12064	148015	1.18%	0.075%
214	12.841	12.826	12.856	VV	24346	296569	2.37%	0.151%
215	12.868	12.856	12.905	VV	14122	271719	2.17%	0.138%
216	12.919	12.905	12.925	VV	4786	48766	0.39%	0.025%
217	12.966	12.925	12.987	VV	947917	11784921	94.31%	6.006%
218	13.008	12.987	13.022	VV	48541	564773	4.52%	0.288%
219	13.039	13.022	13.069	VV	98916	1144379	9.16%	0.583%
220	13.091	13.069	13.103	VV	5746	80047	0.64%	0.041%
221	13.122	13.103	13.142	VV	18485	226271	1.81%	0.115%
222	13.156	13.142	13.177	VV	4996	55282	0.44%	0.028%
223	13.209	13.177	13.237	VV	60569	897148	7.18%	0.457%
224	13.256	13.237	13.267	VV	8073	124359	1.00%	0.063%
225	13.284	13.267	13.316	VV	11808	171616	1.37%	0.087%
226	13.346	13.316	13.364	VV	17286	215356	1.72%	0.110%
227	13.375	13.364	13.384	VV	6756	73550	0.59%	0.037%
228	13.408	13.384	13.418	VV	35030	479198	3.83%	0.244%
229	13.425	13.418	13.476	VV	33053	471159	3.77%	0.240%
230	13.536	13.476	13.577	VV	71033	1214466	9.72%	0.619%
231	13.605	13.577	13.621	VV	8898	131328	1.05%	0.067%
232	13.645	13.621	13.664	VV	29423	407712	3.26%	0.208%
233	13.683	13.664	13.704	VV	42999	512149	4.10%	0.261%
234	13.725	13.704	13.751	VV	12161	219919	1.76%	0.112%
235	13.791	13.751	13.805	VV	62663	952018	7.62%	0.485%
236	13.812	13.805	13.834	VV	39845	434771	3.48%	0.222%
237	13.853	13.834	13.894	VV	34803	479020	3.83%	0.244%
238	13.923	13.894	13.945	VV	12877	208517	1.67%	0.106%
239	13.961	13.945	14.002	VV	5963	137524	1.10%	0.070%
240	14.018	14.002	14.029	VV	4529	60391	0.48%	0.031%
241	14.040	14.029	14.079	VV	4356	92669	0.74%	0.047%
242	14.093	14.079	14.101	VV	1107	12147	0.10%	0.006%
243	14.119	14.101	14.159	VV	4149	70730	0.57%	0.036%
244	14.176	14.159	14.188	VV	2934	34128	0.27%	0.017%
245	14.227	14.188	14.247	VV	15117	327490	2.62%	0.167%
246	14.267	14.247	14.301	VV	40820	572779	4.58%	0.292%

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247	14.321	14.301	14.329	VV	4825	60833	0.49%	0.031%
248	14.371	14.329	14.406	VV	10174	283778	2.27%	0.145%
249	14.446	14.406	14.467	VV	29757	572541	4.58%	0.292%
250	14.476	14.467	14.488	VV	10246	116416	0.93%	0.059%
251	14.511	14.488	14.533	VV	68614	867208	6.94%	0.442%
252	14.571	14.533	14.605	VV	41174	677575	5.42%	0.345%
253	14.635	14.605	14.649	VV	7355	128296	1.03%	0.065%
254	14.694	14.649	14.712	VV	12417	317779	2.54%	0.162%
255	14.725	14.712	14.756	VV	8720	133063	1.06%	0.068%
256	14.772	14.756	14.787	VV	1711	23545	0.19%	0.012%
257	14.836	14.787	14.854	VV	620907	8977150	71.84%	4.575%
258	14.882	14.854	14.938	VV	731103	9333620	74.69%	4.757%
259	15.497	15.438	15.007	VV	41188	636183	5.09%	0.324%
260	15.016	15.007	15.037	VV	8195	117811	0.94%	0.060%
261	15.058	15.037	15.092	VV	15512	249680	2.00%	0.127%
262	15.119	15.092	15.144	VV	14919	279682	2.24%	0.143%
263	15.159	15.144	15.220	VV	14783	349736	2.80%	0.178%
264	15.263	15.220	15.288	VV	28062	446689	3.57%	0.228%
265	15.300	15.288	15.324	VV	8807	138474	1.11%	0.071%
266	15.337	15.324	15.372	VV	3072	75182	0.60%	0.038%
267	15.408	15.372	15.422	VV	6408	134347	1.08%	0.068%
268	15.449	15.422	15.468	VV	13317	226356	1.81%	0.115%
269	15.493	15.468	15.513	VV	52555	673522	5.39%	0.343%
270	15.529	15.513	15.550	VV	24581	323899	2.59%	0.165%
271	15.572	15.550	15.588	VV	10937	184835	1.48%	0.094%
272	15.604	15.588	15.609	VV	7957	90356	0.72%	0.046%
273	15.634	15.609	15.640	VV	20553	271568	2.17%	0.138%
274	15.654	15.640	15.688	VV	25150	444171	3.55%	0.226%
275	15.730	15.688	15.757	VV	13788	278492	2.23%	0.142%
276	15.771	15.757	15.793	VV	4069	69118	0.55%	0.035%
277	15.813	15.793	15.830	VV	11590	149398	1.20%	0.076%
278	15.847	15.830	15.867	VV	9712	128515	1.03%	0.066%
279	15.911	15.867	15.944	VV	47264	721822	5.78%	0.368%
280	15.959	15.944	15.969	VV	1575	18875	0.15%	0.010%
281	15.990	15.969	16.006	VV	2172	37249	0.30%	0.019%
282	16.021	16.006	16.032	VV	2154	25196	0.20%	0.013%
283	16.052	16.032	16.067	VV	2690	41372	0.33%	0.021%
284	16.103	16.067	16.121	VV	11467	238063	1.91%	0.121%
285	16.125	16.121	16.144	VV	6202	59150	0.47%	0.030%
286	16.163	16.144	16.173	VV	3969	54211	0.43%	0.028%
287	16.197	16.173	16.230	VV	6365	168530	1.35%	0.086%
288	16.239	16.230	16.247	VV	4415	44083	0.35%	0.022%
289	16.311	16.247	16.338	VV	13108	366479	2.93%	0.187%
290	16.391	16.338	16.405	VV	519103	8572715	68.60%	4.369%
291	16.424	16.405	16.448	VV	560879	6565864	52.54%	3.346%
292	16.460	16.448	16.484	VV	4803	84383	0.68%	0.043%
293	16.508	16.484	16.529	VV	44262	524714	4.20%	0.267%
294	16.543	16.529	16.602	VV	9780	170674	1.37%	0.087%
295	16.627	16.602	16.644	VV	9964	139399	1.12%	0.071%
296	16.700	16.644	16.727	VV	113164	1775936	14.21%	0.905%
297	16.771	16.727	16.806	VV	535540	7707646	61.68%	3.928%
298	16.855	16.806	16.884	VV	87029	1173451	9.39%	0.598%
299	16.903	16.884	16.937	VV	12656	233251	1.87%	0.119%

rteres								
300	16.995	16.937	17.035	VV	13126	441450	3.53%	0.225%
301	17.057	17.035	17.076	VV	6338	96298	0.77%	0.049%
302	17.119	17.076	17.147	VV	21353	498897	3.99%	0.254%
303	17.151	17.147	17.189	VV	8775	101220	0.81%	0.052%
304	17.214	17.189	17.227	PV	6818	90899	0.73%	0.046%
305	17.251	17.227	17.264	VV	12602	199458	1.60%	0.102%
306	17.276	17.264	17.301	VV	11730	174687	1.40%	0.089%
307	17.306	17.301	17.313	VV	3811	25163	0.20%	0.013%
308	17.334	17.313	17.352	VV	11501	181155	1.45%	0.092%
309	17.362	17.352	17.382	VV	7615	104154	0.83%	0.053%
310	17.407	17.382	17.431	VV	13111	231652	1.85%	0.118%
311	17.447	17.431	17.487	VV	7296	136578	1.09%	0.070%
312	17.523	17.487	17.572	VV	4999	146462	1.17%	0.075%
313	17.591	17.572	17.607	VV	2440	30304	0.24%	0.015%
314	17.621	17.607	17.642	VV	1231	15321	0.12%	0.008%
315	17.671	17.642	17.685	VV	3832	68710	0.55%	0.035%
316	17.742	17.685	17.771	VV	44423	738641	5.91%	0.376%
317	17.806	17.771	17.819	VV	6902	126119	1.01%	0.064%
318	17.843	17.819	17.864	VV	11088	216709	1.73%	0.110%
319	17.894	17.864	17.937	VV	12931	332310	2.66%	0.169%
320	17.973	17.937	17.996	VV	6130	122763	0.98%	0.063%
321	18.027	17.996	18.073	VV	30005	567411	4.54%	0.289%
322	18.135	18.073	18.149	VV	426827	6987085	55.91%	3.561%
323	18.171	18.149	18.194	VV	424591	5564657	44.53%	2.836%
324	18.204	18.194	18.227	VV	12384	146976	1.18%	0.075%
325	18.252	18.227	18.269	VV	29911	377642	3.02%	0.192%
326	18.286	18.269	18.343	VV	22910	403609	3.23%	0.206%
327	18.392	18.343	18.433	PV	409758	5961818	47.71%	3.039%
328	18.455	18.433	18.472	PV	5189	51294	0.41%	0.026%
Sum of corrected areas:					196204983			

Aromatic EPH 090425.M Tue Sep 23 07:37:35 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	Con Edison FOPL2	Date Received:	
Client Sample ID:	TP-2MSD	SDG No.:	Q3123
Lab Sample ID:	Q3123-01MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.5
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
FE055932.D	1	09/22/25	09/22/25	PB169768

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	7.35		0.16	1.10	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	7.72		0.12	0.74	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	12.1		0.14	1.10	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	15.0		0.59	1.47	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	29.1		1.30	2.21	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	53.9		40 - 140	108%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q3123-01MSD	Acq On:	22 Sep 2025 19:27
Client Sample ID:	TP-2MSD	Operator:	YP\AJ
Data file:	FE055932.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	3.312	6.947	12818427	99.829	300	ug/ml
Aliphatic C12-C16	6.948	10.400	14167262	104.869	200	ug/ml
Aliphatic C16-C21	10.401	13.780	23796487	165.005	300	ug/ml
Aliphatic C21-C28	13.781	17.452	29090503	203.095	400	ug/ml
Aliphatic C28-C40	17.453	22.472	54360132	394.716	600	ug/ml
Aliphatic EPH	3.312	22.472	134232811	967.513		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.513	13.513	6742247	53.92		ug/ml
Aliphatic C9-C28	3.312	17.452	79872679	572.798	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
 Data File : FE055932.D
 Signal(s) : FID1B.ch
 Acq On : 22 Sep 2025 19:27
 Operator : YP\AJ
 Sample : Q3123-01MSD
 Misc :
 ALS Vial : 20 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 TP-2MSD

Integration File: sample.E
 Quant Time: Sep 23 04:34:54 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
 Quant Title : GC Extractables
 QLast Update : Fri Aug 29 08:12:09 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...	13.513	6742247	53.919 ug/ml
Spiked Amount 50.000		Recovery =	107.84%
Target Compounds			
1) T n-Nonane (C9)	3.409	3118540	24.574 ug/ml
2) T n-Decane (C10)	4.669	3812915	29.766 ug/ml
4) T n-Dodecane (C12)	6.845	4669279	35.859 ug/ml
6) T n-Tetradecane (C14)	8.683	5641512	42.838 ug/ml
7) T n-Hexadecane (C16)	10.298	6630151	47.872 ug/ml
8) T n-Octadecane (C18)	11.748	7280486	49.914 ug/ml
10) T n-Eicosane (C20)	13.064	7868200	54.661 ug/ml
11) T n-Heneicosane (C21)	13.679	7631396	53.424 ug/ml
13) T n-Docosane (C22)	14.268	7576434	52.929 ug/ml
14) T n-Tetracosane (C24)	15.374	7335255	50.693 ug/ml
15) T n-Hexacosane (C26)	16.398	6814327	47.698 ug/ml
16) T n-Octacosane (C28)	17.351	6457762	45.401 ug/ml
17) T n-Tricontane (C30)	18.241	6517958	44.094 ug/ml
18) T n-Dotriacontane (C32)	19.076	6537301	44.539 ug/ml
19) T n-Tetratriacontane (C34)	19.862	6641925	47.011 ug/ml
20) T n-Hexatriacontane (C36)	20.603	6648719	50.385 ug/ml
21) T n-Octatriacontane (C38)	21.382	6805982	52.257 ug/ml
22) T n-Tetracontane (C40)	22.369	6396210	49.877 ug/ml

(f)=RT Delta > 1/2 Window

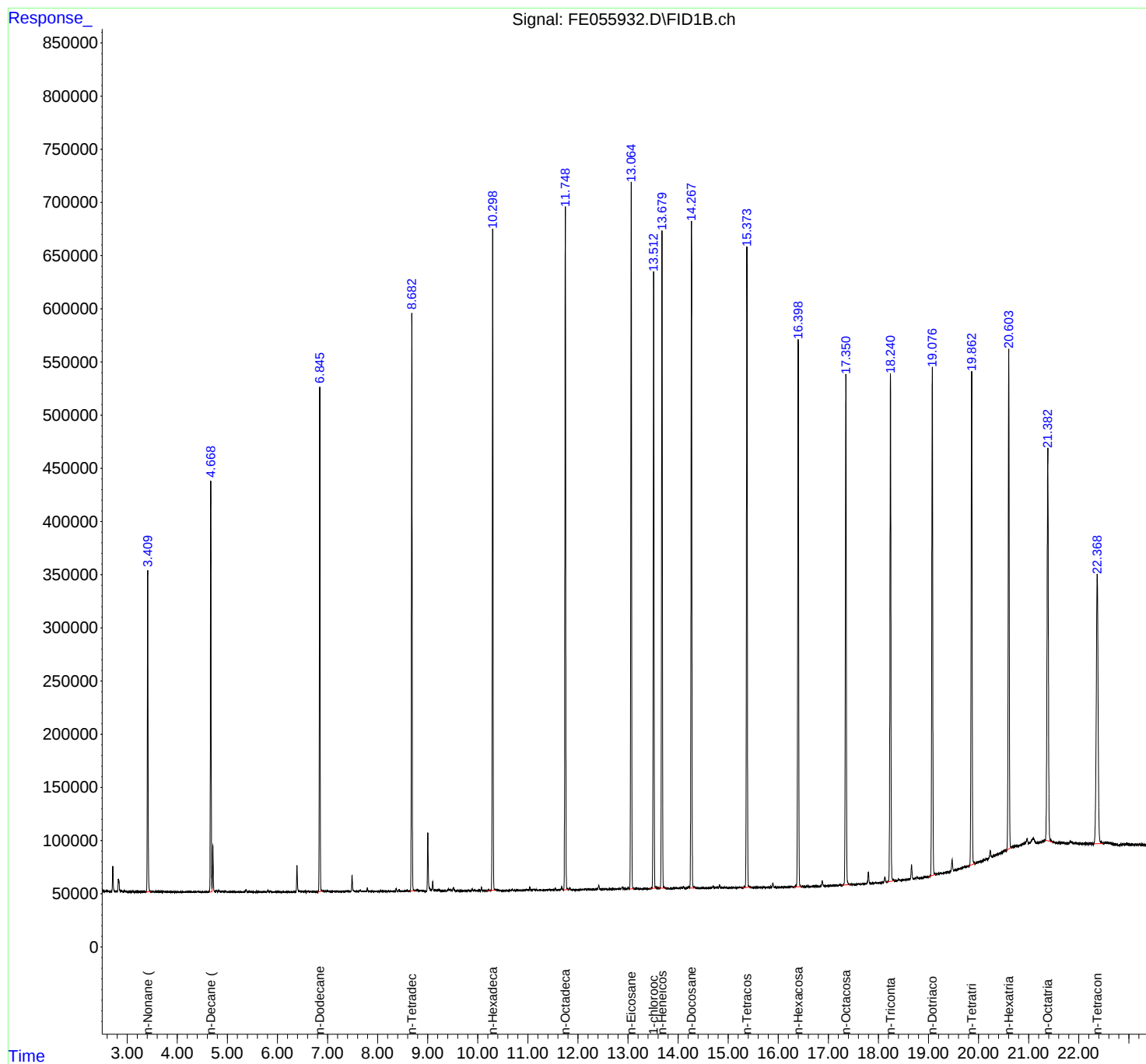
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE092225AL\
Data File : FE055932.D
Signal(s) : FID1B.ch
Acq On : 22 Sep 2025 19:27
Operator : YP\AJ
Sample : Q3123-01MSD
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
TP-2MSD

Integration File: sample.E
Quant Time: Sep 23 04:34:54 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.M
Quant Title : GC Extractables
QLast Update : Fri Aug 29 08:12:09 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\FE092225AL\
 Data File : FE055932.D
 Signal(s) : FID1B.ch
 Acq On : 22 Sep 2025 19:27
 Sample : Q3123-01MSD
 Misc :
 ALS Vial : 20 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 082925.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	2.825	2.804	2.867	PV	11421	181875	1.94%	0.129%
2	2.881	2.867	2.924	PV	629	5421	0.06%	0.004%
3	2.947	2.924	3.005	PV	832	10698	0.11%	0.008%
4	3.039	3.005	3.074	PV	120	3076	0.03%	0.002%
5	3.104	3.074	3.138	PV	875	10196	0.11%	0.007%
6	3.197	3.138	3.209	VV	256	5399	0.06%	0.004%
7	3.225	3.209	3.235	VV	172	1998	0.02%	0.001%
8	3.273	3.235	3.302	VV	174	4961	0.05%	0.004%
9	3.316	3.302	3.378	VV	119	4084	0.04%	0.003%
10	3.409	3.378	3.540	PV	300477	3139937	33.43%	2.223%
11	3.557	3.540	3.606	VV	407	10698	0.11%	0.008%
12	3.623	3.606	3.643	VV	266	5319	0.06%	0.004%
13	3.657	3.643	3.686	VV	339	6032	0.06%	0.004%
14	3.699	3.686	3.714	VV	261	3542	0.04%	0.003%
15	3.746	3.714	3.769	VV	360	9318	0.10%	0.007%
16	3.788	3.769	3.840	VV	434	10191	0.11%	0.007%
17	3.861	3.840	3.911	VV	267	7095	0.08%	0.005%
18	3.918	3.911	3.979	VV	144	4358	0.05%	0.003%
19	3.999	3.979	4.044	PV	230	4730	0.05%	0.003%
20	4.058	4.044	4.078	VV	134	1985	0.02%	0.001%
21	4.096	4.078	4.132	VV	223	4403	0.05%	0.003%
22	4.140	4.132	4.164	VV	132	1804	0.02%	0.001%
23	4.207	4.164	4.223	VV	403	6445	0.07%	0.005%
24	4.241	4.223	4.268	VV	608	8196	0.09%	0.006%
25	4.273	4.268	4.301	VV	142	2211	0.02%	0.002%
26	4.316	4.301	4.348	VV	268	3852	0.04%	0.003%
27	4.413	4.348	4.432	VV	466	10968	0.12%	0.008%
28	4.440	4.432	4.494	VV	214	4535	0.05%	0.003%
29	4.509	4.494	4.544	VV	123	3372	0.04%	0.002%
30	4.584	4.544	4.634	VV	199	7139	0.08%	0.005%
31	4.669	4.634	4.694	VV	383214	3817993	40.64%	2.703%
32	4.711	4.694	4.762	VV	43556	453697	4.83%	0.321%
33	4.782	4.762	4.810	VV	1530	22192	0.24%	0.016%
34	4.829	4.810	4.846	VV	1651	19649	0.21%	0.014%
35	4.858	4.846	4.877	VV	761	9470	0.10%	0.007%
36	4.891	4.877	4.906	VV	545	6969	0.07%	0.005%

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37	4.920	4.906	4.936	VV	654	7362	0.08%	0.005%
38	4.954	4.936	4.972	VV	1058	13011	0.14%	0.009%
39	4.981	4.972	5.004	VV	336	4939	0.05%	0.003%
40	5.037	5.004	5.049	VV	290	5844	0.06%	0.004%
41	5.061	5.049	5.070	VV	266	2824	0.03%	0.002%
42	5.087	5.070	5.108	VV	303	5062	0.05%	0.004%
43	5.111	5.108	5.119	VV	246	1354	0.01%	0.001%
44	5.134	5.119	5.158	VV	244	4058	0.04%	0.003%
45	5.171	5.158	5.236	VV	266	7497	0.08%	0.005%
46	5.256	5.236	5.267	VV	162	1895	0.02%	0.001%
47	5.285	5.267	5.324	VV	210	4527	0.05%	0.003%
48	5.346	5.324	5.353	VV	407	4048	0.04%	0.003%
49	5.373	5.353	5.406	VV	2013	25368	0.27%	0.018%
50	5.433	5.406	5.458	VV	500	7315	0.08%	0.005%
51	5.467	5.458	5.475	VV	149	1038	0.01%	0.001%
52	5.489	5.475	5.514	VV	190	2223	0.02%	0.002%
53	5.522	5.514	5.538	VV	64	665	0.01%	0.000%
54	5.575	5.538	5.601	VV	172	3965	0.04%	0.003%
55	5.614	5.601	5.651	VV	177	2847	0.03%	0.002%
56	5.682	5.651	5.752	VV	129	5113	0.05%	0.004%
57	5.775	5.752	5.787	VV	143	2207	0.02%	0.002%
58	5.810	5.787	5.838	VV	1686	19613	0.21%	0.014%
59	5.854	5.838	5.881	VV	815	9281	0.10%	0.007%
60	5.914	5.881	5.949	VV	270	5540	0.06%	0.004%
61	5.960	5.949	5.972	VV	135	1620	0.02%	0.001%
62	6.004	5.972	6.068	VV	303	7201	0.08%	0.005%
63	6.076	6.068	6.087	VV	124	854	0.01%	0.001%
64	6.121	6.087	6.147	VV	238	4446	0.05%	0.003%
65	6.164	6.147	6.238	VV	182	4611	0.05%	0.003%
66	6.248	6.238	6.277	PV	136	1547	0.02%	0.001%
67	6.294	6.277	6.315	VV	137	1959	0.02%	0.001%
68	6.335	6.315	6.349	VV	154	2101	0.02%	0.001%
69	6.359	6.349	6.363	VV	146	965	0.01%	0.001%
70	6.390	6.363	6.468	VV	24779	284773	3.03%	0.202%
71	6.488	6.468	6.516	VV	874	15053	0.16%	0.011%
72	6.551	6.516	6.593	VV	518	14933	0.16%	0.011%
73	6.628	6.593	6.658	VV	396	11876	0.13%	0.008%
74	6.672	6.658	6.702	VV	303	5828	0.06%	0.004%
75	6.721	6.702	6.806	VV	260	11515	0.12%	0.008%
76	6.845	6.806	6.921	VV	472222	4698498	50.02%	3.326%
77	6.932	6.921	6.950	VV	869	12867	0.14%	0.009%
78	6.967	6.950	6.984	VV	722	12298	0.13%	0.009%
79	6.998	6.984	7.020	VV	1247	16748	0.18%	0.012%
80	7.037	7.020	7.056	VV	475	8497	0.09%	0.006%
81	7.073	7.056	7.111	VV	497	9856	0.10%	0.007%
82	7.133	7.111	7.160	VV	300	6116	0.07%	0.004%
83	7.178	7.160	7.201	VV	308	5402	0.06%	0.004%
84	7.220	7.201	7.238	VV	275	4175	0.04%	0.003%
85	7.257	7.238	7.273	VV	234	3384	0.04%	0.002%
86	7.301	7.273	7.336	VV	450	7882	0.08%	0.006%
87	7.357	7.336	7.378	VV	652	9745	0.10%	0.007%
88	7.397	7.378	7.454	VV	728	19492	0.21%	0.014%
89	7.490	7.454	7.555	VV	15284	182645	1.94%	0.129%

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90	7.568	7.555	7.614	VV	477	14024	0.15%	0.010%
91	7.651	7.614	7.684	VV	1490	25349	0.27%	0.018%
92	7.713	7.684	7.742	VV	360	8310	0.09%	0.006%
93	7.762	7.742	7.771	VV	403	5422	0.06%	0.004%
94	7.795	7.771	7.826	VV	3600	41260	0.44%	0.029%
95	7.860	7.826	7.870	VV	277	5865	0.06%	0.004%
96	7.887	7.870	7.941	VV	517	8226	0.09%	0.006%
97	7.975	7.941	7.989	VV	220	3891	0.04%	0.003%
98	8.001	7.989	8.040	VV	126	1871	0.02%	0.001%
99	8.061	8.040	8.080	VV	539	5578	0.06%	0.004%
100	8.119	8.080	8.177	PV	619	13708	0.15%	0.010%
101	8.231	8.177	8.310	VV	351	15932	0.17%	0.011%
102	8.327	8.310	8.344	VV	367	3977	0.04%	0.003%
103	8.372	8.344	8.401	VV	2978	34330	0.37%	0.024%
104	8.428	8.401	8.451	VV	2001	23508	0.25%	0.017%
105	8.461	8.451	8.474	VV	273	3052	0.03%	0.002%
106	8.497	8.474	8.524	VV	451	6686	0.07%	0.005%
107	8.538	8.524	8.554	VV	437	5760	0.06%	0.004%
108	8.587	8.554	8.631	VV	1320	25204	0.27%	0.018%
109	8.683	8.631	8.754	VV	546370	5679138	60.46%	4.020%
110	8.776	8.754	8.783	VV	967	14903	0.16%	0.011%
111	8.800	8.783	8.861	VV	1574	34450	0.37%	0.024%
112	8.872	8.861	8.898	VV	705	10703	0.11%	0.008%
113	8.914	8.898	8.972	VV	833	13401	0.14%	0.009%
114	9.002	8.972	9.076	VV	54907	669039	7.12%	0.474%
115	9.100	9.076	9.131	VV	9045	112968	1.20%	0.080%
116	9.149	9.131	9.168	VV	1182	20805	0.22%	0.015%
117	9.176	9.168	9.204	VV	861	15268	0.16%	0.011%
118	9.221	9.204	9.271	VV	1734	32293	0.34%	0.023%
119	9.285	9.271	9.318	VV	495	8639	0.09%	0.006%
120	9.343	9.318	9.364	VV	626	9623	0.10%	0.007%
121	9.414	9.364	9.435	VV	2096	40189	0.43%	0.028%
122	9.447	9.435	9.484	VV	1144	22588	0.24%	0.016%
123	9.512	9.484	9.582	VV	2924	63821	0.68%	0.045%
124	9.600	9.582	9.631	VV	562	7890	0.08%	0.006%
125	9.650	9.631	9.676	VV	373	5564	0.06%	0.004%
126	9.694	9.676	9.716	VV	205	4194	0.04%	0.003%
127	9.752	9.716	9.784	VV	372	8466	0.09%	0.006%
128	9.812	9.784	9.860	VV	684	14373	0.15%	0.010%
129	9.888	9.860	9.914	PV	1986	31793	0.34%	0.023%
130	9.932	9.914	9.963	VV	1009	16685	0.18%	0.012%
131	9.977	9.963	10.001	VV	383	6539	0.07%	0.005%
132	10.027	10.001	10.051	VV	975	17648	0.19%	0.012%
133	10.074	10.051	10.100	VV	3528	40966	0.44%	0.029%
134	10.118	10.100	10.153	VV	264	6433	0.07%	0.005%
135	10.163	10.153	10.174	VV	197	1874	0.02%	0.001%
136	10.216	10.174	10.264	VV	972	22786	0.24%	0.016%
137	10.298	10.264	10.448	VV	612868	6696030	71.28%	4.740%
138	10.465	10.448	10.488	VV	359	5533	0.06%	0.004%
139	10.504	10.488	10.532	VV	167	2512	0.03%	0.002%
140	10.543	10.532	10.554	VV	98	1057	0.01%	0.001%
141	10.575	10.554	10.592	VV	358	4253	0.05%	0.003%

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142	10.644	10.592	10.658	VV	381	9567	0.10%	0.007%
143	10.689	10.658	10.712	VV	1336	21564	0.23%	0.015%
144	10.733	10.712	10.753	VV	554	10028	0.11%	0.007%
145	10.780	10.753	10.807	VV	635	13142	0.14%	0.009%
146	10.830	10.807	10.867	VV	467	8663	0.09%	0.006%
147	10.900	10.867	10.911	PV	398	8227	0.09%	0.006%
148	10.969	10.911	11.002	VV	866	32062	0.34%	0.023%
149	11.038	11.002	11.076	VV	3016	50823	0.54%	0.036%
150	11.111	11.076	11.134	VV	1355	27076	0.29%	0.019%
151	11.165	11.134	11.201	VV	892	23121	0.25%	0.016%
152	11.256	11.201	11.281	VV	531	15527	0.17%	0.011%
153	11.298	11.281	11.340	VV	315	8062	0.09%	0.006%
154	11.366	11.340	11.395	VV	574	12864	0.14%	0.009%
155	11.414	11.395	11.424	VV	702	8225	0.09%	0.006%
156	11.432	11.424	11.451	VV	632	8437	0.09%	0.006%
157	11.465	11.451	11.484	VV	510	7845	0.08%	0.006%
158	11.494	11.484	11.524	VV	537	7534	0.08%	0.005%
159	11.549	11.524	11.586	VV	1953	24123	0.26%	0.017%
160	11.607	11.586	11.639	PV	437	7036	0.07%	0.005%
161	11.677	11.639	11.704	VV	3438	45724	0.49%	0.032%
162	11.748	11.704	11.814	VV	642260	7310444	77.82%	5.175%
163	11.839	11.814	11.872	VV	1788	31849	0.34%	0.023%
164	11.902	11.872	11.920	VV	281	5370	0.06%	0.004%
165	11.975	11.920	12.007	VV	229	7338	0.08%	0.005%
166	12.058	12.007	12.087	VV	543	16535	0.18%	0.012%
167	12.106	12.087	12.120	VV	507	8352	0.09%	0.006%
168	12.144	12.120	12.168	VV	928	17194	0.18%	0.012%
169	12.206	12.168	12.249	VV	741	21416	0.23%	0.015%
170	12.263	12.249	12.278	VV	369	4513	0.05%	0.003%
171	12.299	12.278	12.334	VV	596	11512	0.12%	0.008%
172	12.351	12.334	12.361	VV	683	8511	0.09%	0.006%
173	12.417	12.361	12.450	VV	4248	78958	0.84%	0.056%
174	12.467	12.450	12.482	VV	492	8285	0.09%	0.006%
175	12.493	12.482	12.504	VV	366	3970	0.04%	0.003%
176	12.516	12.504	12.538	VV	336	6229	0.07%	0.004%
177	12.555	12.538	12.604	VV	557	13847	0.15%	0.010%
178	12.642	12.604	12.672	VV	779	19725	0.21%	0.014%
179	12.691	12.672	12.701	VV	760	9336	0.10%	0.007%
180	12.711	12.701	12.741	VV	629	10539	0.11%	0.007%
181	12.758	12.741	12.774	VV	684	9363	0.10%	0.007%
182	12.796	12.774	12.813	VV	563	11656	0.12%	0.008%
183	12.831	12.813	12.851	VV	927	15443	0.16%	0.011%
184	12.884	12.851	12.903	VV	2432	40749	0.43%	0.029%
185	12.916	12.903	12.938	VV	1200	17626	0.19%	0.012%
186	12.957	12.938	12.973	VV	648	11416	0.12%	0.008%
187	13.001	12.973	13.024	VV	1892	30212	0.32%	0.021%
188	13.064	13.024	13.137	VV	662139	7901445	84.12%	5.594%
189	13.150	13.137	13.165	VV	697	11165	0.12%	0.008%
190	13.178	13.165	13.228	VV	747	16381	0.17%	0.012%
191	13.244	13.228	13.261	VV	375	5077	0.05%	0.004%
192	13.337	13.261	13.367	VV	478	18726	0.20%	0.013%
193	13.386	13.367	13.406	VV	321	5220	0.06%	0.004%
194	13.425	13.406	13.441	VV	520	7621	0.08%	0.005%

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195	13.513	13.441	13.574	VV	575407	6803093	72.42%	4.816%
196	13.583	13.574	13.603	VV	1123	15857	0.17%	0.011%
197	13.621	13.603	13.639	VV	1045	17441	0.19%	0.012%
198	13.679	13.639	13.838	VV	620529	7704161	82.02%	5.454%
199	13.903	13.838	13.924	VV	684	22073	0.23%	0.016%
200	13.954	13.924	14.002	VV	657	22007	0.23%	0.016%
201	14.023	14.002	14.036	VV	548	9037	0.10%	0.006%
202	14.055	14.036	14.081	VV	1259	20619	0.22%	0.015%
203	14.105	14.081	14.146	VV	1898	37771	0.40%	0.027%
204	14.212	14.146	14.229	VV	1788	41714	0.44%	0.030%
205	14.267	14.229	14.371	VV	628619	7621339	81.13%	5.395%
206	14.395	14.371	14.435	VV	562	13646	0.15%	0.010%
207	14.491	14.435	14.524	VV	675	22711	0.24%	0.016%
208	14.535	14.524	14.542	VV	345	3408	0.04%	0.002%
209	14.556	14.542	14.586	VV	404	8334	0.09%	0.006%
210	14.597	14.586	14.614	VV	405	5391	0.06%	0.004%
211	14.628	14.614	14.648	VV	415	7598	0.08%	0.005%
212	14.702	14.648	14.735	VV	2086	43834	0.47%	0.031%
213	14.783	14.735	14.805	VV	723	22705	0.24%	0.016%
214	14.828	14.805	14.853	VV	3106	42183	0.45%	0.030%
215	14.865	14.853	14.884	VV	570	8693	0.09%	0.006%
216	14.902	14.884	14.918	VV	447	8362	0.09%	0.006%
217	14.925	14.918	14.938	VV	542	5125	0.05%	0.004%
218	14.954	14.938	15.011	VV	547	14782	0.16%	0.010%
219	15.031	15.011	15.054	VV	464	8225	0.09%	0.006%
220	15.097	15.054	15.165	VV	534	23485	0.25%	0.017%
221	15.178	15.165	15.194	VV	387	4976	0.05%	0.004%
222	15.228	15.194	15.244	VV	776	13054	0.14%	0.009%
223	15.258	15.244	15.283	VV	375	6191	0.07%	0.004%
224	15.326	15.283	15.336	VV	1606	24706	0.26%	0.017%
225	15.374	15.336	15.496	VV	598099	7357108	78.32%	5.208%
226	15.515	15.496	15.544	VV	300	7367	0.08%	0.005%
227	15.570	15.544	15.585	VV	412	6852	0.07%	0.005%
228	15.593	15.585	15.603	VV	228	2392	0.03%	0.002%
229	15.621	15.603	15.668	VV	249	6023	0.06%	0.004%
230	15.704	15.668	15.737	VV	395	8465	0.09%	0.006%
231	15.761	15.737	15.785	VV	342	6060	0.06%	0.004%
232	15.811	15.785	15.831	VV	347	6320	0.07%	0.004%
233	15.851	15.831	15.866	VV	862	9596	0.10%	0.007%
234	15.892	15.866	15.931	VV	4320	61719	0.66%	0.044%
235	15.946	15.931	16.018	VV	403	9585	0.10%	0.007%
236	16.036	16.018	16.051	PV	177	2416	0.03%	0.002%
237	16.078	16.051	16.124	VV	293	7708	0.08%	0.005%
238	16.133	16.124	16.193	VV	258	7069	0.08%	0.005%
239	16.212	16.193	16.238	VV	444	8765	0.09%	0.006%
240	16.284	16.238	16.306	VV	445	11274	0.12%	0.008%
241	16.398	16.306	16.479	VV	512349	6845221	72.87%	4.846%
242	16.489	16.479	16.511	VV	511	6799	0.07%	0.005%
243	16.526	16.511	16.551	VV	424	6630	0.07%	0.005%
244	16.576	16.551	16.590	VV	446	7950	0.08%	0.006%
245	16.602	16.590	16.661	VV	436	10977	0.12%	0.008%
246	16.707	16.661	16.738	PV	544	13717	0.15%	0.010%

					rteres			
247	16.758	16.738	16.802	VV	387	7598	0.08%	0.005%
248	16.879	16.802	16.924	PV	5150	84818	0.90%	0.060%
249	16.934	16.924	16.948	VV	167	1418	0.02%	0.001%
250	16.955	16.948	16.976	VV	104	1156	0.01%	0.001%
251	17.042	16.976	17.078	VV	451	11800	0.13%	0.008%
252	17.099	17.078	17.147	VV	312	6964	0.07%	0.005%
253	17.175	17.147	17.200	PV	267	5016	0.05%	0.004%
254	17.227	17.200	17.256	VV	660	10968	0.12%	0.008%
255	17.351	17.256	17.448	VV	481731	6488783	69.08%	4.594%
256	17.459	17.448	17.482	VV	490	8337	0.09%	0.006%
257	17.495	17.482	17.518	VV	343	5564	0.06%	0.004%
258	17.536	17.518	17.544	VV	250	2837	0.03%	0.002%
259	17.610	17.544	17.644	VV	613	18442	0.20%	0.013%
260	17.650	17.644	17.660	VV	174	1108	0.01%	0.001%
261	17.681	17.660	17.720	PV	468	8844	0.09%	0.006%
262	17.799	17.720	17.832	PV	10910	163352	1.74%	0.116%
263	17.839	17.832	17.866	VV	309	5419	0.06%	0.004%
264	17.886	17.866	17.906	VV	316	4855	0.05%	0.003%
265	17.935	17.906	17.964	VV	598	8732	0.09%	0.006%
266	18.025	17.964	18.042	VV	400	5183	0.06%	0.004%
267	18.082	18.042	18.090	PV	217	2781	0.03%	0.002%
268	18.128	18.090	18.169	VV	5209	76942	0.82%	0.054%
269	18.241	18.169	18.344	VV	475030	6560672	69.84%	4.644%
270	18.403	18.344	18.467	VV	1240	41512	0.44%	0.029%
271	18.511	18.467	18.531	PV	494	7973	0.08%	0.006%
272	18.609	18.531	18.621	VV	439	11481	0.12%	0.008%
273	18.661	18.621	18.706	VV	13658	192141	2.05%	0.136%
274	18.738	18.706	18.746	VV	491	8714	0.09%	0.006%
275	18.772	18.746	18.797	VV	1427	23791	0.25%	0.017%
276	18.807	18.797	18.831	VV	253	3178	0.03%	0.002%
277	18.928	18.831	18.951	PV	613	10620	0.11%	0.008%
278	18.970	18.951	18.986	VV	268	4510	0.05%	0.003%
279	19.076	18.986	19.150	PV	474540	6599062	70.25%	4.672%
280	19.196	19.150	19.219	VV	1652	52303	0.56%	0.037%
281	19.244	19.219	19.261	VV	1349	27940	0.30%	0.020%
282	19.329	19.261	19.353	VV	1351	52599	0.56%	0.037%
283	19.374	19.353	19.395	VV	1166	23571	0.25%	0.017%
284	19.471	19.395	19.505	VV	11858	215628	2.30%	0.153%
285	19.533	19.505	19.545	VV	1681	37401	0.40%	0.026%
286	19.723	19.545	19.744	VV	3132	263854	2.81%	0.187%
287	19.773	19.744	19.790	VV	3125	80655	0.86%	0.057%
288	19.862	19.790	19.928	VV	460519	6938743	73.87%	4.912%
289	20.012	19.928	20.031	VV	5164	293357	3.12%	0.208%
290	20.147	20.031	20.157	VV	6501	427664	4.55%	0.303%
291	20.234	20.157	20.264	VV	13565	521202	5.55%	0.369%
292	20.424	20.264	20.433	VV	9211	861602	9.17%	0.610%
293	20.506	20.433	20.538	VV	11315	641115	6.83%	0.454%
294	20.603	20.538	20.660	VV	480263	7508504	79.93%	5.315%
295	20.691	20.660	20.701	VV	13220	323215	3.44%	0.229%
296	20.765	20.701	20.794	VV	13386	734748	7.82%	0.520%
297	20.968	20.794	21.007	VV	17767	1815515	19.33%	1.285%
298	21.087	21.007	21.164	VV	17495	1394151	14.84%	0.987%
299	21.176	21.164	21.180	VV	12499	115280	1.23%	0.082%

rteres								
300	21.382	21.180	21.544	VV	377101	9393585	100.00%	6.650%
301	21.561	21.544	21.575	VV	8851	162775	1.73%	0.115%
302	21.605	21.575	21.621	VV	8617	235981	2.51%	0.167%
303	21.667	21.621	21.691	VV	8090	337682	3.59%	0.239%
304	21.703	21.691	21.774	VV	7648	352418	3.75%	0.249%
305	21.839	21.774	21.910	VV	7897	529448	5.64%	0.375%
306	21.921	21.910	21.930	VV	5450	65299	0.70%	0.046%
307	21.940	21.930	22.012	VV	5314	230038	2.45%	0.163%
308	22.032	22.012	22.057	VV	3975	106129	1.13%	0.075%
309	22.073	22.057	22.114	VV	3643	117177	1.25%	0.083%
310	22.155	22.114	22.190	VV	2918	127311	1.36%	0.090%
311	22.234	22.190	22.293	VV	2224	118299	1.26%	0.084%
312	22.369	22.293	22.493	VV	254179	6478893	68.97%	4.587%
Sum of corrected areas:						141259531		

Aliphatic EPH 082925.M Tue Sep 23 06:51:10 2025



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

Manual Integration Report

Sequence:	FD090425AR	Instrument	FID_d
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
100 PPM AROMATIC HC	FD049718.D	Bnezo[k]fluoranthene (C30.14)	yogesh	9/5/2025 7:31:48 AM	mohammad	9/8/2025 4:38:38	Peak Integrated by Software



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

Manual Integration Report

Sequence:

FD092225AR

Instrument

FID_d

Sample ID

File ID

Parameter

Review By

Review On

Supervised
By

Supervised On

Reason

Manual Integration Report

Sequence:

FE082925AL

Instrument

FID_e

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
5 PPM ALIPHATIC HC	FE055549.D	n-Octadecane (C18)	yogesh	8/29/2025 10:36:53 AM	mohammad	8/30/2025 12:45:13	Peak Integrated by Software
Q2970-19	FE055558.D	1-chlorooctadecane (SURR)	yogesh	8/29/2025 10:36:54 AM	mohammad	8/30/2025 12:45:13	Peak Integrated by Software
Q2970-31	FE055560.D	1-chlorooctadecane (SURR)	yogesh	8/29/2025 10:36:56 AM	mohammad	8/30/2025 12:45:13	Peak Integrated by Software

Manual Integration Report

Sequence:

FE092225AL

Instrument

FID_e

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM ALIPHATIC HC	FE055914.D	n-Hexatriacontane (C36)	yogesh	9/23/2025 7:34:13 AM	 	 	Peak Integrated by Software
20 PPM ALIPHATIC HC	FE055914.D	n-Octatriacontane (C38)	yogesh	9/23/2025 7:34:13 AM	 	 	Peak Integrated by Software
20 PPM ALIPHATIC HC	FE055952.D	n-Octatriacontane (C38)	yogesh	9/23/2025 8:21:01 AM	 	 	Peak Integrated by Software

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QC Batch ID # FD090425AR

Review By	yogesh	Review On	9/4/2025 10:41:46 AM
Supervise By	mohammad	Supervise On	9/8/2025 4:38:38 AM
SubDirectory	FD090425AR	HP Acquire Method	HP Processing Method FD090425AR
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24500,PP24502,PP24503,PP24504,PP24505		
CCC Internal Standard/PEM	PP24503		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24501,PP24506		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FD049716.D	04 Sep 2025 08:15	YP/AJ	Ok
2	I.BLK	FD049717.D	04 Sep 2025 08:55	YP/AJ	Ok
3	100 PPM AROMATIC HC STD1	FD049718.D	04 Sep 2025 09:36	YP/AJ	Ok,M
4	50 PPM AROMATIC HC STD2	FD049719.D	04 Sep 2025 10:16	YP/AJ	Ok
5	20 PPM AROMATIC HC STD3	FD049720.D	04 Sep 2025 10:56	YP/AJ	Ok
6	10 PPM AROMATIC HC STD4	FD049721.D	04 Sep 2025 11:38	YP/AJ	Ok
7	5 PPM AROMATIC HC STD5	FD049722.D	04 Sep 2025 12:19	YP/AJ	Ok
8	20 PPM AROMATIC HC STD ICV	FD049723.D	04 Sep 2025 13:00	YP/AJ	Ok
9	I.BLK	FD049724.D	04 Sep 2025 14:24	YP/AJ	Ok
10	20 PPM AROMATIC HC STD	FD049725.D	04 Sep 2025 15:08	YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QC Batch ID # FD092225AR

Review By	yogesh	Review On	9/22/2025 11:48:33 AM
Supervise By		Supervise On	
SubDirectory	FD092225AR	HP Acquire Method	HP Processing Method FD090425AR
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24500,PP24502,PP24503,PP24504,PP24505		
CCC Internal Standard/PEM	PP24503		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24501,PP24506		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FD049735.D	22 Sep 2025 08:53	YP/AJ	Ok
2	I.BLK	FD049736.D	22 Sep 2025 09:35	YP/AJ	Ok
3	20 PPM AROMATIC HC STD	FD049737.D	22 Sep 2025 11:01	YP/AJ	Ok
4	PB169768BL	FD049738.D	22 Sep 2025 14:45	YP/AJ	Ok
5	PB169768BS	FD049739.D	22 Sep 2025 15:29	YP/AJ	Ok
6	PB169768BSD	FD049740.D	22 Sep 2025 16:13	YP/AJ	Ok
7	Q3123-01	FD049741.D	22 Sep 2025 16:58	YP/AJ	Ok
8	Q3123-01D	FD049742.D	22 Sep 2025 17:44	YP/AJ	Ok
9	Q3123-01MS	FD049743.D	22 Sep 2025 18:30	YP/AJ	Ok
10	Q3123-01MSD	FD049744.D	22 Sep 2025 19:15	YP/AJ	Ok
11	I.BLK	FD049745.D	22 Sep 2025 20:46	YP/AJ	Ok
12	20 PPM AROMATIC HC STD	FD049746.D	22 Sep 2025 21:30	YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE082925AL

Review By	yogesh	Review On	8/29/2025 10:37:13 AM
Supervise By	mohammad	Supervise On	8/30/2025 12:45:13 AM
SubDirectory	FE082925AL	HP Acquire Method	HP Processing Method FE082925AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24768,PP24770,PP24771,PP24772,PP24773		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24771 PP24769,PP24774		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FE055543.D	28 Aug 2025 08:33	YP\AJ	Ok
2	I.BLK	FE055544.D	28 Aug 2025 09:03	YP\AJ	Ok
3	100 PPM ALIPHATIC HC STD1	FE055545.D	28 Aug 2025 09:34	YP\AJ	Ok
4	50 PPM ALIPHATIC HC STD2	FE055546.D	28 Aug 2025 10:04	YP\AJ	Ok
5	20 PPM ALIPHATIC HC STD3	FE055547.D	28 Aug 2025 10:34	YP\AJ	Ok
6	10 PPM ALIPHATIC HC STD4	FE055548.D	28 Aug 2025 11:04	YP\AJ	Ok
7	5 PPM ALIPHATIC HC STD5	FE055549.D	28 Aug 2025 11:35	YP\AJ	Ok,M
8	20 PPM ALIPHATIC HC STD ICV	FE055550.D	28 Aug 2025 12:05	YP\AJ	Ok
9	I.BLK	FE055551.D	28 Aug 2025 12:35	YP\AJ	Ok
10	20 PPM ALIPHATIC HC STD	FE055552.D	28 Aug 2025 13:06	YP\AJ	Ok
11	Q2969-01	FE055553.D	28 Aug 2025 14:35	YP\AJ	Ok
12	Q2969-02	FE055554.D	28 Aug 2025 15:05	YP\AJ	Ok
13	Q2970-01	FE055555.D	28 Aug 2025 15:36	YP\AJ	Ok
14	Q2970-07	FE055556.D	28 Aug 2025 16:06	YP\AJ	Ok
15	Q2970-13	FE055557.D	28 Aug 2025 16:36	YP\AJ	Ok
16	Q2970-19	FE055558.D	28 Aug 2025 17:07	YP\AJ	Ok,M
17	Q2970-25	FE055559.D	28 Aug 2025 17:37	YP\AJ	Ok
18	Q2970-31	FE055560.D	28 Aug 2025 18:08	YP\AJ	Ok,M
19	Q2970-32	FE055561.D	28 Aug 2025 18:38	YP\AJ	Ok
20	Q2970-33	FE055562.D	28 Aug 2025 19:09	YP\AJ	Ok
21	Q2970-34	FE055563.D	28 Aug 2025 19:39	YP\AJ	Ok

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE082925AL

Review By	yogesh	Review On	8/29/2025 10:37:13 AM
Supervise By	mohammad	Supervise On	8/30/2025 12:45:13 AM
SubDirectory	FE082925AL	HP Acquire Method	HP Processing Method FE082925AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24768,PP24770,PP24771,PP24772,PP24773		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24771 PP24769,PP24774		

22	Q2970-35	FE055564.D	28 Aug 2025 20:10	YPIAJ	Ok
23	Q2971-01	FE055565.D	28 Aug 2025 20:40	YPIAJ	Ok
24	Q2971-07	FE055566.D	28 Aug 2025 21:10	YPIAJ	Ok
25	Q2971-13	FE055567.D	28 Aug 2025 21:41	YPIAJ	Ok
26	Q2971-19	FE055568.D	28 Aug 2025 22:11	YPIAJ	Ok
27	Q2971-25	FE055569.D	28 Aug 2025 22:41	YPIAJ	Ok
28	Q2971-31	FE055570.D	28 Aug 2025 23:12	YPIAJ	Ok
29	I.BLK	FE055571.D	29 Aug 2025 00:12	YPIAJ	Ok
30	20 PPM ALIPHATIC HC STD	FE055572.D	29 Aug 2025 00:42	YPIAJ	Ok
31	PB169440BL	FE055573.D	29 Aug 2025 01:43	YPIAJ	Ok
32	PB169440BS	FE055574.D	29 Aug 2025 02:13	YPIAJ	Ok
33	PB169440BSD	FE055575.D	29 Aug 2025 02:43	YPIAJ	Ok
34	PB169430BL	FE055576.D	29 Aug 2025 03:14	YPIAJ	Ok
35	PB169430BS	FE055577.D	29 Aug 2025 03:44	YPIAJ	Ok
36	PB169430BSD	FE055578.D	29 Aug 2025 04:14	YPIAJ	Ok
37	Q2970-08	FE055579.D	29 Aug 2025 04:45	YPIAJ	Ok
38	Q2970-08D	FE055580.D	29 Aug 2025 05:15	YPIAJ	Ok
39	Q2970-08MS	FE055581.D	29 Aug 2025 05:45	YPIAJ	Ok
40	Q2970-08MSD	FE055582.D	29 Aug 2025 06:15	YPIAJ	Ok
41	Q2970-09	FE055583.D	29 Aug 2025 06:45	YPIAJ	Ok
42	Q2970-23	FE055584.D	29 Aug 2025 07:16	YPIAJ	Ok
43	I.BLK	FE055585.D	29 Aug 2025 07:46	YPIAJ	Ok
44	20 PPM ALIPHATIC HC STD	FE055586.D	29 Aug 2025 08:16	YPIAJ	Ok

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE082925AL

Review By	yogesh	Review On	8/29/2025 10:37:13 AM
Supervise By	mohammad	Supervise On	8/30/2025 12:45:13 AM
SubDirectory	FE082925AL	HP Acquire Method	HP Processing Method FE082925AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24768,PP24770,PP24771,PP24772,PP24773		
CCC Internal Standard/PEM	PP24771		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24769,PP24774		

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE092225AL

Review By	yogesh	Review On	9/22/2025 11:16:52 AM
Supervise By		Supervise On	
SubDirectory	FE092225AL	HP Acquire Method	HP Processing Method FE082925AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24768,PP24770,PP24771,PP24772,PP24773		
CCC Internal Standard/PEM	PP24771		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24769,PP24774		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FE055912.D	22 Sep 2025 08:16	YP\AJ	Ok
2	I.BLK	FE055913.D	22 Sep 2025 08:47	YP\AJ	Ok
3	20 PPM ALIPHATIC HC STD	FE055914.D	22 Sep 2025 09:17	YP\AJ	Ok,NS
4	Q3137-01DL	FE055915.D	22 Sep 2025 09:58	YP\AJ	Ok
5	Q3137-02DL	FE055916.D	22 Sep 2025 10:28	YP\AJ	Ok
6	Q3138-02DL	FE055917.D	22 Sep 2025 10:58	YP\AJ	Dilution
7	Q3138-02DL2	FE055918.D	22 Sep 2025 11:29	YP\AJ	Ok
8	Q3140-02DL	FE055919.D	22 Sep 2025 11:59	YP\AJ	Ok
9	Q3138-04DL	FE055920.D	22 Sep 2025 12:30	YP\AJ	Ok
10	I.BLK	FE055921.D	22 Sep 2025 13:30	YP\AJ	Ok
11	20 PPM ALIPHATIC HC STD	FE055922.D	22 Sep 2025 14:01	YP\AJ	Ok
12	PB169768BL	FE055923.D	22 Sep 2025 14:52	YP\AJ	Ok
13	PB169768BS	FE055924.D	22 Sep 2025 15:23	YP\AJ	Ok
14	PB169768BSD	FE055925.D	22 Sep 2025 15:53	YP\AJ	Ok
15	PB169763BS	FE055926.D	22 Sep 2025 16:24	YP\AJ	Ok
16	PB169763BSD	FE055927.D	22 Sep 2025 16:54	YP\AJ	Ok
17	PB169763BL	FE055928.D	22 Sep 2025 17:25	YP\AJ	Ok
18	Q3123-01	FE055929.D	22 Sep 2025 17:55	YP\AJ	Ok
19	Q3123-01D	FE055930.D	22 Sep 2025 18:25	YP\AJ	Ok
20	Q3123-01MS	FE055931.D	22 Sep 2025 18:56	YP\AJ	Ok
21	Q3123-01MSD	FE055932.D	22 Sep 2025 19:27	YP\AJ	Ok

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE092225AL

Review By	yogesh	Review On	9/22/2025 11:16:52 AM
Supervise By		Supervise On	
SubDirectory	FE092225AL	HP Acquire Method	HP Processing Method FE082925AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24768,PP24770,PP24771,PP24772,PP24773		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24771 PP24769,PP24774		

22	Q3135-01	FE055933.D	22 Sep 2025 19:57	YP\AJ	Ok
23	Q3135-02	FE055934.D	22 Sep 2025 20:27	YP\AJ	Ok
24	I.BLK	FE055935.D	22 Sep 2025 21:29	YP\AJ	Ok
25	20 PPM ALIPHATIC HC STD	FE055936.D	22 Sep 2025 21:59	YP\AJ	Ok
26	PB169775BL	FE055937.D	22 Sep 2025 23:00	YP\AJ	Ok
27	PB169775BS	FE055938.D	22 Sep 2025 23:30	YP\AJ	Ok
28	PB169775BSD	FE055939.D	23 Sep 2025 00:01	YP\AJ	Ok
29	Q3145-01	FE055940.D	23 Sep 2025 00:31	YP\AJ	Ok
30	Q3145-01D	FE055941.D	23 Sep 2025 01:01	YP\AJ	Ok
31	Q3145-01MS	FE055942.D	23 Sep 2025 01:32	YP\AJ	Ok
32	Q3145-01MSD	FE055943.D	23 Sep 2025 02:02	YP\AJ	Ok
33	Q3145-02	FE055944.D	23 Sep 2025 02:33	YP\AJ	Ok
34	Q3145-03	FE055945.D	23 Sep 2025 03:03	YP\AJ	Ok
35	Q3145-04	FE055946.D	23 Sep 2025 03:34	YP\AJ	Ok
36	Q3153-03	FE055947.D	23 Sep 2025 04:04	YP\AJ	Ok
37	Q3153-07	FE055948.D	23 Sep 2025 04:35	YP\AJ	Ok
38	Q3152-01	FE055949.D	23 Sep 2025 05:05	YP\AJ	Dilution
39	Q3152-02	FE055950.D	23 Sep 2025 05:35	YP\AJ	Dilution
40	I.BLK	FE055951.D	23 Sep 2025 06:36	YP\AJ	Ok
41	20 PPM ALIPHATIC HC STD	FE055952.D	23 Sep 2025 07:06	YP\AJ	Ok,NS

M : Manual Integration

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QC Batch ID # FD090425AR

Review By	yogesh	Review On	9/4/2025 10:41:46 AM
Supervise By	mohammad	Supervise On	9/8/2025 4:38:38 AM
SubDirectory	FD090425AR	HP Acquire Method	HP Processing Method
			FD090425AR
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24500,PP24502,PP24503,PP24504,PP24505		
CCC	PP24503		
Internal Standard/PEM			
ICV/I.BLK	PP24501,PP24506		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FD049716.D	04 Sep 2025 08:15		YP/AJ	Ok
2	I.BLK	I.BLK	FD049717.D	04 Sep 2025 08:55		YP/AJ	Ok
3	100 PPM AROMATIC HC	100 PPM AROMATIC HC	FD049718.D	04 Sep 2025 09:36		YP/AJ	Ok,M
4	50 PPM AROMATIC HC	50 PPM AROMATIC HC	FD049719.D	04 Sep 2025 10:16		YP/AJ	Ok
5	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD049720.D	04 Sep 2025 10:56		YP/AJ	Ok
6	10 PPM AROMATIC HC	10 PPM AROMATIC HC	FD049721.D	04 Sep 2025 11:38		YP/AJ	Ok
7	5 PPM AROMATIC HC	5 PPM AROMATIC HC	FD049722.D	04 Sep 2025 12:19		YP/AJ	Ok
8	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD049723.D	04 Sep 2025 13:00		YP/AJ	Ok
9	I.BLK	I.BLK	FD049724.D	04 Sep 2025 14:24		YP/AJ	Ok
10	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD049725.D	04 Sep 2025 15:08		YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QC Batch ID # FD092225AR

Review By	yogesh	Review On	9/22/2025 11:48:33 AM
Supervise By		Supervise On	
SubDirectory	FD092225AR	HP Acquire Method	HP Processing Method FD090425AR

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP24500,PP24502,PP24503,PP24504,PP24505
CCC Internal Standard/PEM	PP24503
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24501,PP24506

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FD049735.D	22 Sep 2025 08:53		YP/AJ	Ok
2	I.BLK	I.BLK	FD049736.D	22 Sep 2025 09:35		YP/AJ	Ok
3	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD049737.D	22 Sep 2025 11:01		YP/AJ	Ok
4	PB169768BL	PB169768BL	FD049738.D	22 Sep 2025 14:45		YP/AJ	Ok
5	PB169768BS	PB169768BS	FD049739.D	22 Sep 2025 15:29		YP/AJ	Ok
6	PB169768BSD	PB169768BSD	FD049740.D	22 Sep 2025 16:13		YP/AJ	Ok
7	Q3123-01	TP-2	FD049741.D	22 Sep 2025 16:58		YP/AJ	Ok
8	Q3123-01D	Q3123-01D	FD049742.D	22 Sep 2025 17:44		YP/AJ	Ok
9	Q3123-01MS	TP-2MS	FD049743.D	22 Sep 2025 18:30	FD049741.D	YP/AJ	Ok
10	Q3123-01MSD	TP-2MSD	FD049744.D	22 Sep 2025 19:15	FD049741.D!FD049743.D	YP/AJ	Ok
11	I.BLK	I.BLK	FD049745.D	22 Sep 2025 20:46		YP/AJ	Ok
12	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD049746.D	22 Sep 2025 21:30		YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE082925AL

Review By	yogesh	Review On	8/29/2025 10:37:13 AM
Supervise By	mohammad	Supervise On	8/30/2025 12:45:13 AM
SubDirectory	FE082925AL	HP Acquire Method	HP Processing Method FE082925AL

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP24768,PP24770,PP24771,PP24772,PP24773
CCC Internal Standard/PEM	PP24771
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24769,PP24774

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FE055543.D	28 Aug 2025 08:33		YPIAJ	Ok
2	I.BLK	I.BLK	FE055544.D	28 Aug 2025 09:03		YPIAJ	Ok
3	100 PPM ALIPHATIC HC	100 PPM ALIPHATIC HC	FE055545.D	28 Aug 2025 09:34		YPIAJ	Ok
4	50 PPM ALIPHATIC HC	50 PPM ALIPHATIC HC	FE055546.D	28 Aug 2025 10:04		YPIAJ	Ok
5	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE055547.D	28 Aug 2025 10:34		YPIAJ	Ok
6	10 PPM ALIPHATIC HC	10 PPM ALIPHATIC HC	FE055548.D	28 Aug 2025 11:04		YPIAJ	Ok
7	5 PPM ALIPHATIC HC	5 PPM ALIPHATIC HC	FE055549.D	28 Aug 2025 11:35		YPIAJ	Ok,M
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE055550.D	28 Aug 2025 12:05		YPIAJ	Ok
9	I.BLK	I.BLK	FE055551.D	28 Aug 2025 12:35		YPIAJ	Ok
10	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE055552.D	28 Aug 2025 13:06		YPIAJ	Ok
11	Q2969-01	TR-05-08272025	FE055553.D	28 Aug 2025 14:35		YPIAJ	Ok
12	Q2969-02	TR-05-08272025-E2	FE055554.D	28 Aug 2025 15:05		YPIAJ	Ok
13	Q2970-01	TP10	FE055555.D	28 Aug 2025 15:36		YPIAJ	Ok
14	Q2970-07	TP11	FE055556.D	28 Aug 2025 16:06		YPIAJ	Ok
15	Q2970-13	TP12	FE055557.D	28 Aug 2025 16:36		YPIAJ	Ok
16	Q2970-19	TP9	FE055558.D	28 Aug 2025 17:07		YPIAJ	Ok,M
17	Q2970-25	TP6	FE055559.D	28 Aug 2025 17:37		YPIAJ	Ok
18	Q2970-31	TP3	FE055560.D	28 Aug 2025 18:08		YPIAJ	Ok,M

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE082925AL

Review By	yogesh	Review On	8/29/2025 10:37:13 AM
Supervise By	mohammad	Supervise On	8/30/2025 12:45:13 AM
SubDirectory	FE082925AL	HP Acquire Method	HP Processing Method FE082925AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24768,PP24770,PP24771,PP24772,PP24773		
CCC	PP24771		
Internal Standard/PEM			
ICV/I.BLK	PP24769,PP24774		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

19	Q2970-32	TP3-A	FE055561.D	28 Aug 2025 18:38		YPIAJ	Ok
20	Q2970-33	TP3-B	FE055562.D	28 Aug 2025 19:09		YPIAJ	Ok
21	Q2970-34	TP3-C	FE055563.D	28 Aug 2025 19:39		YPIAJ	Ok
22	Q2970-35	TP3-D	FE055564.D	28 Aug 2025 20:10		YPIAJ	Ok
23	Q2971-01	TP2	FE055565.D	28 Aug 2025 20:40		YPIAJ	Ok
24	Q2971-07	TP1	FE055566.D	28 Aug 2025 21:10		YPIAJ	Ok
25	Q2971-13	TP5	FE055567.D	28 Aug 2025 21:41		YPIAJ	Ok
26	Q2971-19	TP8	FE055568.D	28 Aug 2025 22:11		YPIAJ	Ok
27	Q2971-25	TP7	FE055569.D	28 Aug 2025 22:41		YPIAJ	Ok
28	Q2971-31	TP4	FE055570.D	28 Aug 2025 23:12		YPIAJ	Ok
29	I.BLK	I.BLK	FE055571.D	29 Aug 2025 00:12		YPIAJ	Ok
30	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE055572.D	29 Aug 2025 00:42		YPIAJ	Ok
31	PB169440BL	PB169440BL	FE055573.D	29 Aug 2025 01:43		YPIAJ	Ok
32	PB169440BS	PB169440BS	FE055574.D	29 Aug 2025 02:13		YPIAJ	Ok
33	PB169440BSD	PB169440BSD	FE055575.D	29 Aug 2025 02:43		YPIAJ	Ok
34	PB169430BL	PB169430BL	FE055576.D	29 Aug 2025 03:14		YPIAJ	Ok
35	PB169430BS	PB169430BS	FE055577.D	29 Aug 2025 03:44		YPIAJ	Ok
36	PB169430BSD	PB169430BSD	FE055578.D	29 Aug 2025 04:14		YPIAJ	Ok
37	Q2970-08	TP11-A	FE055579.D	29 Aug 2025 04:45		YPIAJ	Ok

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE082925AL

Review By	yogesh	Review On	8/29/2025 10:37:13 AM
Supervise By	mohammad	Supervise On	8/30/2025 12:45:13 AM
SubDirectory	FE082925AL	HP Acquire Method	HP Processing Method FE082925AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24768,PP24770,PP24771,PP24772,PP24773		
CCC	PP24771		
Internal Standard/PEM			
ICV/I.BLK	PP24769,PP24774		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

38	Q2970-08D	Q2970-08D	FE055580.D	29 Aug 2025 05:15		YP\AJ	Ok
39	Q2970-08MS	TP11-AMS	FE055581.D	29 Aug 2025 05:45	FE055579.D	YP\AJ	Ok
40	Q2970-08MSD	TP11-AMSD	FE055582.D	29 Aug 2025 06:15	FE055579.D!FE055581.D	YP\AJ	Ok
41	Q2970-09	TP11-B	FE055583.D	29 Aug 2025 06:45		YP\AJ	Ok
42	Q2970-23	TP9-D	FE055584.D	29 Aug 2025 07:16		YP\AJ	Ok
43	I.BLK	I.BLK	FE055585.D	29 Aug 2025 07:46		YP\AJ	Ok
44	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE055586.D	29 Aug 2025 08:16		YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE092225AL

Review By	yogesh	Review On	9/22/2025 11:16:52 AM
Supervise By		Supervise On	
SubDirectory	FE092225AL	HP Acquire Method	HP Processing Method FE082925AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24768,PP24770,PP24771,PP24772,PP24773		
CCC	PP24771		
Internal Standard/PEM			
ICV/I.BLK	PP24769,PP24774		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FE055912.D	22 Sep 2025 08:16		YPIAJ	Ok
2	I.BLK	I.BLK	FE055913.D	22 Sep 2025 08:47		YPIAJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE055914.D	22 Sep 2025 09:17		YPIAJ	Ok,NS
4	Q3137-01DL	OR-02-09182025DL	FE055915.D	22 Sep 2025 09:58		YPIAJ	Ok
5	Q3137-02DL	OR-02-09182025-E2DL	FE055916.D	22 Sep 2025 10:28		YPIAJ	Ok
6	Q3138-02DL	PAD-091825-BDL	FE055917.D	22 Sep 2025 10:58	need further dilution	YPIAJ	Dilution
7	Q3138-02DL2	PAD-091825-BDL2	FE055918.D	22 Sep 2025 11:29		YPIAJ	Ok
8	Q3140-02DL	TR-04-091825-E2DL	FE055919.D	22 Sep 2025 11:59		YPIAJ	Ok
9	Q3138-04DL	MOO-25-0239-0241DL	FE055920.D	22 Sep 2025 12:30		YPIAJ	Ok
10	I.BLK	I.BLK	FE055921.D	22 Sep 2025 13:30		YPIAJ	Ok
11	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE055922.D	22 Sep 2025 14:01		YPIAJ	Ok
12	PB169768BL	PB169768BL	FE055923.D	22 Sep 2025 14:52		YPIAJ	Ok
13	PB169768BS	PB169768BS	FE055924.D	22 Sep 2025 15:23		YPIAJ	Ok
14	PB169768BSD	PB169768BSD	FE055925.D	22 Sep 2025 15:53		YPIAJ	Ok
15	PB169763BS	PB169763BS	FE055926.D	22 Sep 2025 16:24		YPIAJ	Ok
16	PB169763BSD	PB169763BSD	FE055927.D	22 Sep 2025 16:54		YPIAJ	Ok
17	PB169763BL	PB169763BL	FE055928.D	22 Sep 2025 17:25		YPIAJ	Ok
18	Q3123-01	TP-2	FE055929.D	22 Sep 2025 17:55		YPIAJ	Ok

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE092225AL

Review By	yogesh	Review On	9/22/2025 11:16:52 AM
Supervise By		Supervise On	
SubDirectory	FE092225AL	HP Acquire Method	HP Processing Method FE082925AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24768,PP24770,PP24771,PP24772,PP24773		
CCC	PP24771		
Internal Standard/PEM			
ICV/I.BLK	PP24769,PP24774		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

19	Q3123-01D	Q3123-01D	FE055930.D	22 Sep 2025 18:25		YPIAJ	Ok
20	Q3123-01MS	TP-2MS	FE055931.D	22 Sep 2025 18:56	FE055929.D	YPIAJ	Ok
21	Q3123-01MSD	TP-2MSD	FE055932.D	22 Sep 2025 19:27	FE055929.D!FE055931.D	YPIAJ	Ok
22	Q3135-01	MH-121	FE055933.D	22 Sep 2025 19:57		YPIAJ	Ok
23	Q3135-02	Q3135-02	FE055934.D	22 Sep 2025 20:27		YPIAJ	Ok
24	I.BLK	I.BLK	FE055935.D	22 Sep 2025 21:29		YPIAJ	Ok
25	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE055936.D	22 Sep 2025 21:59		YPIAJ	Ok
26	PB169775BL	PB169775BL	FE055937.D	22 Sep 2025 23:00		YPIAJ	Ok
27	PB169775BS	PB169775BS	FE055938.D	22 Sep 2025 23:30		YPIAJ	Ok
28	PB169775BSD	PB169775BSD	FE055939.D	23 Sep 2025 00:01		YPIAJ	Ok
29	Q3145-01	SP-A	FE055940.D	23 Sep 2025 00:31		YPIAJ	Ok
30	Q3145-01D	Q3145-01D	FE055941.D	23 Sep 2025 01:01		YPIAJ	Ok
31	Q3145-01MS	SP-AMS	FE055942.D	23 Sep 2025 01:32	FE055940.D	YPIAJ	Ok
32	Q3145-01MSD	SP-AMSD	FE055943.D	23 Sep 2025 02:02	FE055940.D!FE055942.D	YPIAJ	Ok
33	Q3145-02	SP-A-EPH-2	FE055944.D	23 Sep 2025 02:33		YPIAJ	Ok
34	Q3145-03	SP-B	FE055945.D	23 Sep 2025 03:03		YPIAJ	Ok
35	Q3145-04	SP-B-EPH-2	FE055946.D	23 Sep 2025 03:34		YPIAJ	Ok
36	Q3153-03	OR-500-115	FE055947.D	23 Sep 2025 04:04		YPIAJ	Ok
37	Q3153-07	OR-500-116	FE055948.D	23 Sep 2025 04:35		YPIAJ	Ok

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE092225AL

Review By	yogesh	Review On	9/22/2025 11:16:52 AM
Supervise By		Supervise On	
SubDirectory	FE092225AL	HP Acquire Method	HP Processing Method FE082925AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24768,PP24770,PP24771,PP24772,PP24773		
CCC	PP24771		
Internal Standard/PEM			
ICV/I.BLK	PP24769,PP24774		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

38	Q3152-01	EO-02-091925	FE055949.D	23 Sep 2025 05:05	Need 5X	YP\AJ	Dilution
39	Q3152-02	EO-02-091925-E2	FE055950.D	23 Sep 2025 05:35	Need 5X	YP\AJ	Dilution
40	I.BLK	I.BLK	FE055951.D	23 Sep 2025 06:36		YP\AJ	Ok
41	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE055952.D	23 Sep 2025 07:06		YP\AJ	Ok,NS

M : Manual Integration



PERCENT SOLID

Supervisor: Iwona
Analyst: JIGNESH
Date: 9/18/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:10
In Date: 09/17/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:37
Out Date: 09/18/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB137212

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
Q3123-01	TP-2	1	1.14	10.76	11.9	10.88	90.5	
Q3124-01	WEST-SIDE	2	1.19	10.48	11.67	10.63	90.1	
Q3124-03	NORTH-SIDE	3	1.12	11.10	12.22	10.6	85.4	
Q3126-01	OK-01-091725	4	1.15	10.74	11.89	11.5	96.4	
Q3126-02	OK-01-091725-E2	5	1.12	10.74	11.86	11.22	94.0	

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

JB 137212

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-091725 WorkList ID : 191920 Department : Wet-Chemistry Date : 09-17-2025 10:33:47

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3123-01	TP-2	Solid	Percent Solids	Cool 4 deg C	CAMP02	J31	09/16/2025	Chemtech -SO
Q3124-01	WEST-SIDE	Solid	Percent Solids	Cool 4 deg C	ATGG02	D31	09/16/2025	Chemtech -SO
Q3124-03	NORTH-SIDE	Solid	Percent Solids	Cool 4 deg C	ATGG02	D31	09/16/2025	Chemtech -SO
Q3126-01	OK-01-091725	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	09/17/2025	Chemtech -SO
Q3126-02	OK-01-091725-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	09/17/2025	Chemtech -SO

Date/Time 09-17-25 15:10
Raw Sample Received by: JB (CoolC)
Raw Sample Relinquished by: RJ C (E-24-1066)

Date/Time 09-17-25 17:20
Raw Sample Received by: RJ C (E-24-1066)
Raw Sample Relinquished by: JB (CoolC)

SOP ID:	MNJDEP-EPH-8		
Clean Up SOP #:	N/A	Extraction Start Date :	09/22/2025
Matrix :	Solid	Extraction Start Time :	08:35
Weigh By:	EH	Extraction By:	RJ
Balance check:	EH	Extraction End Date :	09/22/2025
Balance ID:	EX-SC-2	Filter By:	RJ
pH Strip Lot#:	N/A	Extraction End Time :	14:25
		Concentration By:	EH
		Supervisor By :	ritesh
Extraction Method:	☐ Separatory Funnel ☐ Continuous Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☒ Soxhlet		

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	100 PPM	PP24918
Surrogate	1.0ML	100 PPM	PP24866
Fractionation Surrogate	1.0ML	100 PPM	PP24915
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	EP2641
Baked Na2SO4	N/A	EP2639
Sand	N/A	E3951
Hexane	N/A	E3971
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5ML Vial Lot#2210443.

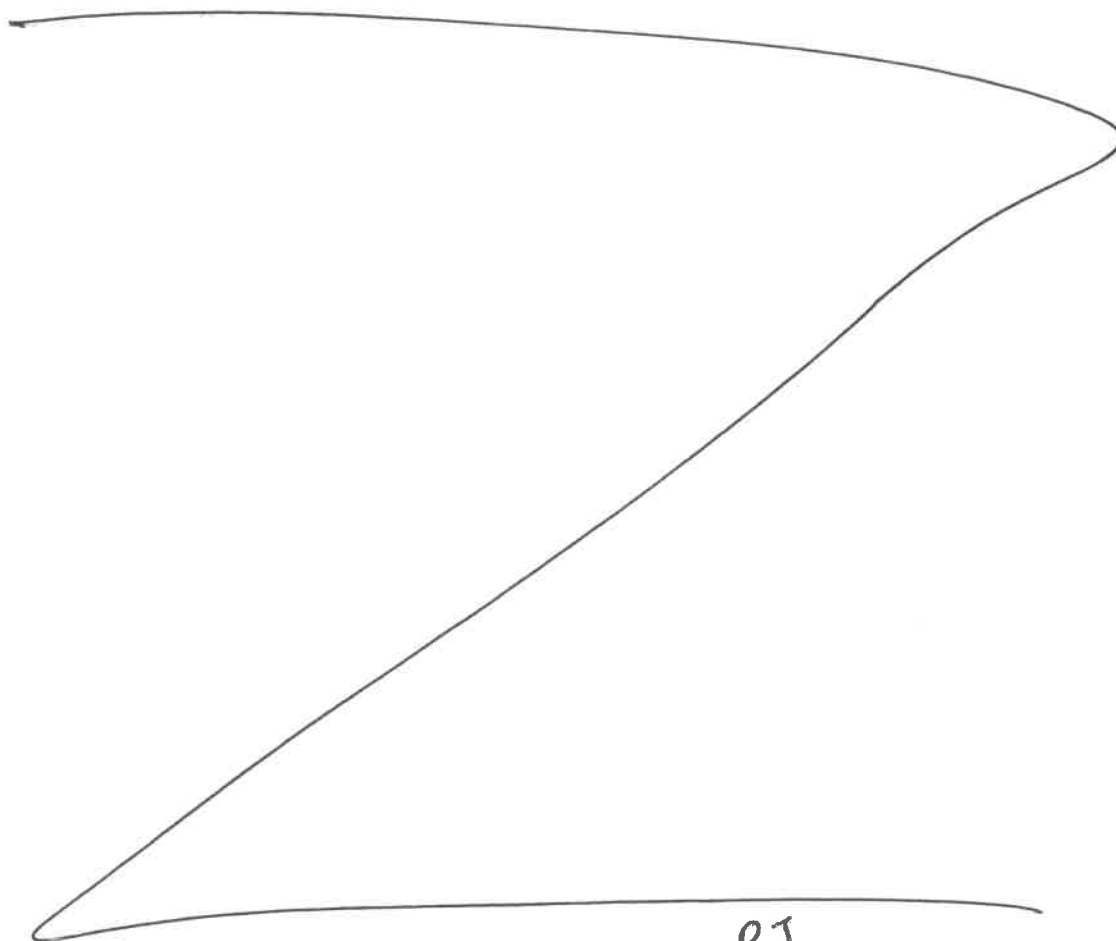
KD Bath ID:	N/A	Envap ID:	NEVAP-02
KD Bath Temperature:	N/A	Envap Temperature:	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
9/22/25	RJ (Ext. Lab)	RJ-Ext. Lab
14:30	Preparation Group	Analysis Group

Analytical Method: MNJDEP-EPH-8

Concentration Date: 09/22/2025

Sample ID	Client Sample ID	Test	gV mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB169768BL	PB169768BL	EPH	30.02	N/A	Evelyn	ritesh	2			U1-1
PB169768BS	PB169768BS	EPH	30.01	N/A	Evelyn	ritesh	2			2
PB169768BSD	PB169768BSD	EPH	30.03	N/A	Evelyn	ritesh	2			3
Q3123-01	TP-2	EPH	30.04	N/A	Evelyn	ritesh	2	A		4
Q3123-01DUP	TP-2DUP	EPH	30.08	N/A	Evelyn	ritesh	2	A		5
Q3123-01MS	TP-2MS	EPH	30.07	N/A	Evelyn	ritesh	2	A		6
Q3123-01MSD	TP-2MSD	EPH	30.02	N/A	Evelyn	ritesh	2	A		U2-1



RJ
9/22

164780
8:35

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q3123EPH WorkList ID : 191980 Department : Extraction Date : 09-22-2025 08:30:04

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3123-01	TP-2	Solid	EPH	Cool 4 deg C	CAMP02	J11	09/16/2025	NJEPH

Date/Time 9/22/25 8:30
Raw Sample Received by: RJ CLK 106
Raw Sample Relinquished by: ASU

Date/Time 9/22/25 8:45
Raw Sample Received by: ASU
Raw Sample Relinquished by: RJ CLK 106

SOP ID:	MNJDEP-EPH-8		
Clean Up SOP #:	N/A	Extraction Start Date :	09/22/2025
Matrix :	Solid	Extraction Start Time :	10:00
Weigh By:	EH	Extraction By:	RJ
Balance check:	EH	Extraction End Date :	09/22/2025
Balance ID:	EX-SC-2	Filter By:	RJ
pH Strip Lot#:	N/A	Extraction End Time :	14:15
		Concentration By:	EH
		Supervisor By :	ritesh
Extraction Method:	☐ Seperatory Funnel ☐ Continious Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☒ Soxhlet		

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	100 PPM	PP24918
Surrogate	1.0ML	100 PPM	PP24866
Fractionation Surrogate	1.0ML	100 PPM	PP24915
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	EP2641
Baked Na2SO4	N/A	EP2639
Sand	N/A	E3951
Hexane	N/A	E3971
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

N/A

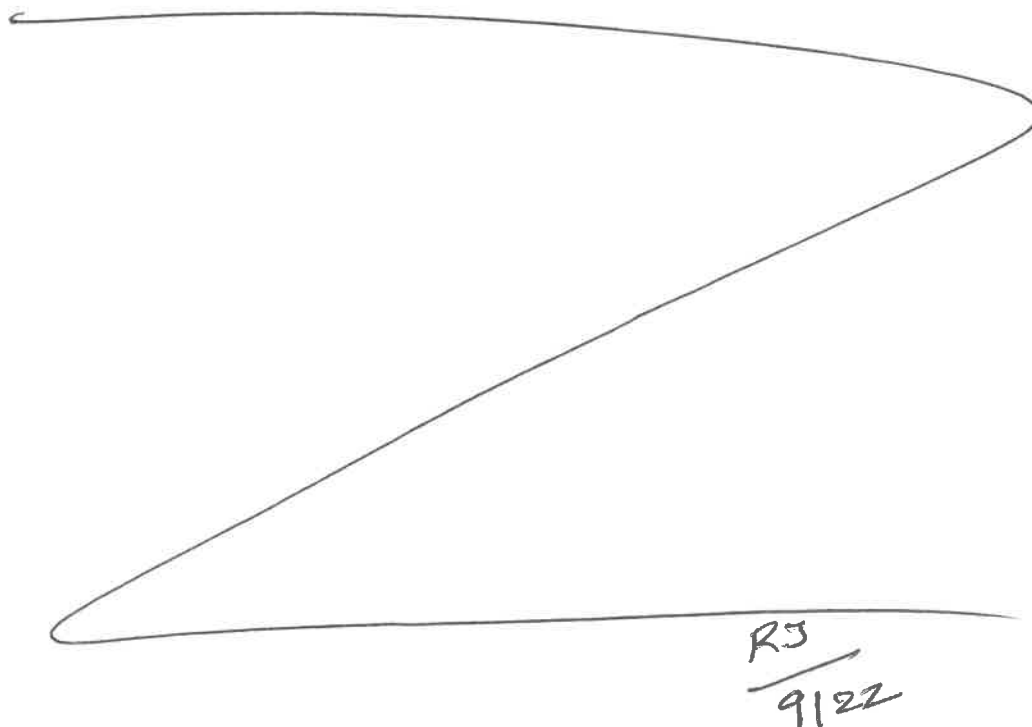
KD Bath ID:	N/A	Envap ID:	NEVAP-02
KD Bath Temperature:	N/A	Envap Temperature:	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
9/22/25	RJ CELL - (Lab)	JR - Pest/PCB Lab
14:20	Preparation Group	Analysis Group

Analytical Method: MNJDEP-EPH-8

Concentration Date: 09/19/2025

Sample ID	Client Sample ID	Test	g/mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB169775BL	PB169775BL	EPH_NF	30.02	N/A	Evelyn	ritesh	2			U6-1
PB169775BS	PB169775BS	EPH_NF	30.03	N/A	Evelyn	ritesh	2			2
PB169775BSD	PB169775BSD	EPH_NF	30.01	N/A	Evelyn	ritesh	2			3
Q3145-01	SP-A	EPH_NF	30.06	N/A	Evelyn	ritesh	2	E		4
Q3145-01DUP	SP-ADUP	EPH_NF	30.09	N/A	Evelyn	ritesh	2	E		5
Q3145-01MS	SP-AMS	EPH_NF	30.07	N/A	Evelyn	ritesh	2	E		6
Q3145-01MSD	SP-AMSD	EPH_NF	30.02	N/A	Evelyn	ritesh	2	E		U2-1
Q3145-02	SP-A-EPH-2	EPH_NF	30.05	N/A	Evelyn	ritesh	2			2
Q3145-03	SP-B	EPH_NF	30.01	N/A	Evelyn	ritesh	2	E		3
Q3145-04	SP-B-EPH-2	EPH_NF	30.04	N/A	Evelyn	ritesh	2			4
Q3152-01	EO-02-091925	EPH_NF	30.03	N/A	Evelyn	ritesh	2	E		5
Q3152-02	EO-02-091925-E2	EPH_NF	30.06	N/A	Evelyn	ritesh	2			6
Q3153-03	OR-500-115	EPH_NF	30.01	N/A	Evelyn	ritesh	2			U1-1
Q3153-07	OR-500-116	EPH_NF	30.08	N/A	Evelyn	ritesh	2			2



164725
09:19:21

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q3152NF WorkList ID : 191987 Department : Extraction Date : 09-22-2025 09:20:12

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3145-01	SP-A	Solid	EPH_NF	Cool 4 deg C	PSEG03	D31	09/19/2025	NJEPH
Q3145-02	SP-A-EPH-2	Solid	EPH_NF	Cool 4 deg C	PSEG03	D31	09/19/2025	NJEPH
Q3145-03	SP-B	Solid	EPH_NF	Cool 4 deg C	PSEG03	D31	09/19/2025	NJEPH
Q3145-04	SP-B-EPH-2	Solid	EPH_NF	Cool 4 deg C	PSEG03	D31	09/19/2025	NJEPH
Q3152-01	EO-02-091925	Solid	EPH_NF	Cool 4 deg C	PSEG05	D31	09/19/2025	NJEPH
Q3152-02	EO-02-091925-E2	Solid	EPH_NF	Cool 4 deg C	PSEG05	D31	09/19/2025	NJEPH
Q3153-03	OR-500-115	Solid	EPH_NF	Cool 4 deg C	PSEG03	D31	09/19/2025	NJEPH
Q3153-07	OR-500-116	Solid	EPH_NF	Cool 4 deg C	PSEG03	D31	09/19/2025	NJEPH

Date/Time 9/22/25 9:55
Raw Sample Received by: RS LFEA-VLB
Raw Sample Relinquished by: JLSH

Date/Time 9/22/25 10:15
Raw Sample Received by: JLSH
Raw Sample Relinquished by: RS LFEA-VLB

Prep Standard - Chemical Standard Summary

Order ID : Q3123

Test : EPH

Prepbatch ID : PB169768,

Sequence ID/Qc Batch ID: FD092225AR,FE092225AL,

Standard ID :

EP2639,EP2641,PP24500,PP24501,PP24502,PP24503,PP24504,PP24505,PP24506,PP24768,PP24769,PP24770,PP
24771,PP24772,PP24773,PP24774,PP24866,PP24915,PP24918,

Chemical ID :

E3875,E3926,E3951,E3956,E3963,E3966,E3971,E3972,E3973,P10758,P11140,P12364,P13280,P13281,P13620,P136
21,P13623,P13624,P13673,P13674,P13690,P13691,P13692,P13693,P13694,P13954,P13955,P14028,P14058,P14059
,P14060,P14061,P14074,P14075,P14076,P14077,P14078,P14079,P14080,P14081,P14082,P14083,P14094,P14095,P
14096,P14097,P14098,P14099,P14100,P14101,P14102,P14103,W3234,



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3923	Baked Sodium Sulfate	EP2639	09/12/2025	01/28/2026	Riteshkumar Patel	Extraction_SC ALE_2 (EX-SC-2)	None	Evelyn Huang 09/12/2025
FROM 4000.00000gram of E3875 = Final Quantity: 4000.000 gram								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2017	1:1 ACETONE/METHYLENE CHLORIDE	EP2641	09/16/2025	03/16/2026	Evelyn Huang	None	None	Riteshkumar Patel 09/16/2025
<u>FROM</u> 8000.00000ml of E3972 + 8000.00000ml of E3973 = Final Quantity: 16000.000 ml								

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
782	100 PPM Aromatic HC Working STD	PP24500	05/01/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza
								05/08/2025

FROM 0.25000ml of P13673 + 0.62500ml of P13954 + 1.25000ml of P10758 + 22.87500ml of E3926 = Final Quantity: 25.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2945	100 PPM Aromatic HC Working STD (Absolute)	PP24501	05/01/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza
								05/08/2025

FROM 0.25000ml of P13674 + 0.62500ml of P13955 + 1.25000ml of P11140 + 22.87500ml of E3926 = Final Quantity: 25.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
787	50 PPM Aromatic HC STD	PP24502	05/01/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza
								05/08/2025

FROM 0.50000ml of E3926 + 0.50000ml of PP24500 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
788	20 PPM Aromatic HC STD	PP24503	05/01/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza
								05/08/2025

FROM 0.80000ml of E3926 + 0.20000ml of PP24500 = Final Quantity: 1.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
789	10 PPM Aromatic HC STD	PP24504	05/01/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza
								05/08/2025

FROM 0.90000ml of E3926 + 0.10000ml of PP24500 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
790	5 PPM Aromatic HC STD	PP24505	05/01/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza
								05/08/2025

FROM 0.90000ml of E3926 + 0.10000ml of PP24502 = Final Quantity: 1.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2946	20 PPM Aromatic HC STD ICV (Absolute)	PP24506	05/01/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza
								05/08/2025

FROM 0.80000ml of E3926 + 0.20000ml of PP24501 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
781	100 PPM Aliphatic HC Working STD (Restek)	PP24768	08/01/2025	02/01/2026	Yogesh Patel	None	None	Abdul Mirza
								08/19/2025

FROM 0.25000ml of P13620 + 0.25000ml of P13690 + 1.25000ml of P12364 + 23.25000ml of E3956 = Final Quantity: 25.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2900	100 PPM Aliphatic HC STD (Absolute)	PP24769	08/01/2025	02/01/2026	Yogesh Patel	None	None	Abdul Mirza 08/19/2025
<u>FROM</u> 0.22000ml of P13690 + 0.25000ml of P13620 + 1.25000ml of P13280 + 1.25000ml of P13281 + 22.00000ml of E3956 = Final Quantity: 25.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
783	50 PPM Aliphatic HC STD	PP24770	08/01/2025	02/01/2026	Yogesh Patel	None	None	Abdul Mirza 08/19/2025
<u>FROM</u> 0.50000ml of W3234 + 0.50000ml of PP24768 = Final Quantity: 1.000 ml								

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
784	20 PPM Aliphatic HC STD	PP24771	08/01/2025	02/01/2026	Yogesh Patel	None	None	Abdul Mirza
								08/19/2025

FROM 0.80000ml of W3234 + 0.20000ml of PP24768 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
785	10 PPM Aliphatic HC STD	PP24772	08/01/2025	02/01/2026	Yogesh Patel	None	None	Abdul Mirza
								08/19/2025

FROM 0.90000ml of W3234 + 0.10000ml of PP24768 = Final Quantity: 1.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
786	5 PPM Aliphatic HC STD	PP24773	08/01/2025	02/01/2026	Yogesh Patel	None	None	Abdul Mirza
								08/19/2025

FROM 0.90000ml of W3234 + 0.10000ml of PP24770 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2901	20 PPM Aliphatic HC STD ICV (Absolute)	PP24774	08/01/2025	02/01/2026	Yogesh Patel	None	None	Abdul Mirza
								08/19/2025

FROM 0.80000ml of W3234 + 0.20000ml of PP24769 = Final Quantity: 1.000 ml



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

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

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



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1330	100 PPM NJEPH Spike Solution	PP24918	09/02/2025	03/02/2026	Abdul Mirza	None	None	Yogesh Patel 09/17/2025
<u>FROM</u> 5.00000ml of P14074 + 5.00000ml of P14075 + 5.00000ml of P14076 + 5.00000ml of P14077 + 5.00000ml of P14078 + 5.00000ml of P14079 + 5.00000ml of P14080 + 5.00000ml of P14081 + 5.00000ml of P14082 + 5.00000ml of P14083 + 5.00000ml of P14094 + 5.00000ml of P14095 + 5.00000ml of P14096 + 5.00000ml of P14097 + 5.00000ml of P14098 + 5.00000ml of P14099 + 5.00000ml of P14100 + 5.00000ml of P14101 + 5.00000ml of P14102 + 5.00000ml of P14103 = Final Quantity: 100.000 ml								

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	417203	01/28/2026	07/28/2025 / RUPESH	01/29/2025 / Rajesh	E3875

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)	25A0262002	10/08/2025	04/08/2025 / Rajesh	02/07/2025 / Rajesh	E3926

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)	25A2756718	12/31/2028	07/09/2025 / RUPESH	04/28/2020 / RUPESH	E3951

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)	25C0362005	04/30/2026	07/16/2025 / RUPESH	07/16/2025 / RUPESH	E3956

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	02/15/2026	08/15/2025 / RUPESH	08/07/2025 / RUPESH	E3963

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)	25C0362005	04/30/2026	08/22/2025 / RUPESH	08/20/2025 / RUPESH	E3966

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	25C0362005	04/30/2026	09/15/2025 / Evelyn	09/04/2025 / Riteshkumar	E3971

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	05/24/2027	09/16/2025 / Evelyn	09/04/2025 / Riteshkumar	E3972

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)	25C1262005	04/16/2026	09/15/2025 / Riteshkumar	09/15/2025 / Riteshkumar	E3973

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30541 / Custom NJEPH Aromatics Calibration Standard	A0172403	11/01/2025	05/01/2025 / yogesh	06/17/2021 / dhaval	P10758

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	11/01/2025	05/01/2025 / yogesh	10/29/2021 / Abdul	P11140

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30540 / Custom NJEPH Aliphatics Calibration Standard	A0190424	02/01/2026	08/01/2025 / yogesh	03/16/2023 / Yogesh	P12364

CHEMICAL RECEIPT LOG BOOK

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	02/01/2026	08/01/2025 / yogesh	04/11/2024 / yogesh	P13280

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	02/01/2026	08/01/2025 / yogesh	04/11/2024 / yogesh	P13281

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0213283	02/01/2026	08/01/2025 / yogesh	10/16/2024 / yogesh	P13620

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0213283	02/21/2026	08/21/2025 / Abdul	10/16/2024 / yogesh	P13621

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0213283	02/21/2026	08/21/2025 / Abdul	10/16/2024 / yogesh	P13623

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0213283	02/21/2026	08/21/2025 / Abdul	10/16/2024 / yogesh	P13624

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	11/01/2025	05/01/2025 / yogesh	10/16/2024 / yogesh	P13673

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	11/01/2025	05/01/2025 / yogesh	10/16/2024 / yogesh	P13674

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	02/01/2026	08/01/2025 / yogesh	10/16/2024 / yogesh	P13690

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	02/21/2026	08/21/2025 / Abdul	10/16/2024 / yogesh	P13691

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	02/21/2026	08/21/2025 / Abdul	10/16/2024 / yogesh	P13692

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	02/21/2026	08/21/2025 / Abdul	10/16/2024 / yogesh	P13693

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	02/21/2026	08/21/2025 / Abdul	10/16/2024 / yogesh	P13694

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0219106	11/01/2025	05/01/2025 / yogesh	03/10/2025 / yogesh	P13954

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0221895	11/01/2025	05/01/2025 / yogesh	03/10/2025 / yogesh	P13955

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0225485	02/21/2026	08/21/2025 / Abdul	06/02/2025 / Rahul	P14028

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0224278	02/28/2026	08/28/2025 / Abdul	06/09/2025 / anahy	P14058

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0221895	02/28/2026	08/28/2025 / Abdul	06/09/2025 / anahy	P14059

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0221895	02/28/2026	08/28/2025 / Abdul	06/09/2025 / anahy	P14060

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0221895	02/28/2026	08/28/2025 / Abdul	06/09/2025 / anahy	P14061

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0225381	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14074

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0225381	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14075

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0225381	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14076

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0225381	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14077

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0225381	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14078

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0225381	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14079

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0225381	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14080

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0225381	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14081

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0225381	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14082

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0225381	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14083

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	A0226411	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14094

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0226411	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14095

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0226411	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14096

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0226411	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14097

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0226411	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14098

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0226411	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14099

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	A0226411	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14100

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0226411	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14101

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0226411	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14102

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0226411	03/02/2026	09/02/2025 / Abdul	07/16/2025 / anahy	P14103

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)	25C0362005	04/30/2026	07/28/2025 / jignesh	07/25/2025 / jignesh	W3234



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

DD
06/17/2021

Catalog No. : 30541 **Lot No.:** A0172403

Description : NJEPH Aromatics Calibration Standard

NJEPH Aromatics Calibration Standard 2,000µg/mL, Methylene Chloride, 1mL/ampul

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

Expiration Date : April 30, 2027 **Storage:** 10°C or colder

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

P10758
TO
P10762
- (S)

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene CAS # 526-73-8 (Lot 8776.10-36) Purity 98%	2,010.0 µg/mL	+/- 11.7957 µg/mL Gravimetric +/- 90.5449 µg/mL Unstressed +/- 100.4678 µg/mL Stressed
2	Naphthalene CAS # 91-20-3 (Lot MKBZ8680V) Purity 99%	2,006.0 µg/mL	+/- 11.7723 µg/mL Gravimetric +/- 90.3656 µg/mL Unstressed +/- 100.2689 µg/mL Stressed
3	2-Methylnaphthalene CAS # 91-57-6 (Lot STBG8884) Purity 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL Gravimetric +/- 90.4557 µg/mL Unstressed +/- 100.3688 µg/mL Stressed
4	Acenaphthylene CAS # 208-96-8 (Lot N19U) Purity 95%	2,002.6 µg/mL	+/- 11.7524 µg/mL Gravimetric +/- 90.2125 µg/mL Unstressed +/- 100.0989 µg/mL Stressed
5	Acenaphthene CAS # 83-32-9 (Lot MKCN0610) Purity 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL Gravimetric +/- 90.0953 µg/mL Unstressed +/- 99.9689 µg/mL Stressed
6	Fluorene CAS # 86-73-7 (Lot 10217947) Purity 99%	2,016.0 µg/mL	+/- 11.8310 µg/mL Gravimetric +/- 90.8161 µg/mL Unstressed +/- 100.7687 µg/mL Stressed
7	Phenanthrene CAS # 85-01-8 (Lot MKCL7390) Purity 99%	2,012.0 µg/mL	+/- 11.8075 µg/mL Gravimetric +/- 90.6359 µg/mL Unstressed +/- 100.5688 µg/mL Stressed

8	Anthracene			2,002.0	µg/mL	+/-	11.7489	µg/mL	Gravimetric
	CAS #	120-12-7	(Lot MKCM0015)			+/-	90.1854	µg/mL	Unstressed
	Purity	99%				+/-	100.0689	µg/mL	Stressed
9	Fluoranthene			2,003.0	µg/mL	+/-	11.7547	µg/mL	Gravimetric
	CAS #	206-44-0	(Lot MKCF7378)			+/-	90.2305	µg/mL	Unstressed
	Purity	99%				+/-	100.1189	µg/mL	Stressed
10	Pyrene			2,011.0	µg/mL	+/-	11.8017	µg/mL	Gravimetric
	CAS #	129-00-0	(Lot BCCB9880)			+/-	90.5909	µg/mL	Unstressed
	Purity	99%				+/-	100.5188	µg/mL	Stressed
11	Benz(a)anthracene			2,011.0	µg/mL	+/-	11.8014	µg/mL	Gravimetric
	CAS #	56-55-3	(Lot P0022018-0505)			+/-	90.5890	µg/mL	Unstressed
	Purity	98%				+/-	100.5168	µg/mL	Stressed
12	Chrysene			2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS #	218-01-9	(Lot STBJ8094)			+/-	90.0953	µg/mL	Unstressed
	Purity	99%				+/-	99.9689	µg/mL	Stressed
13	Benzo(b)fluoranthene			2,006.0	µg/mL	+/-	11.7721	µg/mL	Gravimetric
	CAS #	205-99-2	(Lot 012012B)			+/-	90.3638	µg/mL	Unstressed
	Purity	97%				+/-	100.2669	µg/mL	Stressed
14	Benzo(k)fluoranthene			2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS #	207-08-9	(Lot 012019K)			+/-	90.5458	µg/mL	Unstressed
	Purity	99%				+/-	100.4688	µg/mL	Stressed
15	Benzo(a)pyrene			2,004.0	µg/mL	+/-	11.7606	µg/mL	Gravimetric
	CAS #	50-32-8	(Lot RP210113)			+/-	90.2755	µg/mL	Unstressed
	Purity	99%				+/-	100.1689	µg/mL	Stressed
16	Indeno(1,2,3-cd)pyrene			2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS #	193-39-5	(Lot 1-RAK-33-4)			+/-	90.5458	µg/mL	Unstressed
	Purity	99%				+/-	100.4688	µg/mL	Stressed
17	Dibenz(a,h)anthracene			2,017.0	µg/mL	+/-	11.8369	µg/mL	Gravimetric
	CAS #	53-70-3	(Lot ER032211-01)			+/-	90.8611	µg/mL	Unstressed
	Purity	99%				+/-	100.8187	µg/mL	Stressed
18	Benzo(g,h,i)perylene			2,003.0	µg/mL	+/-	11.7547	µg/mL	Gravimetric
	CAS #	191-24-2	(Lot 8GFYJ)			+/-	90.2305	µg/mL	Unstressed
	Purity	99%				+/-	100.1189	µg/mL	Stressed
Solvent:	Methylene chloride								
	CAS #	75-09-2							
	Purity	99%							

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

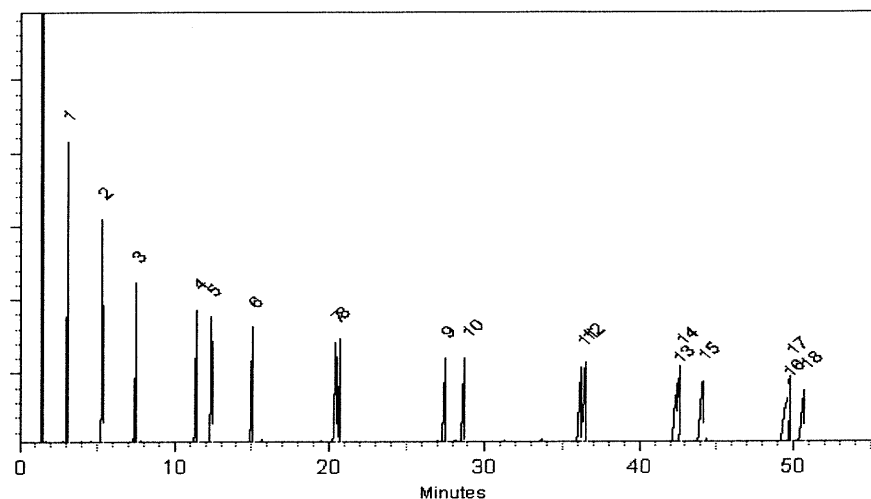
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

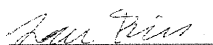
Inj. Temp:
250°C

Det. Temp:
330°C

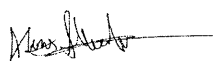
Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Lane Kibe - Mix Technician

Date Mixed: 14-May-2021 **Balance:** B345965662


Alexis Shelow - Operations Tech I

Date Passed: 18-May-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.



**PRODUCTOS
QUÍMICOS
MONTERREY, S.A. DE C.V.**

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MÉXICO
CP 64070
TEL +52 81 13 52 67 67
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na ₂ SO ₄
SPECIFICATION NUMBER:	6399	RELEASE DATE:	MAY/23/2024
LOT NUMBER :	417203		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.8 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.2
Insoluble matter	Max. 0.01%	0.001 %
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%	0.001 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.001 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreign matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.2 %
Retained on US Standard No. 60 sieve	Min. 94%	96.2 %
Through US Standard No. 60 sieve	Max. 5%	3.5 %
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.

RE-02-01, Ed. 3

E 3875

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor



Material No.: 9266-A4
Batch No.: 25A0262002
Manufactured Date: 2024-11-21
Expiration Date: 2026-02-20
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	4
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8\%$	99.9%
Color (APHA)	≤ 10	10
Residue after Evaporation	≤ 1.0 ppm	0.8 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02\%$	$< 0.01\%$

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3926

J. Croak

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



Material	BDH9274-2.5KG
Material Description	BDH SAND STDD OTTAWA W+I 2.5KG
Grade	NOT APPLICABLE
Batch	25A2756718
Reassay Date	12/31/2028
CAS Number	14808-60-7
Molecular Formula	SiO ₂
Molecular Mass	60.09
Date of Manufacture	12/05/2024
Storage	Room Temperature

Characteristics	Specifications	Measured Values
Appearance	Beige granules.	Beige granules.
Moisture	<= 0.1 %	0.1 %
Particle Size 30-40 mesh	>= 80 %	99 %
CUSTOMER PART # BDH9274-2.5KG		

Received on 1/12/25.

E3951

Internal ID #: 793

Signature	Additional Information
We certify that this batch conforms to the specifications listed above. This document has been electronically produced and is valid without a signature. Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA	Analysis may have been rounded to significant digits in specification limits Product meets analytical specifications of the grades listed.

n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis

 **avantors**[™]



Material No.: 9262-03

Batch No.: 25C0362005

Manufactured Date: 2025-01-29

Expiration Date: 2026-04-30

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	6
ECD-Sensitive Impurities (as EthyleneDibromide) - Single Impurity Peak (ng/mL)	≤ 5	5
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	$\geq 99.5 \%$	100.0 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	100 %
Color (APHA)	≤ 10	10
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	$\leq 0.05 \%$	$< 0.01 \%$

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

Received on 7/16/25

E3956



Jamie Croak
Director Quality Operations, Bioscience Production

Acetone.
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

Avantor™



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) ₂ CO) (by GC, corrected for water)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (μeq/g)	<= 0.3	0.2
Titration Base (μeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	<0.1 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

Received on 8/6/25

E 3963

J. Croak

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



Material No.: 9262-03
Batch No.: 25C0362005
Manufactured Date: 2025-01-29
Expiration Date: 2026-04-30
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	6
ECD-Sensitive Impurities (as EthyleneDibromide) - Single Impurity Peak (ng/mL)	≤ 5	5
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	$\geq 99.5\%$	100.0 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95\%$	100 %
Color (APHA)	≤ 10	10
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	$\leq 0.05\%$	$< 0.01\%$

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3966

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



Material No.: 9262-03
Batch No.: 25C0362005
Manufactured Date: 2025-01-29
Expiration Date: 2026-04-30
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	6
ECD-Sensitive Impurities (as EthyleneDibromide) - Single Impurity Peak (ng/mL)	≤ 5	5
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	$\geq 99.5 \%$	100.0 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	100 %
Color (APHA)	≤ 10	10
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	$\leq 0.05 \%$	$< 0.01 \%$

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E3971

Jamie Croak
Director Quality Operations, Bioscience Production

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (μeq/g)	<= 0.3	0.2
Titration Base (μeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E3972

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

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantortm



Material No.: 9266-A4

Batch No.: 25C1262005

Manufactured Date: 2025-01-15

Expiration Date: 2026-04-16

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	1
Assay (CH ₂ Cl ₂) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8\%$	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Titration Acid (μ eq/g)	≤ 0.3	<0.1
Chloride (Cl)	≤ 10 ppm	<5 ppm
Water (by KF, coulometric)	$\leq 0.02\%$	<0.01 %

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3973

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



CERTIFIED WEIGHT REPORT

Part Number: 95709
Lot Number: 060420
Description: NJ EPH Aromatic Hydrocarbons
18 components
Expiration Date: 060425
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 23060
Weight(s) shown below were combined and diluted to (mL): 500.0
Balance Uncertainty: 5E-05
Flask Uncertainty: 0.058

Solvent(s): Methylene chloride
Lot# 104923

Formulated By:	Benson Chan	060420
Reviewed By:	Pedro L. Renteria	060420
		DATE

Compound	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (±) (µg/mL)	CAS#	SDS Information (Solvent Safety Info. On Attached pg.)	LD50
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1. Acenaphthene	1	MKB14871V	2000	99	0.2	1.01003	1.01010	2000.1	8.1	83-32-9	N/A	ip-tral 600mg/kg
2. Acenaphthylene	3	012014	2000	98	0.2	1.02033	1.02053	2000.4	8.2	208-96-6	N/A	N/A
3. Anthracene	13	A0210580	2000	99	0.2	1.01003	1.01009	2000.1	8.1	120-12-7	0.2mg/m3 (8h)	ip-trus 430mg/kg
4. Benz(a)anthracene	28	JY2TD-JT	2000	98	0.2	1.02033	1.02051	2000.3	8.2	56-55-3	N/A	N/A
5. Benz(a)pyrene	30	012012	2000	99.5	0.2	1.00495	1.00511	2000.3	8.1	50-32-8	0.2mg/m3 (8h)	scu-tral 50mg/kg
6. Benz(b)fluoranthene	31	012012b	2000	99	0.2	1.01003	1.01012	2000.2	8.1	205-99-2	N/A	N/A
7. Benz(k)fluoranthene	33	012012k	2000	99	0.2	1.01003	1.01018	2000.3	8.1	207-08-9	N/A	N/A
8. Benz(g,h,i)perylene	32	012018	2000	99	0.2	1.01003	1.01019	2000.3	8.1	191-24-2	N/A	N/A
9. Chrysene	91	012015	2000	98	0.2	1.02033	1.02040	2000.1	8.2	218-01-9	0.2mg/m3	N/A
10. Dibenzo(a,h)anthracene	112	012011	2000	98	0.2	1.02033	1.02050	2000.3	8.2	53-70-3	0.2mg/m3	N/A
11. Fluoranthene	183	04221PV	2000	98	0.2	1.02033	1.02050	2000.3	8.2	206-44-0	N/A	of-tral 2000mg/kg
12. Fluorene	184	07211MV	2000	98	0.2	1.02033	1.02047	2000.3	8.2	86-73-7	N/A	ip-trus 2 g/kg
13. Indeno(1,2,3-cd)pyrene	202	012014	2000	99.9	0.2	1.00093	1.00119	2000.5	8.0	193-39-5	N/A	N/A
14. 2-Methylnaphthalene	214	MKB13783V	2000	97	0.2	1.03085	1.03090	2000.1	8.3	91-57-6	N/A	of-tral 1630mg/kg
15. Naphthalene	222	MKB28690V	2000	100	0.2	0.99993	0.99999	2000.1	8.0	91-20-3	10 ppm (50mg/m3/8h)	of-tral 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	of-trus 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	of-tral 2700mg/kg
18. 1,2,3-trimethylbenzene	944	031097	2000	99	0.2	1.01003	1.01025	2000.4	8.1	526-73-8	N/A	N/A

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certified (±) 0.5% of the stated value, unless otherwise stated.
* All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.F., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

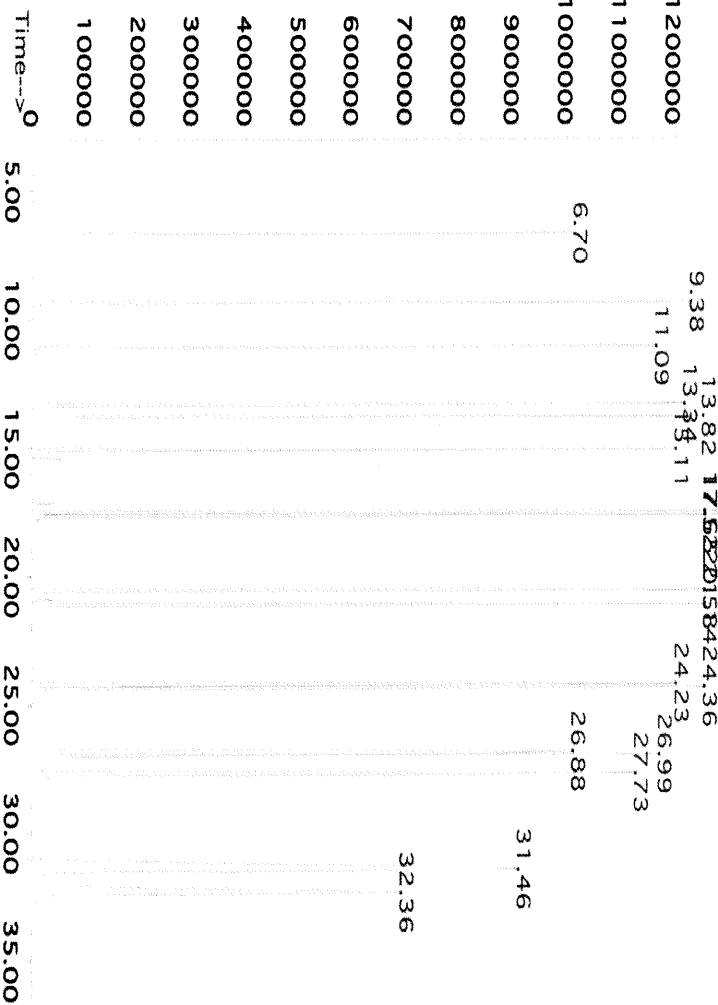
P11137
P11141
11/10/21



Method GC8MSD-2.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (14min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Melissa Stonier.

Abundance

TIC: 95709.D



Peak No.	Name	MSD RT (min.)
1	1,2,3-Trimethylbenzene	6.70
2	Naphthalene	9.38
3	2-Methylnaphthalene	11.09
4	Acenaphthylene	13.34
5	Acenaphthene	13.82
6	Fluorene	15.11
7	Phenanthrene	17.52
8	Anthracene	17.65
9	Fluoranthene	20.58
10	Pyrene	21.14
11	Chrysene	24.23
12	Benzo(a)anthracene	24.36
13	Benzo(b)fluoranthene/Benzo(k)fluoranthene	26.98
14	Benzo(a)pyrene	27.73
15	Indeno(1,2,3-cd)pyrene/Dibenzo(a,h)anthracene	31.46
16	Benzo(g,h,i)perylene	32.36



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30540 **Lot No.:** A0190424

Description : NJEPH Aliphatics Calibration Standard

Aliphatics Calibration Standard 2000µg/mL, Hexane/Carbon Disulfide (80:20), 1mL/ampul

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

Expiration Date : November 30, 2029 **Storage:** 25°C nominal

Handling: Sonicate prior to use. **Ship:** Ambient

P12361
↓
P12370 } Y.P.
031/6/23

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Nonane (C9) CAS # 111-84-2 Purity 99% (Lot SHBN5361)	2,014.0 µg/mL	+/- 11.8193 +/- 50.0027 +/- 59.9491	µg/mL Gravimetric Unstressed Stressed
2	n-Decane (C10) CAS # 124-18-5 Purity 99% (Lot SHBN8619)	2,014.7 µg/mL	+/- 11.8232 +/- 50.0193 +/- 59.9689	µg/mL Gravimetric Unstressed Stressed
3	Naphthalene CAS # 91-20-3 Purity 99% (Lot MKCH0219)	2,015.3 µg/mL	+/- 11.8271 +/- 50.0358 +/- 59.9888	µg/mL Gravimetric Unstressed Stressed
4	n-Dodecane (C12) CAS # 112-40-3 Purity 99% (Lot SHBN7174)	2,008.0 µg/mL	+/- 11.7841 +/- 49.8538 +/- 59.7705	µg/mL Gravimetric Unstressed Stressed
5	2-Methylnaphthalene CAS # 91-57-6 Purity 96% (Lot STBK0259)	2,007.0 µg/mL	+/- 11.7784 +/- 49.8299 +/- 59.7419	µg/mL Gravimetric Unstressed Stressed
6	n-Tetradecane (C14) CAS # 629-59-4 Purity 99% (Lot STBK2282)	2,016.7 µg/mL	+/- 11.8349 +/- 50.0689 +/- 60.0284	µg/mL Gravimetric Unstressed Stressed
7	n-Hexadecane (C16) CAS # 544-76-3 Purity 98% (Lot SHBM4146)	2,014.9 µg/mL	+/- 11.8244 +/- 50.0246 +/- 59.9753	µg/mL Gravimetric Unstressed Stressed

8	n-Octadecane (C18) CAS # 593-45-3 Purity 97%	(Lot VZKOJ)	2,004.7 µg/mL	+/-	11.7645	µg/mL	Gravimetric
				+/-	49.7710	µg/mL	Unstressed
				+/-	59.6712	µg/mL	Stressed
9	n-Eicosane (C20) CAS # 112-95-8 Purity 99%	(Lot MKCF7888)	2,018.0 µg/mL	+/-	11.8428	µg/mL	Gravimetric
				+/-	50.1020	µg/mL	Unstressed
				+/-	60.0681	µg/mL	Stressed
10	n-Heneicosane (C21) CAS # 629-94-7 Purity 99%	(Lot MKCL3226)	2,000.7 µg/mL	+/-	11.7410	µg/mL	Gravimetric
				+/-	49.6717	µg/mL	Unstressed
				+/-	59.5522	µg/mL	Stressed
11	n-Docosane (C22) CAS # 629-97-0 Purity 99%	(Lot MKCL8918)	2,005.3 µg/mL	+/-	11.7684	µg/mL	Gravimetric
				+/-	49.7876	µg/mL	Unstressed
				+/-	59.6911	µg/mL	Stressed
12	n-Tetracosane (C24) CAS # 646-31-1 Purity 99%	(Lot MKCN2863)	2,018.0 µg/mL	+/-	11.8428	µg/mL	Gravimetric
				+/-	50.1020	µg/mL	Unstressed
				+/-	60.0681	µg/mL	Stressed
13	n-Hexacosane (C26) CAS # 630-01-3 Purity 99%	(Lot MKCD4540)	2,014.0 µg/mL	+/-	11.8193	µg/mL	Gravimetric
				+/-	50.0027	µg/mL	Unstressed
				+/-	59.9491	µg/mL	Stressed
14	n-Octacosane (C28) CAS # 630-02-4 Purity 99%	(Lot BCCG0084)	2,002.0 µg/mL	+/-	11.7489	µg/mL	Gravimetric
				+/-	49.7048	µg/mL	Unstressed
				+/-	59.5919	µg/mL	Stressed
15	n-Triacontane (C30) CAS # 638-68-6 Purity 97%	(Lot MKCQ9436)	2,011.1 µg/mL	+/-	11.8025	µg/mL	Gravimetric
				+/-	49.9316	µg/mL	Unstressed
				+/-	59.8637	µg/mL	Stressed
16	n-Dotriacontane (C32) CAS # 544-85-4 Purity 99%	(Lot BCBW0661)	2,012.0 µg/mL	+/-	11.8075	µg/mL	Gravimetric
				+/-	49.9531	µg/mL	Unstressed
				+/-	59.8895	µg/mL	Stressed
17	n-Tetratriacontane (C34) CAS # 14167-59-0 Purity 99%	(Lot OML4N)	2,006.7 µg/mL	+/-	11.7762	µg/mL	Gravimetric
				+/-	49.8207	µg/mL	Unstressed
				+/-	59.7308	µg/mL	Stressed
18	n-Hexatriacontane (C36) CAS # 630-06-8 Purity 99%	(Lot Z27H018)	2,017.3 µg/mL	+/-	11.8388	µg/mL	Gravimetric
				+/-	50.0855	µg/mL	Unstressed
				+/-	60.0483	µg/mL	Stressed
19	n-Octatriacontane (C38) CAS # 7194-85-6 Purity 96%	(Lot 0000145137)	2,017.3 µg/mL	+/-	11.8385	µg/mL	Gravimetric
				+/-	50.0842	µg/mL	Unstressed
				+/-	60.0467	µg/mL	Stressed
20	n-Tetracontane (C40) CAS # 4181-95-7 Purity 99%	(Lot BSBME)	2,008.7 µg/mL	+/-	11.7880	µg/mL	Gravimetric
				+/-	49.8703	µg/mL	Unstressed
				+/-	59.7903	µg/mL	Stressed
Solvent: Hexane/Carbon disulfide (80:20)							
	CAS # 110-54-3/75-15-0						
	Purity 99%						

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

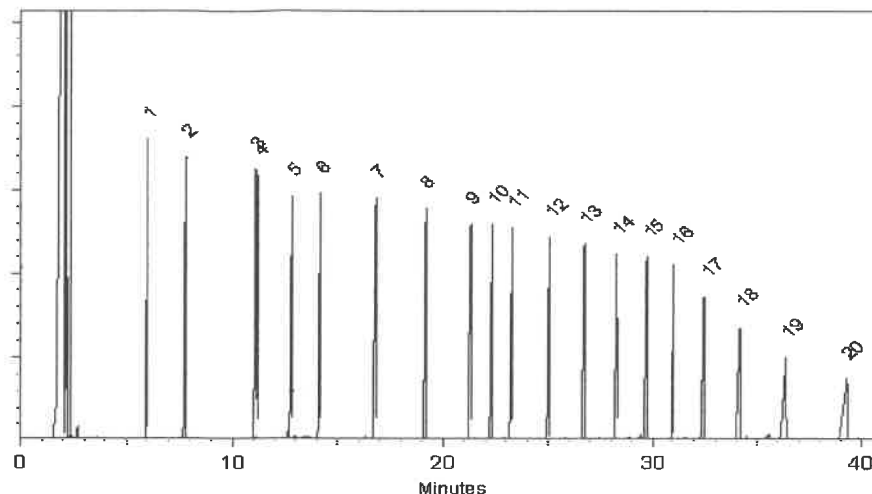
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Morgan Craighead - Mix Technician

Date Mixed: 10-Oct-2022 Balance: 1128360905


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 20-Oct-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

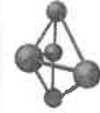
- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.



CERTIFIED WEIGHT REPORT

Part Number: 95999

Lot Number: 040524

Description: NJ EPH Aliphatic n-Hydrocarbons - Revised
20 components

Expiration Date: 040534

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 1000

NIST Test ID#: 6UTB

Weight(s) shown below were combined and diluted to (mL):

CAUTION: Sonicate Before Use

Solvent(s):
Cyclohexane

Lot#
28930

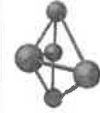
P13278
2
P13287
Y.P.
04/11/24

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By:	Anthony Mahoney	040524	DATE
Reviewed By:	Pedro L. Rentas	040524	DATE

Compound		Part Number	(RM#)	Lot Number	DIL Factor	Initial Vol. (mL)	Initial Conc (µg/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity 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	NA	1000	97	0.2	NA	0.02579	0.02594	1005.7	5.7	91-57-6	N/A	or-rat 1630mg/kg
2.	Naphthalene	(0222)	MKB28680V	NA	NA	NA	NA	1000	100	0.2	NA	0.02502	0.02511	1003.7	5.7	91-20-3	10 ppm (50mg/m ³ 8H)	or-rat 490mg/kg
3.	n-Nonane	95708	120222	1.00	25.00	1000.7	1000	1000	NA	0.013	NA	NA	NA	1000.0	4.2	111-84-2	200 ppm (1050mg/m ³ 8H)	ivn-mus 218mg/kg
4.	n-Decane	95708	120222	1.00	25.00	1000.9	1000	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	NA	NA	1000.3	4.1	583-45-3	N/A	N/A
9.	n-Eicosane	95708	120222	1.00	25.00	1001.0	1000	1000	NA	0.013	NA	NA	NA	1000.3	4.2	112-95-8	N/A	N/A
10.	n-Henicosane	95708	120222	1.00	25.00	1002.4	1000	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	NA	NA	999.8	4.3	544-85-4	N/A	ivn-mus 100mg/kg
17.	n-Tetracontane	95708	120222	1.00	25.00	1000.4	1000	1000	NA	0.013	NA	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	1000	NA	0.013	NA	NA	NA	1000.8	4.2	630-08-8	N/A	N/A
19.	n-Octatriacontane	95708	120222	1.00	25.00	1000.3	1000	1000	NA	0.013	NA	NA	NA	999.6	4.3	7184-86-6	N/A	N/A
20.	n-Tetracontane	95708	120222	1.00	25.00	1000.6	1000	1000	NA	0.013	NA	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).



CERTIFIED WEIGHT REPORT

Part Number: 95999

Lot Number: 040524

Description: NJ EPH Aliphatic n-Hydrocarbons - Revised
20 components

Expiration Date: 040534

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 1000

NIST Test ID#: 6UTB

Weight(s) shown below were combined and diluted to (mL):

CAUTION: Sonicate Before Use

Solvent(s):
Cyclohexane

Lot#
28930

P13278
2
P13287
Y.P.
04/11/24

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By:	Anthony Mahoney	040524	DATE
Reviewed By:	Pedro L. Rentas	040524	DATE

Compound		Part Number	(RM#)	Lot Number	DIL Factor	Initial Vol. (mL)	Initial Conc (µg/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity 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	NA	1000	97	0.2	NA	0.02579	0.02594	1005.7	5.7	91-57-6	N/A	or-rat 1630mg/kg
2.	Naphthalene	(0222)	MKB28680V	NA	NA	NA	NA	1000	100	0.2	NA	0.02502	0.02511	1003.7	5.7	91-20-3	10 ppm (50mg/m ³ /8H)	or-rat 490mg/kg
3.	n-Nonane	95708	120222	1.00	25.00	1000.7	1000	1000	NA	0.013	NA	NA	NA	1000.0	4.2	111-84-2	200 ppm (1050mg/m ³ /8H)	ivn-mus 218mg/kg
4.	n-Decane	95708	120222	1.00	25.00	1000.9	1000	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	NA	NA	1000.3	4.1	583-45-3	N/A	N/A
9.	n-Eicosane	95708	120222	1.00	25.00	1001.0	1000	1000	NA	0.013	NA	NA	NA	1000.3	4.2	112-95-8	N/A	N/A
10.	n-Henicosane	95708	120222	1.00	25.00	1002.4	1000	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	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	1000	NA	0.013	NA	NA	NA	999.8	4.3	544-85-4	N/A	ivn-mus 100mg/kg
17.	n-Tetracontane	95708	120222	1.00	25.00	1000.4	1000	1000	NA	0.013	NA	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	1000	NA	0.013	NA	NA	NA	1000.8	4.2	630-08-8	N/A	N/A
19.	n-Octatriacontane	95708	120222	1.00	25.00	1000.3	1000	1000	NA	0.013	NA	NA	NA	999.6	4.3	7184-86-6	N/A	N/A
20.	n-Tetracontane	95708	120222	1.00	25.00	1000.6	1000	1000	NA	0.013	NA	NA	NA	999.9	4.3	4181-95-7	N/A	N/A

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* Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
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* 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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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31098 **Lot No.:** 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-S (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:

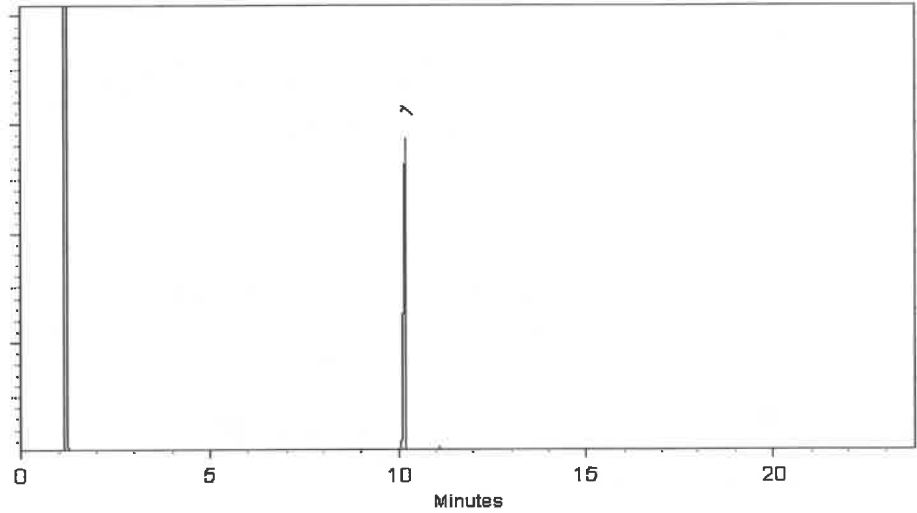
FID

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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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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-S (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

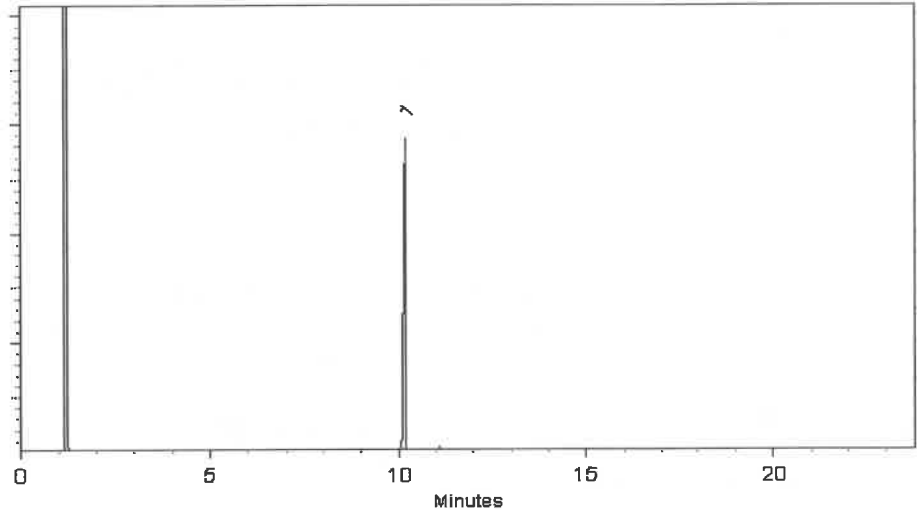
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Stacey Wanner - Operations Technician I

Date Mixed: 28-Jun-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- 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:

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$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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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-S (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

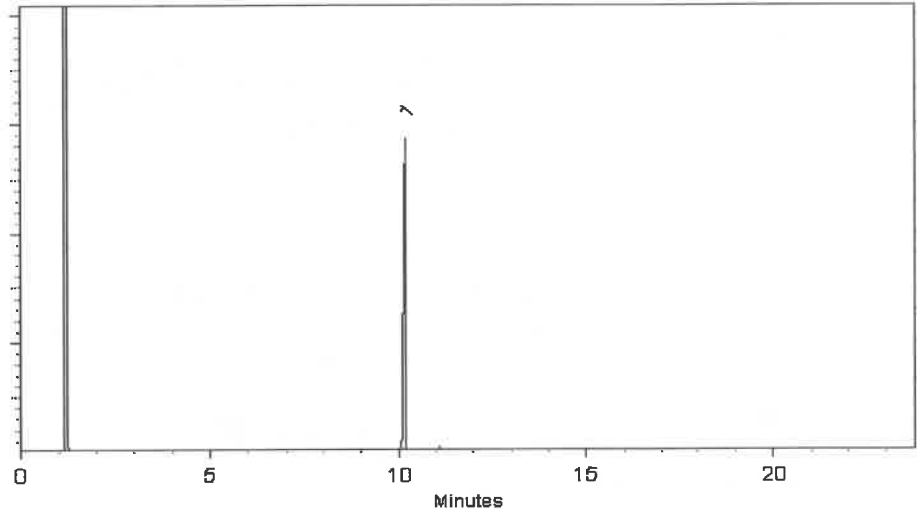
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Stacey Wanner - Operations Technician I

Date Mixed: 28-Jun-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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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:

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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-S (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

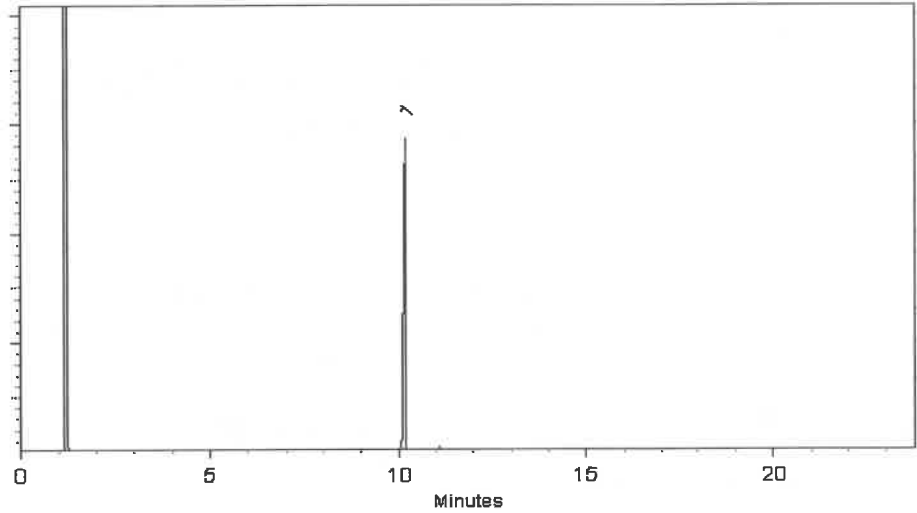
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Stacey Wanner - Operations Technician I

Date Mixed: 28-Jun-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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

General Certified Reference Material Notes

Expiration Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

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Handling Notes:

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Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31097 **Lot No.:** A0216631
Description : o-Terphenyl Standard
o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2028 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

P13645 } Y.P.
↓
P13694 } 10/16/24

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:

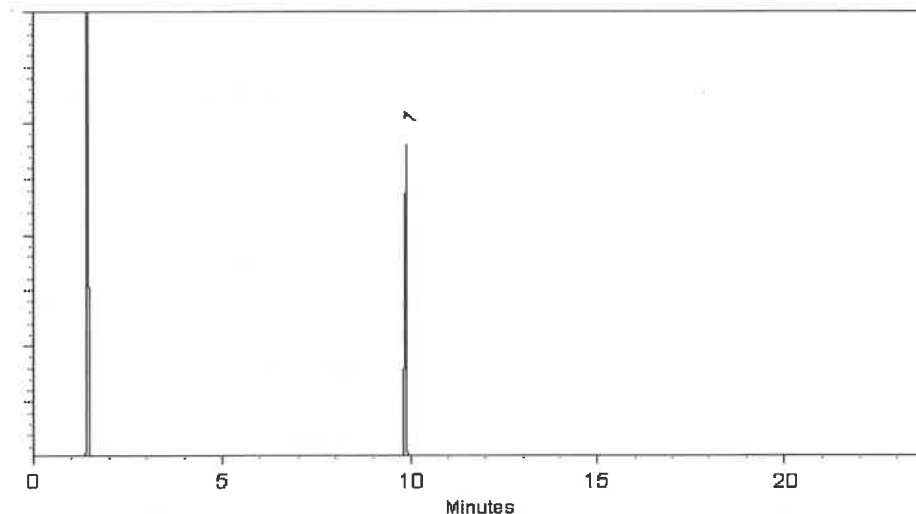
FID

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/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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Handling: Sonicate prior to use. **Ship:** Ambient

P13645 } Y.P.
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P13694 } 10/16/24

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

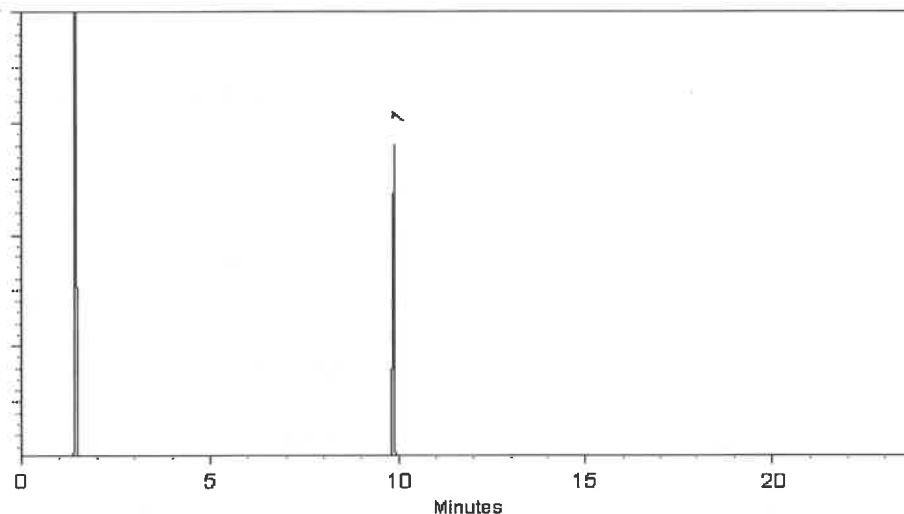
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Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

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P13694 } 10/16/24

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

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Inj. Temp:

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Det. Temp:

330°C

Det. Type:

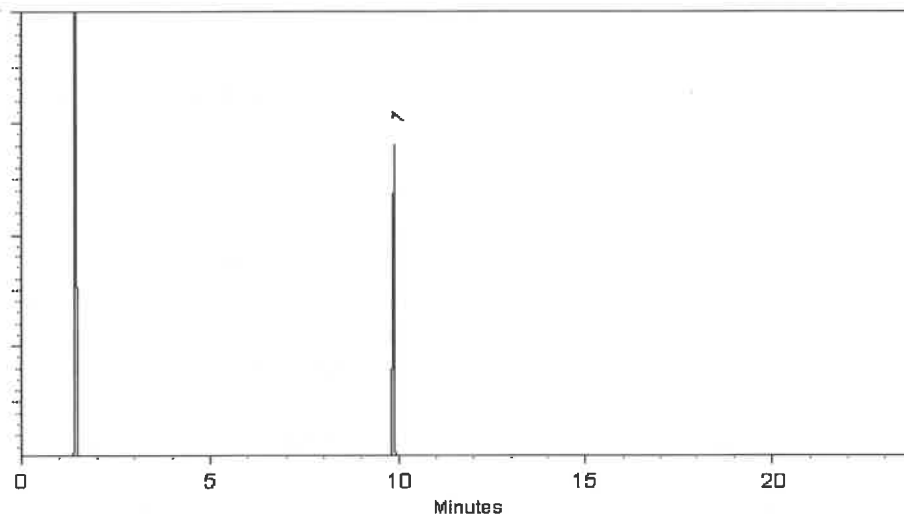
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Split Vent:

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Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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Registered Quality System
Certificate #FM 80397

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

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Det. Type:

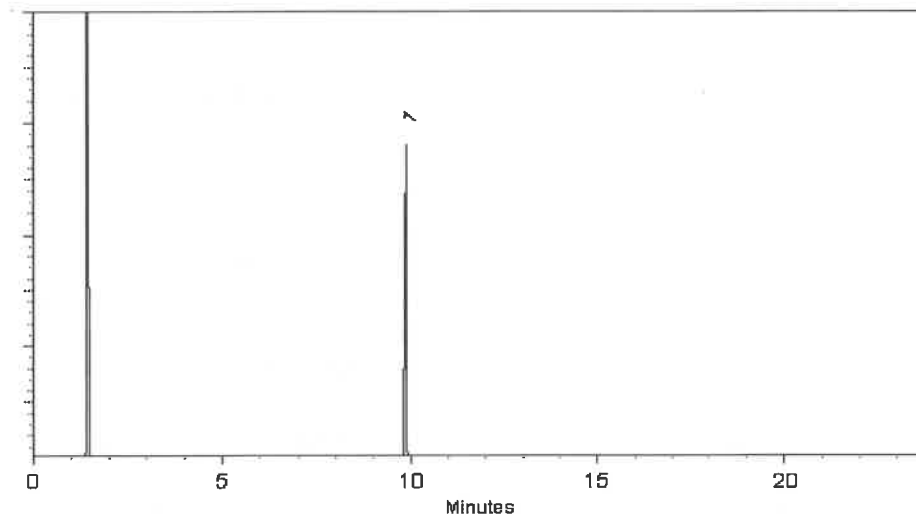
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Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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P13694 } 10/16/24

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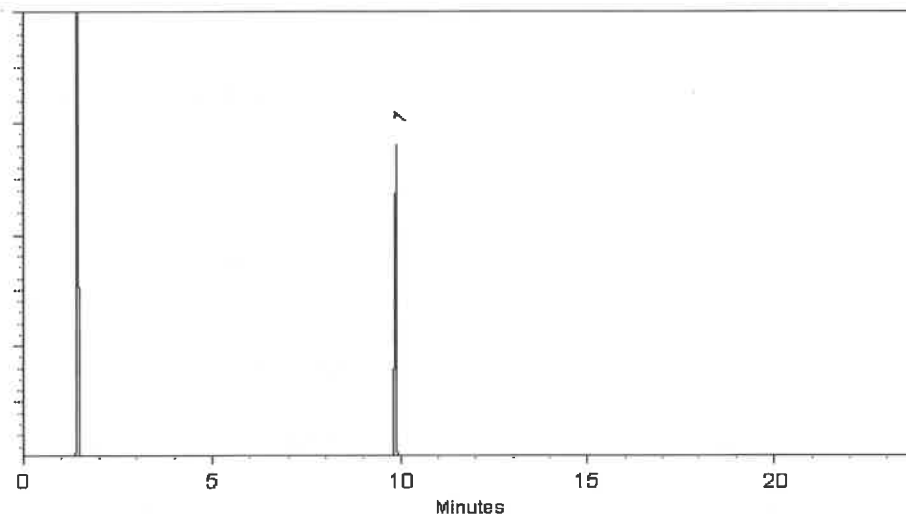
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Split Vent:

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

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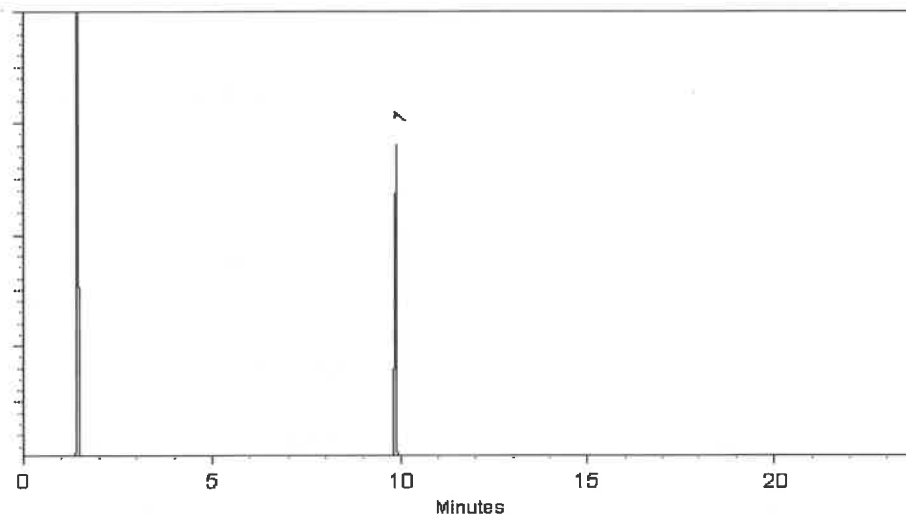
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CERTIFIED VALUES

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:

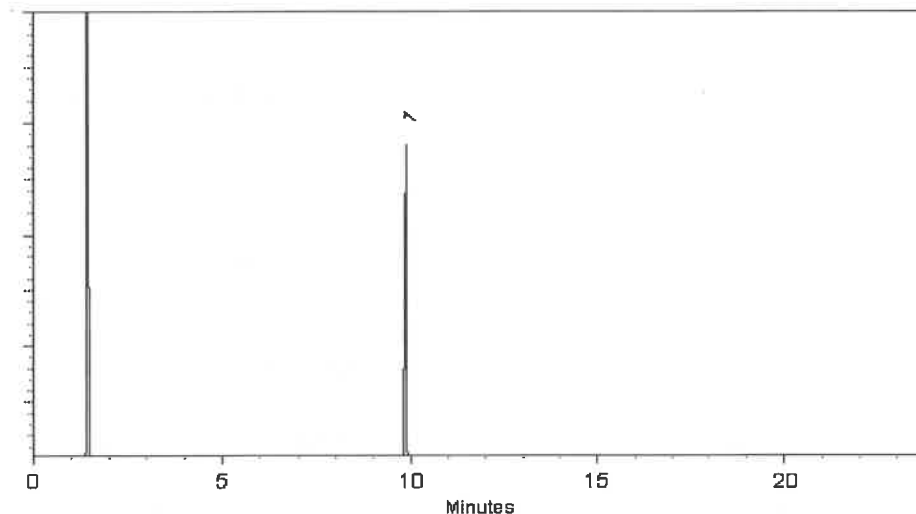
FID

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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31480 **Lot No.:** A0219106
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 : October 31, 2030 **Storage:** 10°C or colder
Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13947
L
P13954

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%	4,013.5 µg/mL	+/- 180.7988
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,011.0 µg/mL	+/- 180.6862

* 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-S (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

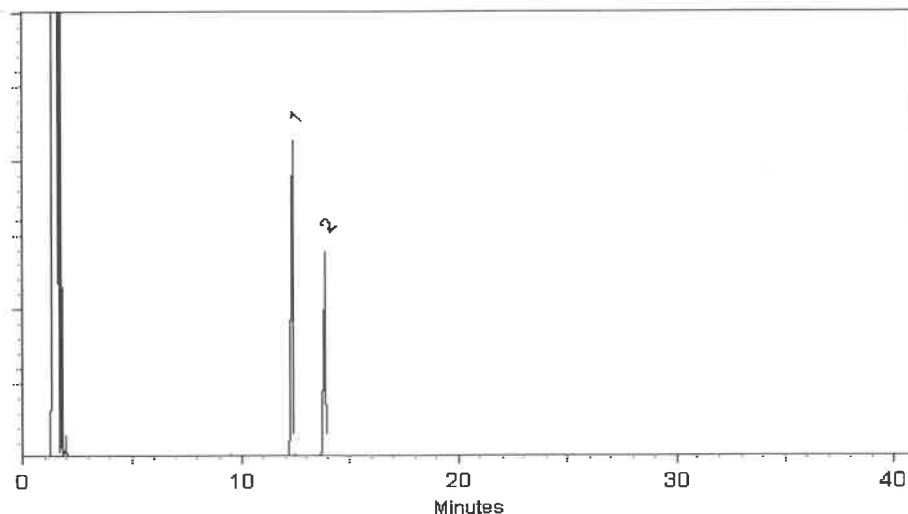
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Wilner Torres
Wilner Torres - Operation Tech I

Date Mixed: 14-Nov-2024

Balance Serial # 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 20-Nov-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31480 **Lot No.:** A0221895
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 : January 31, 2031 **Storage:** 10°C or colder
Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P1395
↓
P13966.

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%	4,032.5 µg/mL	+/- 181.6547
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,033.0 µg/mL	+/- 181.6772

* 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:

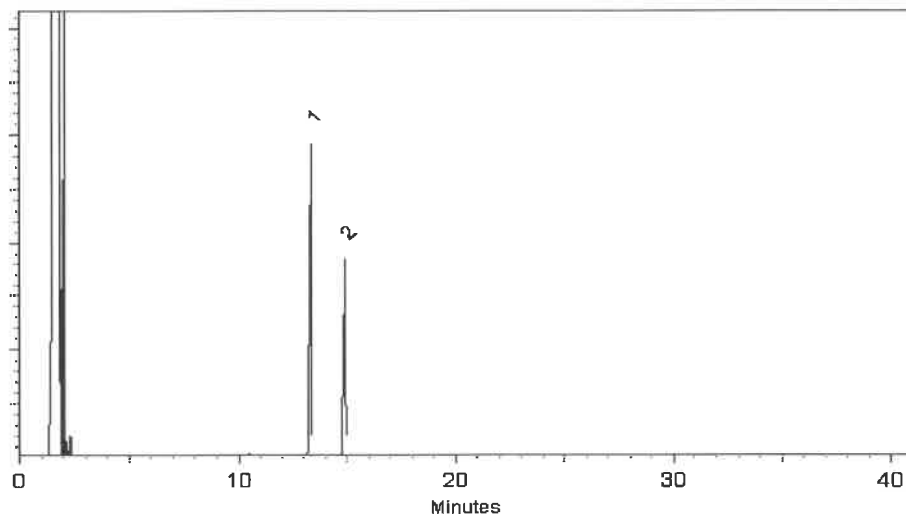
FID

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.

Ven Kelley - Operations Tech I

Date Mixed: 04-Feb-2025

Balance Serial # 1128360905

Dillan Murphy - Operations Technician I

Date Passed: 12-Feb-2025

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31098 **Lot No.:** A0225485

Description : 1-Chlorooctadecane Standard

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

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

Expiration Date : June 30, 2032 **Storage:** 10°C or colder

Ship: Ambient

P14028
↓
P14042 } RC/
6/2/25

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	15711200	99%	10,006.8 µg/mL	+/- 562.1814

* 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:

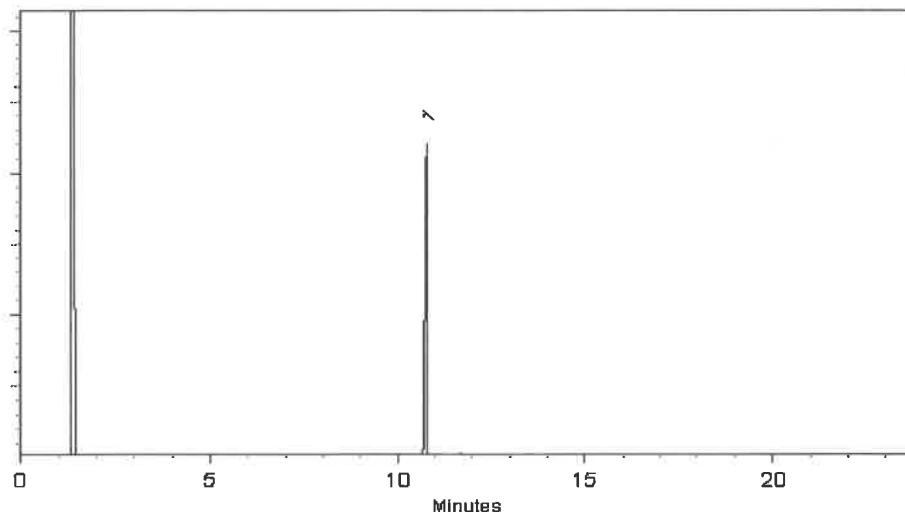
FID

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.

Sam Moodler

Sam Moodler - Operations Tech I

Date Mixed: 08-May-2025

Balance Serial # 1128360905

Brittany Federinko

Brittany Federinko - Operations Tech II

Date Passed: 13-May-2025

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



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Catalog No. : 31480 **Lot No.:** A0224278

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, 2031 **Storage:** 10°C or colder

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

P14043 } AC
↓
P14058 } 6/10/25

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%	4,018.5 µg/mL	+/- 181.0240
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,019.5 µg/mL	+/- 181.0691

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%



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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.:** A0221895
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 : January 31, 2031 **Storage:** 10°C or colder
Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P14059
↓
P14062 } AC
6/10/25

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%	4,032.5 µg/mL	+/- 181.6547
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,033.0 µg/mL	+/- 181.6772

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%



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Catalog No. : 31480 **Lot No.:** A0221895
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 : January 31, 2031 **Storage:** 10°C or colder
Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P14059
↓
P14062 } AC
6/10/25

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%	4,032.5 µg/mL	+/- 181.6547
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,033.0 µg/mL	+/- 181.6772

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%



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Catalog No. : 31480 **Lot No.:** A0221895

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 : January 31, 2031 **Storage:** 10°C or colder

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

P14059
↓
P14062 } AC
6/10/25

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%	4,032.5 µg/mL	+/- 181.6547
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,033.0 µg/mL	+/- 181.6772

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%



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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.:** A0225381

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2031 **Storage:** 10°C or colder

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

P14074 } AC
↓
P14083 } 7/16/25.

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	8776.10-39	98%	200.3 µg/mL	+/- 9.0255
2	Naphthalene	91-20-3	STBL1057	99%	200.4 µg/mL	+/- 9.0294
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V16F	97%	200.2 µg/mL	+/- 9.0208
5	Acenaphthene	83-32-9	MKCV8166	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10246250	98%	200.3 µg/mL	+/- 9.0255
7	Phenanthrene	85-01-8	MKCV8193	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	101492T18R	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	A0458721	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.8 µg/mL	+/- 9.0474
11	Benz(a)anthracene	56-55-3	I70012022BAA	99%	200.4 µg/mL	+/- 9.0294
12	Chrysene	218-01-9	RP250121RSR	99%	200.0 µg/mL	+/- 9.0114
13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.4 µg/mL	+/- 9.0294
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

17	Dibenz(a,h)anthracene	53-70-3	712061504-1-1	99%	200.4 µg/mL	+/- 9.0294
18	Benzo(g,h,i)perylene	191-24-2	RP250219RSR	99%	200.0 µg/mL	+/- 9.0114

* 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.)

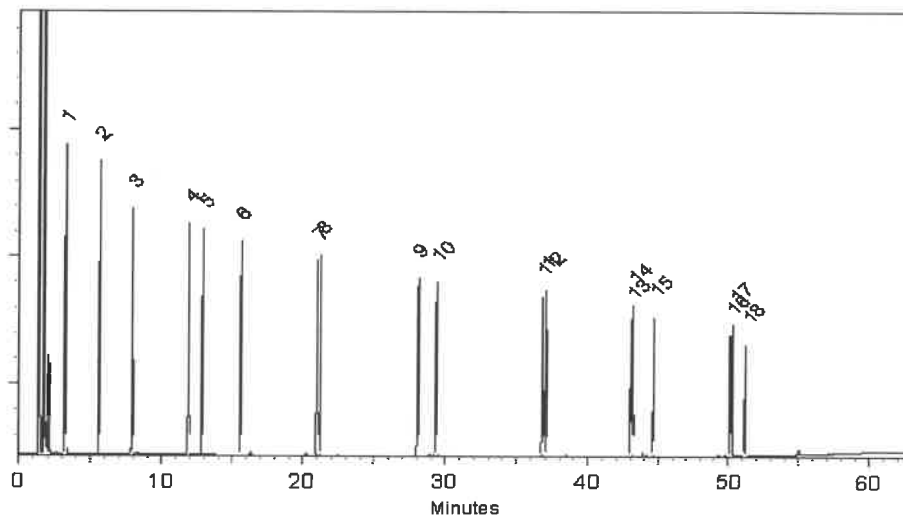
Inj. Temp:
250°C

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.

Richard Zimmerman
Richard Zimmerman - Operations Tech I

Date Mixed: 06-May-2025 **Balance Serial #** 1128353505

Brittany Federinko
Brittany Federinko - Operations Tech II

Date Passed: 09-May-2025

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



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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.:** A0225381

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2031 **Storage:** 10°C or colder

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

P14074 } AC
↓
P14083 } 7/16/25.

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	8776.10-39	98%	200.3 µg/mL	+/- 9.0255
2	Naphthalene	91-20-3	STBL1057	99%	200.4 µg/mL	+/- 9.0294
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V16F	97%	200.2 µg/mL	+/- 9.0208
5	Acenaphthene	83-32-9	MKCV8166	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10246250	98%	200.3 µg/mL	+/- 9.0255
7	Phenanthrene	85-01-8	MKCV8193	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	101492T18R	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	A0458721	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.8 µg/mL	+/- 9.0474
11	Benz(a)anthracene	56-55-3	I70012022BAA	99%	200.4 µg/mL	+/- 9.0294
12	Chrysene	218-01-9	RP250121RSR	99%	200.0 µg/mL	+/- 9.0114
13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.4 µg/mL	+/- 9.0294
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

17	Dibenz(a,h)anthracene	53-70-3	712061504-1-1	99%	200.4 µg/mL	+/- 9.0294
18	Benzo(g,h,i)perylene	191-24-2	RP250219RSR	99%	200.0 µg/mL	+/- 9.0114

* 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.)

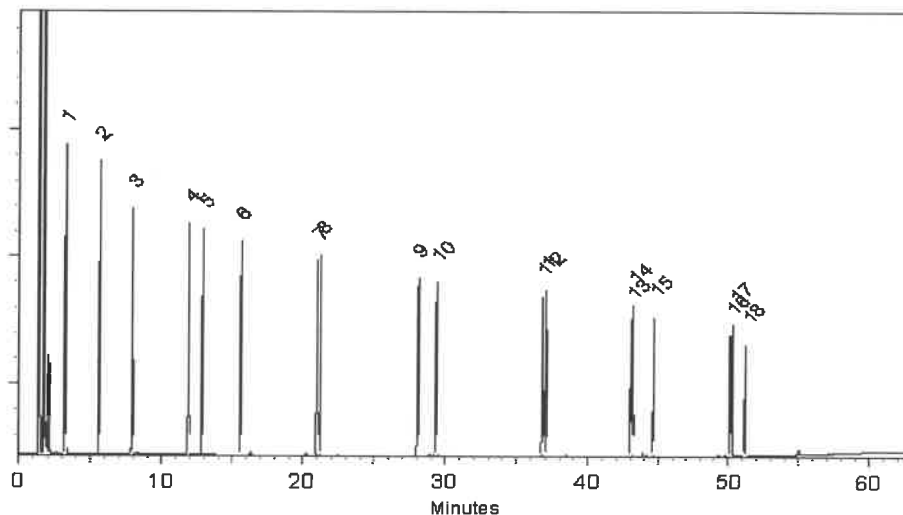
Inj. Temp:
250°C

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.

Richard Zimmerman
Richard Zimmerman - Operations Tech I

Date Mixed: 06-May-2025 **Balance Serial #** 1128353505

Brittany Federinko
Brittany Federinko - Operations Tech II

Date Passed: 09-May-2025

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



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0225381

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2031 **Storage:** 10°C or colder

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

P14074 } AC
↓
P14083 } 7/16/25.

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	8776.10-39	98%	200.3 µg/mL	+/- 9.0255
2	Naphthalene	91-20-3	STBL1057	99%	200.4 µg/mL	+/- 9.0294
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V16F	97%	200.2 µg/mL	+/- 9.0208
5	Acenaphthene	83-32-9	MKCV8166	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10246250	98%	200.3 µg/mL	+/- 9.0255
7	Phenanthrene	85-01-8	MKCV8193	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	101492T18R	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	A0458721	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.8 µg/mL	+/- 9.0474
11	Benz(a)anthracene	56-55-3	I70012022BAA	99%	200.4 µg/mL	+/- 9.0294
12	Chrysene	218-01-9	RP250121RSR	99%	200.0 µg/mL	+/- 9.0114
13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.4 µg/mL	+/- 9.0294
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

17	Dibenz(a,h)anthracene	53-70-3	712061504-1-1	99%	200.4 µg/mL	+/- 9.0294
18	Benzo(g,h,i)perylene	191-24-2	RP250219RSR	99%	200.0 µg/mL	+/- 9.0114

* 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.)

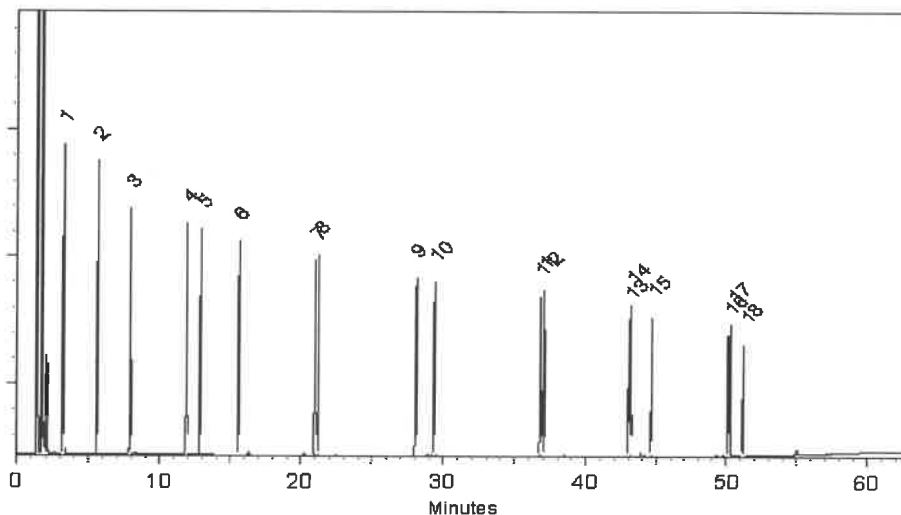
Inj. Temp:
250°C

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.

Richard Zimmerman
Richard Zimmerman - Operations Tech I

Date Mixed: 06-May-2025 **Balance Serial #** 1128353505

Brittany Federinko
Brittany Federinko - Operations Tech II

Date Passed: 09-May-2025

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



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0225381

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2031 **Storage:** 10°C or colder

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

P14074 } AC
↓
P14083 } 7/16/25.

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	8776.10-39	98%	200.3 µg/mL	+/- 9.0255
2	Naphthalene	91-20-3	STBL1057	99%	200.4 µg/mL	+/- 9.0294
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V16F	97%	200.2 µg/mL	+/- 9.0208
5	Acenaphthene	83-32-9	MKCV8166	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10246250	98%	200.3 µg/mL	+/- 9.0255
7	Phenanthrene	85-01-8	MKCV8193	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	101492T18R	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	A0458721	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.8 µg/mL	+/- 9.0474
11	Benz(a)anthracene	56-55-3	I70012022BAA	99%	200.4 µg/mL	+/- 9.0294
12	Chrysene	218-01-9	RP250121RSR	99%	200.0 µg/mL	+/- 9.0114
13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.4 µg/mL	+/- 9.0294
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

17	Dibenz(a,h)anthracene	53-70-3	712061504-1-1	99%	200.4 µg/mL	+/- 9.0294
18	Benzo(g,h,i)perylene	191-24-2	RP250219RSR	99%	200.0 µg/mL	+/- 9.0114

* 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.)

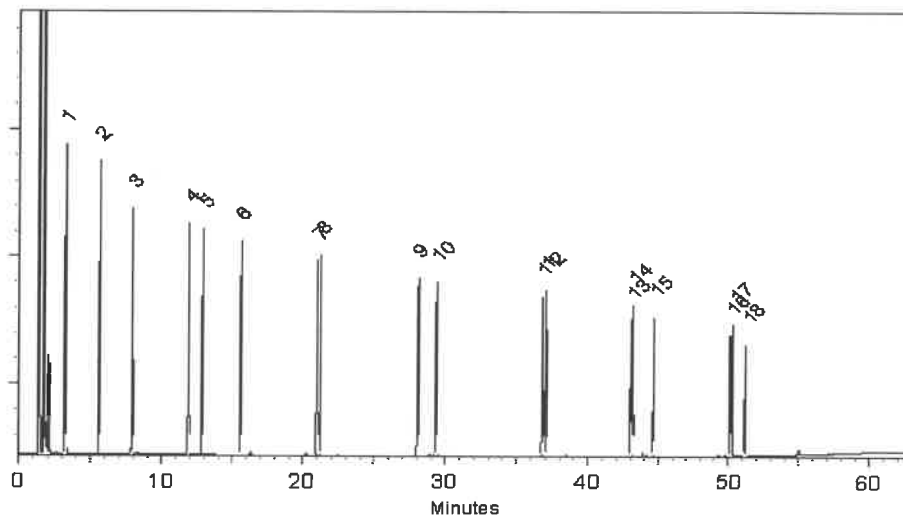
Inj. Temp:
250°C

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.

Richard Zimmerman
Richard Zimmerman - Operations Tech I

Date Mixed: 06-May-2025 **Balance Serial #** 1128353505

Brittany Federinko
Brittany Federinko - Operations Tech II

Date Passed: 09-May-2025

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



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0225381

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2031 **Storage:** 10°C or colder

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

P14074 } AC
↓
P14083 } 7/16/25.

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	8776.10-39	98%	200.3 µg/mL	+/- 9.0255
2	Naphthalene	91-20-3	STBL1057	99%	200.4 µg/mL	+/- 9.0294
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V16F	97%	200.2 µg/mL	+/- 9.0208
5	Acenaphthene	83-32-9	MKCV8166	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10246250	98%	200.3 µg/mL	+/- 9.0255
7	Phenanthrene	85-01-8	MKCV8193	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	101492T18R	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	A0458721	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.8 µg/mL	+/- 9.0474
11	Benz(a)anthracene	56-55-3	I70012022BAA	99%	200.4 µg/mL	+/- 9.0294
12	Chrysene	218-01-9	RP250121RSR	99%	200.0 µg/mL	+/- 9.0114
13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.4 µg/mL	+/- 9.0294
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

17	Dibenz(a,h)anthracene	53-70-3	712061504-1-1	99%	200.4 µg/mL	+/- 9.0294
18	Benzo(g,h,i)perylene	191-24-2	RP250219RSR	99%	200.0 µg/mL	+/- 9.0114

* 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.)

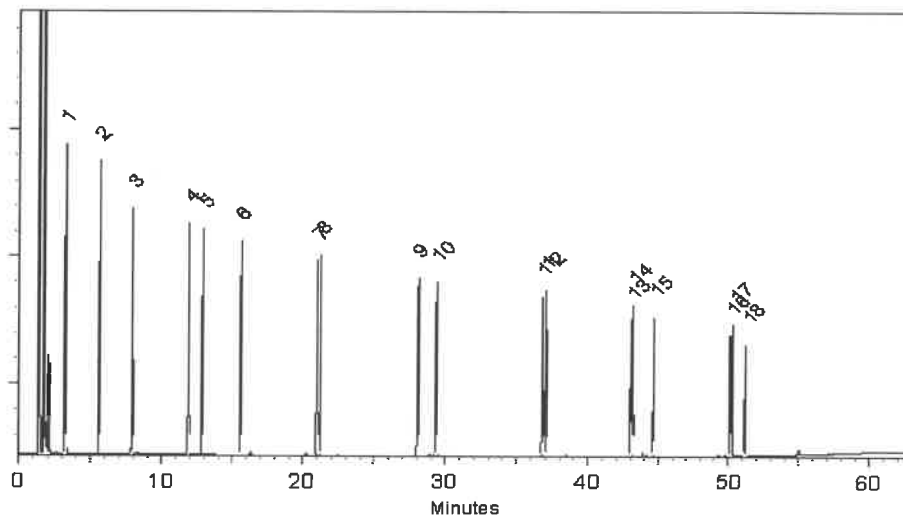
Inj. Temp:
250°C

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.

Richard Zimmerman
Richard Zimmerman - Operations Tech I

Date Mixed: 06-May-2025 **Balance Serial #** 1128353505

Brittany Federinko
Brittany Federinko - Operations Tech II

Date Passed: 09-May-2025

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



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Fax: 1-814-353-1309

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Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 30543 **Lot No.:** A0225381

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2031 **Storage:** 10°C or colder

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

P14074 } AC
↓
P14083 } 7/16/25.

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	8776.10-39	98%	200.3 µg/mL	+/- 9.0255
2	Naphthalene	91-20-3	STBL1057	99%	200.4 µg/mL	+/- 9.0294
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V16F	97%	200.2 µg/mL	+/- 9.0208
5	Acenaphthene	83-32-9	MKCV8166	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10246250	98%	200.3 µg/mL	+/- 9.0255
7	Phenanthrene	85-01-8	MKCV8193	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	101492T18R	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	A0458721	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.8 µg/mL	+/- 9.0474
11	Benz(a)anthracene	56-55-3	I70012022BAA	99%	200.4 µg/mL	+/- 9.0294
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13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.4 µg/mL	+/- 9.0294
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

17	Dibenz(a,h)anthracene	53-70-3	712061504-1-1	99%	200.4 µg/mL	+/- 9.0294
18	Benzo(g,h,i)perylene	191-24-2	RP250219RSR	99%	200.0 µg/mL	+/- 9.0114

* 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.)

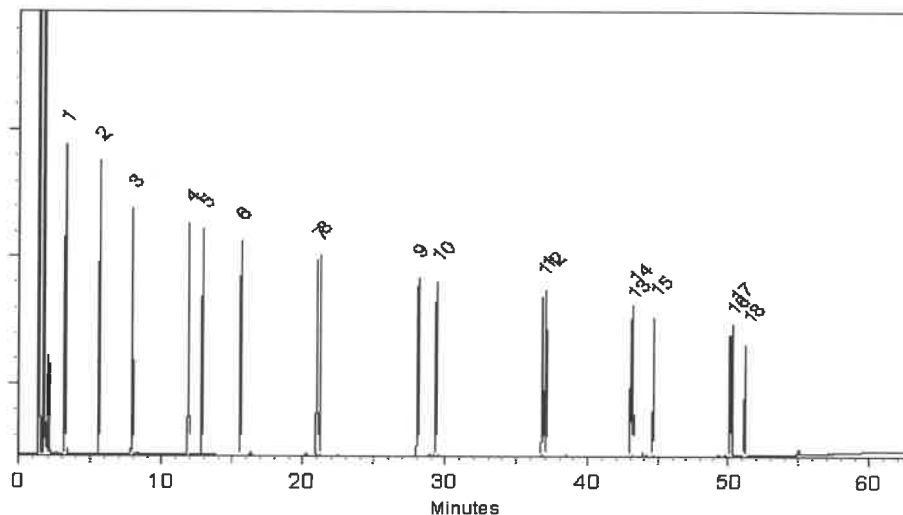
Inj. Temp:
250°C

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.

Richard Zimmerman
Richard Zimmerman - Operations Tech I

Date Mixed: 06-May-2025 **Balance Serial #** 1128353505

Brittany Federinko
Brittany Federinko - Operations Tech II

Date Passed: 09-May-2025

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



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Catalog No. : 30543 **Lot No.:** A0225381

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2031 **Storage:** 10°C or colder

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

P14074 } AC
↓
P14083 } 7/16/25.

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	8776.10-39	98%	200.3 µg/mL	+/- 9.0255
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3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V16F	97%	200.2 µg/mL	+/- 9.0208
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6	Fluorene	86-73-7	10246250	98%	200.3 µg/mL	+/- 9.0255
7	Phenanthrene	85-01-8	MKCV8193	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	101492T18R	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	A0458721	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.8 µg/mL	+/- 9.0474
11	Benz(a)anthracene	56-55-3	I70012022BAA	99%	200.4 µg/mL	+/- 9.0294
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13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.4 µg/mL	+/- 9.0294
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15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

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18	Benzo(g,h,i)perylene	191-24-2	RP250219RSR	99%	200.0 µg/mL	+/- 9.0114

* 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.)

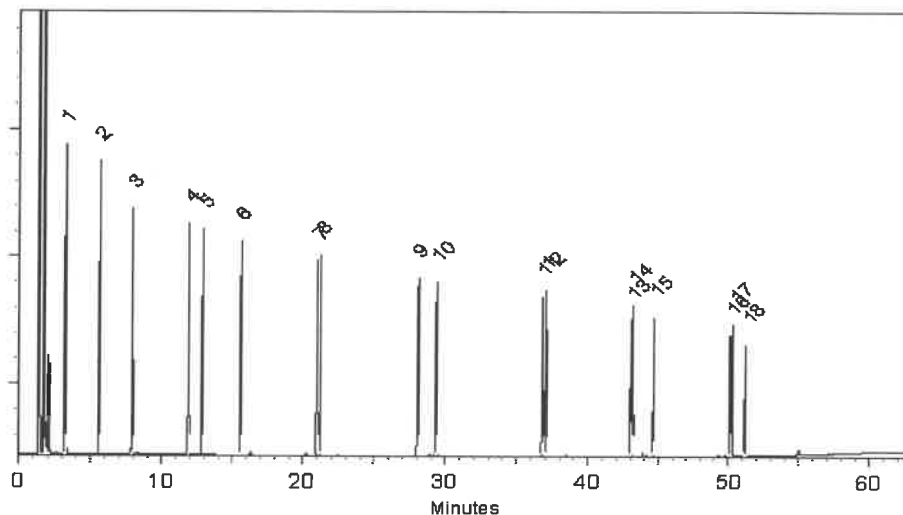
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Richard Zimmerman
Richard Zimmerman - Operations Tech I

Date Mixed: 06-May-2025 **Balance Serial #** 1128353505

Brittany Federinko
Brittany Federinko - Operations Tech II

Date Passed: 09-May-2025

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



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0225381

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2031 **Storage:** 10°C or colder

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

P14074 } AC
↓
P14083 } 7/16/25.

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	8776.10-39	98%	200.3 µg/mL	+/- 9.0255
2	Naphthalene	91-20-3	STBL1057	99%	200.4 µg/mL	+/- 9.0294
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V16F	97%	200.2 µg/mL	+/- 9.0208
5	Acenaphthene	83-32-9	MKCV8166	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10246250	98%	200.3 µg/mL	+/- 9.0255
7	Phenanthrene	85-01-8	MKCV8193	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	101492T18R	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	A0458721	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.8 µg/mL	+/- 9.0474
11	Benz(a)anthracene	56-55-3	I70012022BAA	99%	200.4 µg/mL	+/- 9.0294
12	Chrysene	218-01-9	RP250121RSR	99%	200.0 µg/mL	+/- 9.0114
13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.4 µg/mL	+/- 9.0294
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

17	Dibenz(a,h)anthracene	53-70-3	712061504-1-1	99%	200.4 µg/mL	+/- 9.0294
18	Benzo(g,h,i)perylene	191-24-2	RP250219RSR	99%	200.0 µg/mL	+/- 9.0114

* 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.)

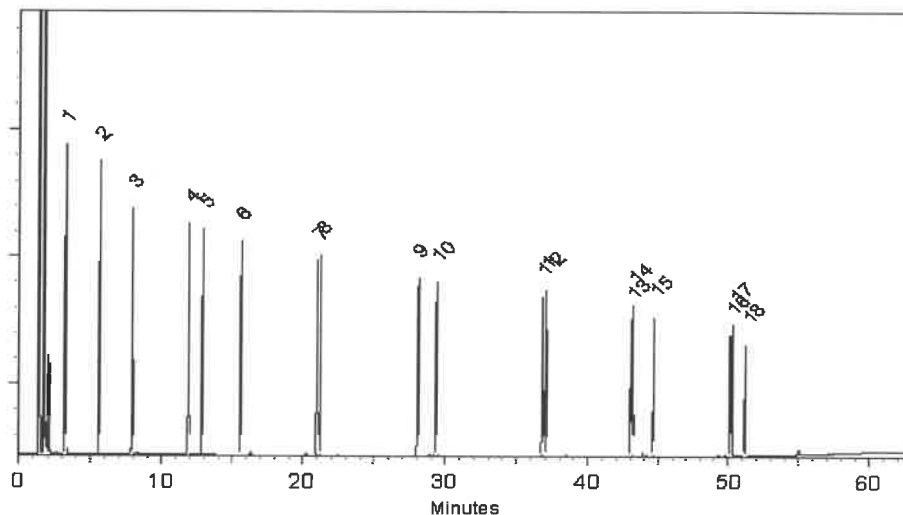
Inj. Temp:
250°C

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.

Richard Zimmerman
Richard Zimmerman - Operations Tech I

Date Mixed: 06-May-2025 **Balance Serial #** 1128353505

Brittany Federinko
Brittany Federinko - Operations Tech II

Date Passed: 09-May-2025

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



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chromatographic plus



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Catalog No. : 30543 **Lot No.:** A0225381

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2031 **Storage:** 10°C or colder

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

P14074 } AC
↓
P14083 } 7/16/25.

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	8776.10-39	98%	200.3 µg/mL	+/- 9.0255
2	Naphthalene	91-20-3	STBL1057	99%	200.4 µg/mL	+/- 9.0294
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V16F	97%	200.2 µg/mL	+/- 9.0208
5	Acenaphthene	83-32-9	MKCV8166	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10246250	98%	200.3 µg/mL	+/- 9.0255
7	Phenanthrene	85-01-8	MKCV8193	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	101492T18R	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	A0458721	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.8 µg/mL	+/- 9.0474
11	Benz(a)anthracene	56-55-3	I70012022BAA	99%	200.4 µg/mL	+/- 9.0294
12	Chrysene	218-01-9	RP250121RSR	99%	200.0 µg/mL	+/- 9.0114
13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.4 µg/mL	+/- 9.0294
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

17	Dibenz(a,h)anthracene	53-70-3	712061504-1-1	99%	200.4 µg/mL	+/- 9.0294
18	Benzo(g,h,i)perylene	191-24-2	RP250219RSR	99%	200.0 µg/mL	+/- 9.0114

* 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.)

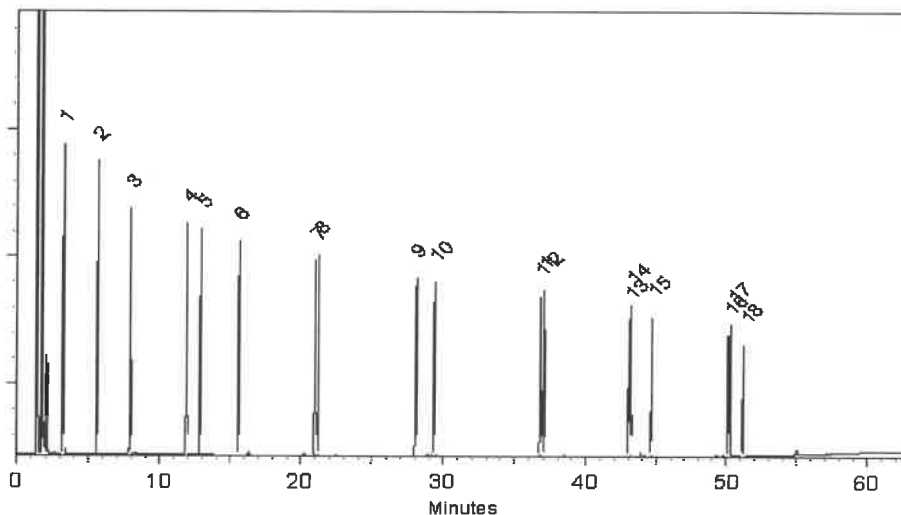
Inj. Temp:
250°C

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.

Richard Zimmerman
Richard Zimmerman - Operations Tech I

Date Mixed: 06-May-2025 **Balance Serial #** 1128353505

Brittany Federinko
Brittany Federinko - Operations Tech II

Date Passed: 09-May-2025

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Catalog No. : 30543 **Lot No.:** A0225381

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2031 **Storage:** 10°C or colder

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

P14074 } AC
↓
P14083 } 7/16/25.

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	8776.10-39	98%	200.3 µg/mL	+/- 9.0255
2	Naphthalene	91-20-3	STBL1057	99%	200.4 µg/mL	+/- 9.0294
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V16F	97%	200.2 µg/mL	+/- 9.0208
5	Acenaphthene	83-32-9	MKCV8166	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10246250	98%	200.3 µg/mL	+/- 9.0255
7	Phenanthrene	85-01-8	MKCV8193	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	101492T18R	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	A0458721	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.8 µg/mL	+/- 9.0474
11	Benz(a)anthracene	56-55-3	I70012022BAA	99%	200.4 µg/mL	+/- 9.0294
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13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.4 µg/mL	+/- 9.0294
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

17	Dibenz(a,h)anthracene	53-70-3	712061504-1-1	99%	200.4 µg/mL	+/- 9.0294
18	Benzo(g,h,i)perylene	191-24-2	RP250219RSR	99%	200.0 µg/mL	+/- 9.0114

* 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.)

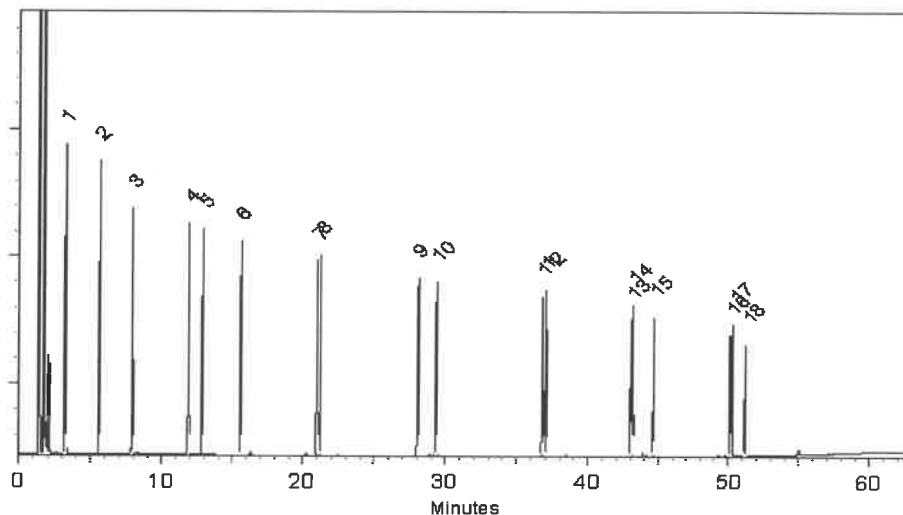
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Richard Zimmerman
Richard Zimmerman - Operations Tech I

Date Mixed: 06-May-2025 **Balance Serial #** 1128353505

Brittany Federinko
Brittany Federinko - Operations Tech II

Date Passed: 09-May-2025

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



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chromatographic plus



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Catalog No. : 30542 **Lot No.:** A0226411

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 : July 31, 2032 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P14094
↓
P14103 } AC
7/16/25

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%	200.3 µg/mL	+/- 5.1753
2	n-Decane (C10)	124-18-5	SHBS1019	99%	200.3 µg/mL	+/- 5.1753
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.0 µg/mL	+/- 5.1667
4	n-Tetradecane (C14)	629-59-4	STBL2522	99%	200.0 µg/mL	+/- 5.1667
5	n-Hexadecane (C16)	544-76-3	SHBR0670	99%	200.0 µg/mL	+/- 5.1667
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.0 µg/mL	+/- 5.1667
7	n-Eicosane (C20)	112-95-8	MKCN8767	99%	200.0 µg/mL	+/- 5.1667
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.3 µg/mL	+/- 5.1753
9	n-Docosane (C22)	629-97-0	MKCQ3729	99%	200.0 µg/mL	+/- 5.1667
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	200.0 µg/mL	+/- 5.1667
11	n-Hexacosane (C26)	630-01-3	MKCV0107	99%	200.0 µg/mL	+/- 5.1667
12	n-Octacosane (C28)	630-02-4	BCCM2091	99%	200.0 µg/mL	+/- 5.1667
13	n-Triacontane (C30)	638-68-6	MKCW9459	99%	200.0 µg/mL	+/- 5.1667
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.0 µg/mL	+/- 5.1667
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.0 µg/mL	+/- 5.1667
16	n-Hexatriacontane (C36)	630-06-8	U30H007	99%	200.0 µg/mL	+/- 5.1667
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	200.0 µg/mL	+/- 5.1667

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

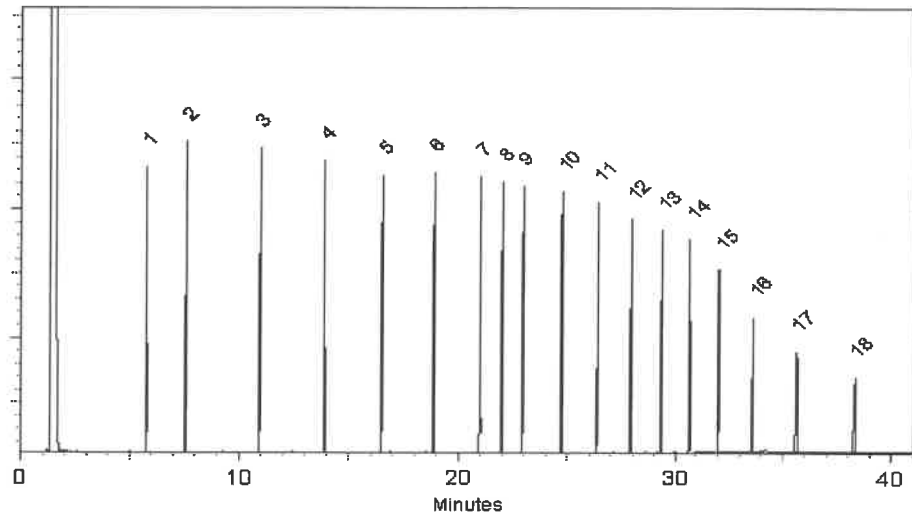
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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A.O.E.
Aaron Enyart - Operations Tech I

Date Mixed: 05-Jun-2025 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-Jun-2025

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Registered Quality System
Certificate #FM 80397



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Catalog No. : 30542 **Lot No.:** A0226411

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 : July 31, 2032 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P14094
↓
P14103 } AC
7/16/25

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%	200.3 µg/mL	+/- 5.1753
2	n-Decane (C10)	124-18-5	SHBS1019	99%	200.3 µg/mL	+/- 5.1753
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.0 µg/mL	+/- 5.1667
4	n-Tetradecane (C14)	629-59-4	STBL2522	99%	200.0 µg/mL	+/- 5.1667
5	n-Hexadecane (C16)	544-76-3	SHBR0670	99%	200.0 µg/mL	+/- 5.1667
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.0 µg/mL	+/- 5.1667
7	n-Eicosane (C20)	112-95-8	MKCN8767	99%	200.0 µg/mL	+/- 5.1667
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.3 µg/mL	+/- 5.1753
9	n-Docosane (C22)	629-97-0	MKCQ3729	99%	200.0 µg/mL	+/- 5.1667
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	200.0 µg/mL	+/- 5.1667
11	n-Hexacosane (C26)	630-01-3	MKCV0107	99%	200.0 µg/mL	+/- 5.1667
12	n-Octacosane (C28)	630-02-4	BCCM2091	99%	200.0 µg/mL	+/- 5.1667
13	n-Triacontane (C30)	638-68-6	MKCW9459	99%	200.0 µg/mL	+/- 5.1667
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.0 µg/mL	+/- 5.1667
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.0 µg/mL	+/- 5.1667
16	n-Hexatriacontane (C36)	630-06-8	U30H007	99%	200.0 µg/mL	+/- 5.1667
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	200.0 µg/mL	+/- 5.1667

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

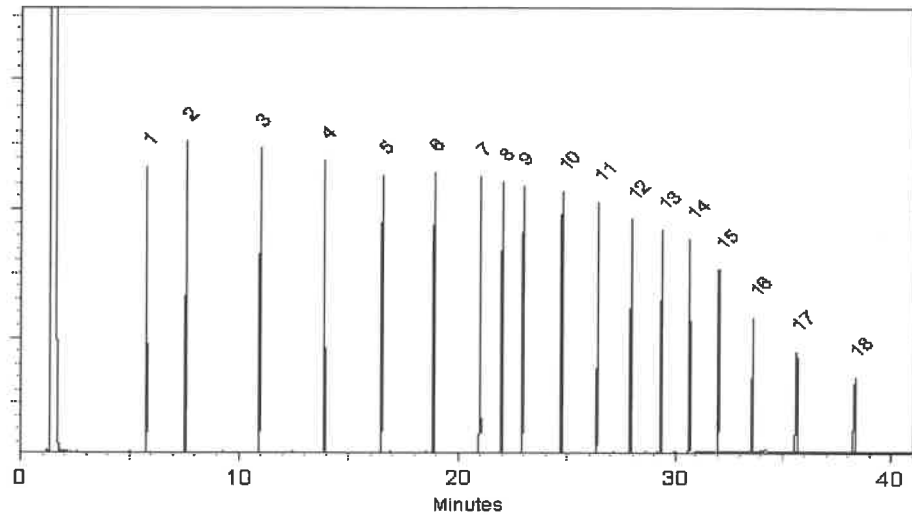
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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A.O.E.
Aaron Enyart - Operations Tech I

Date Mixed: 05-Jun-2025 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-Jun-2025

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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 : July 31, 2032 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P14094
↓
P14103 } AC
7/16/25

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%	200.3 µg/mL	+/- 5.1753
2	n-Decane (C10)	124-18-5	SHBS1019	99%	200.3 µg/mL	+/- 5.1753
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.0 µg/mL	+/- 5.1667
4	n-Tetradecane (C14)	629-59-4	STBL2522	99%	200.0 µg/mL	+/- 5.1667
5	n-Hexadecane (C16)	544-76-3	SHBR0670	99%	200.0 µg/mL	+/- 5.1667
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.0 µg/mL	+/- 5.1667
7	n-Eicosane (C20)	112-95-8	MKCN8767	99%	200.0 µg/mL	+/- 5.1667
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.3 µg/mL	+/- 5.1753
9	n-Docosane (C22)	629-97-0	MKCQ3729	99%	200.0 µg/mL	+/- 5.1667
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	200.0 µg/mL	+/- 5.1667
11	n-Hexacosane (C26)	630-01-3	MKCV0107	99%	200.0 µg/mL	+/- 5.1667
12	n-Octacosane (C28)	630-02-4	BCCM2091	99%	200.0 µg/mL	+/- 5.1667
13	n-Triacontane (C30)	638-68-6	MKCW9459	99%	200.0 µg/mL	+/- 5.1667
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.0 µg/mL	+/- 5.1667
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.0 µg/mL	+/- 5.1667
16	n-Hexatriacontane (C36)	630-06-8	U30H007	99%	200.0 µg/mL	+/- 5.1667
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	200.0 µg/mL	+/- 5.1667

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

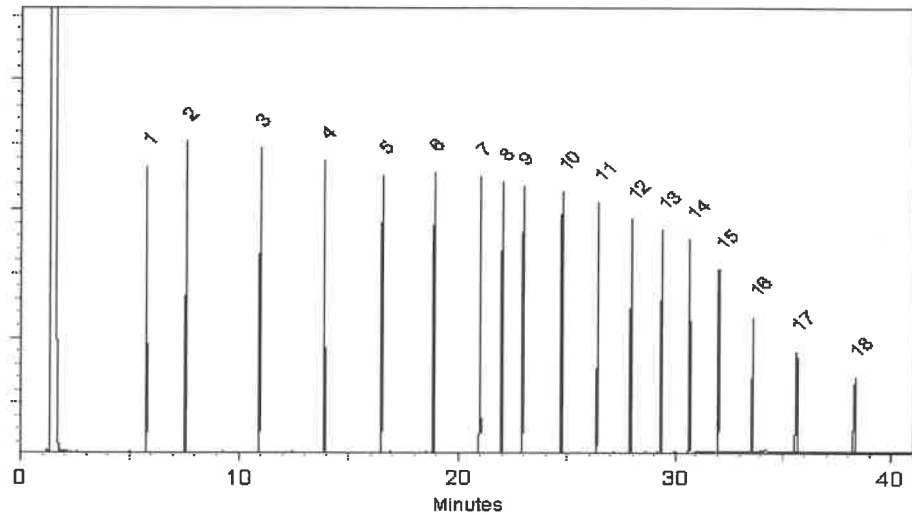
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

A.O.E.
Aaron Enyart - Operations Tech I

Date Mixed: 05-Jun-2025 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-Jun-2025

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



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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.:** A0226411

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 : July 31, 2032 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P14094
↓
P14103 } AC
7/16/25

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%	200.3 µg/mL	+/- 5.1753
2	n-Decane (C10)	124-18-5	SHBS1019	99%	200.3 µg/mL	+/- 5.1753
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.0 µg/mL	+/- 5.1667
4	n-Tetradecane (C14)	629-59-4	STBL2522	99%	200.0 µg/mL	+/- 5.1667
5	n-Hexadecane (C16)	544-76-3	SHBR0670	99%	200.0 µg/mL	+/- 5.1667
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.0 µg/mL	+/- 5.1667
7	n-Eicosane (C20)	112-95-8	MKCN8767	99%	200.0 µg/mL	+/- 5.1667
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.3 µg/mL	+/- 5.1753
9	n-Docosane (C22)	629-97-0	MKCQ3729	99%	200.0 µg/mL	+/- 5.1667
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	200.0 µg/mL	+/- 5.1667
11	n-Hexacosane (C26)	630-01-3	MKCV0107	99%	200.0 µg/mL	+/- 5.1667
12	n-Octacosane (C28)	630-02-4	BCCM2091	99%	200.0 µg/mL	+/- 5.1667
13	n-Triacontane (C30)	638-68-6	MKCW9459	99%	200.0 µg/mL	+/- 5.1667
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.0 µg/mL	+/- 5.1667
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.0 µg/mL	+/- 5.1667
16	n-Hexatriacontane (C36)	630-06-8	U30H007	99%	200.0 µg/mL	+/- 5.1667
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	200.0 µg/mL	+/- 5.1667

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

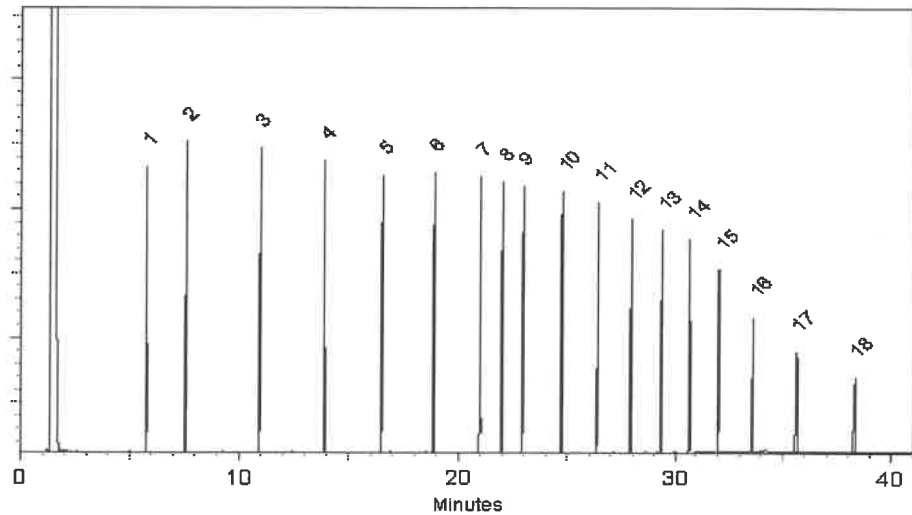
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

A.O.E.
Aaron Enyart - Operations Tech I

Date Mixed: 05-Jun-2025 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-Jun-2025

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



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

Catalog No. : 30542 **Lot No.:** A0226411

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 : July 31, 2032 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P14094
↓
P14103 } AC
7/16/25

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%	200.3 µg/mL	+/- 5.1753
2	n-Decane (C10)	124-18-5	SHBS1019	99%	200.3 µg/mL	+/- 5.1753
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.0 µg/mL	+/- 5.1667
4	n-Tetradecane (C14)	629-59-4	STBL2522	99%	200.0 µg/mL	+/- 5.1667
5	n-Hexadecane (C16)	544-76-3	SHBR0670	99%	200.0 µg/mL	+/- 5.1667
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.0 µg/mL	+/- 5.1667
7	n-Eicosane (C20)	112-95-8	MKCN8767	99%	200.0 µg/mL	+/- 5.1667
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.3 µg/mL	+/- 5.1753
9	n-Docosane (C22)	629-97-0	MKCQ3729	99%	200.0 µg/mL	+/- 5.1667
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	200.0 µg/mL	+/- 5.1667
11	n-Hexacosane (C26)	630-01-3	MKCV0107	99%	200.0 µg/mL	+/- 5.1667
12	n-Octacosane (C28)	630-02-4	BCCM2091	99%	200.0 µg/mL	+/- 5.1667
13	n-Triacontane (C30)	638-68-6	MKCW9459	99%	200.0 µg/mL	+/- 5.1667
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.0 µg/mL	+/- 5.1667
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.0 µg/mL	+/- 5.1667
16	n-Hexatriacontane (C36)	630-06-8	U30H007	99%	200.0 µg/mL	+/- 5.1667
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	200.0 µg/mL	+/- 5.1667

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

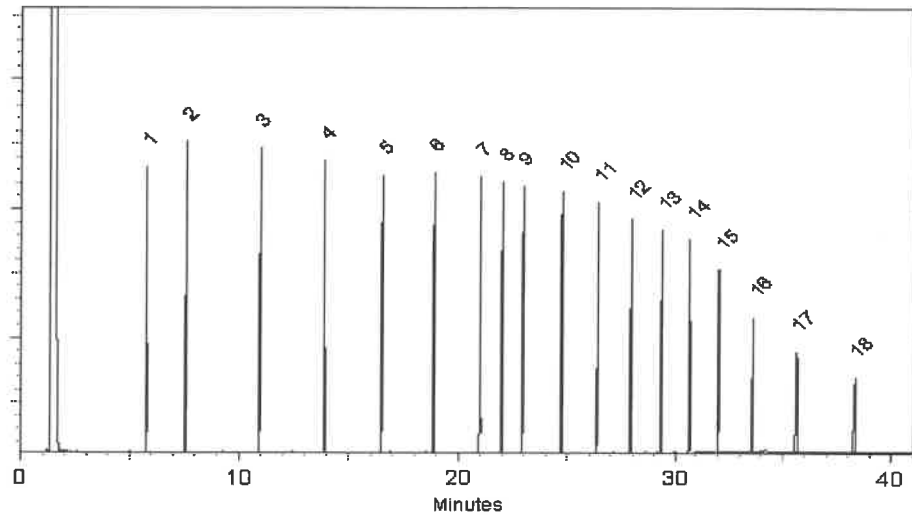
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

A.O.E.
Aaron Enyart - Operations Tech I

Date Mixed: 05-Jun-2025 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-Jun-2025

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



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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.:** A0226411

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 : July 31, 2032 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P14094
↓
P14103 } AC
7/16/25

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%	200.3 µg/mL	+/- 5.1753
2	n-Decane (C10)	124-18-5	SHBS1019	99%	200.3 µg/mL	+/- 5.1753
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.0 µg/mL	+/- 5.1667
4	n-Tetradecane (C14)	629-59-4	STBL2522	99%	200.0 µg/mL	+/- 5.1667
5	n-Hexadecane (C16)	544-76-3	SHBR0670	99%	200.0 µg/mL	+/- 5.1667
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.0 µg/mL	+/- 5.1667
7	n-Eicosane (C20)	112-95-8	MKCN8767	99%	200.0 µg/mL	+/- 5.1667
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.3 µg/mL	+/- 5.1753
9	n-Docosane (C22)	629-97-0	MKCQ3729	99%	200.0 µg/mL	+/- 5.1667
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	200.0 µg/mL	+/- 5.1667
11	n-Hexacosane (C26)	630-01-3	MKCV0107	99%	200.0 µg/mL	+/- 5.1667
12	n-Octacosane (C28)	630-02-4	BCCM2091	99%	200.0 µg/mL	+/- 5.1667
13	n-Triacontane (C30)	638-68-6	MKCW9459	99%	200.0 µg/mL	+/- 5.1667
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.0 µg/mL	+/- 5.1667
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.0 µg/mL	+/- 5.1667
16	n-Hexatriacontane (C36)	630-06-8	U30H007	99%	200.0 µg/mL	+/- 5.1667
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	200.0 µg/mL	+/- 5.1667

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

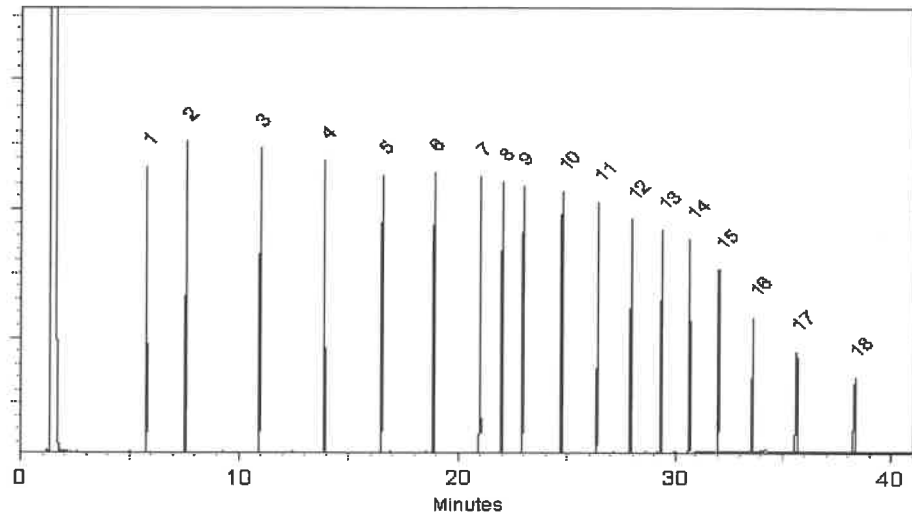
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

A.O.E.
Aaron Enyart - Operations Tech I

Date Mixed: 05-Jun-2025 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-Jun-2025

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



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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.:** A0226411

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 : July 31, 2032 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P14094
↓
P14103 } AC
7/16/25

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%	200.3 µg/mL	+/- 5.1753
2	n-Decane (C10)	124-18-5	SHBS1019	99%	200.3 µg/mL	+/- 5.1753
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.0 µg/mL	+/- 5.1667
4	n-Tetradecane (C14)	629-59-4	STBL2522	99%	200.0 µg/mL	+/- 5.1667
5	n-Hexadecane (C16)	544-76-3	SHBR0670	99%	200.0 µg/mL	+/- 5.1667
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.0 µg/mL	+/- 5.1667
7	n-Eicosane (C20)	112-95-8	MKCN8767	99%	200.0 µg/mL	+/- 5.1667
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.3 µg/mL	+/- 5.1753
9	n-Docosane (C22)	629-97-0	MKCQ3729	99%	200.0 µg/mL	+/- 5.1667
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	200.0 µg/mL	+/- 5.1667
11	n-Hexacosane (C26)	630-01-3	MKCV0107	99%	200.0 µg/mL	+/- 5.1667
12	n-Octacosane (C28)	630-02-4	BCCM2091	99%	200.0 µg/mL	+/- 5.1667
13	n-Triacontane (C30)	638-68-6	MKCW9459	99%	200.0 µg/mL	+/- 5.1667
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.0 µg/mL	+/- 5.1667
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.0 µg/mL	+/- 5.1667
16	n-Hexatriacontane (C36)	630-06-8	U30H007	99%	200.0 µg/mL	+/- 5.1667
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	200.0 µg/mL	+/- 5.1667

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

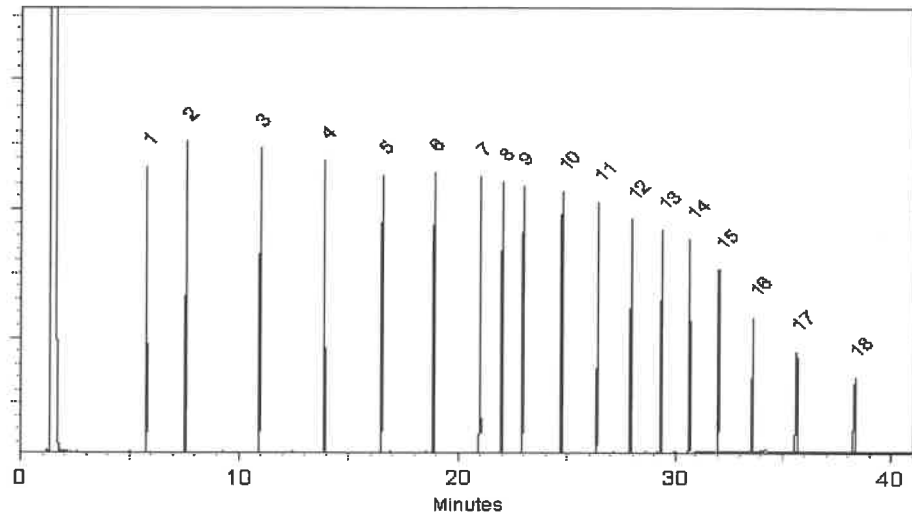
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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A.O.E.
Aaron Enyart - Operations Tech I

Date Mixed: 05-Jun-2025 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-Jun-2025

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Certificate #FM 80397



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Catalog No. : 30542 **Lot No.:** A0226411

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 : July 31, 2032 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P14094
↓
P14103 } AC
7/16/25

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%	200.3 µg/mL	+/- 5.1753
2	n-Decane (C10)	124-18-5	SHBS1019	99%	200.3 µg/mL	+/- 5.1753
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.0 µg/mL	+/- 5.1667
4	n-Tetradecane (C14)	629-59-4	STBL2522	99%	200.0 µg/mL	+/- 5.1667
5	n-Hexadecane (C16)	544-76-3	SHBR0670	99%	200.0 µg/mL	+/- 5.1667
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.0 µg/mL	+/- 5.1667
7	n-Eicosane (C20)	112-95-8	MKCN8767	99%	200.0 µg/mL	+/- 5.1667
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.3 µg/mL	+/- 5.1753
9	n-Docosane (C22)	629-97-0	MKCQ3729	99%	200.0 µg/mL	+/- 5.1667
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	200.0 µg/mL	+/- 5.1667
11	n-Hexacosane (C26)	630-01-3	MKCV0107	99%	200.0 µg/mL	+/- 5.1667
12	n-Octacosane (C28)	630-02-4	BCCM2091	99%	200.0 µg/mL	+/- 5.1667
13	n-Triacontane (C30)	638-68-6	MKCW9459	99%	200.0 µg/mL	+/- 5.1667
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.0 µg/mL	+/- 5.1667
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.0 µg/mL	+/- 5.1667
16	n-Hexatriacontane (C36)	630-06-8	U30H007	99%	200.0 µg/mL	+/- 5.1667
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	200.0 µg/mL	+/- 5.1667

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

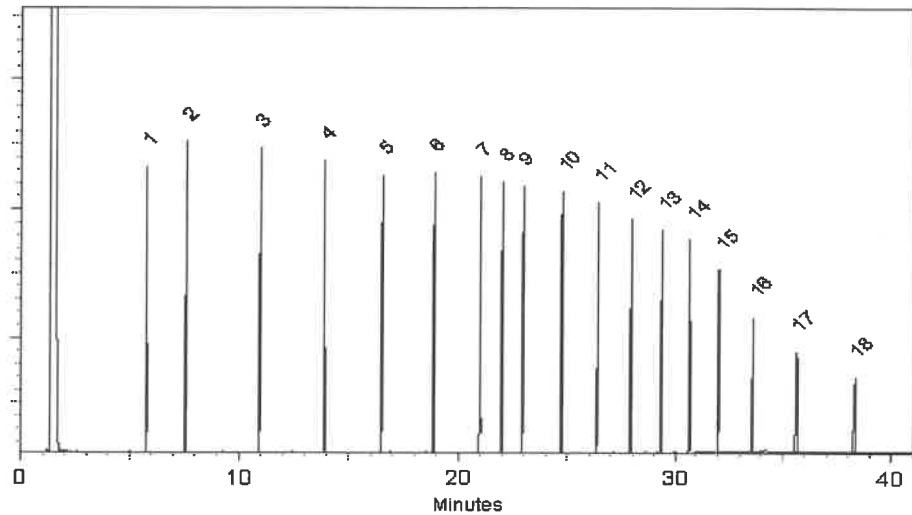
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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A.O.E.
Aaron Enyart - Operations Tech I

Date Mixed: 05-Jun-2025 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-Jun-2025

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Catalog No. : 30542 **Lot No.:** A0226411

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 : July 31, 2032 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P14094
↓
P14103 } AC
7/16/25

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%	200.3 µg/mL	+/- 5.1753
2	n-Decane (C10)	124-18-5	SHBS1019	99%	200.3 µg/mL	+/- 5.1753
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.0 µg/mL	+/- 5.1667
4	n-Tetradecane (C14)	629-59-4	STBL2522	99%	200.0 µg/mL	+/- 5.1667
5	n-Hexadecane (C16)	544-76-3	SHBR0670	99%	200.0 µg/mL	+/- 5.1667
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.0 µg/mL	+/- 5.1667
7	n-Eicosane (C20)	112-95-8	MKCN8767	99%	200.0 µg/mL	+/- 5.1667
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.3 µg/mL	+/- 5.1753
9	n-Docosane (C22)	629-97-0	MKCQ3729	99%	200.0 µg/mL	+/- 5.1667
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	200.0 µg/mL	+/- 5.1667
11	n-Hexacosane (C26)	630-01-3	MKCV0107	99%	200.0 µg/mL	+/- 5.1667
12	n-Octacosane (C28)	630-02-4	BCCM2091	99%	200.0 µg/mL	+/- 5.1667
13	n-Triacontane (C30)	638-68-6	MKCW9459	99%	200.0 µg/mL	+/- 5.1667
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.0 µg/mL	+/- 5.1667
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.0 µg/mL	+/- 5.1667
16	n-Hexatriacontane (C36)	630-06-8	U30H007	99%	200.0 µg/mL	+/- 5.1667
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	200.0 µg/mL	+/- 5.1667

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

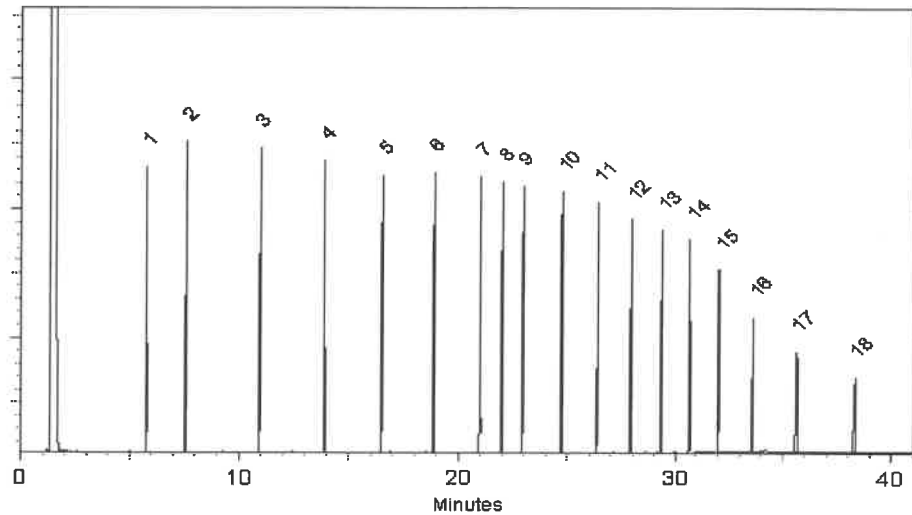
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

A.O.E.
Aaron Enyart - Operations Tech I

Date Mixed: 05-Jun-2025 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-Jun-2025

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



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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.:** A0226411

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 : July 31, 2032 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P14094
↓
P14103 } AC
7/16/25

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%	200.3 µg/mL	+/- 5.1753
2	n-Decane (C10)	124-18-5	SHBS1019	99%	200.3 µg/mL	+/- 5.1753
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.0 µg/mL	+/- 5.1667
4	n-Tetradecane (C14)	629-59-4	STBL2522	99%	200.0 µg/mL	+/- 5.1667
5	n-Hexadecane (C16)	544-76-3	SHBR0670	99%	200.0 µg/mL	+/- 5.1667
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11	n-Hexacosane (C26)	630-01-3	MKCV0107	99%	200.0 µg/mL	+/- 5.1667
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* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: n-Pentane
CAS # 109-66-0
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30m x 0.25mm x 0.25µm
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hydrogen-constant pressure 10 psi.

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40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

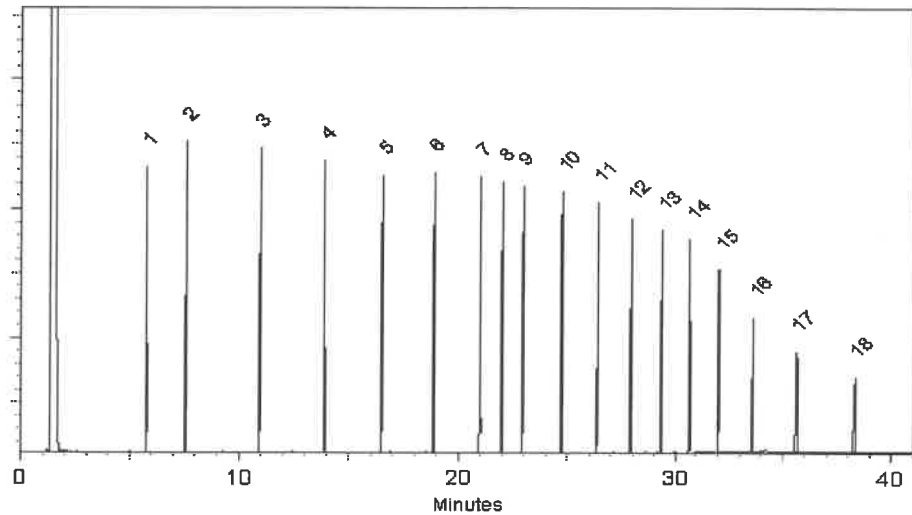
Inj. Temp:
250°C

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.

A.O.E.
Aaron Enyart - Operations Tech I

Date Mixed: 05-Jun-2025 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-Jun-2025

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

n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis

 **avantor**™



Material No.: 9262-03

Batch No.: 25C0362005

Manufactured Date: 2025-01-29

Expiration Date: 2026-04-30

Revision No.: 0

W3234 JB
OP4421 07/28/2025

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	6
ECD-Sensitive Impurities (as EthyleneDibromide) - Single Impurity Peak (ng/mL)	<= 5	5
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	>= 99.5 %	100.0 %
Assay (as n-Hexane) (by GC, corrected for water)	>= 95 %	100 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	<= 0.05 %	<0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC



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



SHIPPING DOCUMENTS

CLIENT INFORMATION

CLIENT PROJECT INFORMATION

CLIENT BILLING INFORMATION

REPORT TO BE SENT TO:
COMPANY: CDM SMITH
ADDRESS: 110 FIELDCREST AVE #8 6TH FLOOR
CITY: EDISON STATE: NJ ZIP:
ATTENTION: MARCE ENCINAS
PHONE: 7325904679 FAX:

PROJECT NAME: CON ED FOR2 FDR
PROJECT NO.: LOCATION: NEW YRK, NY
PROJECT MANAGER: MARCE ENCINAS
e-mail: encinasma@cdmsmith.com
PHONE: 7325904679 FAX:

BILL TO: CDM SMITH PO#:
ADDRESS: 110 FIELDCREST AVE #8 6TH FLOOR
CITY: EDISON STATE: NJ ZIP:
ATTENTION: MARCE ENCINAS PHONE: 7325904679

ANALYSIS

DATA TURNAROUND INFORMATION

DATA DELIVERABLE INFORMATION

FAX (RUSH) 24 HOURS DAYS*
HARDCOPY (DATA PACKAGE): 24 HOURS DAYS*
EDD: 24 HOURS DAYS*

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☒ Level 2 (Results + QC) ☒ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B
+ Raw Data ☐ Other
☐ EDD FORMAT

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	TP-2	S	X		9/16/25	1045	2	X									
2.																	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: 1. [Signature]	DATE/TIME: 9/16/25/515	RECEIVED BY: [Signature] 9:16-25	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 6.1 °C
RELINQUISHED BY SAMPLER: 2. [Signature]	DATE/TIME:	RECEIVED BY:	Comments:
RELINQUISHED BY SAMPLER: 3. [Signature]	DATE/TIME: 9:16-25	RECEIVED BY:	

Page ____ of CLIENT: ☐ Hand Delivered ☐ Other Shipment Complete ☐ YES ☐ NO

Laboratory Certification

Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q3123	CAMP02	Order Date : 9/16/2025 3:31:49 PM	Project Mgr : Deepak
Client Name : CDM Smith		Project Name : Con Edison FOPL2	Report Type : NYS ASPA
Client Contact : Marcie Ann Encinas		Receive DateTime : 9/16/2025 4:04:00 PM	EDD Type : EQUIS
Invoice Name : CDM Smith		Purchase Order :	Hard Copy Date :
Invoice Contact : Marcie Ann Encinas			Date Signoff : 9/17/2025 8:31:48 AM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q3123-01	TP-2	Solid	09/16/2025	10:45	Gasoline Range Organics		8015D		1 Bus. Day

Relinquished By :

Date / Time :

9/22/25 10:32

Received By :

Date / Time :

09/22/25

10:28

Storage Area : VOA Refridgerator Room