

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



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

LAB CHRONICLE

OrderID:	Q3662	OrderDate:	11/18/2025 11:14:00 AM
Client:	HDR, Inc.	Project:	PVWC Linear Construction
Contact:	Andrew Wadden	Location:	D41,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3662-04	B1-0.0-1.0-20251117	Solid	EPH_NF	NJEPH	11/17/25	11/19/25	11/19/25	11/18/25



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: HDRI08
Lab Code: ACE SDG No.: Q3662
Run Number: FE111925AL

CLIENT SAMPLE NO.	1-chlorooctadecane (SURR)	ortho-Terphenyl (SURR)		TOT OUT
PB170632BL	58	70		0
PB170632BS	60	69		0
PB170632BSD	59	67		0
B1-0.0-1.0-20251117	53	56		0
EO-01-11182025MS	111	72		0
EO-01-11182025MSD	113	73		0

QC LIMITS

1-chlorooctadecane (SURR)

(40-140)

ortho-Terphenyl (SURR)

(40-140)

Column to be used to flag recovery values

* Values outside of contract required QC Limits

D Surrogate diluted out

SOIL EPH SURROGATE RECOVERY

QC LIMITS

1-chlorooctadecane (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

SOLID EPH_NF MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Alliance</u>	Client:	<u>HDR, Inc.</u>
Lab Code:	<u>ACE</u>	SDG No:	<u>Q3662</u>
Sample No :	<u>Q3669-01MS</u>	Datafile:	<u>FE056946.D</u>
		Client ID :	<u>EO-01-11182025MS</u>

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS (%)
Aliphatic C28-C40	32.2	63.8	106	130		(40-140)
Aliphatic C9-C28	107.3	66.8	117	48		(40-140)

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS (%)
n-Nonane (C9)	3.6	0.0163	1.2972	36	*	(40-140)
n-Decane (C10)	3.6	0.1470	3.4832	93		(40-140)
Naphthalene (C11.7)	3.6	0.4916	2.2181	48		(40-140)
n-Dodecane (C12)	3.6	0.7230	2.5712	51		(40-140)
2-methylnaphthalene (C12.89)	3.6	0.7637	2.7022	54		(40-140)
n-Tetradecane (C14)	3.6	2.0328	4.0605	56		(40-140)
n-Hexadecane (C16)	3.6	1.9288	3.8696	54		(40-140)
n-Octadecane (C18)	3.6	1.3531	3.1208	49		(40-140)
n-Eicosane (C20)	3.6	0.7366	2.6803	54		(40-140)
n-Heneicosane (C21)	3.6	0.4433	2.4708	56		(40-140)
n-Docosane (C22)	3.6	0.4497	2.4071	54		(40-140)
n-Tetracosane (C24)	7.2	0.5743	6.2566	79		(40-140)
n-Hexacosane (C26)	3.6	0.2196	2.0336	50		(40-140)
n-Octacosane (C28)	3.6	0.4763	2.2412	49		(40-140)
n-Tricontane (C30)	3.6	0.6469	2.1247	41		(40-140)
n-Dotriacontane (C32)	3.6	1.7840	3.9405	60		(40-140)
n-Tetratriacontane (C34)	3.6	1.3782	4.1891	78		(40-140)
n-Hexatriacontane (C36)	3.6	2.1555	6.5501	122		(40-140)
n-Octatriacontane (C38)	3.6	2.7285	6.9484	117		(40-140)
n-Tetracontane (C40)	3.6	0.7228	4.1969	97		(40-140)

SOLID EPH_NF MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Alliance</u>	Client:	<u>HDR, Inc.</u>
Lab Code:	<u>ACE</u>	SDG No:	<u>Q3662</u>
Sample No :	<u>Q3669-01MSD</u>	Datafile:	<u>FE056947.D</u>
		Client ID :	<u>EO-01-11182025MSD</u>

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS (%) QC Limit Of RPD
Aliphatic C28-C40	32.2	63.8	102	118		9.68 (40-140) 50
Aliphatic C9-C28	107.5	66.8	114	44		6.7 (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)	3.6	0.0163	1.3130	36	*	0 (40-140) 50
n-Decane (C10)	3.6	0.1470	3.5342	94		1.07 (40-140) 50
Naphthalene (C11.7)	3.6	0.4916	2.2778	50		4.08 (40-140) 50
n-Dodecane (C12)	3.6	0.7230	2.6558	54		5.71 (40-140) 50
2-methylnaphthalene (C12.89)	3.6	0.7637	2.7619	56		3.64 (40-140) 50
n-Tetradecane (C14)	3.6	2.0328	4.1467	59		5.22 (40-140) 50
n-Hexadecane (C16)	3.6	1.9288	3.9387	56		3.64 (40-140) 50
n-Octadecane (C18)	3.6	1.3531	3.0963	48		2.06 (40-140) 50
n-Eicosane (C20)	3.6	0.7366	2.7382	56		3.64 (40-140) 50
n-Heneicosane (C21)	3.6	0.4433	2.5178	58		3.51 (40-140) 50
n-Docosane (C22)	3.6	0.4497	2.4434	55		1.83 (40-140) 50
n-Tetracosane (C24)	7.2	0.5743	6.4141	81		2.5 (40-140) 50
n-Hexacosane (C26)	3.6	0.2196	2.0919	52		3.92 (40-140) 50
n-Octacosane (C28)	3.6	0.4763	2.2792	50		2.02 (40-140) 50
n-Tricontane (C30)	3.6	0.6469	2.4392	50		19.78 (40-140) 50
n-Dotriacontane (C32)	3.6	1.7840	3.8697	58		3.39 (40-140) 50
n-Tetratriacontane (C34)	3.6	1.3782	4.1457	77		1.29 (40-140) 50
n-Hexatriacontane (C36)	3.6	2.1555	6.3695	117		4.18 (40-140) 50
n-Octatriacontane (C38)	3.6	2.7285	6.7216	111		5.26 (40-140) 50
n-Tetracontane (C40)	3.6	0.7228	4.1658	96		1.04 (40-140) 50

SOLID EPH_NF LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Alliance</u>	Client:	<u>HDR, Inc.</u>
Lab Code:	<u>ACE</u>	SDG No:	<u>Q3662</u>
Sample No :	<u>PB170632BS</u>	Datafile:	<u>FE056935.D</u>
		Client ID :	<u>PB170632BS</u>

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS (%)
Aliphatic C28-C40	30.0	24.5	82		(40-140)
Aliphatic C9-C28	99.9	68.9	70		(40-140)

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS(%)
n-Nonane (C9)	3.3	2.34445	71		(40-140)
n-Decane (C10)	3.3	2.48495	75		(40-140)
Naphthalene (C11.7)	3.3	2.83041	86		(40-140)
n-Dodecane (C12)	3.3	2.63822	80		(40-140)
2-methylnaphthalene (C12.89)	3.3	2.62871	80		(40-140)
n-Tetradecane (C14)	3.3	2.65986	81		(40-140)
n-Hexadecane (C16)	3.3	2.48197	75		(40-140)
n-Octadecane (C18)	3.3	2.38402	72		(40-140)
n-Eicosane (C20)	3.3	2.40465	73		(40-140)
n-Heneicosane (C21)	3.3	2.38857	72		(40-140)
n-Docosane (C22)	3.3	2.32008	70		(40-140)
n-Tetracosane (C24)	6.7	4.79870	72		(40-140)
n-Hexacosane (C26)	3.3	2.15535	65		(40-140)
n-Octacosane (C28)	3.3	2.26277	69		(40-140)
n-Tricontane (C30)	3.3	1.98578	60		(40-140)
n-Dotriacontane (C32)	3.3	2.03120	62		(40-140)
n-Tetratriacontane (C34)	3.3	2.24779	68		(40-140)
n-Hexatriacontane (C36)	3.3	2.65040	80		(40-140)
n-Octatriacontane (C38)	3.3	3.09295	94		(40-140)
n-Tetracontane (C40)	3.3	3.46243	105		(40-140)

SOLID EPH_NF LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Alliance **Client:** HDR, Inc.
Lab Code: ACE **SDG No:** Q3662
Sample No : PB170632BSD **Datafile:** FE056936.D **Client ID :** PB170632BSD

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS (%) QC Limit Of RPD
Aliphatic C28-C40	30.0	24.4	81		0.383 (40-140) 25
Aliphatic C9-C28	99.9	68.7	70		0.338 (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	2.32957	71		0 (40-140) 25
n-Decane (C10)	3.3	2.46745	75		0 (40-140) 25
Naphthalene (C11.7)	3.3	2.80621	85		1.17 (40-140) 25
n-Dodecane (C12)	3.3	2.62149	79		1.26 (40-140) 25
2-methylnaphthalene (C12.89)	3.3	2.62010	79		1.26 (40-140) 25
n-Tetradecane (C14)	3.3	2.64707	80		1.24 (40-140) 25
n-Hexadecane (C16)	3.3	2.47392	75		0 (40-140) 25
n-Octadecane (C18)	3.3	2.38469	72		0 (40-140) 25
n-Eicosane (C20)	3.3	2.40560	73		0 (40-140) 25
n-Heneicosane (C21)	3.3	2.38719	72		0 (40-140) 25
n-Docosane (C22)	3.3	2.31626	70		0 (40-140) 25
n-Tetracosane (C24)	6.7	4.78562	71		1.4 (40-140) 25
n-Hexacosane (C26)	3.3	2.14747	65		0 (40-140) 25
n-Octacosane (C28)	3.3	2.25397	68		1.46 (40-140) 25
n-Tricontane (C30)	3.3	1.97512	60		0 (40-140) 25
n-Dotriacontane (C32)	3.3	2.02108	61		1.63 (40-140) 25
n-Tetratriacontane (C34)	3.3	2.23415	68		0 (40-140) 25
n-Hexatriacontane (C36)	3.3	2.63342	80		0 (40-140) 25
n-Octatriacontane (C38)	3.3	3.08316	93		1.07 (40-140) 25
n-Tetracontane (C40)	3.3	3.45771	105		0 (40-140) 25

4B
METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PB170632BL

Lab Name: Alliance

Contract: HDRI08

Lab Code: ACE

SDG NO.: Q3662

Instrument ID: FID_E

Lab Sample ID: PB170632BL

Matrix: (soil/water) Solid

Date Extracted: 11/19/2025 9:45:00

Level: (low/med) low

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

CLIENT SAMPLE NO.	LAB SAMPLE ID
PB170632BS	PB170632BS
PB170632BSD	PB170632BSD
B1-0.0-1.0-20251117	Q3662-04
EO-01-11182025MS	Q3669-01MS
EO-01-11182025MSD	Q3669-01MSD

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	HDR, Inc.	Date Collected:	11/17/25
Project:	PVWC Linear Construction	Date Received:	11/18/25
Client Sample ID:	B1-0.0-1.0-20251117	SDG No.:	Q3662
Lab Sample ID:	Q3662-04	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	88.1
Sample Wt/Vol:	30.09 g	Test:	EPH_NF
Prep Method :	Final Vol: 2000 uL Prep Date : 11/19/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Datafile	Date Ana.	Prep BatchID
TARGETS										
Aliphatic C28-C40	Aliphatic C28-C40	27.9		1	1.34	2.26	mg/kg	FE056937.D	11/19/25 15:39	PB170632
Aliphatic C9-C28	Aliphatic C9-C28	15.6		1	1.03	4.52	mg/kg	FE056937.D	11/19/25 15:39	PB170632
Total AliphaticEPH	Total AliphaticEPH	43.5			2.37	6.78	mg/kg			
Total EPH	Total EPH	43.5			2.37	6.78	mg/kg			

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C40 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C40 concentration for the sample is reported as the Total EPH.

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:	HDR, Inc.	Date Collected:	11/17/25
Project:	PVWC Linear Construction	Date Received:	11/18/25
Client Sample ID:	B1-0.0-1.0-20251117	SDG No.:	Q3662
Lab Sample ID:	Q3662-04	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	88.1
Sample Wt/Vol:	30.09 g	Final Vol:	2000 uL
Prep Method :		Test:	EPH_NF
	Prep Date	11/19/25	

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS									
Aliphatic C9-C28	Aliphatic C9-C28	15.6	1		1.03	4.52	mg/kg	11/19/25	PB170632
Aliphatic C28-C40	Aliphatic C28-C40	27.9	1		1.34	2.26	mg/kg	11/19/25	PB170632
SURROGATES									
3383-33-2	1-chlorooctadecane (SURR)	26.3			40 - 140	53%	SPK: 50		
84-15-1	ortho-Terphenyl (SURR)	28.0			40 - 140	56%	SPK: 50		

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q3662-04	Acq On:	19 Nov 2025 15:39
Client Sample ID:	B1-0.0-1.0-20251117	Operator:	YP\AJ
Data file:	FE056937.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	3.209	6.832	484509	2.831	300	ug/ml
Aliphatic C12-C16	6.833	10.276	2813984	15.742	200	ug/ml
Aliphatic C16-C21	10.277	13.648	14506096	77.778	300	ug/ml
Aliphatic C21-C28	13.649	17.318	21202667	109.992	400	ug/ml
Aliphatic C28-C40	17.319	22.247	58903474	369.73	600	ug/ml
Aliphatic EPH	3.209	22.247	97910730	576.073		ug/ml
ortho-Terphenyl (SURR)	11.945	11.945	5850823	28.01		ug/ml
1-chlorooctadecane (SURR)	13.381	13.381	4236962	26.3		ug/ml
Aliphatic C9-C28	3.209	17.318	39007256	206.343	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
 Data File : FE056937.D
 Signal(s) : FID1B.ch
 Acq On : 19 Nov 2025 15:39
 Operator : YP\AJ
 Sample : Q3662-04
 Misc :
 ALS Vial : 20 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 B1-0.0-1.0-20251117

Integration File: sample.E
 Quant Time: Nov 20 01:24:23 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
 Quant Title : GC Extractables
 QLast Update : Tue Nov 18 13:37:28 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.945	5850823	28.006 ug/ml
Spiked Amount 50.000		Recovery =	56.01%
12) S 1-chlorooctadecane (S...	13.381	4236962	26.297 ug/ml
Spiked Amount 50.000		Recovery =	52.59%

Target Compounds

(f)=RT Delta > 1/2 Window

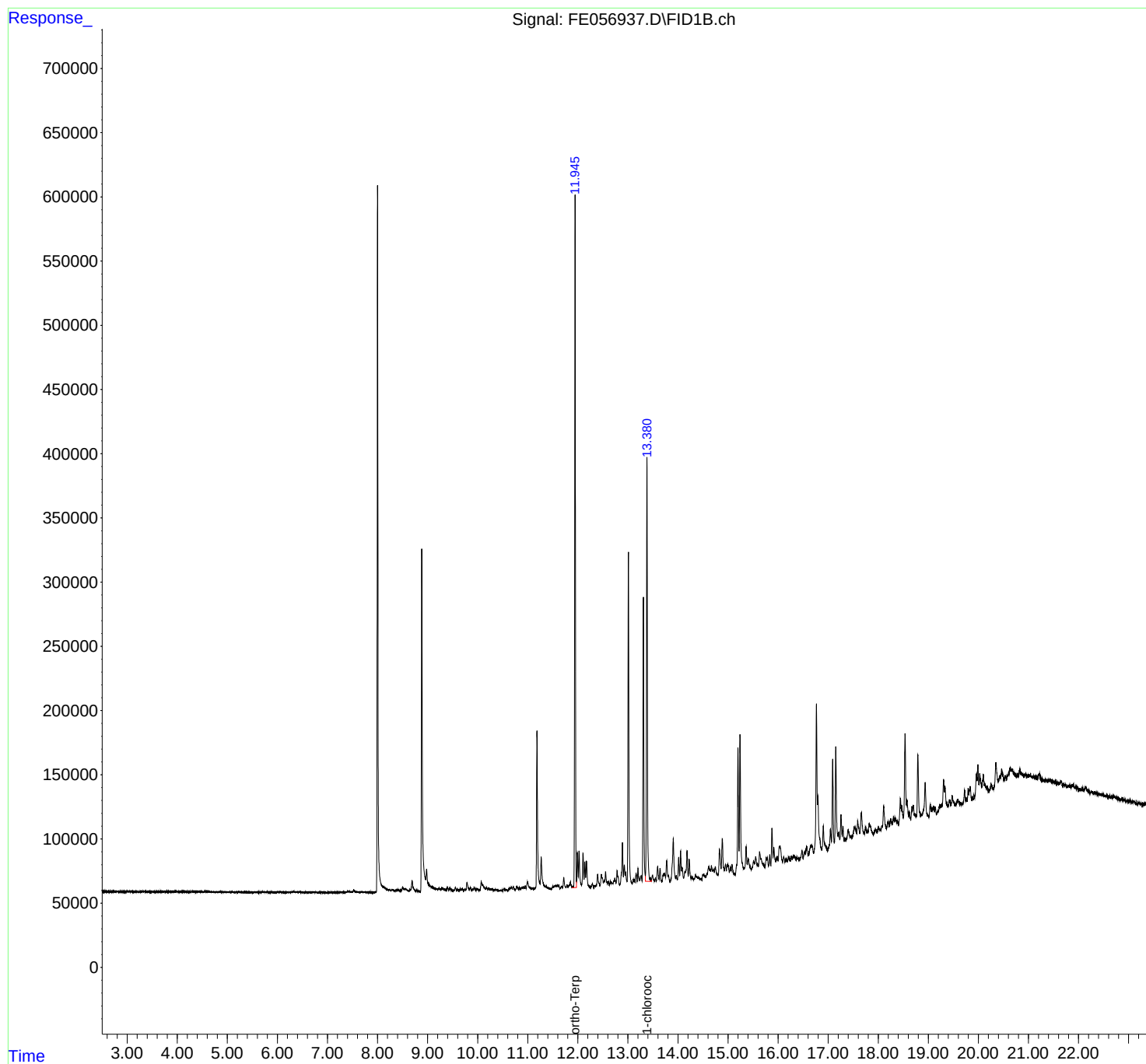
(m)=manual int.

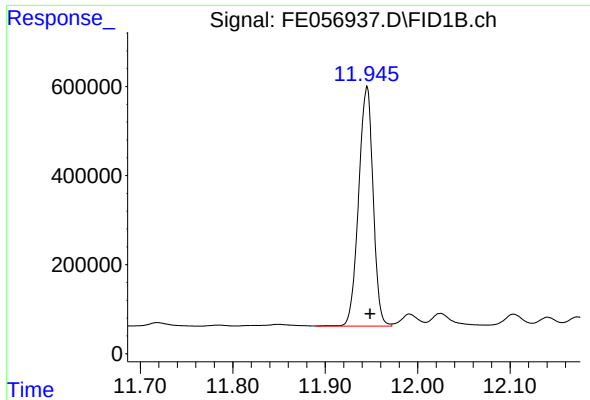
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
Data File : FE056937.D
Signal(s) : FID1B.ch
Acq On : 19 Nov 2025 15:39
Operator : YP\AJ
Sample : Q3662-04
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
B1-0.0-1.0-20251117

Integration File: sample.E
Quant Time: Nov 20 01:24:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
Quant Title : GC Extractables
QLast Update : Tue Nov 18 13:37:28 2025
Response via : Initial Calibration
Integrator: ChemStation

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

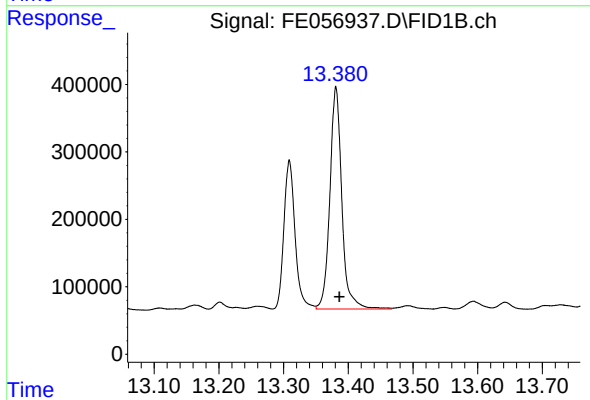




#9 ortho-Terphenyl (SURR)

R.T.: 11.945 min
Delta R.T.: -0.004 min
Response: 5850823
Conc: 28.01 ug/ml

Instrument :
FID_E
ClientSampleId :
B1-0.0-1.0-20251117



#12 1-chlorooctadecane (SURR)

R.T.: 13.381 min
Delta R.T.: -0.005 min
Response: 4236962
Conc: 26.30 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
 Data File : FE056937.D
 Signal(s) : FID1B.ch
 Acq On : 19 Nov 2025 15:39
 Sample : Q3662-04
 Misc :
 ALS Vial : 20 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.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	2.552	2.524	2.611	BV	64	-501	-0.01%	-0.000%
2	2.624	2.611	2.720	PV	141	1717	0.03%	0.002%
3	2.739	2.720	2.771	VV	186	3446	0.06%	0.003%
4	2.776	2.771	2.791	VV	95	910	0.02%	0.001%
5	2.797	2.791	2.850	PV	88	3259	0.06%	0.003%
6	2.860	2.850	2.928	VV	197	4698	0.08%	0.004%
7	2.935	2.928	2.954	VV	118	1457	0.02%	0.001%
8	2.998	2.954	3.074	VV	226	10536	0.18%	0.010%
9	3.085	3.074	3.158	VV	217	5607	0.10%	0.005%
10	3.166	3.158	3.261	VV	184	6635	0.11%	0.006%
11	3.271	3.261	3.284	VV	151	2036	0.03%	0.002%
12	3.306	3.284	3.354	VV	680	13105	0.22%	0.012%
13	3.366	3.354	3.378	VV	255	2791	0.05%	0.003%
14	3.386	3.378	3.411	VV	202	3140	0.05%	0.003%
15	3.426	3.411	3.464	VV	244	5884	0.10%	0.005%
16	3.474	3.464	3.508	VV	232	4660	0.08%	0.004%
17	3.555	3.508	3.603	VV	227	10827	0.18%	0.010%
18	3.616	3.603	3.638	VV	284	4453	0.08%	0.004%
19	3.663	3.638	3.724	VV	317	9221	0.16%	0.009%
20	3.734	3.724	3.742	VV	245	1891	0.03%	0.002%
21	3.757	3.742	3.780	VV	267	5620	0.10%	0.005%
22	3.802	3.780	3.826	VV	480	9875	0.17%	0.009%
23	3.834	3.826	3.849	VV	332	4178	0.07%	0.004%
24	3.857	3.849	3.869	VV	282	2830	0.05%	0.003%
25	3.892	3.869	3.904	VV	291	5006	0.09%	0.005%
26	3.930	3.904	3.978	VV	367	13700	0.23%	0.013%
27	3.994	3.978	4.038	VV	401	11276	0.19%	0.010%
28	4.051	4.038	4.091	VV	304	9431	0.16%	0.009%
29	4.105	4.091	4.121	VV	373	5855	0.10%	0.005%
30	4.134	4.121	4.152	VV	374	5803	0.10%	0.005%
31	4.166	4.152	4.188	VV	377	6169	0.11%	0.006%

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32	4.208	4.188	4.232	VV	278	6368	0.11%	0.006%
33	4.252	4.232	4.266	VV	300	5094	0.09%	0.005%
34	4.301	4.266	4.348	VV	482	18704	0.32%	0.017%
35	4.358	4.348	4.365	VV	395	3808	0.06%	0.004%
36	4.371	4.365	4.408	VV	409	9409	0.16%	0.009%
37	4.423	4.408	4.484	VV	405	15720	0.27%	0.015%
38	4.487	4.484	4.498	VV	409	2638	0.04%	0.002%
39	4.502	4.498	4.524	VV	359	4627	0.08%	0.004%
40	4.560	4.524	4.581	VV	851	16225	0.28%	0.015%
41	4.606	4.581	4.634	VV	696	15370	0.26%	0.014%
42	4.642	4.634	4.704	VV	395	10746	0.18%	0.010%
43	4.716	4.704	4.723	VV	207	1878	0.03%	0.002%
44	4.749	4.723	4.764	VV	278	4901	0.08%	0.005%
45	4.777	4.764	4.791	VV	209	2760	0.05%	0.003%
46	4.835	4.791	4.883	VV	406	15358	0.26%	0.014%
47	4.897	4.883	4.907	VV	293	3564	0.06%	0.003%
48	4.920	4.907	4.971	VV	250	7124	0.12%	0.007%
49	4.982	4.971	4.990	VV	180	1907	0.03%	0.002%
50	5.001	4.990	5.029	VV	225	4178	0.07%	0.004%
51	5.066	5.029	5.144	VV	292	12989	0.22%	0.012%
52	5.153	5.144	5.211	VV	195	4447	0.08%	0.004%
53	5.231	5.211	5.256	VV	215	4220	0.07%	0.004%
54	5.270	5.256	5.305	VV	218	4966	0.08%	0.005%
55	5.312	5.305	5.328	VV	195	1953	0.03%	0.002%
56	5.339	5.328	5.347	VV	144	1395	0.02%	0.001%
57	5.358	5.347	5.378	VV	190	2907	0.05%	0.003%
58	5.380	5.378	5.398	VV	167	1468	0.03%	0.001%
59	5.407	5.398	5.438	VV	148	2674	0.05%	0.002%
60	5.465	5.438	5.519	VV	205	6742	0.11%	0.006%
61	5.566	5.519	5.628	VV	250	9890	0.17%	0.009%
62	5.641	5.628	5.680	PV	140	3205	0.05%	0.003%
63	5.703	5.680	5.722	VV	523	7565	0.13%	0.007%
64	5.734	5.722	5.814	VV	490	12080	0.21%	0.011%
65	5.821	5.814	5.836	VV	158	2020	0.03%	0.002%
66	5.864	5.836	5.915	VV	233	7532	0.13%	0.007%
67	5.926	5.915	5.973	VV	130	2704	0.05%	0.002%
68	5.998	5.973	6.034	VV	322	8681	0.15%	0.008%
69	6.054	6.034	6.158	VV	375	13608	0.23%	0.013%
70	6.176	6.158	6.211	VV	159	3112	0.05%	0.003%
71	6.221	6.211	6.254	VV	160	2432	0.04%	0.002%
72	6.271	6.254	6.284	VV	171	2270	0.04%	0.002%
73	6.312	6.284	6.424	VV	657	32872	0.56%	0.030%
74	6.436	6.424	6.495	VV	481	10466	0.18%	0.010%
75	6.505	6.495	6.537	VV	163	3774	0.06%	0.003%
76	6.564	6.537	6.587	VV	282	5437	0.09%	0.005%
77	6.625	6.587	6.644	VV	230	5980	0.10%	0.006%
78	6.654	6.644	6.718	VV	216	8088	0.14%	0.007%
79	6.733	6.718	6.771	VV	698	9518	0.16%	0.009%

80	6.777	6.771	6.791	VV	119	1384	0.02%	0.001%
81	6.884	6.791	6.904	VV	236	9404	0.16%	0.009%
82	6.920	6.904	6.955	VV	190	3759	0.06%	0.003%
83	6.968	6.955	6.980	VV	138	1099	0.02%	0.001%
84	7.072	6.980	7.118	PV	188	8507	0.15%	0.008%
85	7.155	7.118	7.195	VV	236	7078	0.12%	0.007%
86	7.202	7.195	7.217	VV	213	2085	0.04%	0.002%
87	7.238	7.217	7.261	VV	216	4405	0.08%	0.004%
88	7.267	7.261	7.281	VV	149	1776	0.03%	0.002%
89	7.312	7.281	7.337	VV	234	5785	0.10%	0.005%
90	7.355	7.337	7.377	VV	245	4735	0.08%	0.004%
91	7.404	7.377	7.440	VV	1046	28095	0.48%	0.026%
92	7.451	7.440	7.495	VV	762	18562	0.32%	0.017%
93	7.525	7.495	7.621	VV	2204	62850	1.07%	0.058%
94	7.630	7.621	7.652	VV	455	6879	0.12%	0.006%
95	7.681	7.652	7.728	VV	643	15806	0.27%	0.015%
96	7.738	7.728	7.746	VV	217	1967	0.03%	0.002%
97	7.765	7.746	7.825	VV	231	5675	0.10%	0.005%
98	7.854	7.825	7.937	VV	199	4302	0.07%	0.004%
99	8.293	8.273	8.344	VV	2052	69955	1.19%	0.065%
100	8.391	8.344	8.416	VV	1711	62159	1.06%	0.057%
101	8.424	8.416	8.477	VV	1593	47736	0.81%	0.044%
102	8.501	8.477	8.519	VV	4277	68090	1.16%	0.063%
103	8.533	8.519	8.551	VV	2824	45391	0.77%	0.042%
104	8.565	8.551	8.629	VV	2647	76531	1.30%	0.071%
105	8.689	8.629	8.757	VV	8910	230856	3.94%	0.213%
106	8.777	8.757	8.853	VV	1546	41638	0.71%	0.038%
107	8.979	8.961	9.202	VV	17742	734200	12.52%	0.677%
108	9.226	9.202	9.251	VV	2521	60888	1.04%	0.056%
109	9.300	9.251	9.374	VV	2648	147066	2.51%	0.136%
110	9.396	9.374	9.421	VV	3302	61104	1.04%	0.056%
111	9.442	9.421	9.504	VV	2703	73619	1.26%	0.068%
112	9.553	9.504	9.577	VV	3179	64138	1.09%	0.059%
113	9.594	9.577	9.631	VV	1843	38111	0.65%	0.035%
114	9.653	9.631	9.664	VV	1525	25073	0.43%	0.023%
115	9.691	9.664	9.719	VV	2101	49483	0.84%	0.046%
116	9.740	9.719	9.759	VV	1428	25683	0.44%	0.024%
117	9.786	9.759	9.834	VV	6875	155041	2.64%	0.143%
118	9.854	9.834	9.882	VV	2788	53611	0.91%	0.049%
119	9.899	9.882	9.910	VV	1385	21443	0.37%	0.020%
120	9.931	9.910	9.968	VV	2721	60561	1.03%	0.056%
121	9.987	9.968	10.032	VV	1465	41625	0.71%	0.038%
122	10.072	10.032	10.096	VV	7001	140315	2.39%	0.129%
123	10.105	10.096	10.157	VV	4712	116249	1.98%	0.107%
124	10.175	10.157	10.197	VV	3233	55358	0.94%	0.051%
125	10.217	10.197	10.256	VV	2074	55291	0.94%	0.051%
126	10.286	10.256	10.334	VV	1407	48359	0.82%	0.045%

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127	10.354	10.334	10.433	VV	1233	32579	0.56%	0.030%
128	10.448	10.433	10.471	PV	214	3081	0.05%	0.003%
129	10.489	10.471	10.498	VV	250	3099	0.05%	0.003%
130	10.525	10.498	10.588	VV	1363	39407	0.67%	0.036%
131	10.628	10.588	10.641	VV	1842	26943	0.46%	0.025%
132	10.670	10.641	10.690	VV	2364	53726	0.92%	0.050%
133	10.710	10.690	10.743	VV	2970	52112	0.89%	0.048%
134	10.779	10.743	10.821	VV	3132	67361	1.15%	0.062%
135	10.841	10.821	10.860	VV	1683	27971	0.48%	0.026%
136	10.881	10.860	10.896	VV	1964	35150	0.60%	0.032%
137	10.914	10.896	10.931	VV	2884	44065	0.75%	0.041%
138	10.948	10.931	10.966	VV	3153	43376	0.74%	0.040%
139	10.996	10.966	11.074	VV	6071	180310	3.07%	0.166%
140	11.089	11.074	11.118	VV	1450	24167	0.41%	0.022%
141	11.184	11.118	11.244	VV	122875	1717219	29.28%	1.584%
142	11.268	11.244	11.352	VV	25121	545760	9.30%	0.503%
143	11.364	11.352	11.471	VV	2175	67112	1.14%	0.062%
144	11.502	11.471	11.517	PV	2213	32769	0.56%	0.030%
145	11.552	11.517	11.567	VV	2739	62473	1.07%	0.058%
146	11.585	11.567	11.603	VV	2912	49131	0.84%	0.045%
147	11.619	11.603	11.643	VV	3114	41779	0.71%	0.039%
148	11.674	11.643	11.691	VV	1779	30267	0.52%	0.028%
149	11.719	11.691	11.764	VV	8644	145142	2.47%	0.134%
150	11.785	11.764	11.803	VV	2826	38959	0.66%	0.036%
151	11.849	11.803	11.891	VV	4463	113734	1.94%	0.105%
152	11.945	11.891	11.972	VV	534882	5865488	100.00%	5.410%
153	11.991	11.972	12.008	VV	27427	344596	5.87%	0.318%
154	12.025	12.008	12.074	VV	28625	451021	7.69%	0.416%
155	12.104	12.074	12.124	VV	26750	383371	6.54%	0.354%
156	12.141	12.124	12.157	VV	19817	257207	4.39%	0.237%
157	12.173	12.157	12.258	VV	20459	335678	5.72%	0.310%
158	12.291	12.258	12.315	VV	2546	38771	0.66%	0.036%
159	12.333	12.315	12.347	PV	992	13035	0.22%	0.012%
160	12.395	12.347	12.443	VV	9742	195329	3.33%	0.180%
161	12.469	12.443	12.511	VV	9450	224718	3.83%	0.207%
162	12.554	12.511	12.590	VV	11375	249409	4.25%	0.230%
163	12.610	12.590	12.628	VV	2944	55299	0.94%	0.051%
164	12.647	12.628	12.659	VV	3196	43709	0.75%	0.040%
165	12.670	12.659	12.701	VV	2641	54863	0.94%	0.051%
166	12.738	12.701	12.764	VV	5970	130478	2.22%	0.120%
167	12.784	12.764	12.835	VV	11582	222351	3.79%	0.205%
168	12.891	12.835	12.911	VV	32907	525669	8.96%	0.485%
169	12.928	12.911	12.945	VV	15498	230315	3.93%	0.212%
170	12.955	12.945	12.984	VV	10173	141710	2.42%	0.131%
171	13.010	12.984	13.087	VV	260622	3282093	55.96%	3.027%
172	13.109	13.087	13.124	VV	3848	54989	0.94%	0.051%
173	13.164	13.124	13.184	VV	7869	156597	2.67%	0.144%
174	13.202	13.184	13.240	VV	12265	200845	3.42%	0.185%

175	13.260	13.240	13.282	VV	rteres 5928	110039	1.88%	0.101%
176	13.309	13.282	13.349	VV	220310	2715957	46.30%	2.505%
177	13.381	13.349	13.467	VV	330735	4348818	74.14%	4.011%
178	13.492	13.467	13.530	VV	6198	132387	2.26%	0.122%
179	13.548	13.530	13.565	VV	3474	48506	0.83%	0.045%
180	13.593	13.565	13.622	VV	12635	220903	3.77%	0.204%
181	13.642	13.622	13.676	VV	10979	160200	2.73%	0.148%
182	13.706	13.676	13.713	VV	5896	74056	1.26%	0.068%
183	13.729	13.713	13.752	VV	6932	132561	2.26%	0.122%
184	13.775	13.752	13.840	VV	16647	350232	5.97%	0.323%
185	13.906	13.840	13.950	PV	33621	729684	12.44%	0.673%
186	13.966	13.950	13.986	VV	4492	64375	1.10%	0.059%
187	14.014	13.986	14.034	VV	18288	247838	4.23%	0.229%
188	14.053	14.034	14.074	VV	23305	321134	5.47%	0.296%
189	14.085	14.074	14.113	VV	10174	153803	2.62%	0.142%
190	14.139	14.113	14.151	VV	6815	113220	1.93%	0.104%
191	14.181	14.151	14.205	VV	23177	389445	6.64%	0.359%
192	14.225	14.205	14.271	VV	16281	270532	4.61%	0.250%
193	14.287	14.271	14.325	VV	2217	39899	0.68%	0.037%
194	14.350	14.325	14.398	VV	3429	87779	1.50%	0.081%
195	14.413	14.398	14.451	VV	1535	30123	0.51%	0.028%
196	14.460	14.451	14.472	VV	456	3094	0.05%	0.003%
197	14.499	14.472	14.534	PV	3491	86593	1.48%	0.080%
198	14.543	14.534	14.558	VV	2103	25808	0.44%	0.024%
199	14.614	14.558	14.631	VV	9026	238765	4.07%	0.220%
200	14.641	14.631	14.653	VV	6990	86064	1.47%	0.079%
201	14.669	14.653	14.687	VV	9569	146484	2.50%	0.135%
202	14.702	14.687	14.722	VV	6610	120174	2.05%	0.111%
203	14.746	14.722	14.794	VV	8309	213319	3.64%	0.197%
204	14.829	14.794	14.860	VV	21645	435866	7.43%	0.402%
205	14.885	14.860	14.929	VV	29599	576185	9.82%	0.531%
206	14.948	14.929	14.966	VV	9043	153709	2.62%	0.142%
207	14.999	14.966	15.027	VV	8401	240372	4.10%	0.222%
208	15.046	15.027	15.062	VV	6476	97801	1.67%	0.090%
209	15.080	15.062	15.143	VV	8322	159159	2.71%	0.147%
210	15.198	15.143	15.219	PV	98298	1339151	22.83%	1.235%
211	15.239	15.219	15.325	VV	108407	1804720	30.77%	1.665%
212	15.360	15.325	15.384	VV	20023	353957	6.03%	0.326%
213	15.403	15.384	15.463	VV	9988	274642	4.68%	0.253%
214	15.509	15.463	15.530	VV	6997	173973	2.97%	0.160%
215	15.552	15.530	15.579	VV	10535	216952	3.70%	0.200%
216	15.587	15.579	15.605	VV	4670	60886	1.04%	0.056%
217	15.631	15.605	15.734	VV	12851	458822	7.82%	0.423%
218	15.761	15.734	15.772	VV	7959	105059	1.79%	0.097%
219	15.785	15.772	15.807	VV	7908	107804	1.84%	0.099%
220	15.833	15.807	15.852	VV	9751	128330	2.19%	0.118%
221	15.877	15.852	15.900	VV	30019	436423	7.44%	0.403%

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222	15.916	15.900	15.951	VV	14528	261713	4.46%	0.241%
223	15.981	15.951	15.999	VV	6685	149777	2.55%	0.138%
224	16.038	15.999	16.091	VV	15034	510558	8.70%	0.471%
225	16.110	16.091	16.137	VV	5233	109825	1.87%	0.101%
226	16.159	16.137	16.184	VV	3173	71938	1.23%	0.066%
227	16.206	16.184	16.243	VV	4694	107822	1.84%	0.099%
228	16.263	16.243	16.280	VV	4582	72583	1.24%	0.067%
229	16.300	16.280	16.359	VV	4595	165534	2.82%	0.153%
230	16.378	16.359	16.428	VV	3023	75880	1.29%	0.070%
231	16.478	16.428	16.501	VV	7511	152369	2.60%	0.141%
232	16.531	16.501	16.540	VV	5734	94544	1.61%	0.087%
233	16.572	16.540	16.604	VV	9661	257635	4.39%	0.238%
234	16.646	16.604	16.658	VV	9652	214004	3.65%	0.197%
235	16.678	16.658	16.710	VV	9610	235223	4.01%	0.217%
236	16.766	16.710	16.873	VV	118776	2869212	48.92%	2.647%
237	16.903	16.873	16.987	VV	22937	649826	11.08%	0.599%
238	17.046	16.987	17.065	VV	19393	435794	7.43%	0.402%
239	17.090	17.065	17.123	VV	73784	1098424	18.73%	1.013%
240	17.152	17.123	17.194	VV	82529	1442931	24.60%	1.331%
241	17.212	17.194	17.234	VV	15355	320457	5.46%	0.296%
242	17.256	17.234	17.280	VV	28720	520657	8.88%	0.480%
243	17.296	17.280	17.321	VV	19014	337168	5.75%	0.311%
244	17.337	17.321	17.347	VV	9685	135914	2.32%	0.125%
245	17.398	17.347	17.443	VV	16120	662309	11.29%	0.611%
246	17.458	17.443	17.472	VV	10963	170206	2.90%	0.157%
247	17.533	17.472	17.567	VV	16625	764959	13.04%	0.706%
248	17.590	17.567	17.632	VV	21089	603544	10.29%	0.557%
249	17.664	17.632	17.722	VV	26622	884899	15.09%	0.816%
250	17.745	17.722	17.763	VV	15257	314290	5.36%	0.290%
251	17.774	17.763	17.793	VV	12376	202656	3.46%	0.187%
252	17.819	17.793	17.900	VV	17373	799751	13.63%	0.738%
253	17.948	17.900	17.977	VV	11631	457162	7.79%	0.422%
254	18.007	17.977	18.041	VV	12840	416544	7.10%	0.384%
255	18.108	18.041	18.164	VV	27599	1132320	19.30%	1.044%
256	18.196	18.164	18.214	VV	15589	396716	6.76%	0.366%
257	18.248	18.214	18.272	VV	17195	496834	8.47%	0.458%
258	18.307	18.272	18.321	VV	18155	449872	7.67%	0.415%
259	18.337	18.321	18.381	VV	16956	544089	9.28%	0.502%
260	18.388	18.381	18.404	VV	13945	180113	3.07%	0.166%
261	18.442	18.404	18.460	VV	31354	719390	12.26%	0.664%
262	18.471	18.460	18.504	VV	24971	539688	9.20%	0.498%
263	18.535	18.504	18.562	VV	81057	1552465	26.47%	1.432%
264	18.573	18.562	18.604	VV	28456	586586	10.00%	0.541%
265	18.615	18.604	18.648	VV	18683	443898	7.57%	0.409%
266	18.672	18.648	18.682	VV	22892	383230	6.53%	0.353%
267	18.699	18.682	18.728	VV	23488	545271	9.30%	0.503%
268	18.737	18.728	18.755	VV	16916	259785	4.43%	0.240%
269	18.791	18.755	18.865	VV	62156	1712543	29.20%	1.580%

270	18.936	18.865	19.010	VV	rteres 39708	1701355	29.01%	1.569%
271	19.039	19.010	19.060	VV	21578	518842	8.85%	0.479%
272	19.073	19.060	19.084	VV	17697	254042	4.33%	0.234%
273	19.105	19.084	19.122	VV	19433	404854	6.90%	0.373%
274	19.139	19.122	19.171	VV	17862	458594	7.82%	0.423%
275	19.230	19.171	19.248	VV	19752	749124	12.77%	0.691%
276	19.259	19.248	19.274	VV	19388	296684	5.06%	0.274%
277	19.306	19.274	19.324	VV	38636	872868	14.88%	0.805%
278	19.334	19.324	19.395	VV	32828	953792	16.26%	0.880%
279	19.431	19.395	19.451	VV	21527	659101	11.24%	0.608%
280	19.480	19.451	19.541	VV	24356	1059443	18.06%	0.977%
281	19.548	19.541	19.555	VV	17726	140456	2.39%	0.130%
282	19.592	19.555	19.613	VV	20675	664474	11.33%	0.613%
283	19.620	19.613	19.629	VV	19438	174202	2.97%	0.161%
284	19.636	19.629	19.684	VV	17994	554560	9.45%	0.512%
285	19.724	19.684	19.774	VV	26926	1088889	18.56%	1.004%
286	19.795	19.774	19.810	VV	27555	501642	8.55%	0.463%
287	19.838	19.810	19.867	VV	28691	823534	14.04%	0.760%
288	19.881	19.867	19.895	VV	20158	328056	5.59%	0.303%
289	19.909	19.895	19.925	VV	21203	355468	6.06%	0.328%
290	19.961	19.925	19.973	VV	36759	837450	14.28%	0.772%
291	19.991	19.973	20.011	VV	44620	847715	14.45%	0.782%
292	20.028	20.011	20.064	VV	36536	993066	16.93%	0.916%
293	20.099	20.064	20.121	VV	34864	1034330	17.63%	0.954%
294	20.132	20.121	20.169	VV	28292	748789	12.77%	0.691%
295	20.178	20.169	20.202	VV	25912	467788	7.98%	0.431%
296	20.255	20.202	20.308	VV	27005	1528793	26.06%	1.410%
297	20.349	20.308	20.392	VV	42460	1621270	27.64%	1.495%
298	20.435	20.392	20.444	VV	32429	937770	15.99%	0.865%
299	20.464	20.444	20.481	VV	36657	749299	12.77%	0.691%
300	20.490	20.481	20.513	VV	32625	576659	9.83%	0.532%
301	20.535	20.513	20.558	VV	31373	786333	13.41%	0.725%
302	20.637	20.558	20.651	VV	36875	1819020	31.01%	1.678%
303	20.662	20.651	20.707	VV	35071	1125872	19.19%	1.038%
304	20.717	20.707	20.734	VV	31992	505782	8.62%	0.467%
305	20.748	20.734	20.758	VV	30139	411851	7.02%	0.380%
306	20.780	20.758	20.793	VV	29447	609543	10.39%	0.562%
307	20.829	20.793	20.861	VV	34268	1273468	21.71%	1.175%
308	20.872	20.861	20.909	VV	30431	836479	14.26%	0.772%
309	20.928	20.909	20.941	VV	28640	540055	9.21%	0.498%
310	20.948	20.941	20.963	VV	29473	363175	6.19%	0.335%
311	20.989	20.963	21.009	VV	27643	746568	12.73%	0.689%
312	21.018	21.009	21.038	VV	27824	465985	7.94%	0.430%
313	21.044	21.038	21.074	VV	28392	562794	9.60%	0.519%
314	21.083	21.074	21.141	VV	25772	1013848	17.28%	0.935%
315	21.154	21.141	21.164	VV	26012	339929	5.80%	0.314%
316	21.176	21.164	21.188	VV	23979	331962	5.66%	0.306%

					rteres			
317	21.219	21.188	21.251	VV	26622	939030	16.01%	0.866%
318	21.270	21.251	21.330	VV	22440	999033	17.03%	0.921%
319	21.344	21.330	21.381	VV	21506	624406	10.65%	0.576%
320	21.396	21.381	21.524	VV	21300	1650574	28.14%	1.522%
321	21.532	21.524	21.538	VV	18180	148783	2.54%	0.137%
322	21.550	21.538	21.572	VV	19321	346194	5.90%	0.319%
323	21.584	21.572	21.634	VV	17159	586324	10.00%	0.541%
324	21.648	21.634	21.686	VV	17624	498339	8.50%	0.460%
325	21.707	21.686	21.763	VV	15472	621230	10.59%	0.573%
326	21.770	21.763	21.780	VV	12637	125852	2.15%	0.116%
327	21.842	21.780	21.854	VV	12545	533549	9.10%	0.492%
328	21.878	21.854	21.926	VV	12690	495574	8.45%	0.457%
329	21.938	21.926	22.008	VV	11230	452525	7.72%	0.417%
330	22.017	22.008	22.027	VV	7878	92225	1.57%	0.085%
331	22.037	22.027	22.058	VV	8380	137193	2.34%	0.127%
332	22.073	22.058	22.110	VV	8957	227296	3.88%	0.210%
333	22.140	22.110	22.171	VV	8477	267018	4.55%	0.246%
334	22.182	22.171	22.232	VV	5825	167722	2.86%	0.155%
335	22.257	22.232	22.279	VV	4638	103468	1.76%	0.095%
336	22.285	22.279	22.307	VV	3829	46205	0.79%	0.043%
337	22.319	22.307	22.331	VV	3525	37522	0.64%	0.035%
338	22.348	22.331	22.358	VV	2768	35861	0.61%	0.033%
339	22.364	22.358	22.392	VV	2682	29007	0.49%	0.027%
					Sum of corrected areas:	108414862		

Aliphatic EPH 103025.M Thu Nov 20 04:44:20 2025



CALIBRATION SUMMARY

Initial Calibration Report for SequenceID : FE103025AL

AreaCount

Parameter Range	FE056575.D	FE056576.D	FE056577.D	FE056578.D	FE056579.D	
Aliphatic C9-C12	47378340.000	25372826.000	10134874.000	5323968.000	2735296.000	
Aliphatic C12-C16	32958436.000	17867364.000	7039199.000	3707774.000	1889371.000	
Aliphatic C16-C21	50634896.000	27807189.000	10962966.000	5844076.000	3012669.000	
Aliphatic C21-C28	65391355.000	36849784.000	14322959.000	8150425.000	4666116.000	
Aliphatic C28-C40	76863576.000	43549713.000	17723612.000	10141838.000	6197225.000	
Aliphatic EPH	273226603.000	151446876.000	60183610.000	33168081.000	18500677.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aliphatic C9-C12	171162.641333	5.459				
Aliphatic C12-C16	178754.319	5.236				
Aliphatic C16-C21	186505.4959998	6.59				
Aliphatic C21-C28	192766.144	13.927				
Aliphatic C28-C40	159314.647333	18.927				
Aliphatic EPH	175414.750555	11.628				

Concentration

Parameter Range	FE056575.D	FE056576.D	FE056577.D	FE056578.D	FE056579.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	FE056575.D	FE056576.D	FE056577.D	FE056578.D	FE056579.D	
Aliphatic C9-C12	157927.800000	169152.173333	168914.566666	177465.600000	182353.066666	
Aliphatic C12-C16	164792.180000	178673.640000	175979.975000	185388.700000	188937.100000	
Aliphatic C16-C21	168782.986666	185381.260000	182716.100000	194802.533333	200844.600000	

Initial Calibration Report for SequenceID : FE103025AL

Aliphatic C21-C28	163478.387500	184248.920000	179036.987500	203760.625000	233305.800000	
Aliphatic C28-C40	128105.960000	145165.710000	147696.766666	169030.633333	206574.166666	
Aliphatic EPH	151792.557222	168274.306666	167176.694444	184267.116666	205563.077777	

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
 Data File : FE056575.D
 Signal(s) : FID1B.ch
 Acq On : 30 Oct 2025 10:20
 Operator : YP\AJ
 Sample : 100 PPM ALIPHATIC HC STD1
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
 Quant Time: Oct 30 12:03:34 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
 Quant Title : GC Extractables
 QLast Update : Thu Oct 30 11:59:52 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.992	19059851	96.235 ug/ml
Spiked Amount 50.000		Recovery =	192.47%
12) S 1-chlorooctadecane (S...	13.427	14749289	96.361 ug/ml
Spiked Amount 50.000		Recovery =	192.72%
Target Compounds			
1) T n-Nonane (C9)	3.337	15510371	96.767 ug/ml
2) T n-Decane (C10)	4.591	15797359	96.498 ug/ml
3) T A~Naphthalene (C11.7)	6.308	17418486	97.460 ug/ml
4) T n-Dodecane (C12)	6.765	16070610	96.653 ug/ml
5) T A~2-methylnaphthalene...	7.409	16955970	98.036 ug/ml
6) T n-Tetradecane (C14)	8.601	16108586	96.787 ug/ml
7) T n-Hexadecane (C16)	10.215	16849850	96.650 ug/ml
8) T n-Octadecane (C18)	11.666	17249418	96.237 ug/ml
10) T n-Eicosane (C20)	12.979	16787284	95.930 ug/ml
11) T n-Heneicosane (C21)	13.593	16598194	95.935 ug/ml
13) T n-Docosane (C22)	14.181	16594646	95.890 ug/ml
14) T n-Tetracosane (C24)	15.288	16611261	95.631 ug/ml
15) T n-Hexacosane (C26)	16.313	16325668	95.495 ug/ml
16) T n-Octacosane (C28)	17.266	15859780	94.791 ug/ml
17) T n-Tricontane (C30)	18.155	15787066	93.066 ug/ml
18) T n-Dotriacontane (C32)	18.990	14882432	91.297 ug/ml
19) T n-Tetratriacontane (C34)	19.776	13398021	91.103 ug/ml
20) T n-Hexatriacontane (C36)	20.516	11781393	92.518 ug/ml
21) T n-Octatriacontane (C38)	21.272	10906555	95.307 ug/ml
22) T n-Tetracontane (C40)	22.223	10108109	95.430 ug/ml

(f)=RT Delta > 1/2 Window

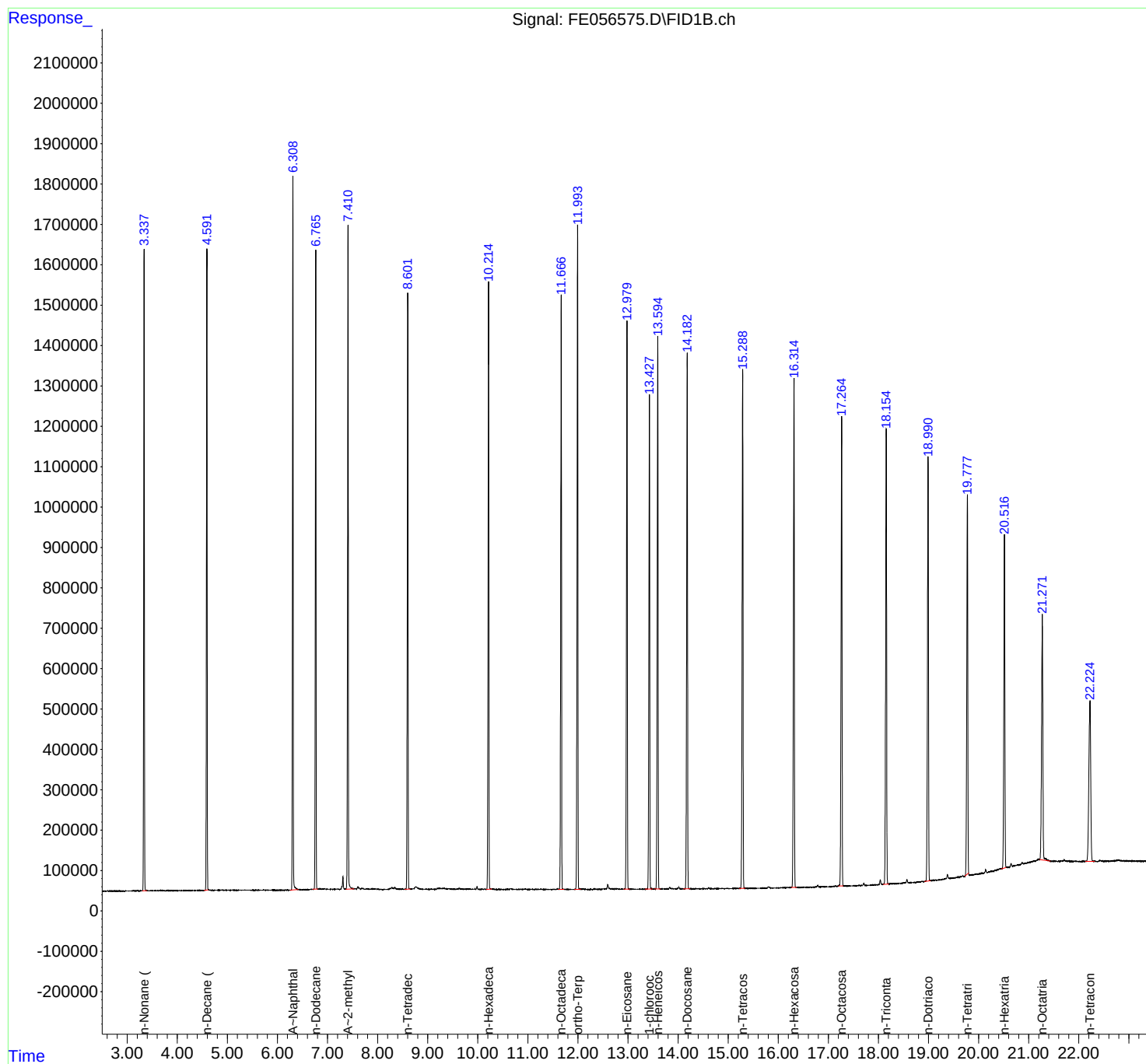
(m)=manual int.

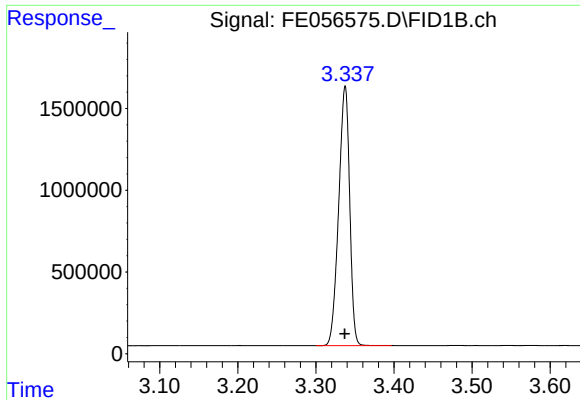
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
Data File : FE056575.D
Signal(s) : FID1B.ch
Acq On : 30 Oct 2025 10:20
Operator : YP\AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Oct 30 12:03:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
Quant Title : GC Extractables
QLast Update : Thu Oct 30 11:59:52 2025
Response via : Initial Calibration
Integrator: ChemStation

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

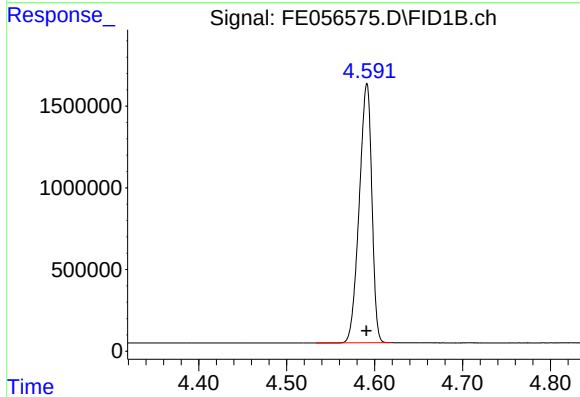




#1 n-Nonane (C9)

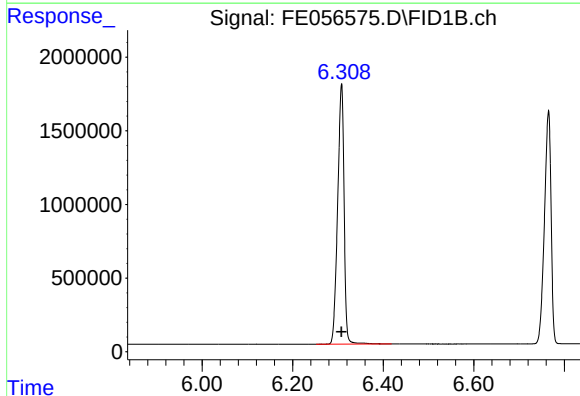
R.T.: 3.337 min
Delta R.T.: 0.000 min
Response: 15510371
Conc: 96.77 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



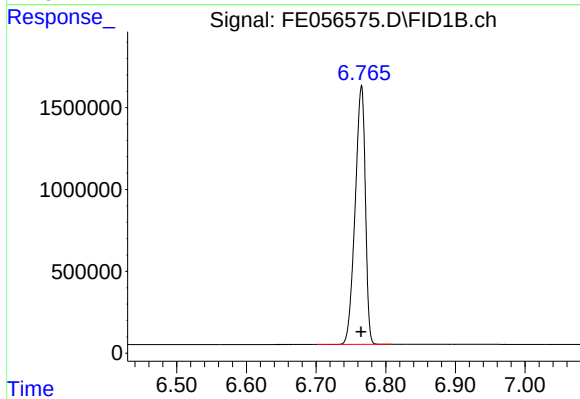
#2 n-Decane (C10)

R.T.: 4.591 min
Delta R.T.: 0.000 min
Response: 15797359
Conc: 96.50 ug/ml



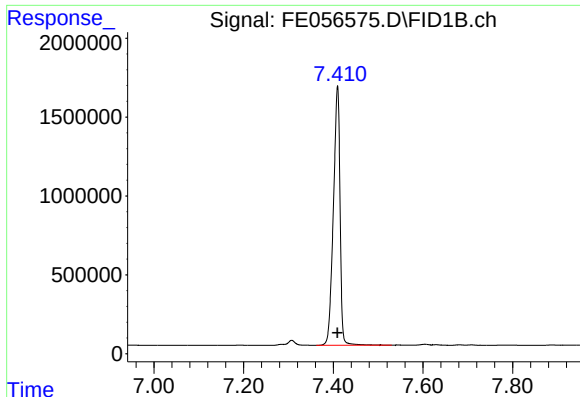
#3 A~Naphthalene (C11.7)

R.T.: 6.308 min
Delta R.T.: 0.000 min
Response: 17418486
Conc: 97.46 ug/ml



#4 n-Dodecane (C12)

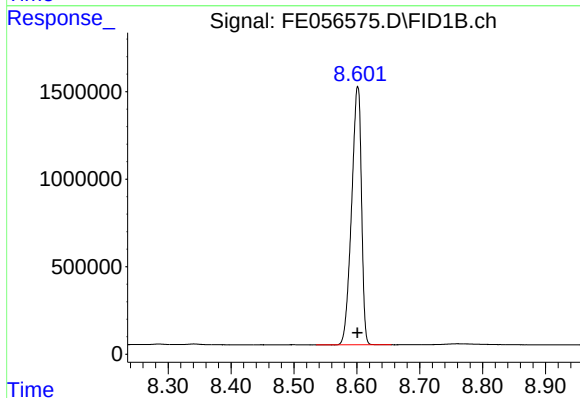
R.T.: 6.765 min
Delta R.T.: 0.000 min
Response: 16070610
Conc: 96.65 ug/ml



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

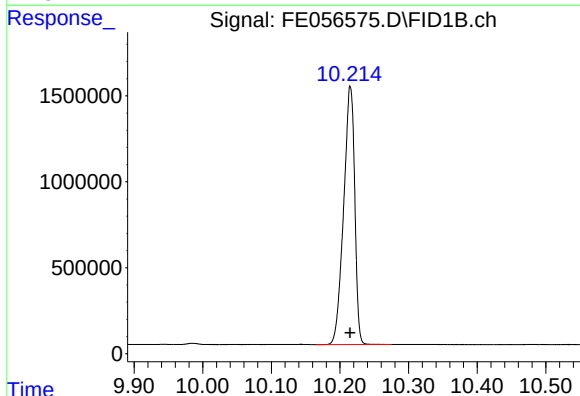
R.T.: 7.409 min
Delta R.T.: 0.000 min
Response: 16955970
Conc: 98.04 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



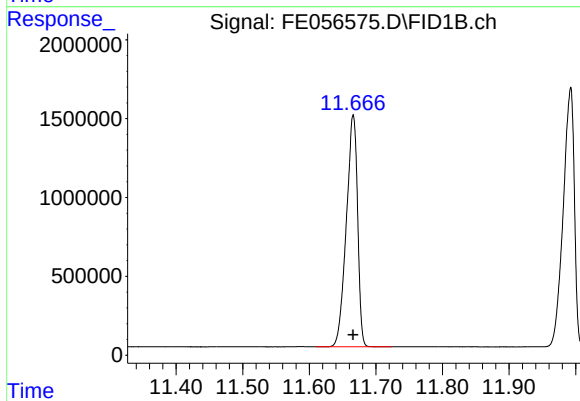
#6 n-Tetradecane (C14)

R.T.: 8.601 min
Delta R.T.: 0.000 min
Response: 16108586
Conc: 96.79 ug/ml



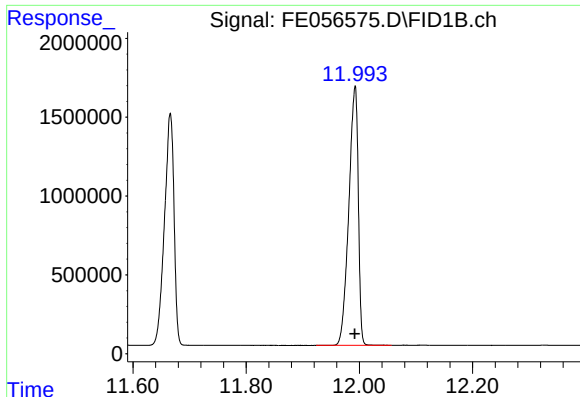
#7 n-Hexadecane (C16)

R.T.: 10.215 min
Delta R.T.: 0.000 min
Response: 16849850
Conc: 96.65 ug/ml



#8 n-Octadecane (C18)

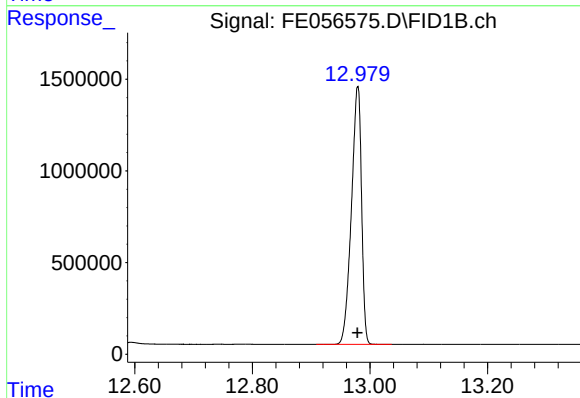
R.T.: 11.666 min
Delta R.T.: 0.000 min
Response: 17249418
Conc: 96.24 ug/ml



#9 ortho-Terphenyl (SURR)

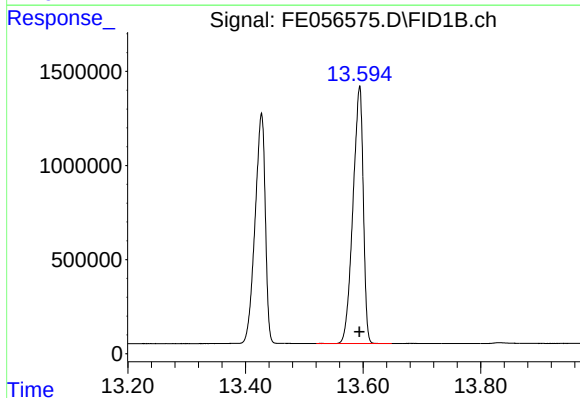
R.T.: 11.992 min
Delta R.T.: 0.000 min
Response: 19059851
Conc: 96.24 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



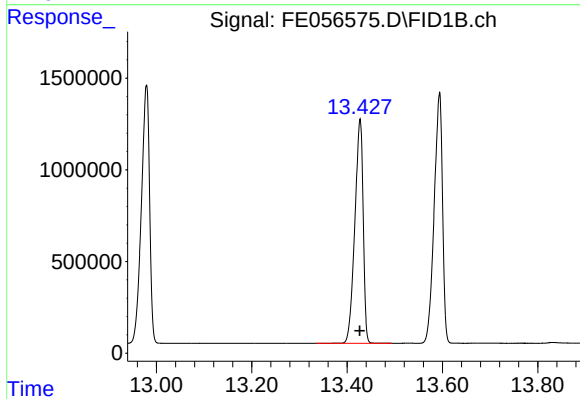
#10 n-Eicosane (C20)

R.T.: 12.979 min
Delta R.T.: 0.000 min
Response: 16787284
Conc: 95.93 ug/ml



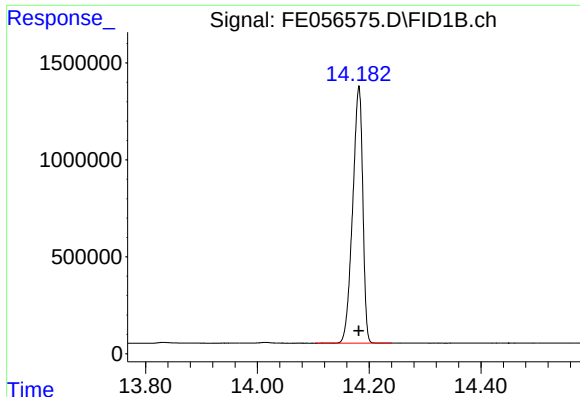
#11 n-Heneicosane (C21)

R.T.: 13.593 min
Delta R.T.: 0.000 min
Response: 16598194
Conc: 95.93 ug/ml



#12 1-chlorooctadecane (SURR)

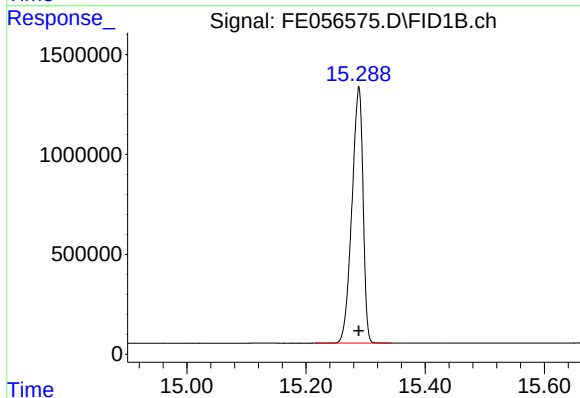
R.T.: 13.427 min
Delta R.T.: 0.000 min
Response: 14749289
Conc: 96.36 ug/ml



#13 n-Docosane (C22)

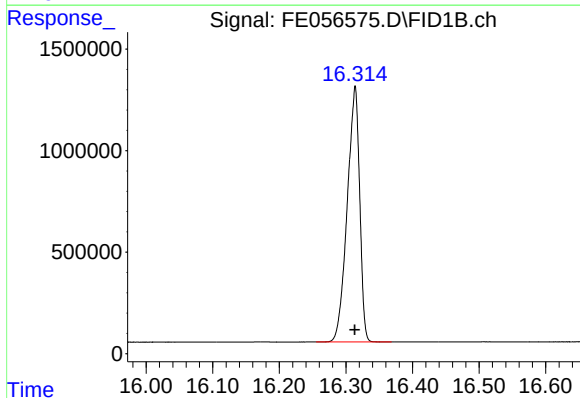
R.T.: 14.181 min
Delta R.T.: 0.000 min
Response: 16594646
Conc: 95.89 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



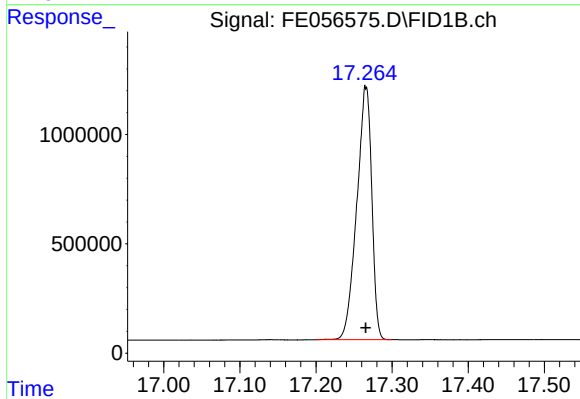
#14 n-Tetracosane (C24)

R.T.: 15.288 min
Delta R.T.: 0.000 min
Response: 16611261
Conc: 95.63 ug/ml



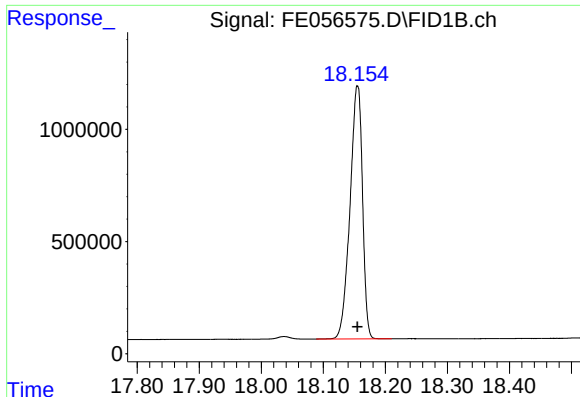
#15 n-Hexacosane (C26)

R.T.: 16.313 min
Delta R.T.: 0.000 min
Response: 16325668
Conc: 95.50 ug/ml



#16 n-Octacosane (C28)

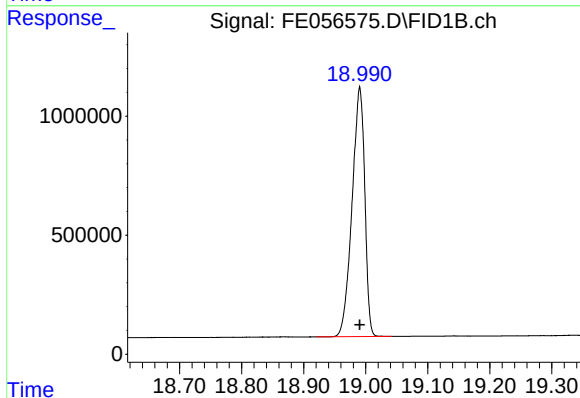
R.T.: 17.266 min
Delta R.T.: 0.000 min
Response: 15859780
Conc: 94.79 ug/ml



#17 n-Tricontane (C30)

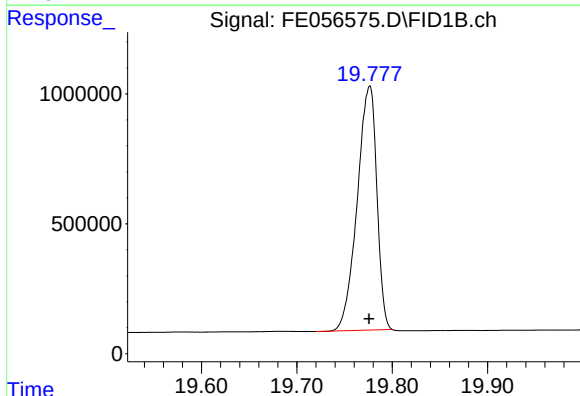
R.T.: 18.155 min
Delta R.T.: 0.000 min
Response: 15787066
Conc: 93.07 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



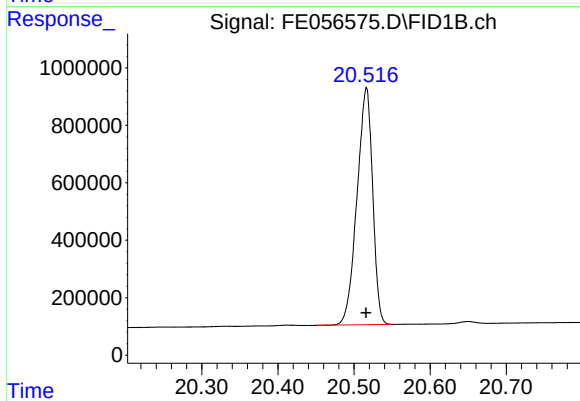
#18 n-Dotriacontane (C32)

R.T.: 18.990 min
Delta R.T.: 0.000 min
Response: 14882432
Conc: 91.30 ug/ml



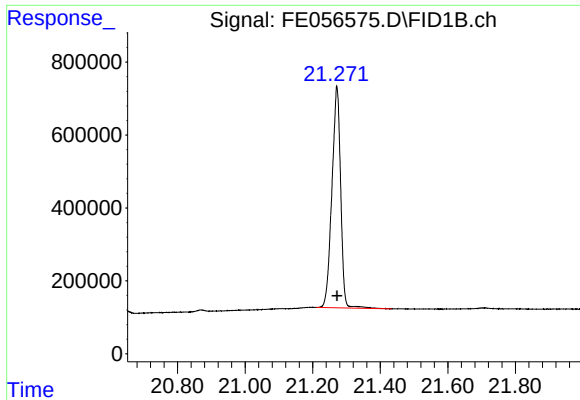
#19 n-Tetratriacontane (C34)

R.T.: 19.776 min
Delta R.T.: 0.000 min
Response: 13398021
Conc: 91.10 ug/ml



#20 n-Hexatriacontane (C36)

R.T.: 20.516 min
Delta R.T.: 0.000 min
Response: 11781393
Conc: 92.52 ug/ml



#21 n-Octatriacontane (C38)

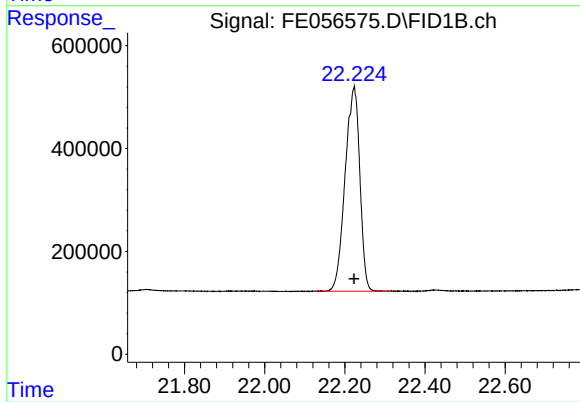
R.T.: 21.272 min
Delta R.T.: 0.000 min
Response: 10906555
Conc: 95.31 ug/ml

Instrument :

FID_E

ClientSampleId :

100 PPM ALIPHATIC HC STD1



#22 n-Tetracontane (C40)

R.T.: 22.223 min
Delta R.T.: 0.000 min
Response: 10108109
Conc: 95.43 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
 Data File : FE056575.D
 Signal(s) : FID1B.ch
 Acq On : 30 Oct 2025 10:20
 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 103025.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	3.337	3.300	3.397	BB	1587559	15510371	81.38%	4.543%
2	4.591	4.534	4.619	BBA	1581962	15797359	82.88%	4.627%
3	6.308	6.252	6.419	BB	1757870	17418486	91.39%	5.102%
4	6.765	6.700	6.809	BB	1584765	16070610	84.32%	4.707%
5	7.409	7.362	7.530	PV	1636096	16955970	88.96%	4.966%
6	8.601	8.535	8.655	BB	1480313	16108586	84.52%	4.718%
7	10.215	10.165	10.275	BB	1502827	16849850	88.40%	4.935%
8	11.666	11.610	11.724	BB	1469692	17249418	90.50%	5.052%
9	11.992	11.924	12.057	BB	1639468	19059851	100.00%	5.583%
10	12.979	12.909	13.037	BB	1409836	16787284	88.08%	4.917%
11	13.427	13.335	13.494	BB	1223044	14749289	77.38%	4.320%
12	13.593	13.520	13.649	BB	1361908	16598194	87.08%	4.862%
13	14.181	14.105	14.240	BB	1330972	16594646	87.07%	4.861%
14	15.288	15.217	15.344	BB	1288586	16611261	87.15%	4.865%
15	16.313	16.255	16.369	BB	1263736	16325668	85.65%	4.782%
16	17.266	17.200	17.299	BBA	1155432	15859780	83.21%	4.645%
17	18.155	18.089	18.210	BB	1127298	15787066	82.83%	4.624%
18	18.990	18.920	19.042	BB	1047781	14882432	78.08%	4.359%
19	19.776	19.720	19.799	BBA	935373	13398021	70.29%	3.924%
20	20.516	20.450	20.549	BBA	822409	11781393	61.81%	3.451%
21	21.272	21.210	21.434	BB	606103	10906555	57.22%	3.195%
22	22.223	22.129	22.317	BB	398455	10108109	53.03%	2.961%
Sum of corrected areas:						341410195		

Aliphatic EPH 103025.M Thu Oct 30 12:55:02 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
 Data File : FE056576.D
 Signal(s) : FID1B.ch
 Acq On : 30 Oct 2025 10:50
 Operator : YP\AJ
 Sample : 50 PPM ALIPHATIC HC STD2
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
 Quant Time: Oct 30 12:05:52 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
 Quant Title : GC Extractables
 QLast Update : Thu Oct 30 11:59:52 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.985	10390390	51.615 ug/ml
Spiked Amount 50.000		Recovery =	103.23%
12) S 1-chlorooctadecane (S...	13.422	8069798	51.782 ug/ml
Spiked Amount 50.000		Recovery =	103.56%
Target Compounds			
1) T n-Nonane (C9)	3.334	8283699	51.108 ug/ml
2) T n-Decane (C10)	4.587	8458707	51.101 ug/ml
3) T A~Naphthalene (C11.7)	6.303	9255687	51.178 ug/ml
4) T n-Dodecane (C12)	6.761	8630420	51.255 ug/ml
5) T A~2-methylnaphthalene...	7.404	9018328	51.408 ug/ml
6) T n-Tetradecane (C14)	8.597	8702299	51.502 ug/ml
7) T n-Hexadecane (C16)	10.210	9165065	51.685 ug/ml
8) T n-Octadecane (C18)	11.660	9466424	51.842 ug/ml
10) T n-Eicosane (C20)	12.974	9224749	51.777 ug/ml
11) T n-Heneicosane (C21)	13.588	9116016	51.761 ug/ml
13) T n-Docosane (C22)	14.176	9188407	52.021 ug/ml
14) T n-Tetracosane (C24)	15.283	9376021	52.583 ug/ml
15) T n-Hexacosane (C26)	16.307	9244371	52.644 ug/ml
16) T n-Octacosane (C28)	17.261	9040985	52.620 ug/ml
17) T n-Tricontane (C30)	18.150	9116641	52.435 ug/ml
18) T n-Dotriacontane (C32)	18.985	8697901	52.190 ug/ml
19) T n-Tetratriacontane (C34)	19.770	7726773	51.665 ug/ml
20) T n-Hexatriacontane (C36)	20.510	6593672	51.172 ug/ml
21) T n-Octatriacontane (C38)	21.266	5889118	50.965 ug/ml
22) T n-Tetracontane (C40)	22.214	5525608	51.424 ug/ml

(f)=RT Delta > 1/2 Window

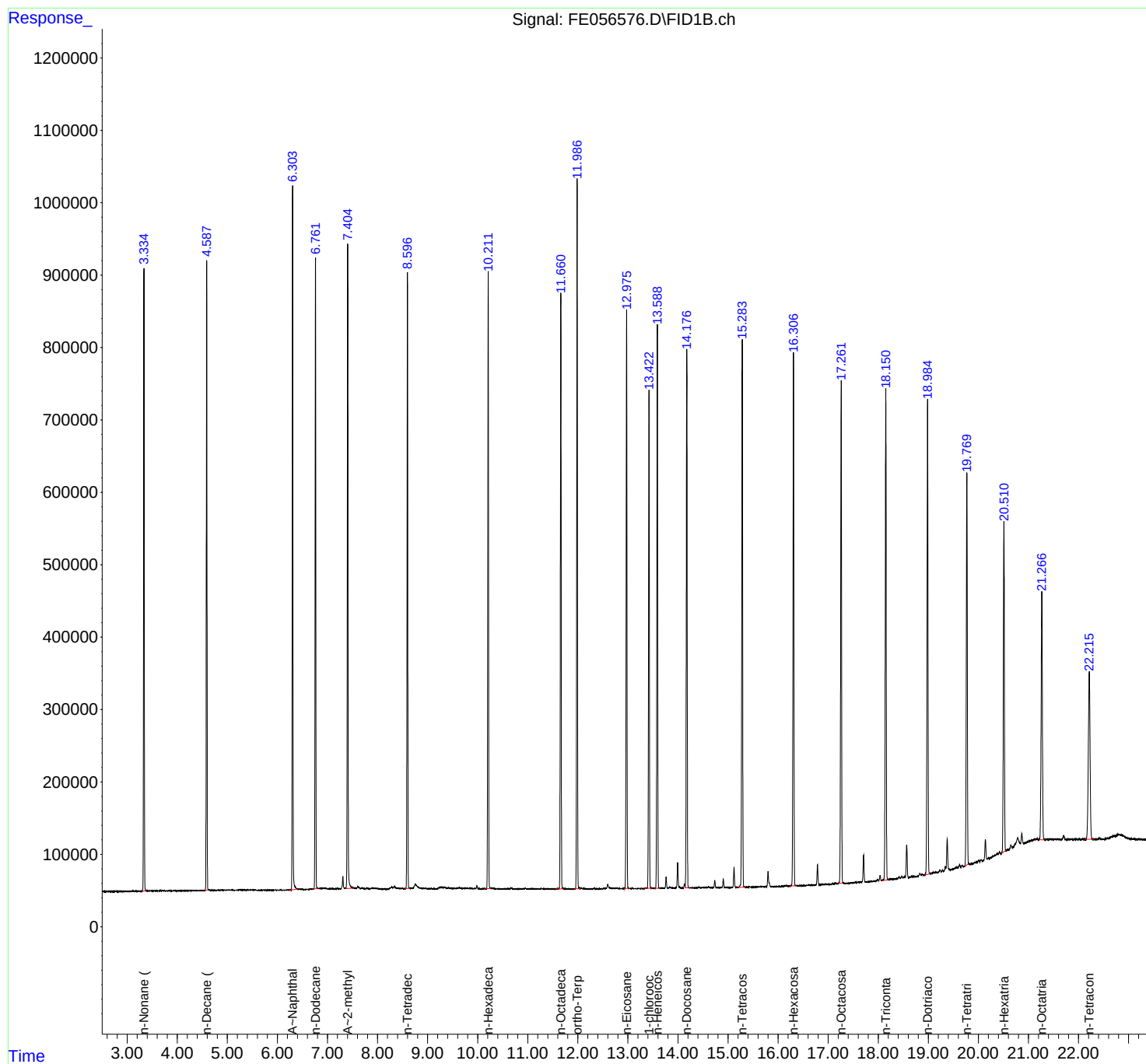
(m)=manual int.

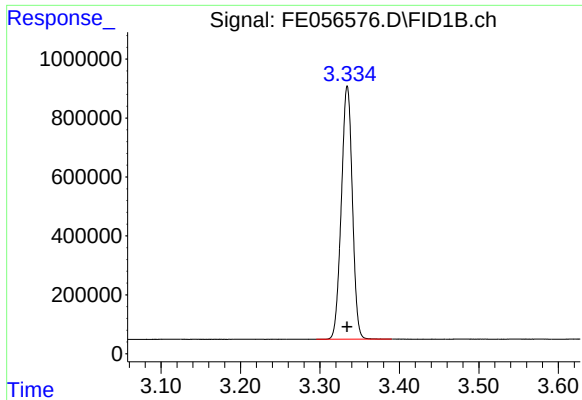
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
Data File : FE056576.D
Signal(s) : FID1B.ch
Acq On : 30 Oct 2025 10:50
Operator : YP\AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Oct 30 12:05:52 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
Quant Title : GC Extractables
QLast Update : Thu Oct 30 11:59:52 2025
Response via : Initial Calibration
Integrator: ChemStation

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

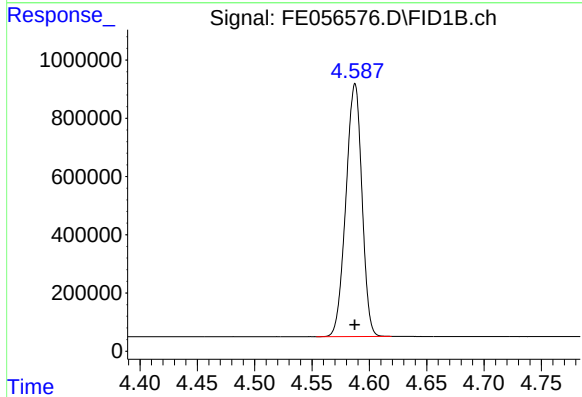




#1 n-Nonane (C9)

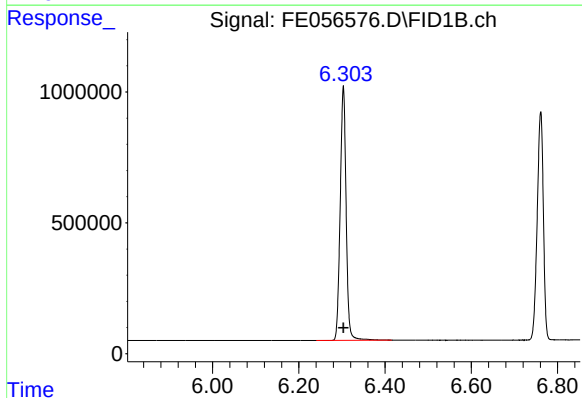
R.T.: 3.334 min
Delta R.T.: 0.000 min
Response: 8283699
Conc: 51.11 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



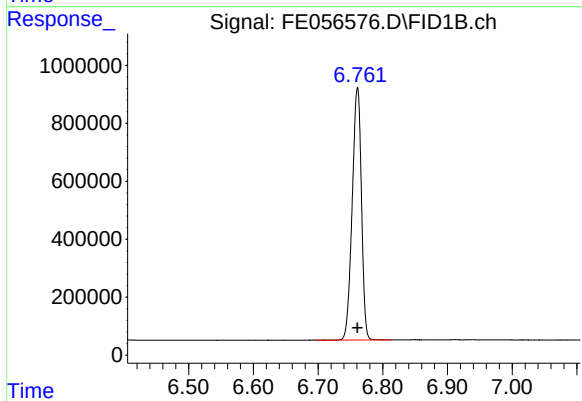
#2 n-Decane (C10)

R.T.: 4.587 min
Delta R.T.: 0.000 min
Response: 8458707
Conc: 51.10 ug/ml



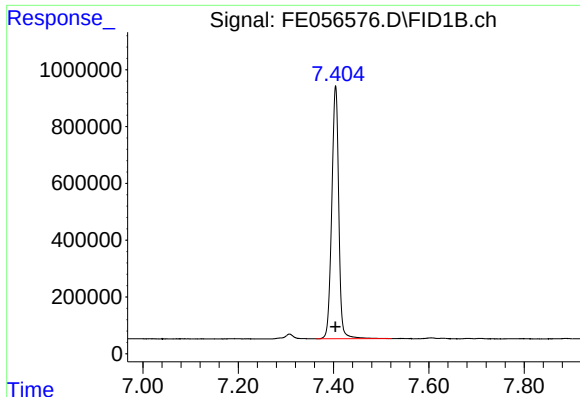
#3 A~Naphthalene (C11.7)

R.T.: 6.303 min
Delta R.T.: 0.000 min
Response: 9255687
Conc: 51.18 ug/ml



#4 n-Dodecane (C12)

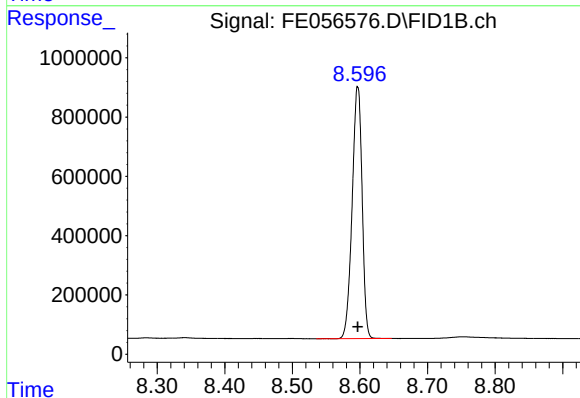
R.T.: 6.761 min
Delta R.T.: 0.000 min
Response: 8630420
Conc: 51.25 ug/ml



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

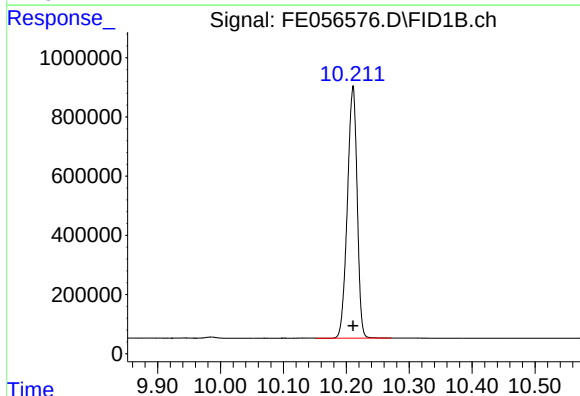
R.T.: 7.404 min
Delta R.T.: 0.000 min
Response: 9018328
Conc: 51.41 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



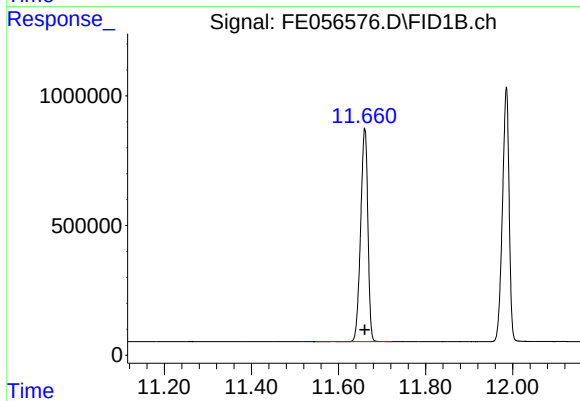
#6 n-Tetradecane (C14)

R.T.: 8.597 min
Delta R.T.: 0.000 min
Response: 8702299
Conc: 51.50 ug/ml



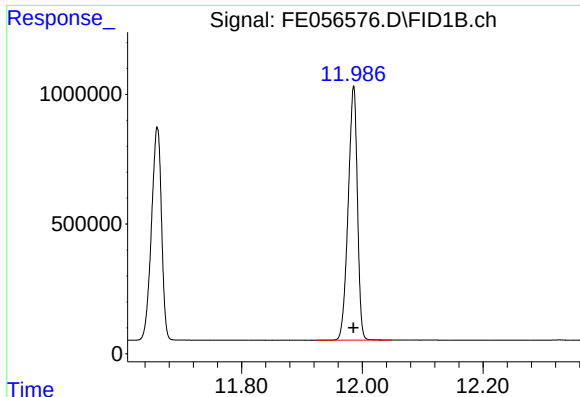
#7 n-Hexadecane (C16)

R.T.: 10.210 min
Delta R.T.: 0.000 min
Response: 9165065
Conc: 51.68 ug/ml



#8 n-Octadecane (C18)

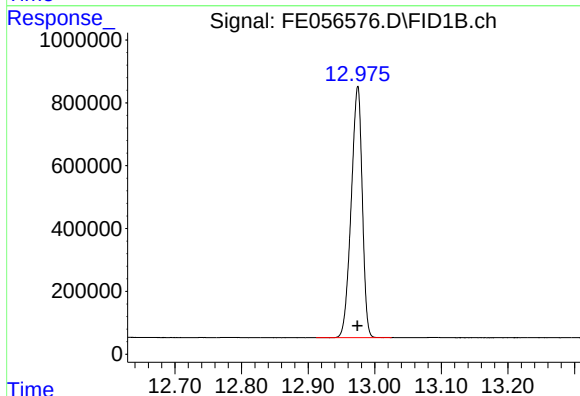
R.T.: 11.660 min
Delta R.T.: 0.000 min
Response: 9466424
Conc: 51.84 ug/ml



#9 ortho-Terphenyl (SURR)

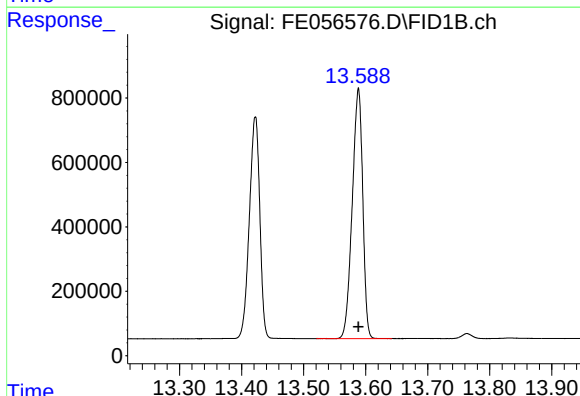
R.T.: 11.985 min
Delta R.T.: 0.000 min
Response: 10390390
Conc: 51.61 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



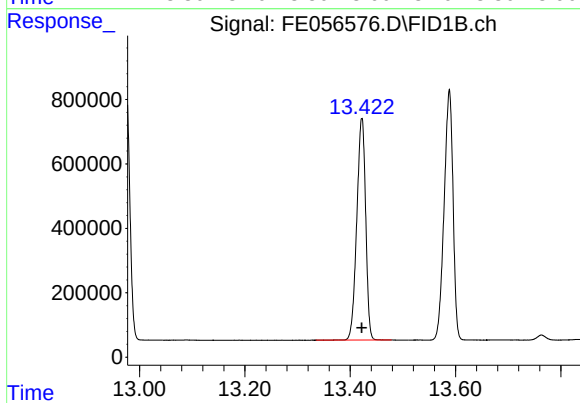
#10 n-Eicosane (C20)

R.T.: 12.974 min
Delta R.T.: 0.000 min
Response: 9224749
Conc: 51.78 ug/ml



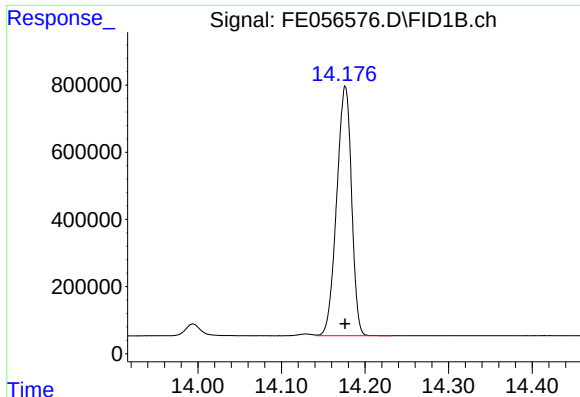
#11 n-Heneicosane (C21)

R.T.: 13.588 min
Delta R.T.: 0.000 min
Response: 9116016
Conc: 51.76 ug/ml



#12 1-chlorooctadecane (SURR)

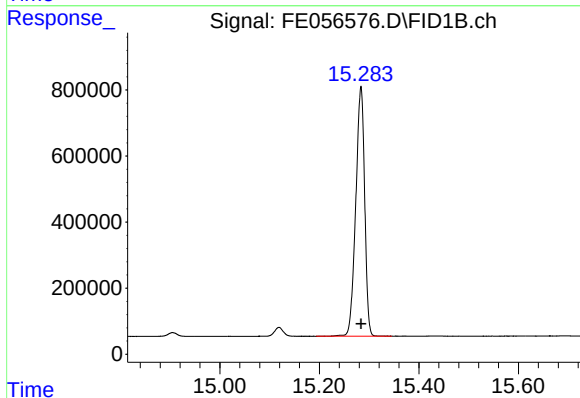
R.T.: 13.422 min
Delta R.T.: 0.000 min
Response: 8069798
Conc: 51.78 ug/ml



#13 n-Docosane (C22)

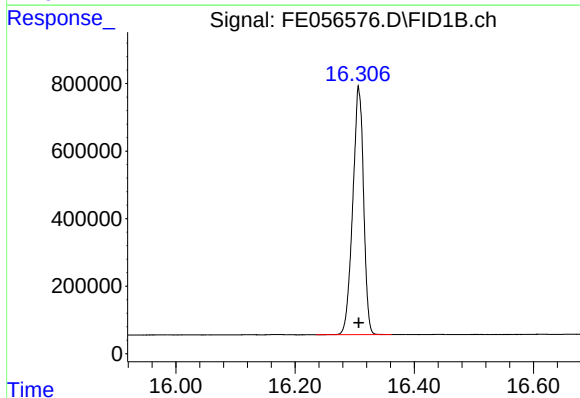
R.T.: 14.176 min
Delta R.T.: 0.000 min
Response: 9188407
Conc: 52.02 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



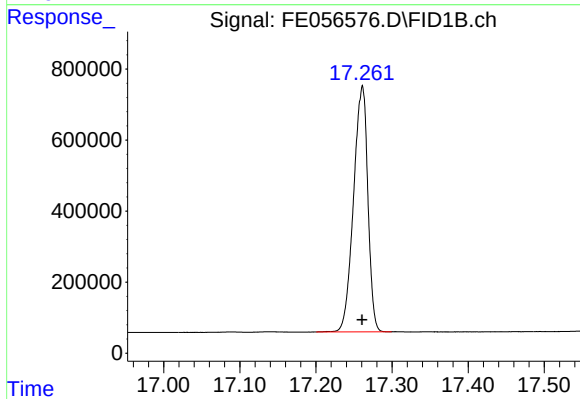
#14 n-Tetracosane (C24)

R.T.: 15.283 min
Delta R.T.: 0.000 min
Response: 9376021
Conc: 52.58 ug/ml



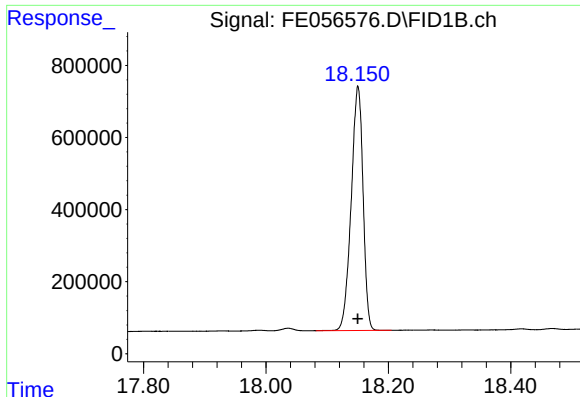
#15 n-Hexacosane (C26)

R.T.: 16.307 min
Delta R.T.: 0.000 min
Response: 9244371
Conc: 52.64 ug/ml



#16 n-Octacosane (C28)

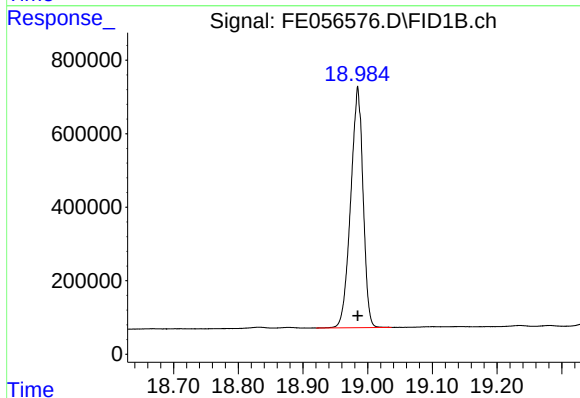
R.T.: 17.261 min
Delta R.T.: 0.000 min
Response: 9040985
Conc: 52.62 ug/ml



#17 n-Tricontane (C30)

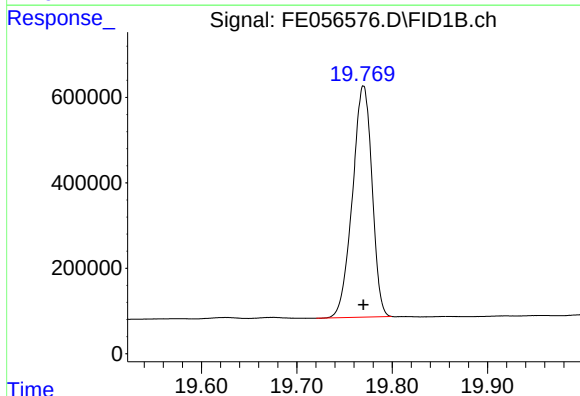
R.T.: 18.150 min
Delta R.T.: 0.000 min
Response: 9116641
Conc: 52.43 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



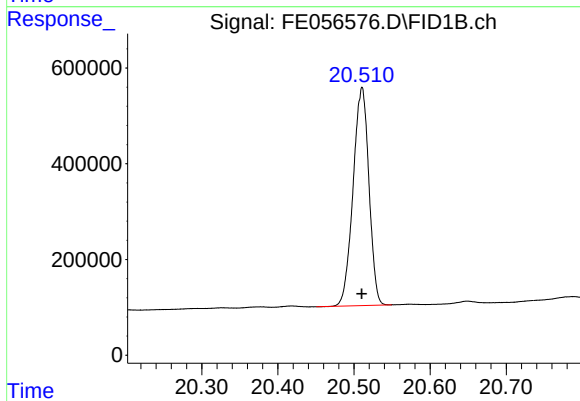
#18 n-Dotriacontane (C32)

R.T.: 18.985 min
Delta R.T.: 0.000 min
Response: 8697901
Conc: 52.19 ug/ml



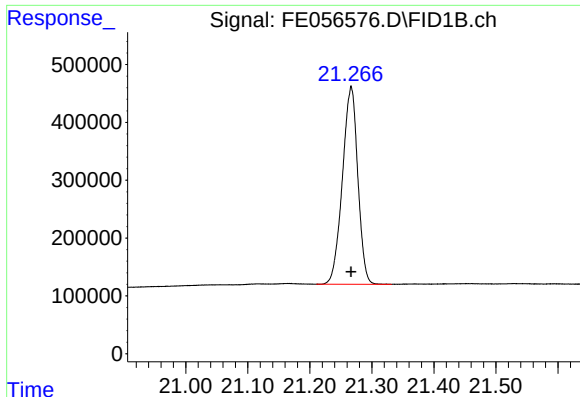
#19 n-Tetratriacontane (C34)

R.T.: 19.770 min
Delta R.T.: 0.000 min
Response: 7726773
Conc: 51.67 ug/ml



#20 n-Hexatriacontane (C36)

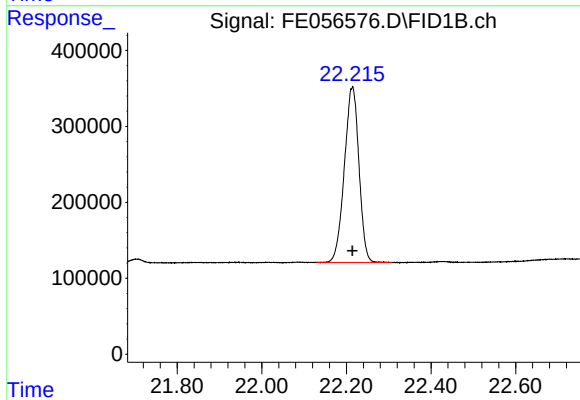
R.T.: 20.510 min
Delta R.T.: 0.000 min
Response: 6593672
Conc: 51.17 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.266 min
Delta R.T.: 0.000 min
Response: 5889118
Conc: 50.97 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



#22 n-Tetracontane (C40)

R.T.: 22.214 min
Delta R.T.: 0.000 min
Response: 5525608
Conc: 51.42 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
Data File : FE056576.D
Signal(s) : FID1B.ch
Acq On : 30 Oct 2025 10:50
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 103025.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	3.334	3.295	3.390	BB	859468	8283699	79.72%	4.402%
2	4.587	4.554	4.619	BBA	868249	8458707	81.41%	4.495%
3	6.303	6.240	6.415	BB	974202	9255687	89.08%	4.919%
4	6.761	6.697	6.814	BB	869786	8630420	83.06%	4.586%
5	7.404	7.364	7.522	BB	890333	9018328	86.79%	4.792%
6	8.597	8.535	8.647	BB	849680	8702299	83.75%	4.624%
7	10.210	10.152	10.272	BB	848274	9165065	88.21%	4.870%
8	11.660	11.549	11.722	BB	822893	9466424	91.11%	5.030%
9	11.985	11.924	12.049	BB	981415	10390390	100.00%	5.521%
10	12.974	12.912	13.025	BB	797927	9224749	88.78%	4.902%
11	13.422	13.335	13.479	BB	689355	8069798	77.67%	4.288%
12	13.588	13.520	13.642	BB	780350	9116016	87.74%	4.844%
13	14.176	14.142	14.232	VB	743785	9188407	88.43%	4.883%
14	15.283	15.194	15.345	BB	757600	9376021	90.24%	4.982%
15	16.307	16.235	16.362	BB	727588	9244371	88.97%	4.912%
16	17.261	17.200	17.299	BBA	690402	9040985	87.01%	4.804%
17	18.150	18.082	18.205	BB	679486	9116641	87.74%	4.845%
18	18.985	18.920	19.037	BB	654654	8697901	83.71%	4.622%
19	19.770	19.720	19.799	BBA	541984	7726773	74.36%	4.106%
20	20.510	20.450	20.549	BBA	457176	6593672	63.46%	3.504%
21	21.266	21.210	21.332	BB	342971	5889118	56.68%	3.129%
22	22.214	22.129	22.307	BB	230200	5525608	53.18%	2.936%
Sum of corrected areas:						188181079		

Aliphatic EPH 103025.M Thu Oct 30 12:57:04 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
 Data File : FE056577.D
 Signal(s) : FID1B.ch
 Acq On : 30 Oct 2025 11:20
 Operator : YP\AJ
 Sample : 20 PPM ALIPHATIC HC STD3
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
 Quant Time: Oct 30 12:00:19 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
 Quant Title : GC Extractables
 QLast Update : Thu Oct 30 11:59:52 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.980	4110239	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
12) S 1-chlorooctadecane (S...	13.418	3172652	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
Target Compounds			
1) T n-Nonane (C9)	3.333	3309356	20.000 ug/ml
2) T n-Decane (C10)	4.585	3388814	20.000 ug/ml
3) T A~Naphthalene (C11.7)	6.302	3665296	20.000 ug/ml
4) T n-Dodecane (C12)	6.758	3436704	20.000 ug/ml
5) T A~2-methylnaphthalene...	7.402	3527076	20.000 ug/ml
6) T n-Tetradecane (C14)	8.593	3435589	20.000 ug/ml
7) T n-Hexadecane (C16)	10.207	3603610	20.000 ug/ml
8) T n-Octadecane (C18)	11.656	3719660	20.000 ug/ml
10) T n-Eicosane (C20)	12.970	3642327	20.000 ug/ml
11) T n-Heneicosane (C21)	13.584	3600979	20.000 ug/ml
13) T n-Docosane (C22)	14.172	3603427	20.000 ug/ml
14) T n-Tetracosane (C24)	15.278	3625778	20.000 ug/ml
15) T n-Hexacosane (C26)	16.302	3573189	20.000 ug/ml
16) T n-Octacosane (C28)	17.255	3520565	20.000 ug/ml
17) T n-Tricontane (C30)	18.146	3627924	20.000 ug/ml
18) T n-Dotriacontane (C32)	18.981	3543930	20.000 ug/ml
19) T n-Tetratriacontane (C34)	19.766	3202986	20.000 ug/ml
20) T n-Hexatriacontane (C36)	20.507	2737391	20.000 ug/ml
21) T n-Octatriacontane (C38)	21.262	2396120	20.000 ug/ml
22) T n-Tetracontane (C40)	22.211	2215261	20.000 ug/ml

(f)=RT Delta > 1/2 Window

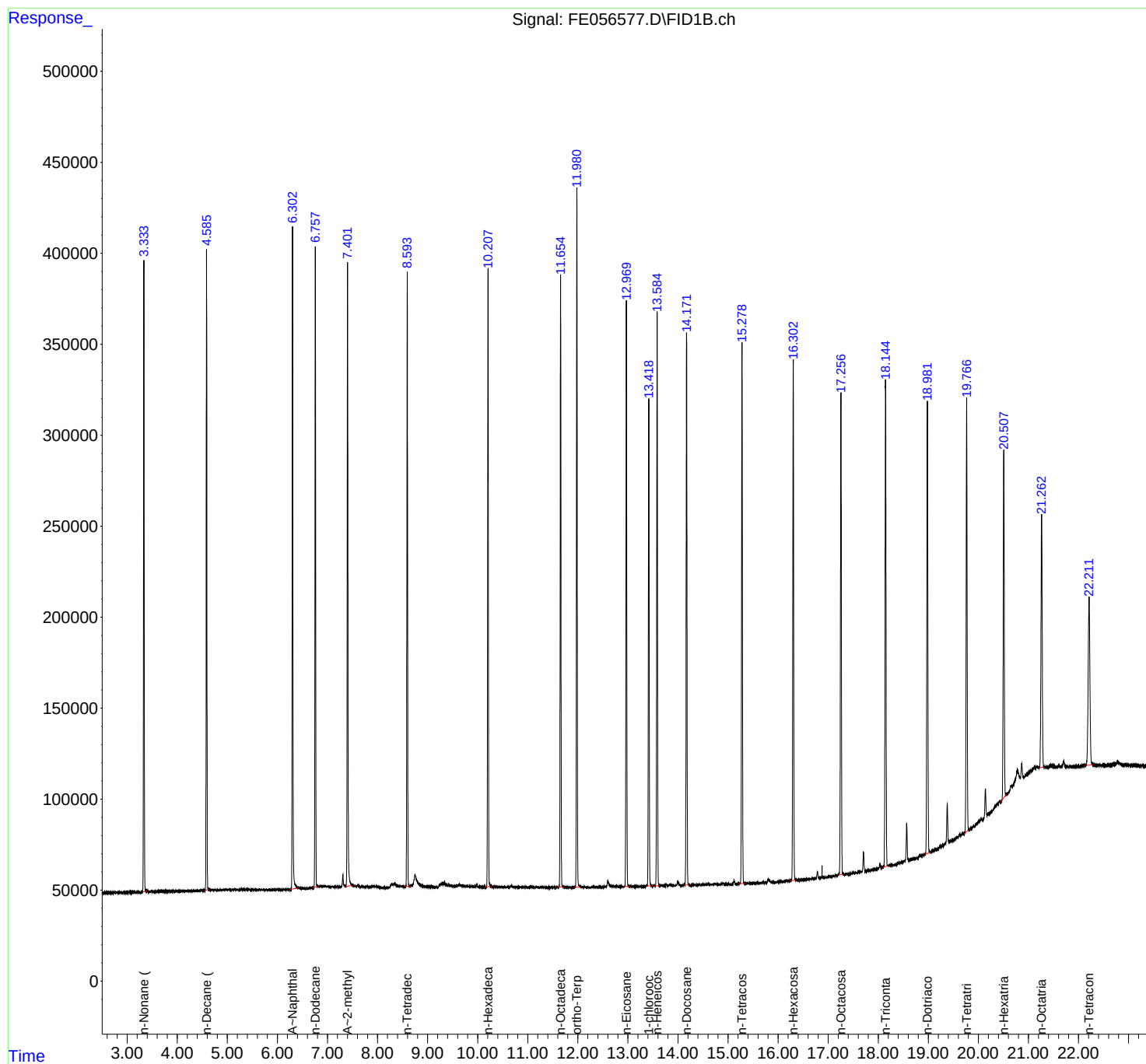
(m)=manual int.

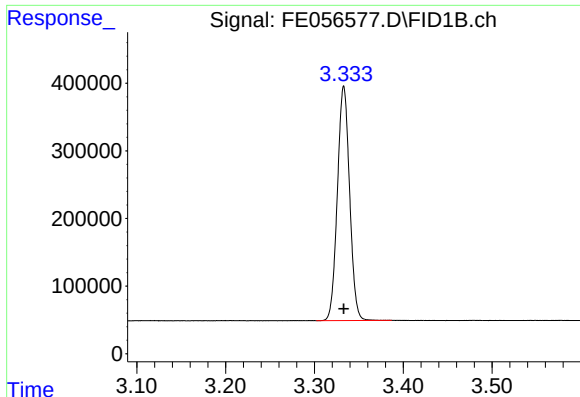
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
Data File : FE056577.D
Signal(s) : FID1B.ch
Acq On : 30 Oct 2025 11:20
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Oct 30 12:00:19 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
Quant Title : GC Extractables
QLast Update : Thu Oct 30 11:59:52 2025
Response via : Initial Calibration
Integrator: ChemStation

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

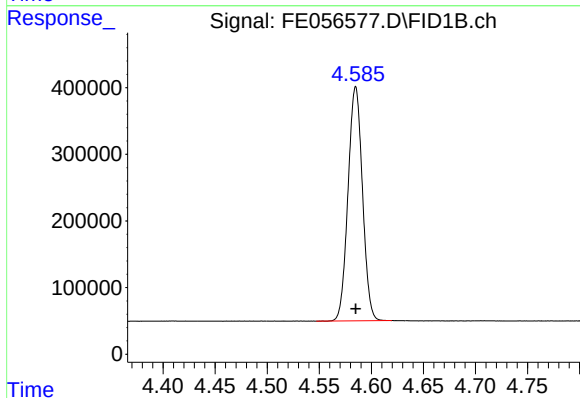




#1 n-Nonane (C9)

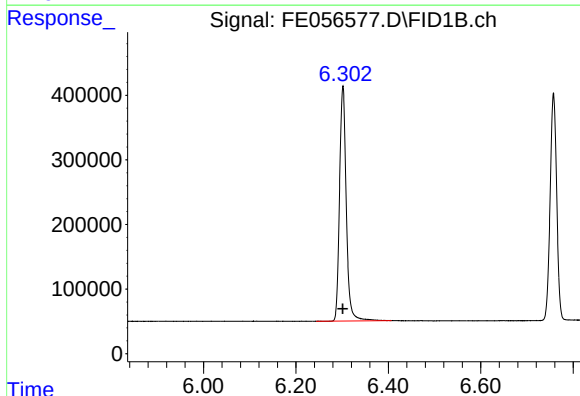
R.T.: 3.333 min
Delta R.T.: 0.000 min
Response: 3309356
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



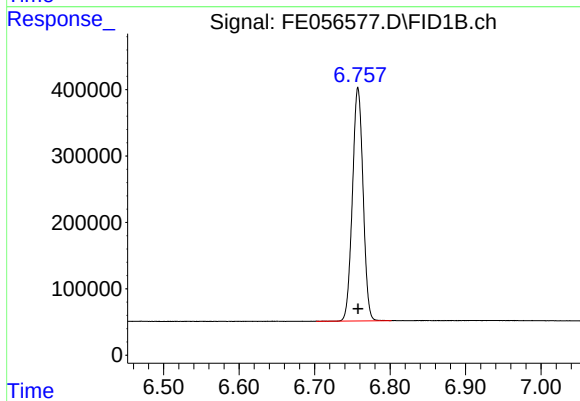
#2 n-Decane (C10)

R.T.: 4.585 min
Delta R.T.: 0.000 min
Response: 3388814
Conc: 20.00 ug/ml



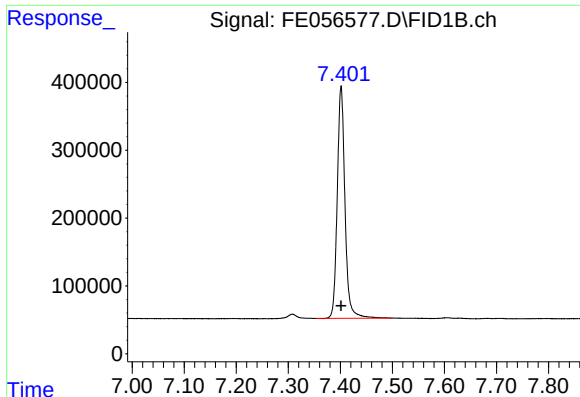
#3 A~Naphthalene (C11.7)

R.T.: 6.302 min
Delta R.T.: 0.000 min
Response: 3665296
Conc: 20.00 ug/ml



#4 n-Dodecane (C12)

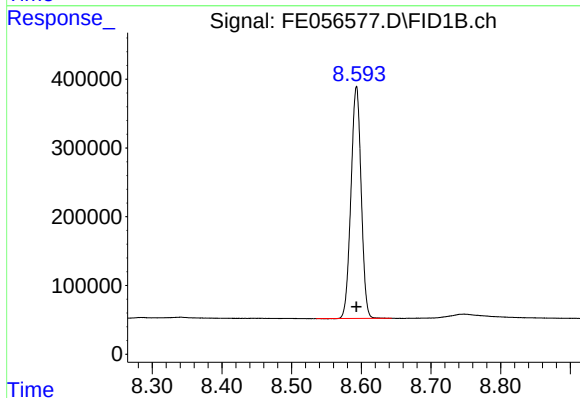
R.T.: 6.758 min
Delta R.T.: 0.000 min
Response: 3436704
Conc: 20.00 ug/ml



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

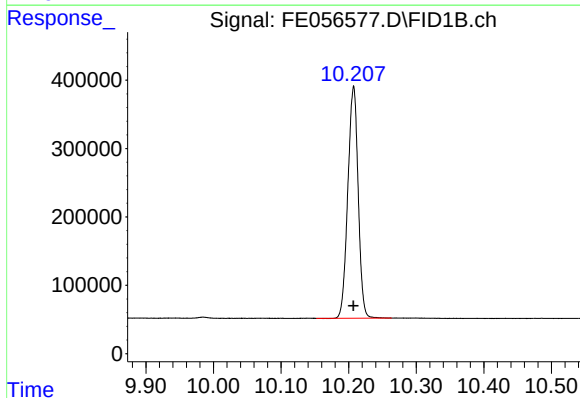
R.T.: 7.402 min
Delta R.T.: 0.000 min
Response: 3527076
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



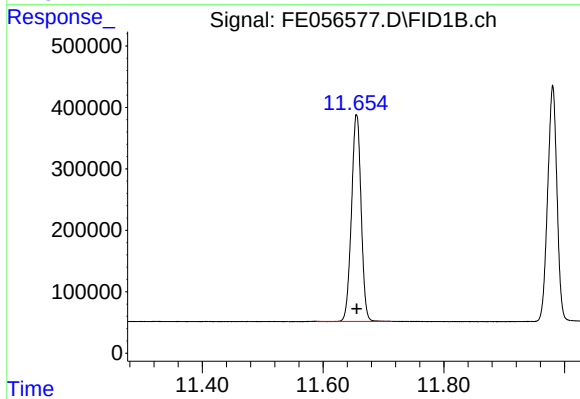
#6 n-Tetradecane (C14)

R.T.: 8.593 min
Delta R.T.: 0.000 min
Response: 3435589
Conc: 20.00 ug/ml



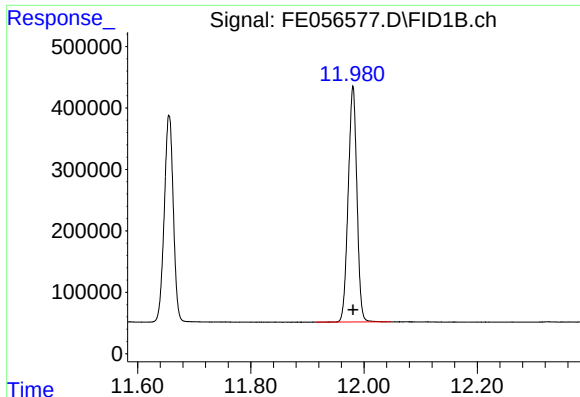
#7 n-Hexadecane (C16)

R.T.: 10.207 min
Delta R.T.: 0.000 min
Response: 3603610
Conc: 20.00 ug/ml



#8 n-Octadecane (C18)

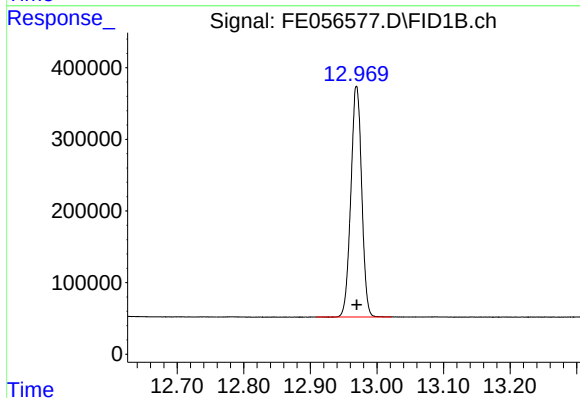
R.T.: 11.656 min
Delta R.T.: 0.000 min
Response: 3719660
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURR)

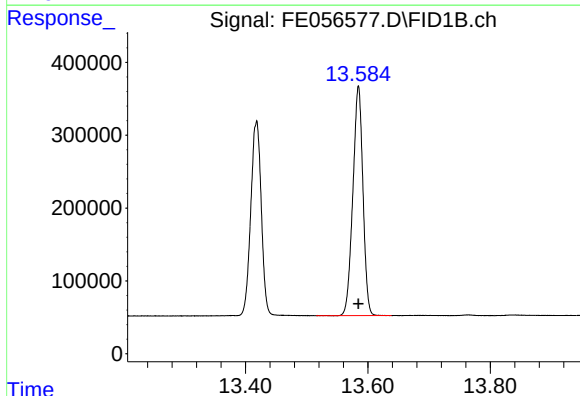
R.T.: 11.980 min
Delta R.T.: 0.000 min
Response: 4110239
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



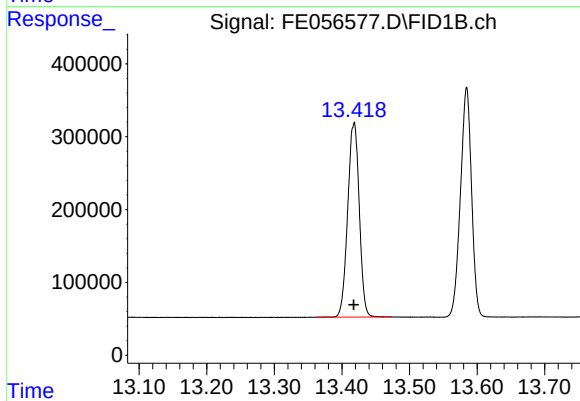
#10 n-Eicosane (C20)

R.T.: 12.970 min
Delta R.T.: 0.000 min
Response: 3642327
Conc: 20.00 ug/ml



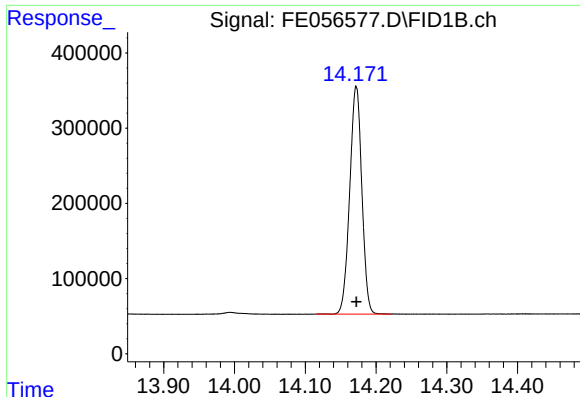
#11 n-Heneicosane (C21)

R.T.: 13.584 min
Delta R.T.: 0.000 min
Response: 3600979
Conc: 20.00 ug/ml



#12 1-chlorooctadecane (SURR)

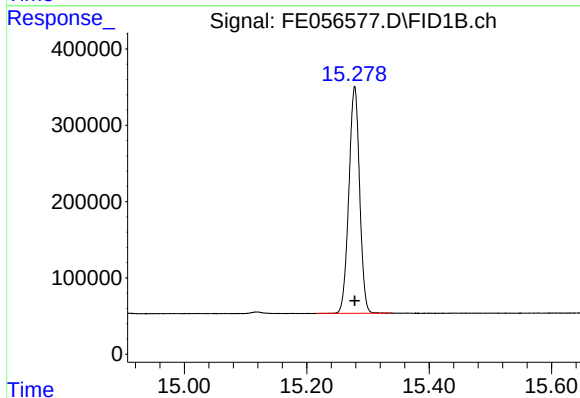
R.T.: 13.418 min
Delta R.T.: 0.000 min
Response: 3172652
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

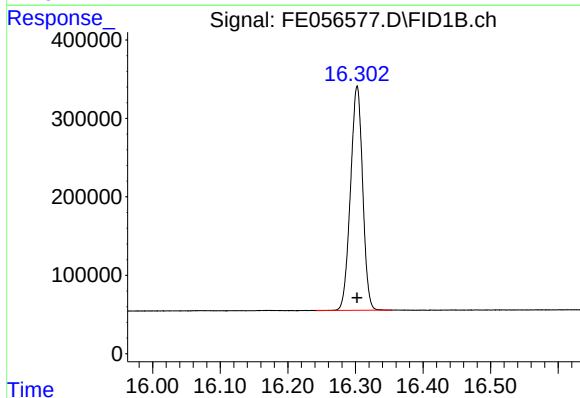
R.T.: 14.172 min
Delta R.T.: 0.000 min
Response: 3603427
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



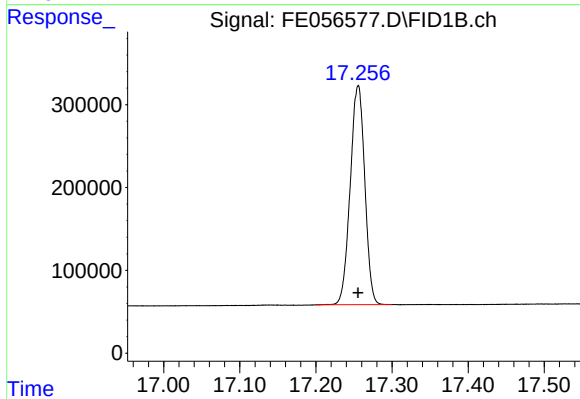
#14 n-Tetracosane (C24)

R.T.: 15.278 min
Delta R.T.: 0.000 min
Response: 3625778
Conc: 20.00 ug/ml



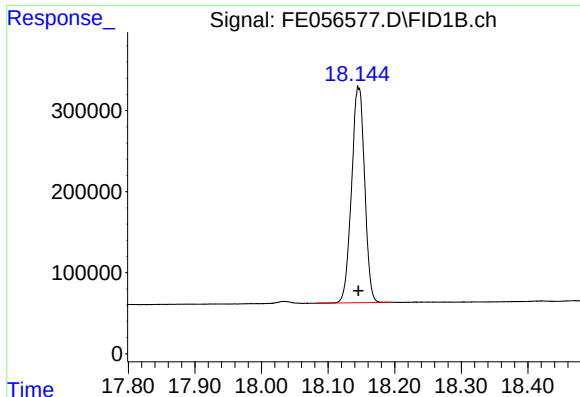
#15 n-Hexacosane (C26)

R.T.: 16.302 min
Delta R.T.: 0.000 min
Response: 3573189
Conc: 20.00 ug/ml



#16 n-Octacosane (C28)

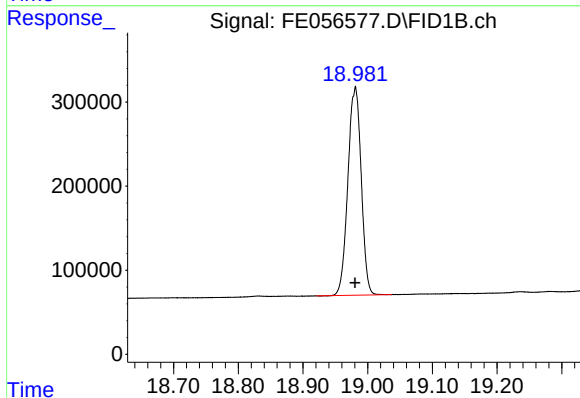
R.T.: 17.255 min
Delta R.T.: 0.000 min
Response: 3520565
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

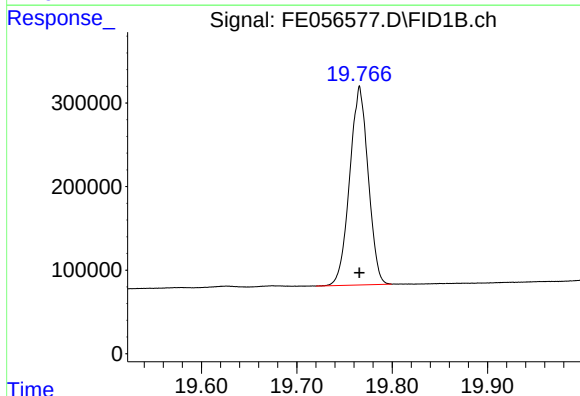
R.T.: 18.146 min
Delta R.T.: 0.000 min
Response: 3627924
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



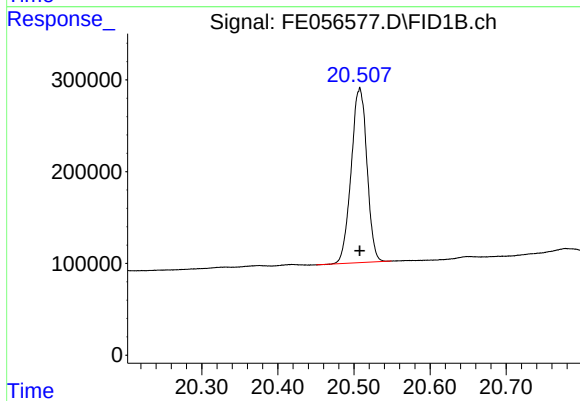
#18 n-Dotriacontane (C32)

R.T.: 18.981 min
Delta R.T.: 0.000 min
Response: 3543930
Conc: 20.00 ug/ml



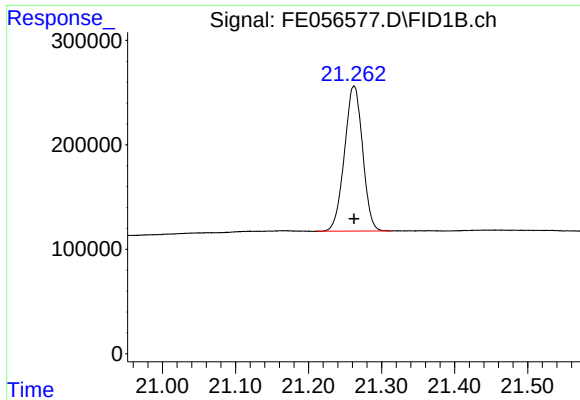
#19 n-Tetratriacontane (C34)

R.T.: 19.766 min
Delta R.T.: 0.000 min
Response: 3202986
Conc: 20.00 ug/ml



#20 n-Hexatriacontane (C36)

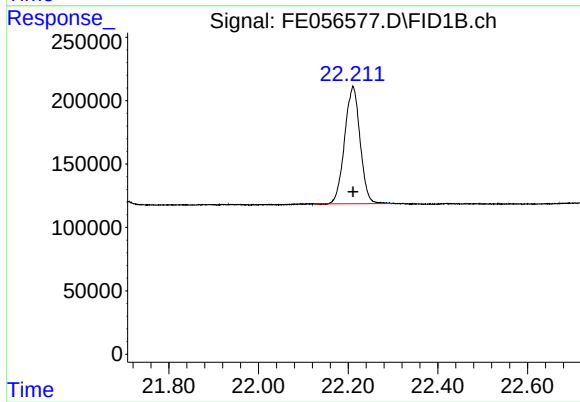
R.T.: 20.507 min
Delta R.T.: 0.000 min
Response: 2737391
Conc: 20.00 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.262 min
Delta R.T.: 0.000 min
Response: 2396120
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



#22 n-Tetracontane (C40)

R.T.: 22.211 min
Delta R.T.: 0.000 min
Response: 2215261
Conc: 20.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
 Data File : FE056577.D
 Signal(s) : FID1B.ch
 Acq On : 30 Oct 2025 11:20
 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 103025.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	3.333	3.302	3.387	BB	346822	3309356	80.51%	4.433%
2	4.585	4.547	4.619	BBA	352192	3388814	82.45%	4.539%
3	6.302	6.244	6.407	BB	364861	3665296	89.17%	4.909%
4	6.758	6.702	6.802	BB	351549	3436704	83.61%	4.603%
5	7.402	7.354	7.499	BB	342824	3527076	85.81%	4.724%
6	8.593	8.535	8.644	BB	338958	3435589	83.59%	4.602%
7	10.207	10.152	10.264	BB	338730	3603610	87.67%	4.827%
8	11.656	11.589	11.714	BB	336890	3719660	90.50%	4.982%
9	11.980	11.915	12.049	BB	384534	4110239	100.00%	5.505%
10	12.970	12.909	13.022	BB	322608	3642327	88.62%	4.879%
11	13.418	13.362	13.474	BB	264565	3172652	77.19%	4.250%
12	13.584	13.515	13.639	BB	315131	3600979	87.61%	4.823%
13	14.172	14.115	14.222	BB	303235	3603427	87.67%	4.827%
14	15.278	15.215	15.339	BB	298227	3625778	88.21%	4.856%
15	16.302	16.242	16.354	BB	285534	3573189	86.93%	4.786%
16	17.255	17.200	17.299	BBA	264764	3520565	85.65%	4.716%
17	18.146	18.082	18.195	BB	266055	3627924	88.27%	4.859%
18	18.981	18.920	19.037	BB	246347	3543930	86.22%	4.747%
19	19.766	19.720	19.799	BBA	237128	3202986	77.93%	4.290%
20	20.507	20.450	20.549	BBA	189105	2737391	66.60%	3.667%
21	21.262	21.210	21.314	BB	138965	2396120	58.30%	3.209%
22	22.211	22.129	22.297	BB	92560	2215261	53.90%	2.967%
Sum of corrected areas:							74658870	

Aliphatic EPH 103025.M Thu Oct 30 12:57:56 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
 Data File : FE056578.D
 Signal(s) : FID1B.ch
 Acq On : 30 Oct 2025 11:51
 Operator : YP\AJ
 Sample : 10 PPM ALIPHATIC HC STD4
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
 Quant Time: Oct 30 12:21:49 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
 Quant Title : GC Extractables
 QLast Update : Thu Oct 30 12:21:37 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.979	2175105	10.592 ug/ml
Spiked Amount 50.000		Recovery =	21.18%
12) S 1-chlorooctadecane (S...	13.417	1673178	10.542 ug/ml
Spiked Amount 50.000		Recovery =	21.08%
Target Compounds			
1) T n-Nonane (C9)	3.332	1739861	10.541 ug/ml
2) T n-Decane (C10)	4.584	1778707	10.549 ug/ml
3) T A~Naphthalene (C11.7)	6.302	1900301	10.376 ug/ml
4) T n-Dodecane (C12)	6.757	1805400	10.532 ug/ml
5) T A~2-methylnaphthalene...	7.401	1809756	10.235 ug/ml
6) T n-Tetradecane (C14)	8.592	1806960	10.512 ug/ml
7) T n-Hexadecane (C16)	10.206	1900814	10.530 ug/ml
8) T n-Octadecane (C18)	11.654	1972225	10.589 ug/ml
10) T n-Eicosane (C20)	12.969	1949024	10.689 ug/ml
11) T n-Heneicosane (C21)	13.583	1922827	10.673 ug/ml
13) T n-Docosane (C22)	14.171	1965821	10.824 ug/ml
14) T n-Tetracosane (C24)	15.278	2071768	11.167 ug/ml
15) T n-Hexacosane (C26)	16.302	2057752	11.236 ug/ml
16) T n-Octacosane (C28)	17.255	2055084	11.402 ug/ml
17) T n-Tricontane (C30)	18.145	2121276	11.564 ug/ml
18) T n-Dotriacontane (C32)	18.980	2084284	11.769 ug/ml
19) T n-Tetratriacontane (C34)	19.764	1830892	11.592 ug/ml
20) T n-Hexatriacontane (C36)	20.507	1529216	11.338 ug/ml
21) T n-Octatriacontane (C38)	21.262	1330818	11.096 ug/ml
22) T n-Tetracontane (C40)	22.208	1245352	11.147 ug/ml

(f)=RT Delta > 1/2 Window

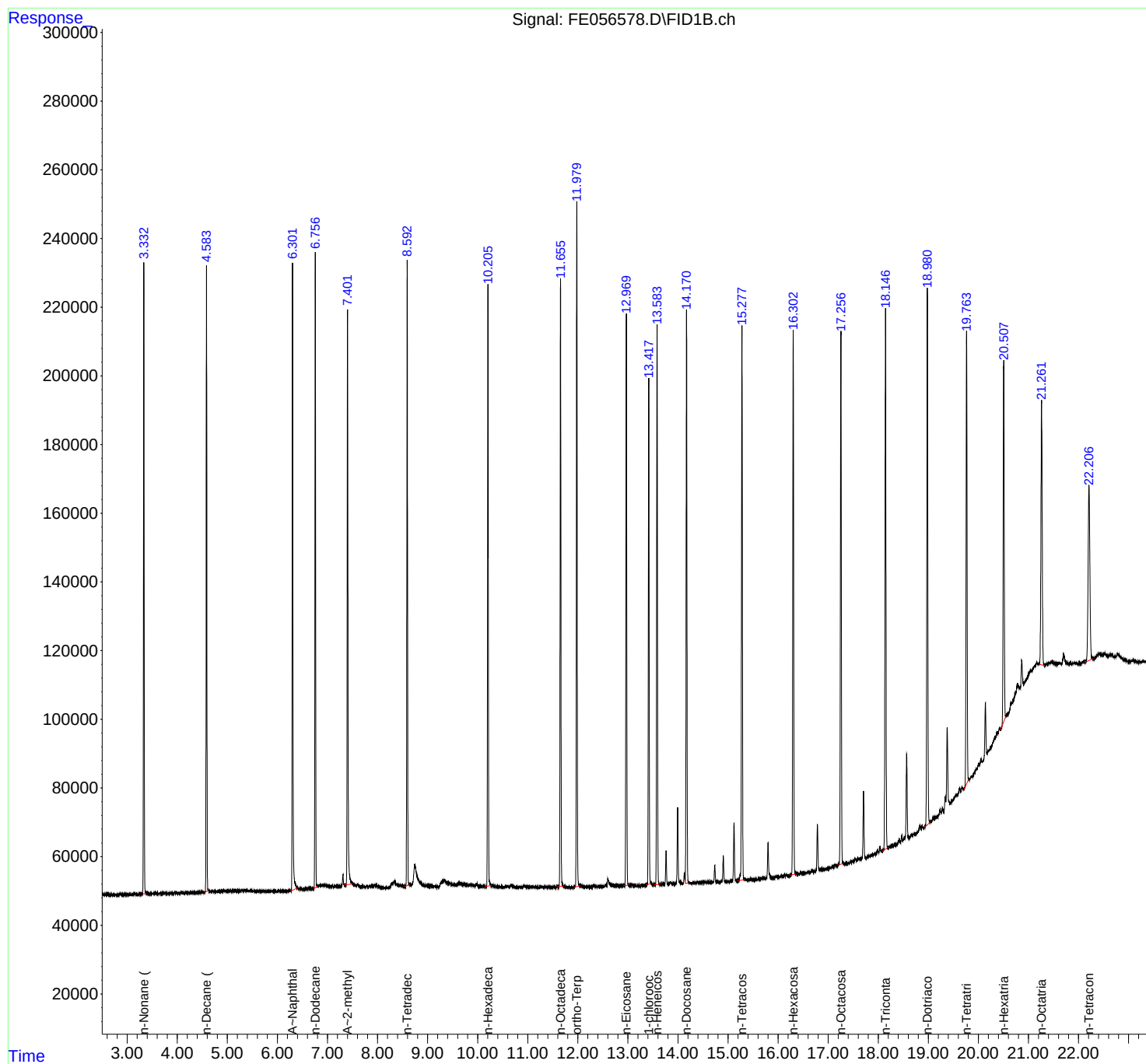
(m)=manual int.

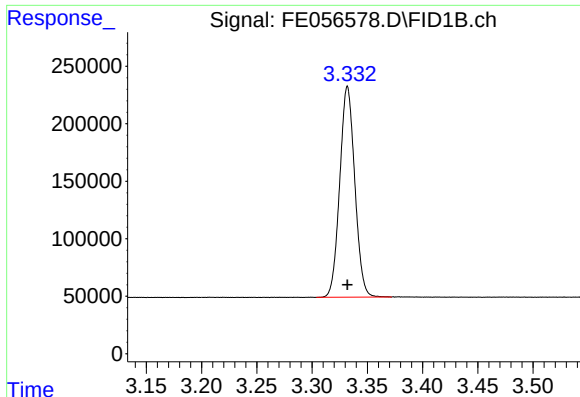
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
Data File : FE056578.D
Signal(s) : FID1B.ch
Acq On : 30 Oct 2025 11:51
Operator : YP\AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
Quant Time: Oct 30 12:21:49 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
Quant Title : GC Extractables
QLast Update : Thu Oct 30 12:21:37 2025
Response via : Initial Calibration
Integrator: ChemStation

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

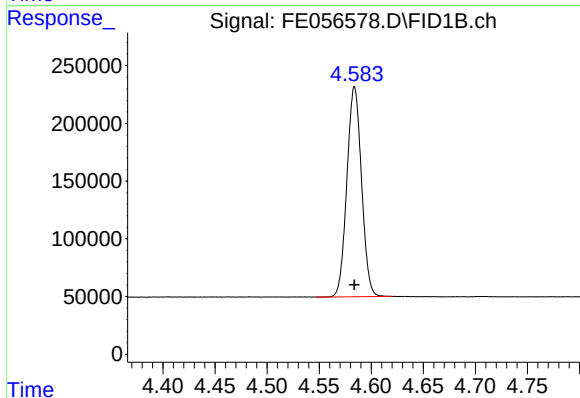




#1 n-Nonane (C9)

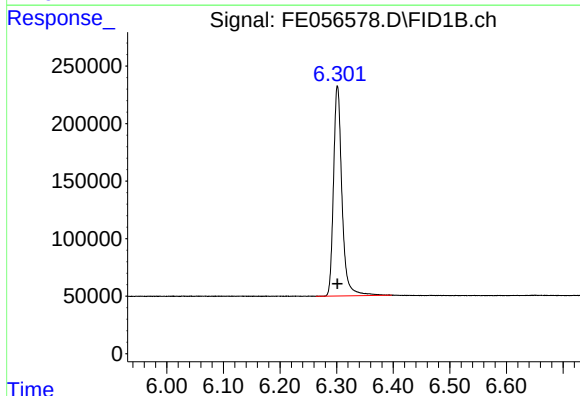
R.T.: 3.332 min
Delta R.T.: 0.000 min
Response: 1739861
Conc: 10.54 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



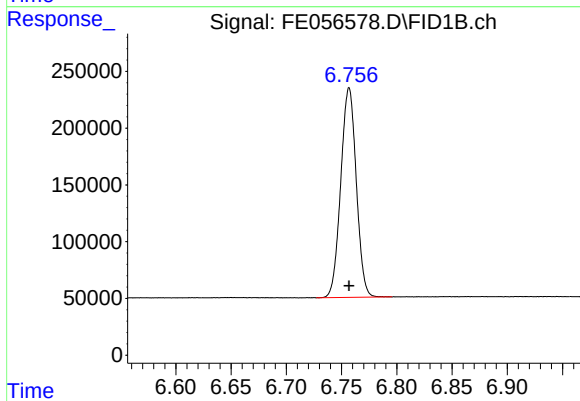
#2 n-Decane (C10)

R.T.: 4.584 min
Delta R.T.: 0.000 min
Response: 1778707
Conc: 10.55 ug/ml



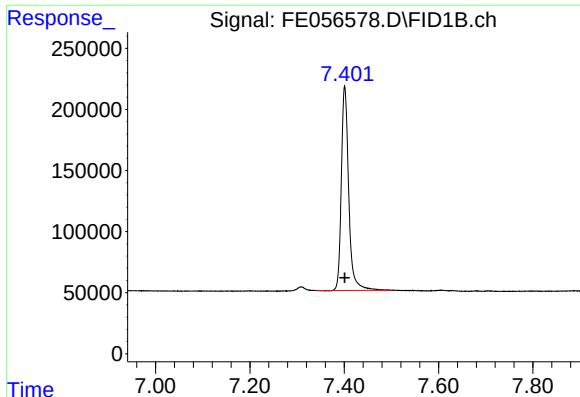
#3 A~Naphthalene (C11.7)

R.T.: 6.302 min
Delta R.T.: 0.000 min
Response: 1900301
Conc: 10.38 ug/ml



#4 n-Dodecane (C12)

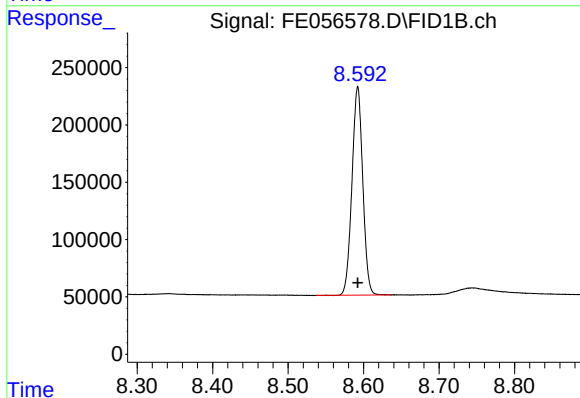
R.T.: 6.757 min
Delta R.T.: 0.000 min
Response: 1805400
Conc: 10.53 ug/ml



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

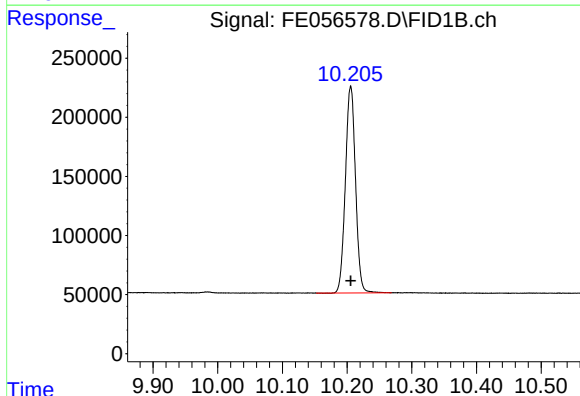
R.T.: 7.401 min
Delta R.T.: 0.000 min
Response: 1809756
Conc: 10.24 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



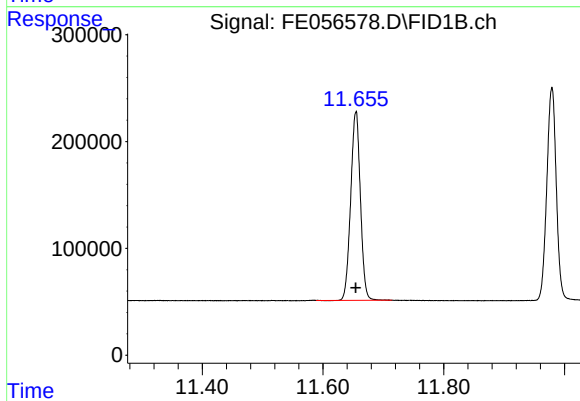
#6 n-Tetradecane (C14)

R.T.: 8.592 min
Delta R.T.: 0.000 min
Response: 1806960
Conc: 10.51 ug/ml



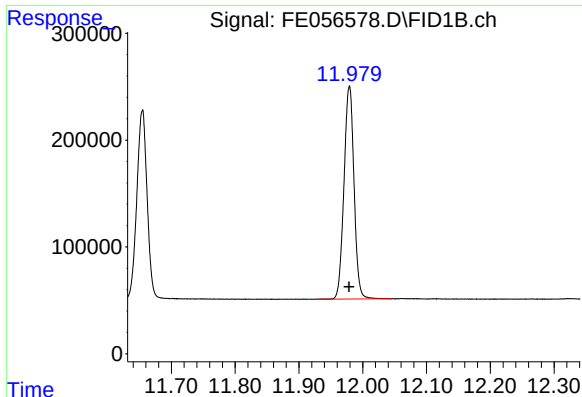
#7 n-Hexadecane (C16)

R.T.: 10.206 min
Delta R.T.: 0.000 min
Response: 1900814
Conc: 10.53 ug/ml



#8 n-Octadecane (C18)

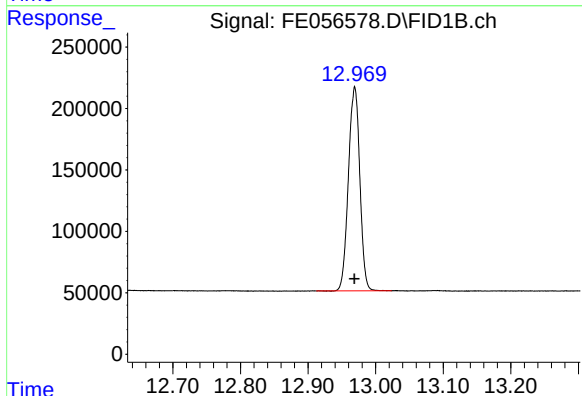
R.T.: 11.654 min
Delta R.T.: 0.000 min
Response: 1972225
Conc: 10.59 ug/ml



#9 ortho-Terphenyl (SURR)

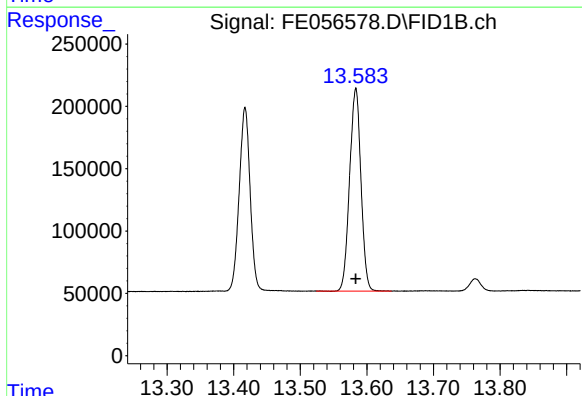
R.T.: 11.979 min
Delta R.T.: 0.000 min
Response: 2175105
Conc: 10.59 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



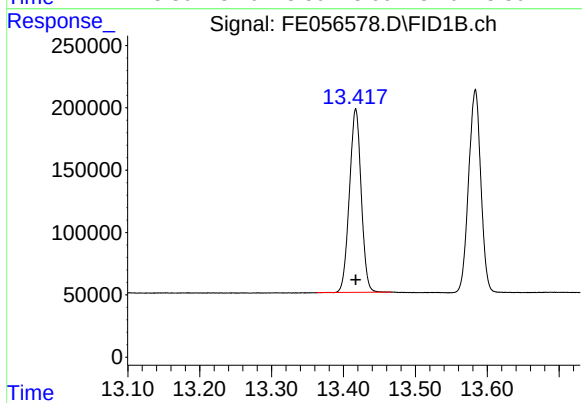
#10 n-Eicosane (C20)

R.T.: 12.969 min
Delta R.T.: 0.000 min
Response: 1949024
Conc: 10.69 ug/ml



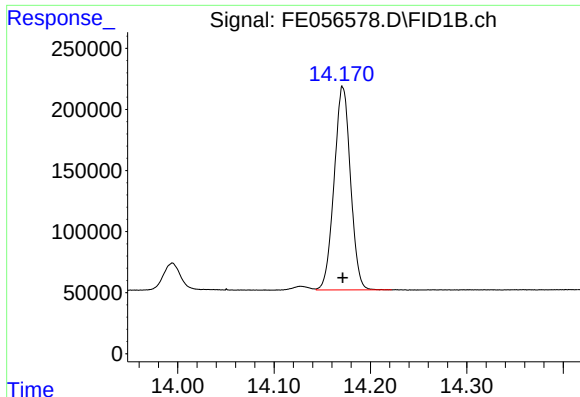
#11 n-Heneicosane (C21)

R.T.: 13.583 min
Delta R.T.: 0.000 min
Response: 1922827
Conc: 10.67 ug/ml



#12 1-chlorooctadecane (SURR)

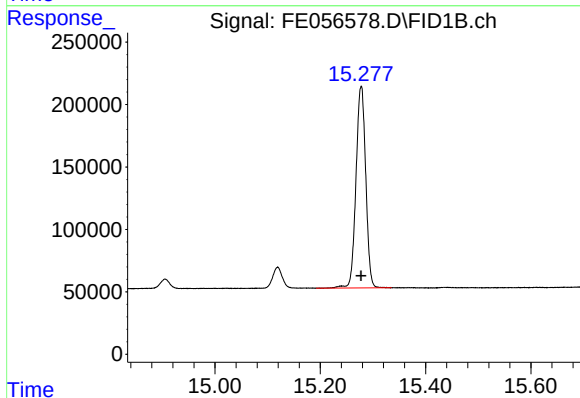
R.T.: 13.417 min
Delta R.T.: 0.000 min
Response: 1673178
Conc: 10.54 ug/ml



#13 n-Docosane (C22)

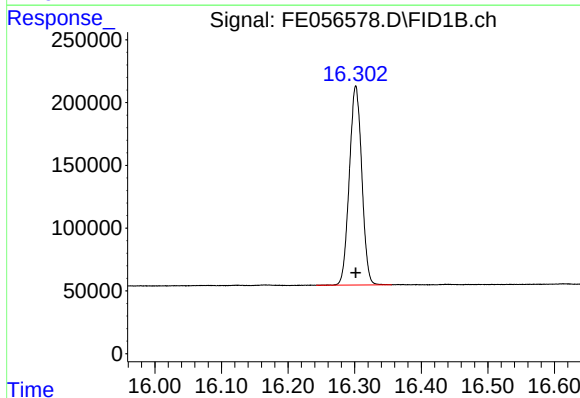
R.T.: 14.171 min
Delta R.T.: 0.000 min
Response: 1965821
Conc: 10.82 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



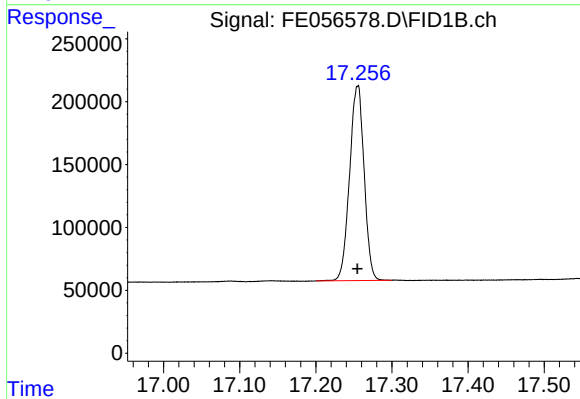
#14 n-Tetracosane (C24)

R.T.: 15.278 min
Delta R.T.: 0.000 min
Response: 2071768
Conc: 11.17 ug/ml



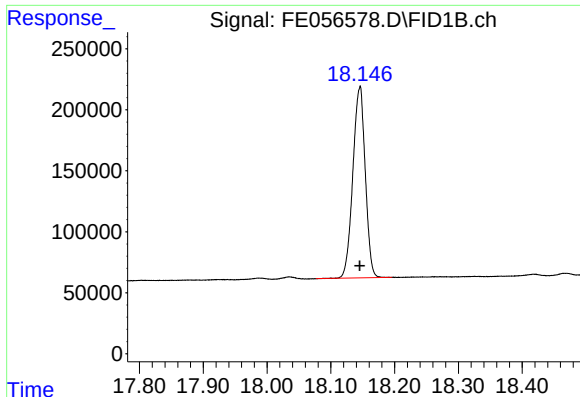
#15 n-Hexacosane (C26)

R.T.: 16.302 min
Delta R.T.: 0.000 min
Response: 2057752
Conc: 11.24 ug/ml



#16 n-Octacosane (C28)

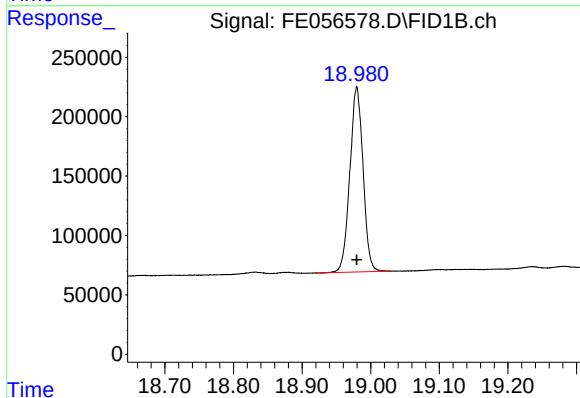
R.T.: 17.255 min
Delta R.T.: 0.000 min
Response: 2055084
Conc: 11.40 ug/ml



#17 n-Tricontane (C30)

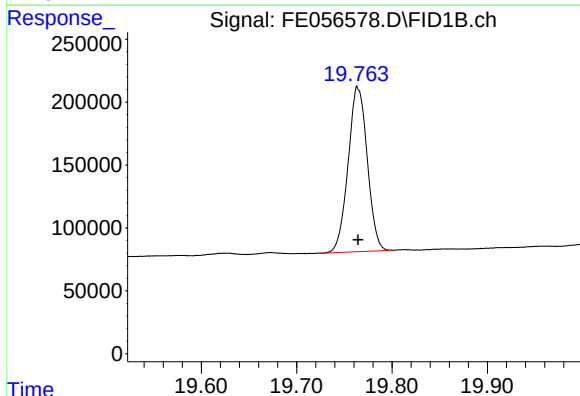
R.T.: 18.145 min
Delta R.T.: 0.000 min
Response: 2121276
Conc: 11.56 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



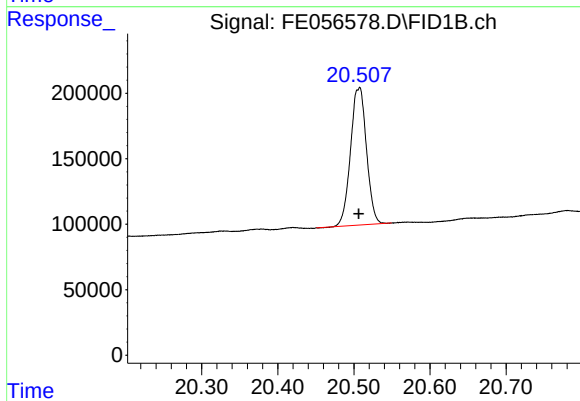
#18 n-Dotriacontane (C32)

R.T.: 18.980 min
Delta R.T.: 0.000 min
Response: 2084284
Conc: 11.77 ug/ml



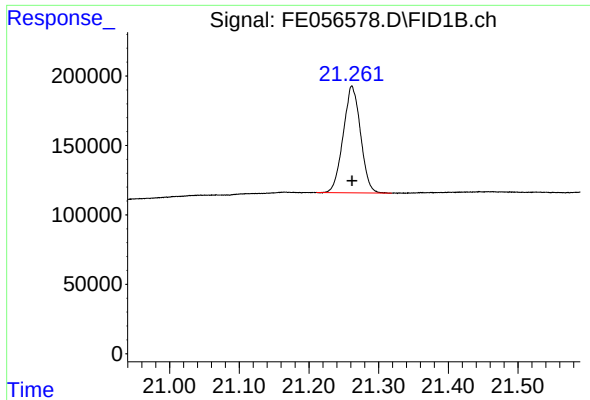
#19 n-Tetratriacontane (C34)

R.T.: 19.764 min
Delta R.T.: 0.000 min
Response: 1830892
Conc: 11.59 ug/ml



#20 n-Hexatriacontane (C36)

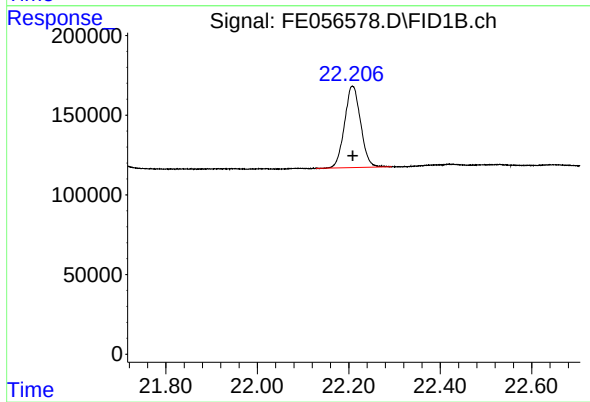
R.T.: 20.507 min
Delta R.T.: 0.000 min
Response: 1529216
Conc: 11.34 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.262 min
Delta R.T.: 0.000 min
Response: 1330818
Conc: 11.10 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



#22 n-Tetracontane (C40)

R.T.: 22.208 min
Delta R.T.: 0.000 min
Response: 1245352
Conc: 11.15 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
Data File : FE056578.D
Signal(s) : FID1B.ch
Acq On : 30 Oct 2025 11:51
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 103025.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	3.332	3.304	3.372	BB	183333	1739861	79.99%	4.272%
2	4.584	4.547	4.620	BBA	182225	1778707	81.78%	4.367%
3	6.302	6.264	6.397	BB	182183	1900301	87.37%	4.666%
4	6.757	6.727	6.795	BB	185256	1805400	83.00%	4.433%
5	7.401	7.340	7.500	BB	165998	1809756	83.20%	4.444%
6	8.592	8.537	8.637	BB	181787	1806960	83.07%	4.437%
7	10.206	10.152	10.269	BB	174738	1900814	87.39%	4.667%
8	11.654	11.589	11.714	BB	176404	1972225	90.67%	4.843%
9	11.979	11.927	12.045	BB	199071	2175105	100.00%	5.341%
10	12.969	12.912	13.024	BB	166384	1949024	89.61%	4.786%
11	13.417	13.362	13.467	BB	147215	1673178	76.92%	4.108%
12	13.583	13.524	13.637	BB	163350	1922827	88.40%	4.721%
13	14.171	14.144	14.222	VB	165444	1965821	90.38%	4.827%
14	15.278	15.192	15.335	BB	161436	2071768	95.25%	5.087%
15	16.302	16.242	16.355	BB	158775	2057752	94.60%	5.053%
16	17.255	17.200	17.300	BBA	155015	2055084	94.48%	5.046%
17	18.145	18.077	18.195	BB	156516	2121276	97.53%	5.209%
18	18.980	18.920	19.030	BB	156591	2084284	95.82%	5.118%
19	19.764	19.720	19.800	BBA	130721	1830892	84.17%	4.496%
20	20.507	20.450	20.550	BBA	104860	1529216	70.31%	3.755%
21	21.262	21.210	21.319	BB	76821	1330818	61.18%	3.268%
22	22.208	22.129	22.294	BB	50974	1245352	57.25%	3.058%
Sum of corrected areas:							40726422	

Aliphatic EPH 103025.M Thu Oct 30 12:58:36 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
 Data File : FE056579.D
 Signal(s) : FID1B.ch
 Acq On : 30 Oct 2025 12:21
 Operator : YP\AJ
 Sample : 5 PPM ALIPHATIC HC STD5
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
 Quant Time: Oct 30 12:48:34 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
 Quant Title : GC Extractables
 QLast Update : Thu Oct 30 12:47:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.979	1115676	5.340 ug/ml
Spiked Amount 50.000		Recovery =	10.68%
12) S 1-chlorooctadecane (S...	13.417	853728	5.299 ug/ml
Spiked Amount 50.000		Recovery =	10.60%
Target Compounds			
1) T n-Nonane (C9)	3.333	897930	5.346 ug/ml
2) T n-Decane (C10)	4.585	917558	5.347 ug/ml
3) T A~Naphthalene (C11.7)	6.303	951651	5.156 ug/ml
4) T n-Dodecane (C12)	6.757	919808	5.288 ug/ml
5) T A~2-methylnaphthalene...	7.403	894288	5.046 ug/ml
6) T n-Tetradecane (C14)	8.592	925756	5.304 ug/ml
7) T n-Hexadecane (C16)	10.206	963615	5.267 ug/ml
8) T n-Octadecane (C18)	11.654	1006643	5.319 ug/ml
10) T n-Eicosane (C20)	12.969	1012155	5.431 ug/ml
11) T n-Heneicosane (C21)	13.582	993871	5.405 ug/ml
13) T n-Docosane (C22)	14.171	1047683	5.597 ug/ml
14) T n-Tetracosane (C24)	15.277	1186109	6.056 ug/ml
15) T n-Hexacosane (C26)	16.302	1195552	6.152 ug/ml
16) T n-Octacosane (C28)	17.255	1236772	6.386 ug/ml
17) T n-Tricontane (C30)	18.145	1343777	6.702 ug/ml
18) T n-Dotriacontane (C32)	18.981	1374204	6.988 ug/ml
19) T n-Tetratriacontane (C34)	19.765	1156477	6.700 ug/ml
20) T n-Hexatriacontane (C36)	20.507	919020	6.353 ug/ml
21) T n-Octatriacontane (C38)	21.262	747858	5.942 ug/ml
22) T n-Tetracontane (C40)	22.209	655889	5.673 ug/ml

(f)=RT Delta > 1/2 Window

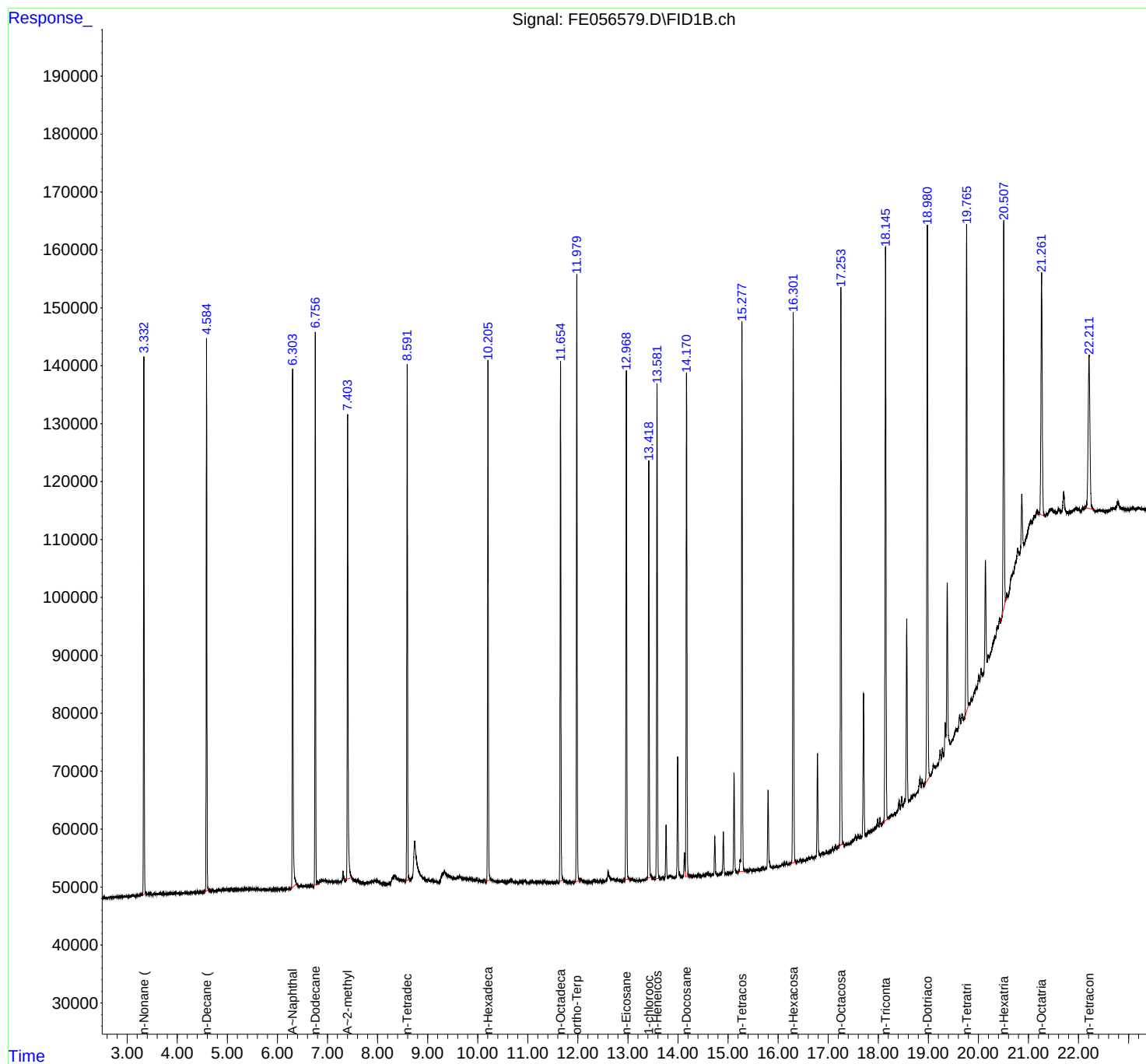
(m)=manual int.

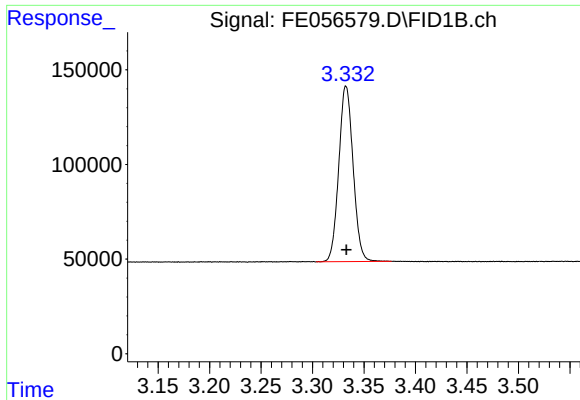
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
Data File : FE056579.D
Signal(s) : FID1B.ch
Acq On : 30 Oct 2025 12:21
Operator : YP\AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
Quant Time: Oct 30 12:48:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
Quant Title : GC Extractables
QLast Update : Thu Oct 30 12:47:42 2025
Response via : Initial Calibration
Integrator: ChemStation

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

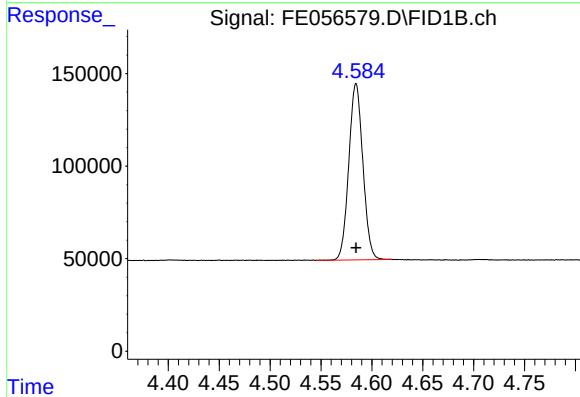




#1 n-Nonane (C9)

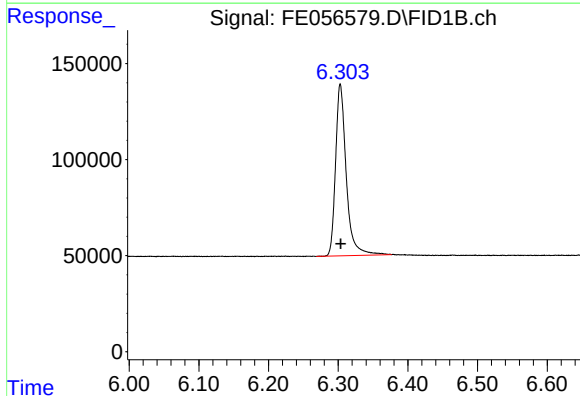
R.T.: 3.333 min
Delta R.T.: 0.000 min
Response: 897930
Conc: 5.35 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



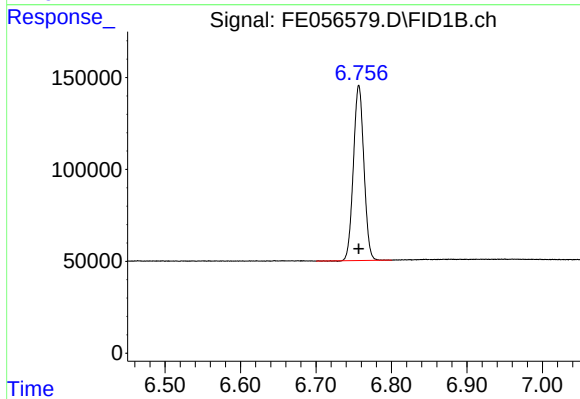
#2 n-Decane (C10)

R.T.: 4.585 min
Delta R.T.: 0.000 min
Response: 917558
Conc: 5.35 ug/ml



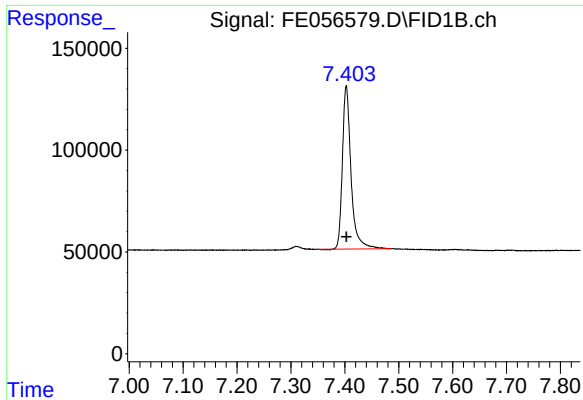
#3 A~Naphthalene (C11.7)

R.T.: 6.303 min
Delta R.T.: 0.000 min
Response: 951651
Conc: 5.16 ug/ml



#4 n-Dodecane (C12)

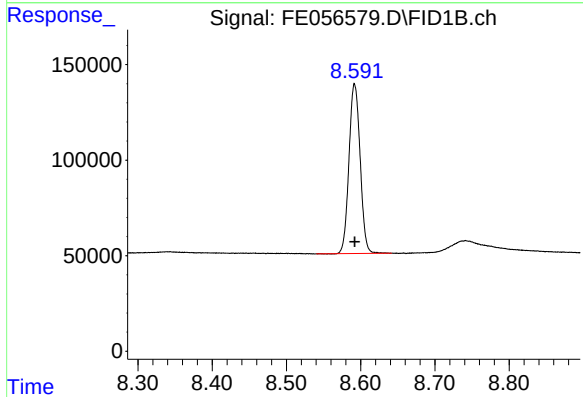
R.T.: 6.757 min
Delta R.T.: 0.000 min
Response: 919808
Conc: 5.29 ug/ml



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

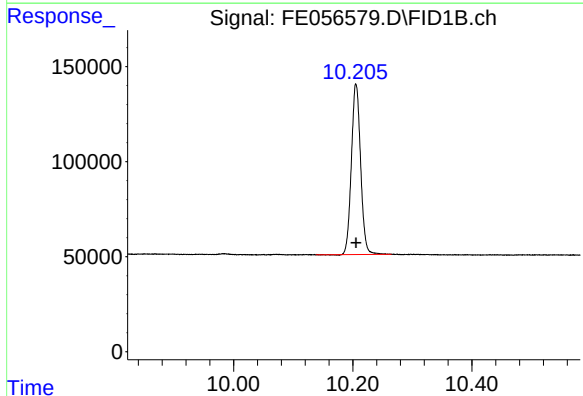
R.T.: 7.403 min
Delta R.T.: 0.000 min
Response: 894288
Conc: 5.05 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



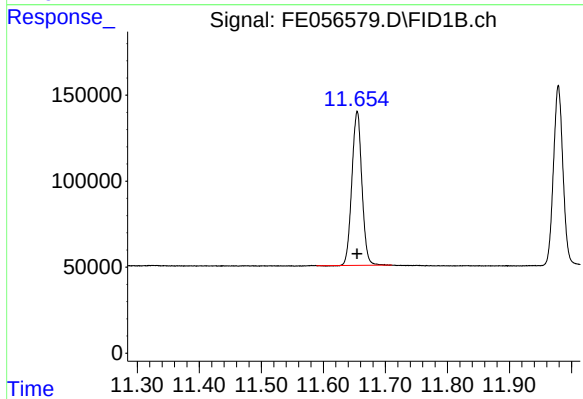
#6 n-Tetradecane (C14)

R.T.: 8.592 min
Delta R.T.: 0.000 min
Response: 925756
Conc: 5.30 ug/ml



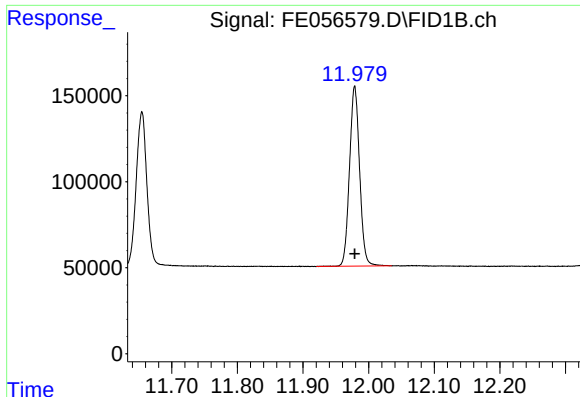
#7 n-Hexadecane (C16)

R.T.: 10.206 min
Delta R.T.: 0.000 min
Response: 963615
Conc: 5.27 ug/ml



#8 n-Octadecane (C18)

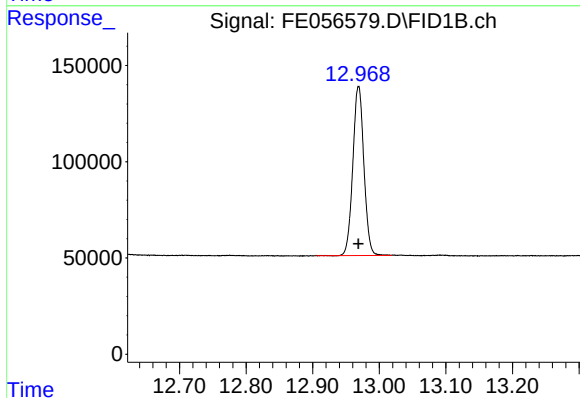
R.T.: 11.654 min
Delta R.T.: 0.000 min
Response: 1006643
Conc: 5.32 ug/ml



#9 ortho-Terphenyl (SURR)

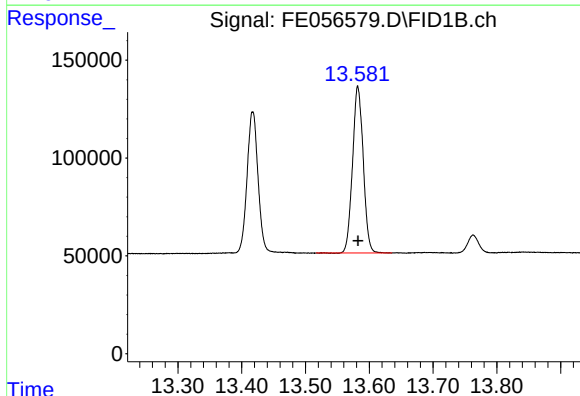
R.T.: 11.979 min
Delta R.T.: 0.000 min
Response: 1115676
Conc: 5.34 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



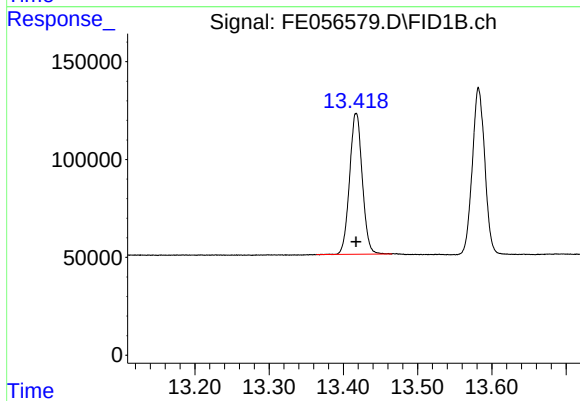
#10 n-Eicosane (C20)

R.T.: 12.969 min
Delta R.T.: 0.000 min
Response: 1012155
Conc: 5.43 ug/ml



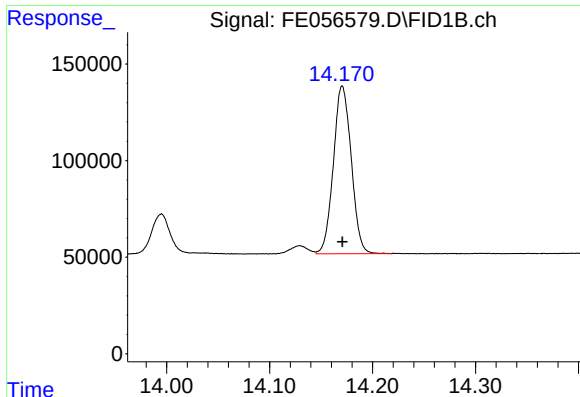
#11 n-Heneicosane (C21)

R.T.: 13.582 min
Delta R.T.: 0.000 min
Response: 993871
Conc: 5.40 ug/ml



#12 1-chlorooctadecane (SURR)

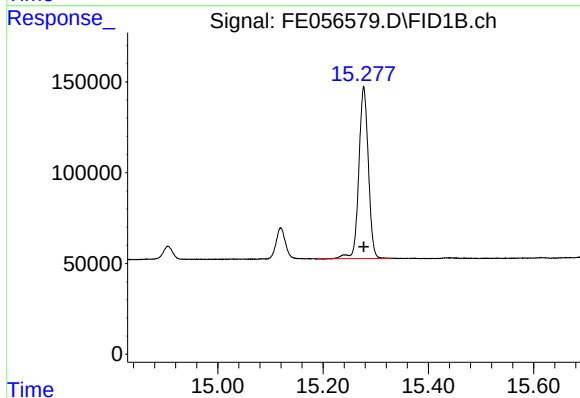
R.T.: 13.417 min
Delta R.T.: 0.000 min
Response: 853728
Conc: 5.30 ug/ml



#13 n-Docosane (C22)

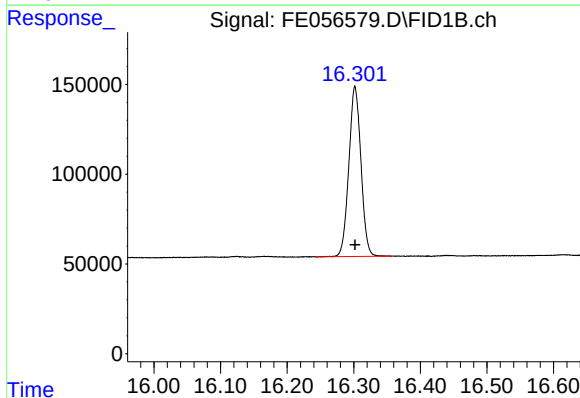
R.T.: 14.171 min
Delta R.T.: 0.000 min
Response: 1047683
Conc: 5.60 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



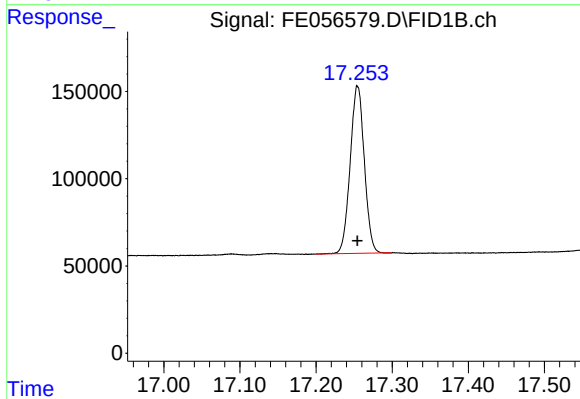
#14 n-Tetracosane (C24)

R.T.: 15.277 min
Delta R.T.: 0.000 min
Response: 1186109
Conc: 6.06 ug/ml



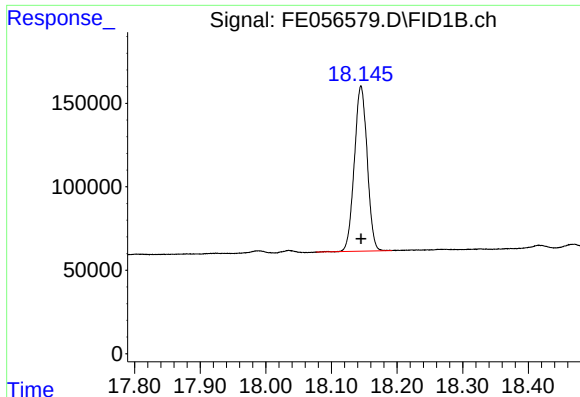
#15 n-Hexacosane (C26)

R.T.: 16.302 min
Delta R.T.: 0.000 min
Response: 1195552
Conc: 6.15 ug/ml



#16 n-Octacosane (C28)

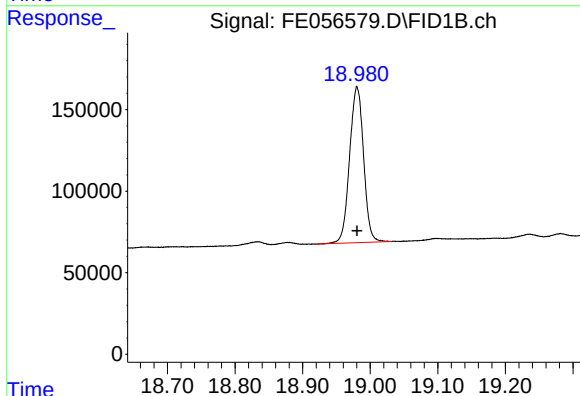
R.T.: 17.255 min
Delta R.T.: 0.000 min
Response: 1236772
Conc: 6.39 ug/ml



#17 n-Tricontane (C30)

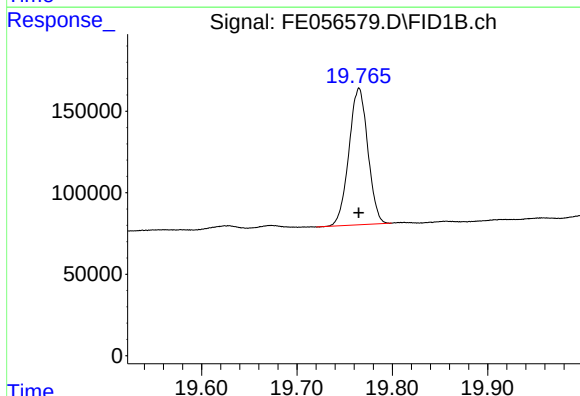
R.T.: 18.145 min
Delta R.T.: 0.000 min
Response: 1343777
Conc: 6.70 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



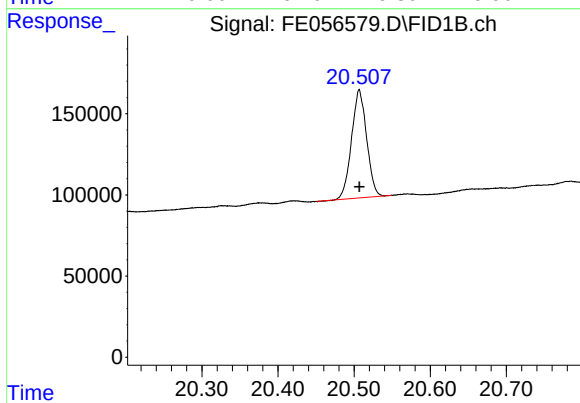
#18 n-Dotriacontane (C32)

R.T.: 18.981 min
Delta R.T.: 0.000 min
Response: 1374204
Conc: 6.99 ug/ml



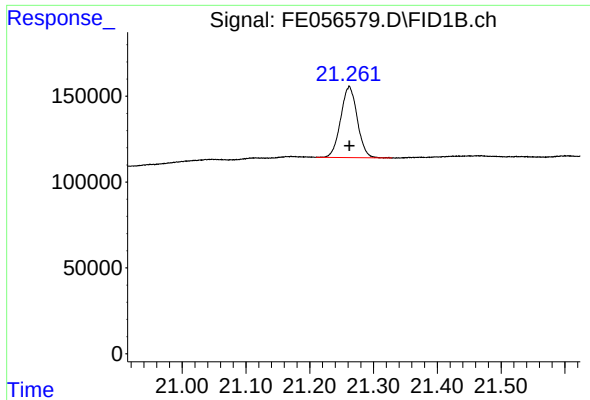
#19 n-Tetratriacontane (C34)

R.T.: 19.765 min
Delta R.T.: 0.000 min
Response: 1156477
Conc: 6.70 ug/ml



#20 n-Hexatriacontane (C36)

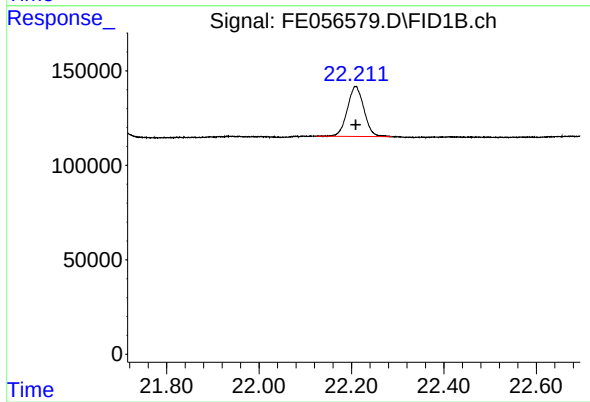
R.T.: 20.507 min
Delta R.T.: 0.000 min
Response: 919020
Conc: 6.35 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.262 min
Delta R.T.: 0.000 min
Response: 747858
Conc: 5.94 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



#22 n-Tetracontane (C40)

R.T.: 22.209 min
Delta R.T.: 0.000 min
Response: 655889
Conc: 5.67 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
 Data File : FE056579.D
 Signal(s) : FID1B.ch
 Acq On : 30 Oct 2025 12:21
 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 103025.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	3.333	3.303	3.377	BB	92471	897930	65.34%	4.024%
2	4.585	4.545	4.619	BBA	95384	917558	66.77%	4.112%
3	6.303	6.268	6.377	BB	88968	951651	69.25%	4.264%
4	6.757	6.700	6.800	BB	95428	919808	66.93%	4.122%
5	7.403	7.347	7.487	BB	80203	894288	65.08%	4.007%
6	8.592	8.540	8.642	BB	88772	925756	67.37%	4.148%
7	10.206	10.138	10.265	BB	89800	963615	70.12%	4.318%
8	11.654	11.588	11.710	BB	89973	1006643	73.25%	4.511%
9	11.979	11.920	12.035	BB	104613	1115676	81.19%	4.999%
10	12.969	12.905	13.018	BB	87940	1012155	73.65%	4.536%
11	13.417	13.363	13.465	BB	72050	853728	62.13%	3.826%
12	13.582	13.517	13.635	BB	85261	993871	72.32%	4.454%
13	14.171	14.145	14.218	VB	86814	1047683	76.24%	4.695%
14	15.277	15.187	15.330	BB	94557	1186109	86.31%	5.315%
15	16.302	16.243	16.357	BB	94717	1195552	87.00%	5.357%
16	17.255	17.200	17.299	BBA	95523	1236772	90.00%	5.542%
17	18.145	18.077	18.192	BB	99085	1343777	97.79%	6.022%
18	18.981	18.920	19.032	BB	95776	1374204	100.00%	6.158%
19	19.765	19.720	19.799	BBA	84124	1156477	84.16%	5.182%
20	20.507	20.450	20.549	BBA	66647	919020	66.88%	4.118%
21	21.262	21.210	21.328	BB	41776	747858	54.42%	3.351%
22	22.209	22.123	22.287	BB	26317	655889	47.73%	2.939%
Sum of corrected areas:							22316018	

Aliphatic EPH 103025.M Thu Oct 30 12:59:22 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
 Data File : FE056580.D
 Signal(s) : FID1B.ch
 Acq On : 30 Oct 2025 12:51
 Operator : YP\AJ
 Sample : 20 PPM ALIPHATIC HC STD ICV
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
 Quant Time: Oct 30 13:21:10 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
 Quant Title : GC Extractables
 QLast Update : Thu Oct 30 12:50:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.979	3698663	17.704 ug/ml
Spiked Amount 50.000		Recovery =	35.41%
12) S 1-chlorooctadecane (S...	13.417	2853138	17.708 ug/ml
Spiked Amount 50.000		Recovery =	35.42%
Target Compounds			
1) T n-Nonane (C9)	3.331	2974720	17.711 ug/ml
2) T n-Decane (C10)	4.584	3032863	17.675 ug/ml
3) T A~Naphthalene (C11.7)	6.301	3268504	17.707 ug/ml
4) T n-Dodecane (C12)	6.757	3080927	17.714 ug/ml
5) T A~2-methylnaphthalene...	7.401	3138399	17.709 ug/ml
6) T n-Tetradecane (C14)	8.592	3087511	17.688 ug/ml
7) T n-Hexadecane (C16)	10.206	3246411	17.744 ug/ml
8) T n-Octadecane (C18)	11.655	3352800	17.714 ug/ml
10) T n-Eicosane (C20)	12.969	3290342	17.656 ug/ml
11) T n-Heneicosane (C21)	13.583	3256292	17.709 ug/ml
13) T n-Docosane (C22)	14.171	3252345	17.374 ug/ml
14) T n-Tetracosane (C24)	15.279	3265557	16.673 ug/ml
15) T n-Hexacosane (C26)	16.303	3203978	16.487 ug/ml
16) T n-Octacosane (C28)	17.256	3101810	16.017 ug/ml
17) T n-Tricontane (C30)	18.145	3129479	15.609 ug/ml
18) T n-Dotriacontane (C32)	18.980	2966227	15.084 ug/ml
19) T n-Tetratriacontane (C34)	19.765	2678828	15.520 ug/ml
20) T n-Hexatriacontane (C36)	20.508	2321116	16.046 ug/ml
21) T n-Octatriacontane (C38)	21.262	2080984	16.534 ug/ml
22) T n-Tetracontane (C40)	22.209	1952947	16.892 ug/ml

(f)=RT Delta > 1/2 Window

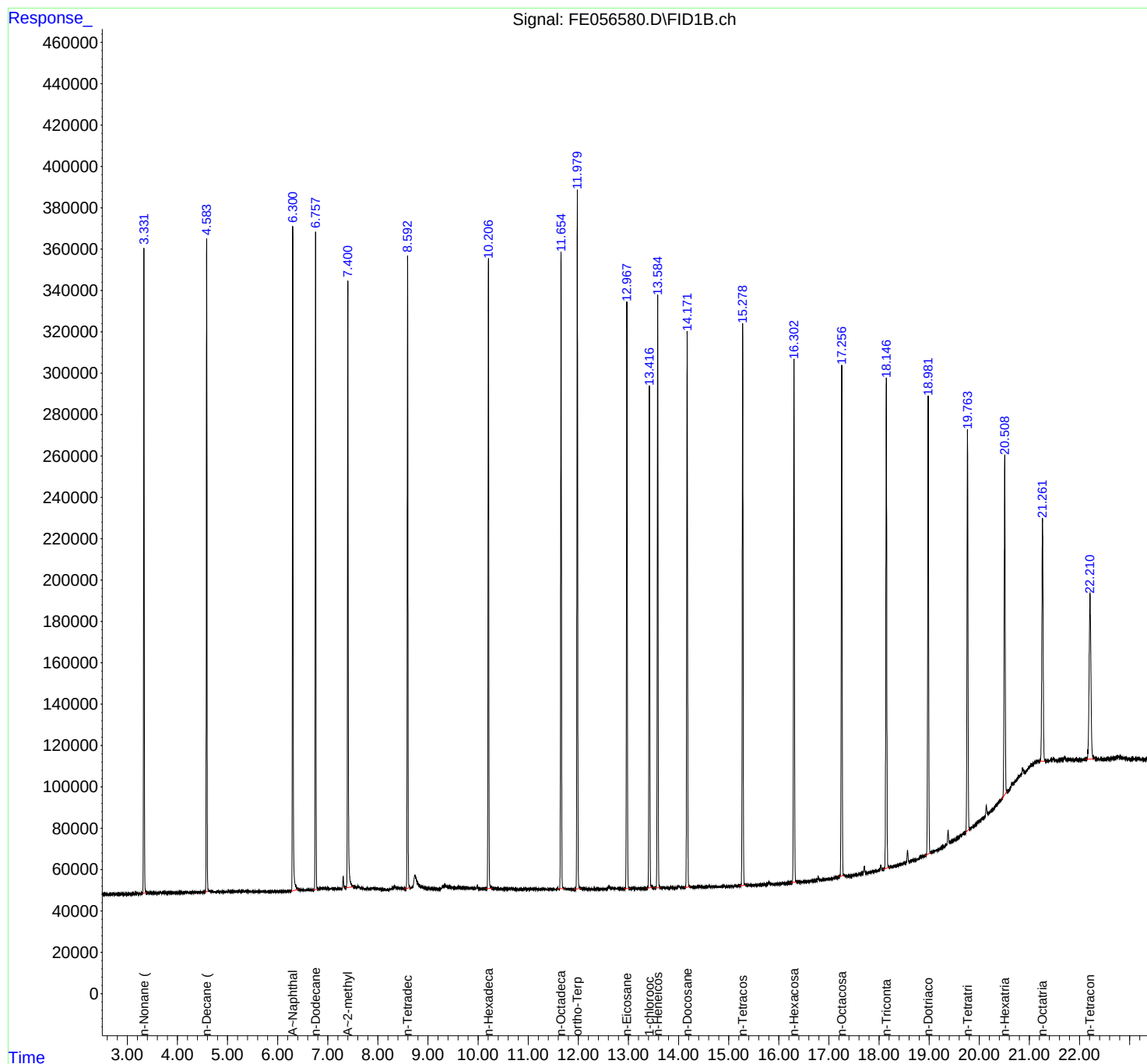
(m)=manual int.

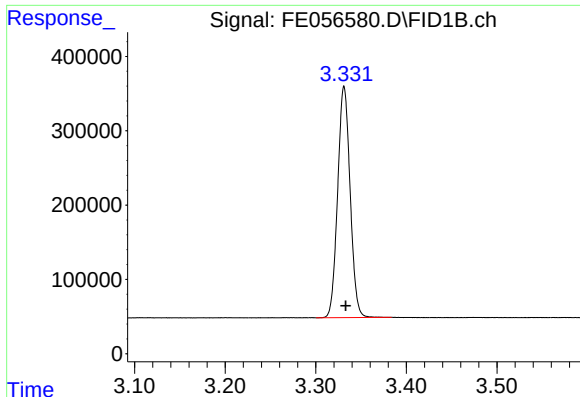
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
Data File : FE056580.D
Signal(s) : FID1B.ch
Acq On : 30 Oct 2025 12:51
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Oct 30 13:21:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
Quant Title : GC Extractables
QLast Update : Thu Oct 30 12:50:27 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)

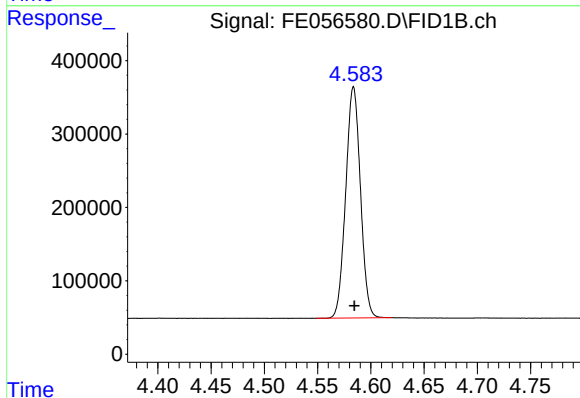
R.T.: 3.331 min
Delta R.T.: -0.002 min
Response: 2974720
Conc: 17.71 ug/ml

Instrument :

FID_E

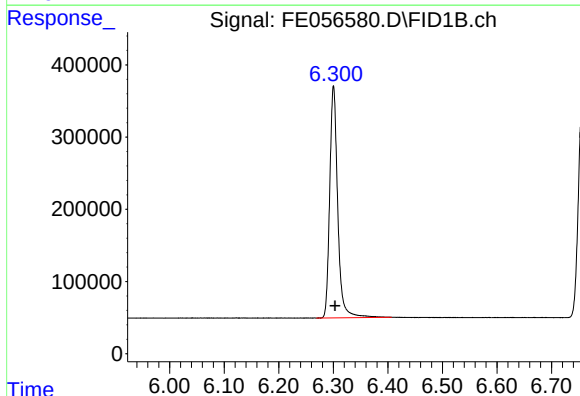
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



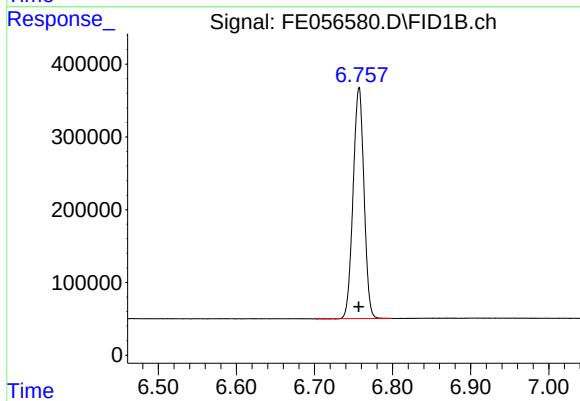
#2 n-Decane (C10)

R.T.: 4.584 min
Delta R.T.: 0.000 min
Response: 3032863
Conc: 17.67 ug/ml



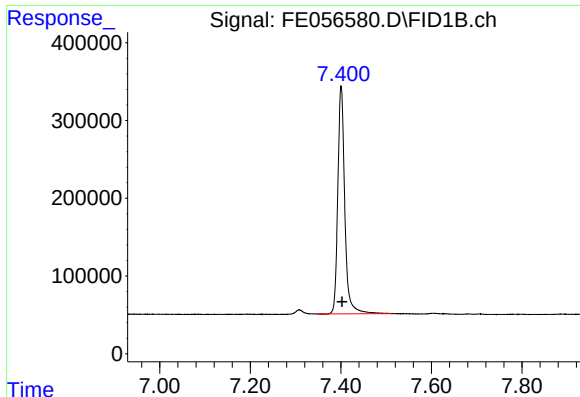
#3 A~Naphthalene (C11.7)

R.T.: 6.301 min
Delta R.T.: -0.003 min
Response: 3268504
Conc: 17.71 ug/ml



#4 n-Dodecane (C12)

R.T.: 6.757 min
Delta R.T.: 0.000 min
Response: 3080927
Conc: 17.71 ug/ml



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

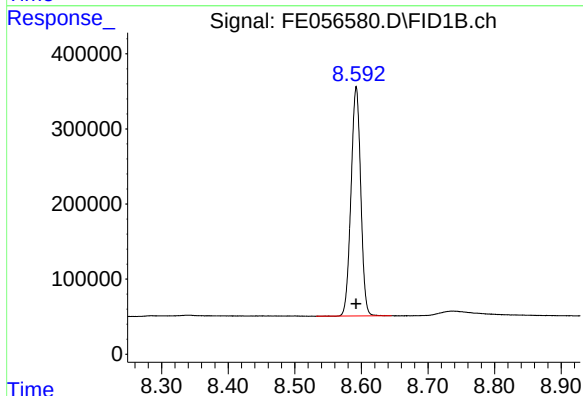
R.T.: 7.401 min
Delta R.T.: -0.002 min
Response: 3138399
Conc: 17.71 ug/ml

Instrument :

FID_E

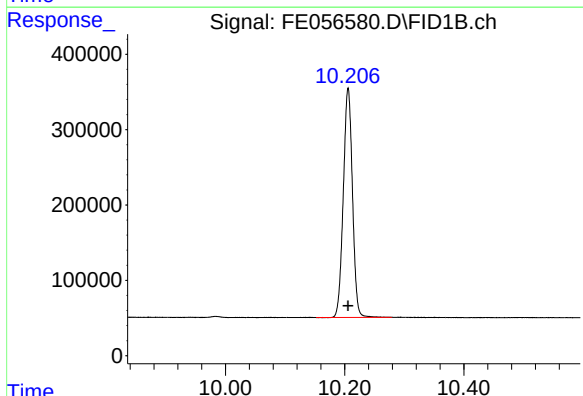
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



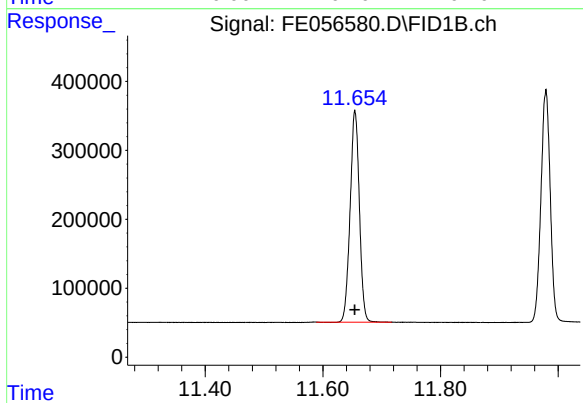
#6 n-Tetradecane (C14)

R.T.: 8.592 min
Delta R.T.: 0.000 min
Response: 3087511
Conc: 17.69 ug/ml



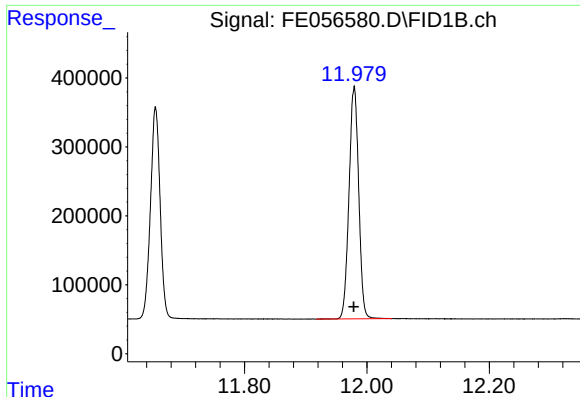
#7 n-Hexadecane (C16)

R.T.: 10.206 min
Delta R.T.: 0.000 min
Response: 3246411
Conc: 17.74 ug/ml



#8 n-Octadecane (C18)

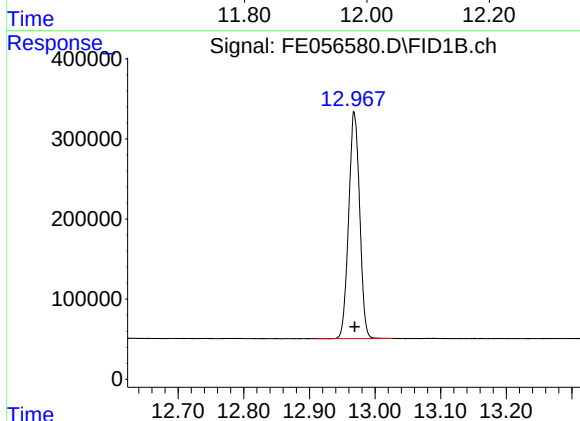
R.T.: 11.655 min
Delta R.T.: 0.000 min
Response: 3352800
Conc: 17.71 ug/ml



#9 ortho-Terphenyl (SURR)

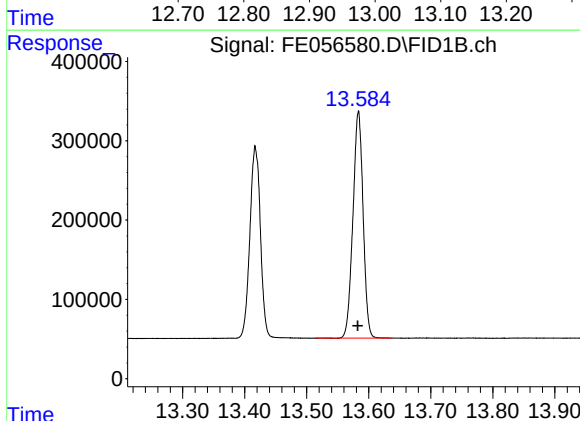
R.T.: 11.979 min
Delta R.T.: 0.000 min
Response: 3698663
Conc: 17.70 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



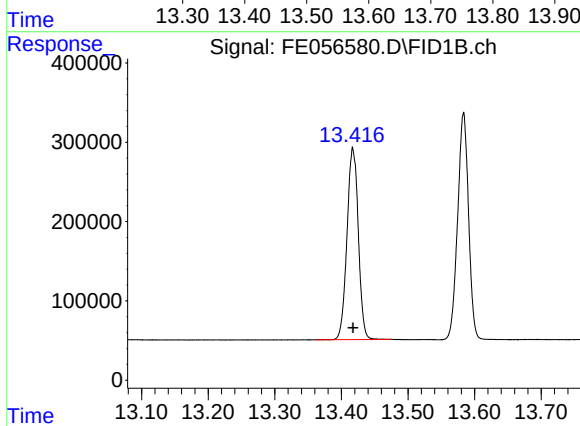
#10 n-Eicosane (C20)

R.T.: 12.969 min
Delta R.T.: 0.000 min
Response: 3290342
Conc: 17.66 ug/ml



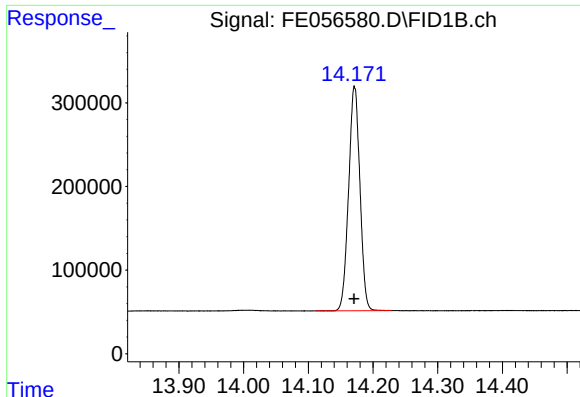
#11 n-Heneicosane (C21)

R.T.: 13.583 min
Delta R.T.: 0.001 min
Response: 3256292
Conc: 17.71 ug/ml



#12 1-chlorooctadecane (SURR)

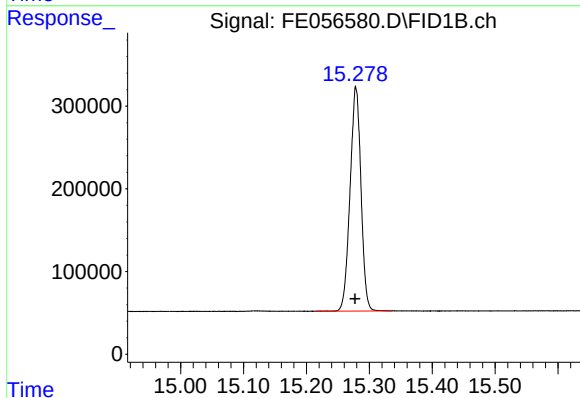
R.T.: 13.417 min
Delta R.T.: 0.000 min
Response: 2853138
Conc: 17.71 ug/ml



#13 n-Docosane (C22)

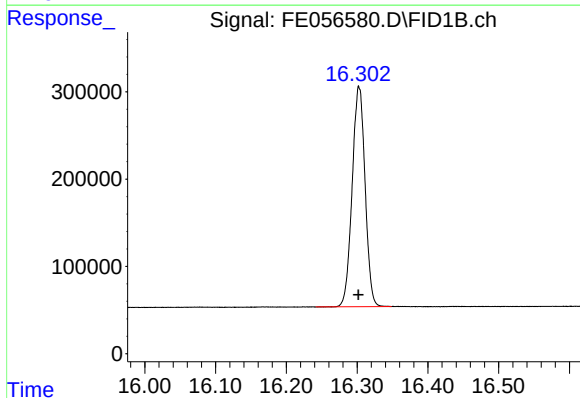
R.T.: 14.171 min
Delta R.T.: 0.000 min
Response: 3252345
Conc: 17.37 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



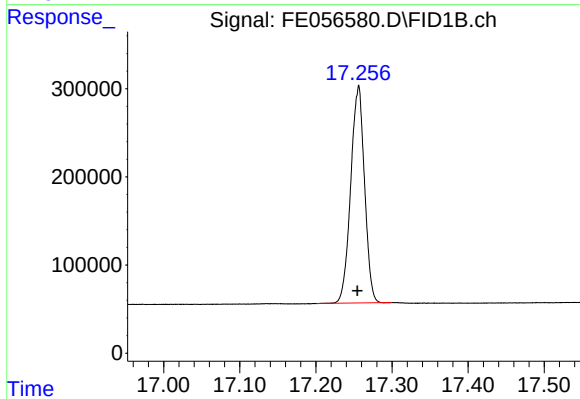
#14 n-Tetracosane (C24)

R.T.: 15.279 min
Delta R.T.: 0.001 min
Response: 3265557
Conc: 16.67 ug/ml



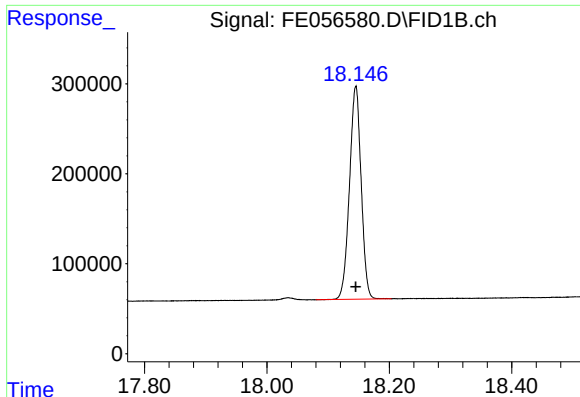
#15 n-Hexacosane (C26)

R.T.: 16.303 min
Delta R.T.: 0.000 min
Response: 3203978
Conc: 16.49 ug/ml



#16 n-Octacosane (C28)

R.T.: 17.256 min
Delta R.T.: 0.001 min
Response: 3101810
Conc: 16.02 ug/ml



#17 n-Tricontane (C30)

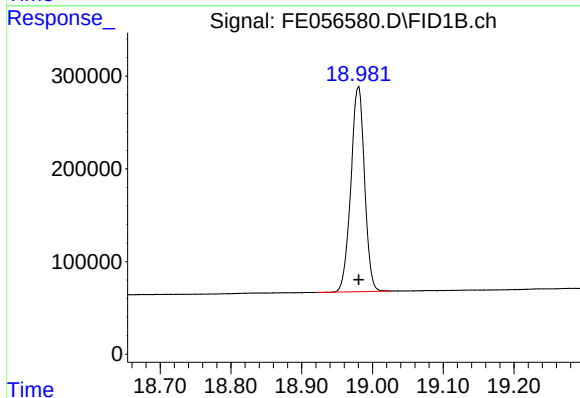
R.T.: 18.145 min
Delta R.T.: 0.000 min
Response: 3129479
Conc: 15.61 ug/ml

Instrument :

FID_E

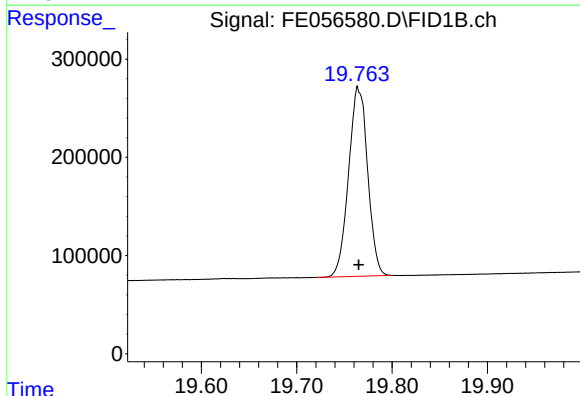
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



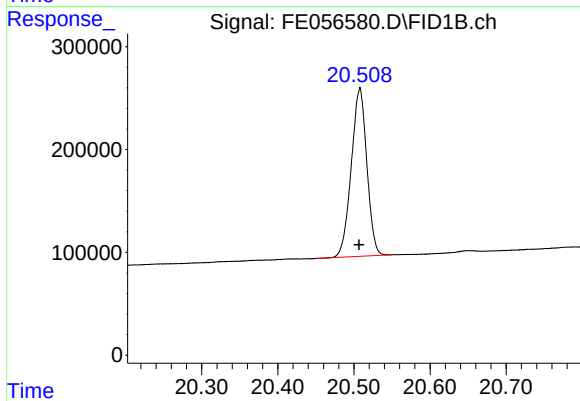
#18 n-Dotriacontane (C32)

R.T.: 18.980 min
Delta R.T.: 0.000 min
Response: 2966227
Conc: 15.08 ug/ml



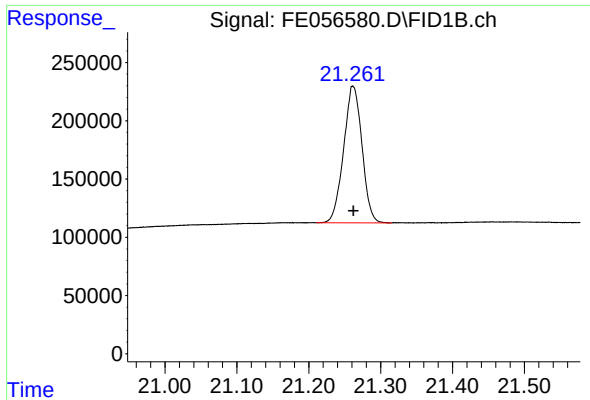
#19 n-Tetratriacontane (C34)

R.T.: 19.765 min
Delta R.T.: 0.000 min
Response: 2678828
Conc: 15.52 ug/ml



#20 n-Hexatriacontane (C36)

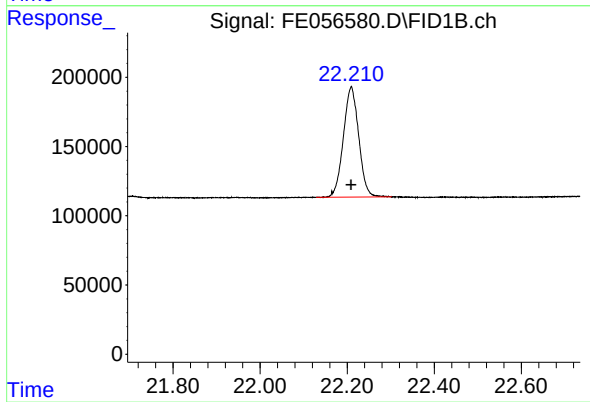
R.T.: 20.508 min
Delta R.T.: 0.000 min
Response: 2321116
Conc: 16.05 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.262 min
Delta R.T.: 0.000 min
Response: 2080984
Conc: 16.53 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



#22 n-Tetracontane (C40)

R.T.: 22.209 min
Delta R.T.: 0.000 min
Response: 1952947
Conc: 16.89 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103025AL\
 Data File : FE056580.D
 Signal(s) : FID1B.ch
 Acq On : 30 Oct 2025 12:51
 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 103025.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	3.331	3.300	3.384	BB	310481	2974720	80.43%	4.491%
2	4.584	4.549	4.620	BBA	315244	3032863	82.00%	4.579%
3	6.301	6.269	6.407	BB	321401	3268504	88.37%	4.935%
4	6.757	6.702	6.799	BB	318158	3080927	83.30%	4.652%
5	7.401	7.345	7.512	BB	293420	3138399	84.85%	4.738%
6	8.592	8.532	8.645	BB	305141	3087511	83.48%	4.662%
7	10.206	10.152	10.279	BB	304154	3246411	87.77%	4.901%
8	11.655	11.589	11.717	BB	305409	3352800	90.65%	5.062%
9	11.979	11.917	12.040	BB	334249	3698663	100.00%	5.584%
10	12.969	12.910	13.025	BB	280820	3290342	88.96%	4.968%
11	13.417	13.362	13.475	BB	241413	2853138	77.14%	4.308%
12	13.583	13.515	13.637	BB	286535	3256292	88.04%	4.916%
13	14.171	14.112	14.229	BB	266967	3252345	87.93%	4.910%
14	15.279	15.215	15.335	BB	270242	3265557	88.29%	4.930%
15	16.303	16.242	16.349	BB	253168	3203978	86.63%	4.837%
16	17.256	17.200	17.300	BBA	243564	3101810	83.86%	4.683%
17	18.145	18.080	18.204	BB	236990	3129479	84.61%	4.725%
18	18.980	18.920	19.027	BB	221501	2966227	80.20%	4.478%
19	19.765	19.720	19.800	BBA	187610	2678828	72.43%	4.044%
20	20.508	20.450	20.550	BBA	162660	2321116	62.76%	3.504%
21	21.262	21.210	21.315	BB	117144	2080984	56.26%	3.142%
22	22.209	22.129	22.302	BB	79731	1952947	52.80%	2.949%
Sum of corrected areas:							66233841	

Aliphatic EPH 103025.M Thu Oct 30 13:22:51 2025

Continuing Calibration Report for SequenceID : FE111925AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FE056933.D

Aliphatic C9-C12	10853352.000	60.000	3.209	6.832	180889.200	171162.641	-5.683
Aliphatic C12-C16	7859238.000	40.000	6.833	10.276	196480.950	178754.319	-9.917
Aliphatic C16-C21	11590539.000	60.000	10.277	13.648	193175.650	186505.496	-3.576
Aliphatic C21-C28	15245799.000	80.000	13.649	17.318	190572.488	192766.144	1.138
Aliphatic C28-C40	21766711.000	120.000	17.319	22.247	181389.258	159314.647	-13.856
Aliphatic EPH	67315639.000	360.000	3.209	22.247	186987.886	175414.751	-6.598

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	19 Nov 2025 12:53
Client Sample ID:		Operator:	YP\AJ
Data file:	FE056933.D	Misc:	
Instrument:	FID_E	ALS Vial:	3
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.209	6.832	10853352.000	60.000	ug/ml
Aliphatic C12-C16	6.833	10.276	7859238.000	40.000	ug/ml
Aliphatic C16-C21	10.277	13.648	11590539.000	60.000	ug/ml
Aliphatic C21-C28	13.649	17.318	15245799.000	80.000	ug/ml
Aliphatic C28-C40	17.319	22.247	21766711.000	120.000	ug/ml
Aliphatic EPH	3.209	22.247	67315639.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
 Data File : FE056933.D
 Signal(s) : FID1B.ch
 Acq On : 19 Nov 2025 12:53
 Operator : YP\AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Integration File: sample.E
 Quant Time: Nov 20 01:22:36 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
 Quant Title : GC Extractables
 QLast Update : Tue Nov 18 13:37:28 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.944	4261802	20.400 ug/ml
Spiked Amount 50.000		Recovery =	40.80%
12) S 1-chlorooctadecane (S...	13.382	3255876	20.208 ug/ml
Spiked Amount 50.000		Recovery =	40.42%
Target Compounds			
1) T n-Nonane (C9)	3.308	3205060	19.082 ug/ml
2) T n-Decane (C10)	4.560	3745573	21.828 ug/ml
3) T A~Naphthalene (C11.7)	6.275	3773896	20.445 ug/ml
4) T n-Dodecane (C12)	6.731	3902719	22.438 ug/ml
5) T A~2-methylnaphthalene...	7.373	3657509	20.638 ug/ml
6) T n-Tetradecane (C14)	8.564	3872512	22.185 ug/ml
7) T n-Hexadecane (C16)	10.175	3986726	21.791 ug/ml
8) T n-Octadecane (C18)	11.622	4023001	21.255 ug/ml
10) T n-Eicosane (C20)	12.934	3831713	20.560 ug/ml
11) T n-Heneicosane (C21)	13.548	3735825	20.316 ug/ml
13) T n-Docosane (C22)	14.135	3752229	20.044 ug/ml
14) T n-Tetracosane (C24)	15.241	3825848	19.533 ug/ml
15) T n-Hexacosane (C26)	16.264	3782828	19.465 ug/ml
16) T n-Octacosane (C28)	17.216	3884894	20.060 ug/ml
17) T n-Tricontane (C30)	18.106	4216883	21.032 ug/ml
18) T n-Dotriacontane (C32)	18.940	4349539	22.118 ug/ml
19) T n-Tetratriacontane (C34)	19.725	3934789	22.796 ug/ml
20) T n-Hexatriacontane (C36)	20.466	3342744	23.108 ug/ml
21) T n-Octatriacontane (C38)	21.212	3016653	23.968 ug/ml
22) T n-Tetracontane (C40)	22.144	2906103	25.136 ug/ml

(f)=RT Delta > 1/2 Window

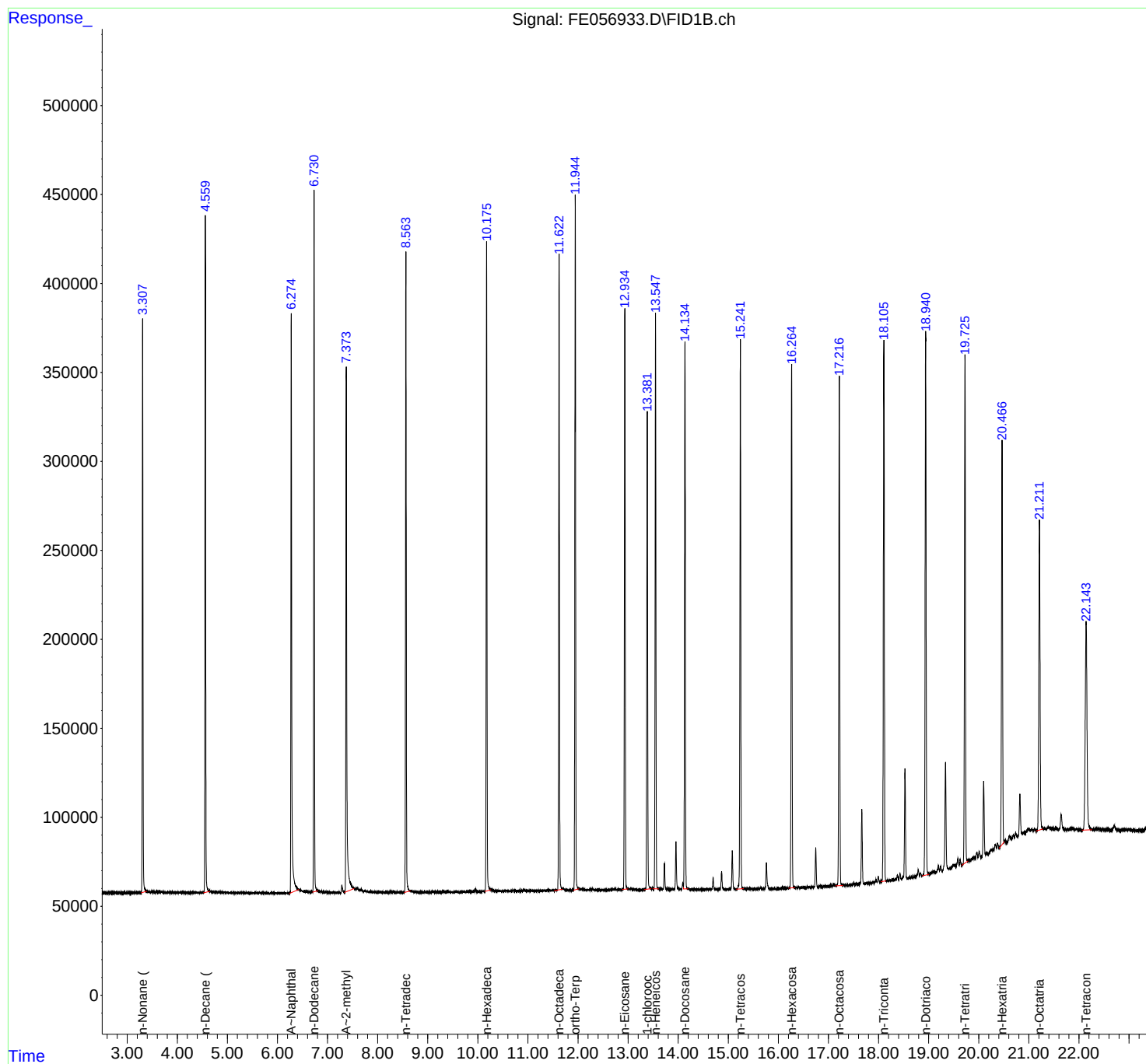
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
Data File : FE056933.D
Signal(s) : FID1B.ch
Acq On : 19 Nov 2025 12:53
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: sample.E
Quant Time: Nov 20 01:22:36 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
Quant Title : GC Extractables
QLast Update : Tue Nov 18 13:37:28 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\FE111925AL\
Data File : FE056933.D
Signal(s) : FID1B.ch
Acq On : 19 Nov 2025 12:53
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.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	3.308	3.275	3.389	BB	321826	3205060	73.69%	3.896%
2	4.560	4.524	4.647	BB	381286	3745573	86.11%	4.553%
3	6.275	6.242	6.424	BB	321993	3773896	86.77%	4.588%
4	6.731	6.697	6.809	BB	393375	3902719	89.73%	4.744%
5	7.373	7.335	7.532	BB	293827	3657509	84.09%	4.446%
6	8.564	8.529	8.650	BB	358849	3872512	89.03%	4.707%
7	10.175	10.139	10.262	BB	364131	3986726	91.66%	4.846%
8	11.622	11.525	11.690	BB	357297	4023001	92.49%	4.890%
9	11.944	11.907	12.020	BB	390002	4261802	97.98%	5.181%
10	12.934	12.877	12.995	BB	325420	3831713	88.09%	4.658%
11	13.382	13.322	13.462	BB	268766	3255876	74.86%	3.958%
12	13.548	13.489	13.614	BB	323627	3735825	85.89%	4.541%
13	14.135	14.105	14.199	VB	306589	3752229	86.27%	4.561%
14	15.241	15.157	15.309	BB	306344	3825848	87.96%	4.651%
15	16.264	16.202	16.325	BB	293705	3782828	86.97%	4.598%
16	17.216	17.139	17.289	BB	285844	3884894	89.32%	4.722%
17	18.106	18.044	18.152	BB	304258	4216883	96.95%	5.126%
18	18.940	18.867	19.012	BB	304259	4349539	100.00%	5.287%
19	19.725	19.662	19.784	BB	285336	3934789	90.46%	4.783%
20	20.466	20.412	20.505	BV	228385	3342744	76.85%	4.063%
21	21.212	21.147	21.287	BB	173650	3016653	69.36%	3.667%
22	22.144	22.062	22.259	BB	117048	2906103	66.81%	3.533%
Sum of corrected areas:							82264719	

Aliphatic EPH 103025.M Thu Nov 20 04:33:18 2025

Continuing Calibration Report for SequenceID : FE111925AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FE056951.D

Aliphatic C9-C12	10640577.000	60.000	3.209	6.832	177342.950	171162.641	-3.611
Aliphatic C12-C16	7687864.000	40.000	6.833	10.276	192196.600	178754.319	-7.520
Aliphatic C16-C21	11208454.000	60.000	10.277	13.648	186807.567	186505.496	-0.162
Aliphatic C21-C28	14779353.000	80.000	13.649	17.318	184741.913	192766.144	4.163
Aliphatic C28-C40	22123582.000	120.000	17.319	22.247	184363.183	159314.647	-15.723
Aliphatic EPH	66439830.000	360.000	3.209	22.247	184555.083	175414.751	-5.211

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	19 Nov 2025 23:12
Client Sample ID:		Operator:	YPAJ
Data file:	FE056951.D	Misc:	
Instrument:	FID_E	ALS Vial:	3
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.209	6.832	10640577.000	60.000	ug/ml
Aliphatic C12-C16	6.833	10.276	7687864.000	40.000	ug/ml
Aliphatic C16-C21	10.277	13.648	11208454.000	60.000	ug/ml
Aliphatic C21-C28	13.649	17.318	14779353.000	80.000	ug/ml
Aliphatic C28-C40	17.319	22.247	22123582.000	120.000	ug/ml
Aliphatic EPH	3.209	22.247	66439830.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
 Data File : FE056951.D
 Signal(s) : FID1B.ch
 Acq On : 19 Nov 2025 23:12
 Operator : YP\AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Integration File: sample.E
 Quant Time: Nov 20 01:29:14 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
 Quant Title : GC Extractables
 QLast Update : Tue Nov 18 13:37:28 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.948	4122148	19.731 ug/ml
Spiked Amount 50.000		Recovery =	39.46%
12) S 1-chlorooctadecane (S...	13.385	3150106	19.552 ug/ml
Spiked Amount 50.000		Recovery =	39.10%
Target Compounds			
1) T n-Nonane (C9)	3.309	3141860	18.706 ug/ml
2) T n-Decane (C10)	4.561	3680166	21.447 ug/ml
3) T A~Naphthalene (C11.7)	6.277	3747643	20.303 ug/ml
4) T n-Dodecane (C12)	6.733	3818551	21.954 ug/ml
5) T A~2-methylnaphthalene...	7.376	3667989	20.697 ug/ml
6) T n-Tetradecane (C14)	8.566	3791062	21.719 ug/ml
7) T n-Hexadecane (C16)	10.178	3896802	21.299 ug/ml
8) T n-Octadecane (C18)	11.625	3905500	20.634 ug/ml
10) T n-Eicosane (C20)	12.938	3705737	19.884 ug/ml
11) T n-Heneicosane (C21)	13.552	3597217	19.563 ug/ml
13) T n-Docosane (C22)	14.139	3615673	19.314 ug/ml
14) T n-Tetracosane (C24)	15.245	3704391	18.913 ug/ml
15) T n-Hexacosane (C26)	16.268	3666691	18.868 ug/ml
16) T n-Octacosane (C28)	17.221	3792598	19.584 ug/ml
17) T n-Tricontane (C30)	18.110	4206352	20.980 ug/ml
18) T n-Dotriacontane (C32)	18.945	4310893	21.922 ug/ml
19) T n-Tetratriacontane (C34)	19.730	4065886	23.555 ug/ml
20) T n-Hexatriacontane (C36)	20.471	3478181	24.044 ug/ml
21) T n-Octatriacontane (C38)	21.220	3300946	26.227 ug/ml
22) T n-Tetracontane (C40)	22.152	2761324	23.884 ug/ml

(f)=RT Delta > 1/2 Window

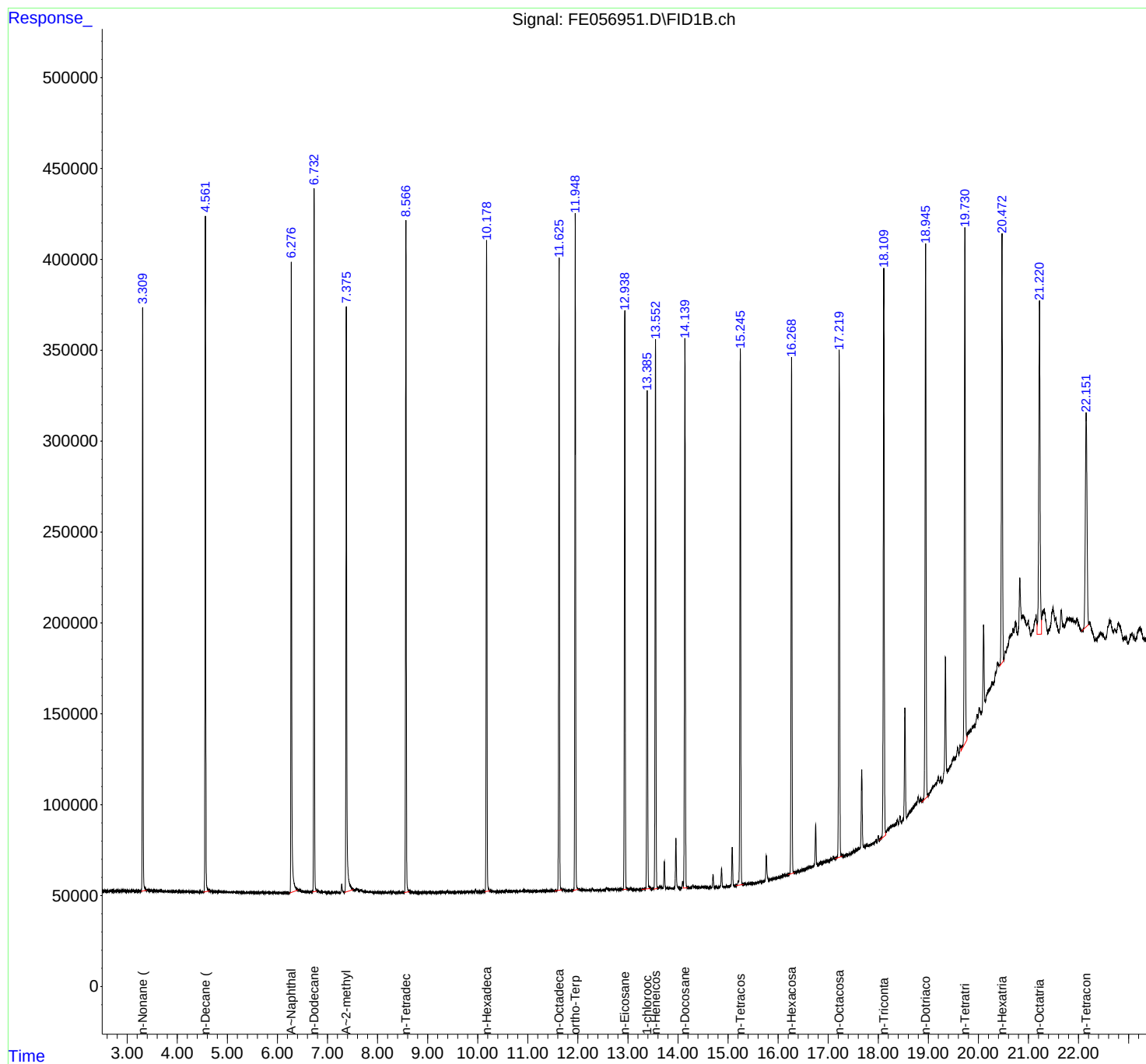
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
Data File : FE056951.D
Signal(s) : FID1B.ch
Acq On : 19 Nov 2025 23:12
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: sample.E
Quant Time: Nov 20 01:29:14 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
Quant Title : GC Extractables
QLast Update : Tue Nov 18 13:37:28 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\FE111925AL\
 Data File : FE056951.D
 Signal(s) : FID1B.ch
 Acq On : 19 Nov 2025 23:12
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.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	3.309	3.278	3.385	BB	320335	3141860	72.88%	3.873%
2	4.561	4.522	4.643	BB	372078	3680166	85.37%	4.536%
3	6.277	6.242	6.410	BB	345900	3747643	86.93%	4.619%
4	6.733	6.700	6.792	BB	384310	3818551	88.58%	4.707%
5	7.376	7.337	7.522	BB	321287	3667989	85.09%	4.521%
6	8.566	8.532	8.637	BB	369249	3791062	87.94%	4.673%
7	10.178	10.143	10.243	BB	358335	3896802	90.39%	4.803%
8	11.625	11.533	11.685	BB	347315	3905500	90.60%	4.814%
9	11.948	11.902	12.010	BB	372181	4122148	95.62%	5.081%
10	12.938	12.900	12.990	BB	318196	3705737	85.96%	4.568%
11	13.385	13.273	13.447	BB	273641	3150106	73.07%	3.883%
12	13.552	13.513	13.597	BB	302392	3597217	83.44%	4.434%
13	14.139	14.108	14.192	VB	301671	3615673	83.87%	4.457%
14	15.245	15.158	15.307	BB	294392	3704391	85.93%	4.566%
15	16.268	16.202	16.322	BB	284452	3666691	85.06%	4.520%
16	17.221	17.138	17.285	BB	278522	3792598	87.98%	4.675%
17	18.110	18.022	18.152	PV	311474	4206352	97.57%	5.185%
18	18.945	18.875	18.992	VV	304925	4310893	100.00%	5.314%
19	19.730	19.652	19.770	VV	282436	4065886	94.32%	5.012%
20	20.472	20.433	20.513	BV	235447	3478181	80.68%	4.287%
21	21.220	21.172	21.260	VV	183263	3300946	76.57%	4.069%
22	22.152	22.063	22.201	BV	117936	2761324	64.05%	3.404%
Sum of corrected areas:							81127718	

Aliphatic EPH 103025.M Thu Nov 20 04:39:21 2025



QC SAMPLE DATA

Report of Analysis

Client:	HDR, Inc.	Date Collected:	
Project:	PVWC Linear Construction	Date Received:	
Client Sample ID:	PB170632BL	SDG No.:	Q3662
Lab Sample ID:	PB170632BL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.01 g	Test:	EPH_NF
Prep Method :			
	Final Vol: 2000 uL		
	Prep Date : 11/19/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Datafile	Date Ana.	Prep BatchID
TARGETS										
Aliphatic C28-C40	Aliphatic C28-C40	1.18	U	1	1.18	2.00	mg/kg	FE056934.D	11/19/25 14:09	PB170632
Aliphatic C9-C28	Aliphatic C9-C28	0.91	U	1	0.91	4.00	mg/kg	FE056934.D	11/19/25 14:09	PB170632
Total AliphaticEPH	Total AliphaticEPH	2.09	U		2.09	6.00	mg/kg			
Total EPH	Total EPH	2.09	U		2.09	6.00	mg/kg			

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C40 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C40 concentration for the sample is reported as the Total EPH.

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:	HDR, Inc.		Date Collected:	
Project:	PVWC Linear Construction		Date Received:	
Client Sample ID:	PB170632BL		SDG No.:	Q3662
Lab Sample ID:	PB170632BL		Matrix:	Solid
Analytical Method:	NJEPH		% Solid:	100
Sample Wt/Vol:	30.01 g	Final Vol:	2000 uL	Test:
Prep Method :		Prep Date	11/19/25	EPH_NF

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS									
Aliphatic C9-C28	Aliphatic C9-C28	0.91	U	1	0.91	4.00	mg/kg	11/19/25	PB170632
Aliphatic C28-C40	Aliphatic C28-C40	1.18	U	1	1.18	2.00	mg/kg	11/19/25	PB170632
SURROGATES									
3383-33-2	1-chlorooctadecane (SURR)	29.1			40 - 140	58%	SPK: 50		
84-15-1	ortho-Terphenyl (SURR)	35.0			40 - 140	70%	SPK: 50		

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB170632BL	Acq On:	19 Nov 2025 14:09
Client Sample ID:	PB170632BL	Operator:	YP\AJ
Data file:	FE056934.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	3.209	6.832	0	0	300	ug/ml
Aliphatic C12-C16	6.833	10.276	0	0	200	ug/ml
Aliphatic C16-C21	10.277	13.648	0	0	300	ug/ml
Aliphatic C21-C28	13.649	17.318	0	0	400	ug/ml
Aliphatic C28-C40	17.319	22.247	0	0	600	ug/ml
Aliphatic EPH	3.209	22.247	0	0		ug/ml
ortho-Terphenyl (SURR)	11.948	11.948	7320148	35.04		ug/ml
1-chlorooctadecane (SURR)	13.384	13.384	4691521	29.12		ug/ml
Aliphatic C9-C28	3.209	17.318	0	0	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
 Data File : FE056934.D
 Signal(s) : FID1B.ch
 Acq On : 19 Nov 2025 14:09
 Operator : YP\AJ
 Sample : PB170632BL
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 PB170632BL

Integration File: sample.E
 Quant Time: Nov 20 01:23:03 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
 Quant Title : GC Extractables
 QLast Update : Tue Nov 18 13:37:28 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.948	7320148	35.039 ug/ml
Spiked Amount 50.000		Recovery =	70.08%
12) S 1-chlorooctadecane (S...	13.384	4691521	29.119 ug/ml
Spiked Amount 50.000		Recovery =	58.24%

Target Compounds

(f)=RT Delta > 1/2 Window

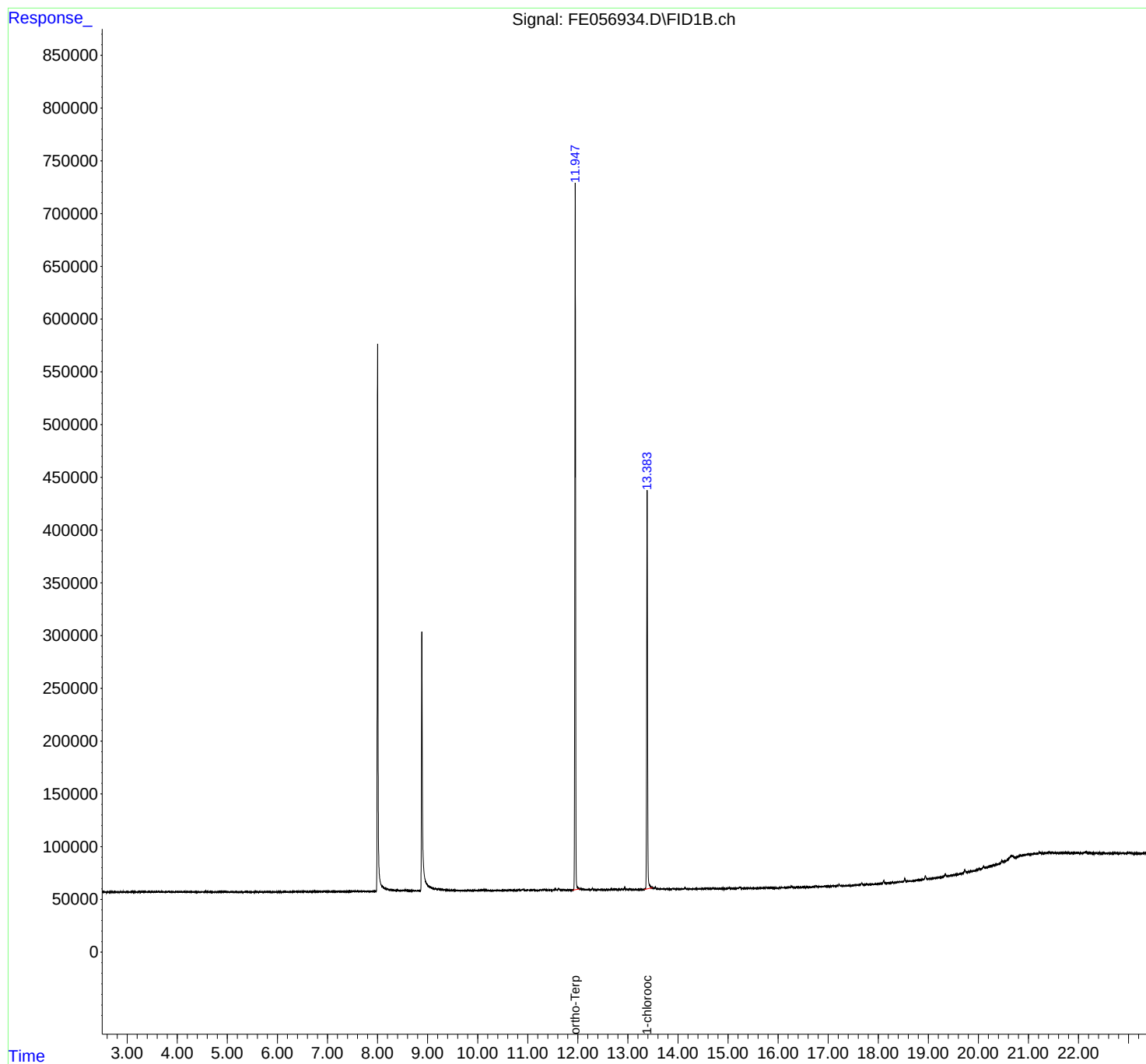
(m)=manual int.

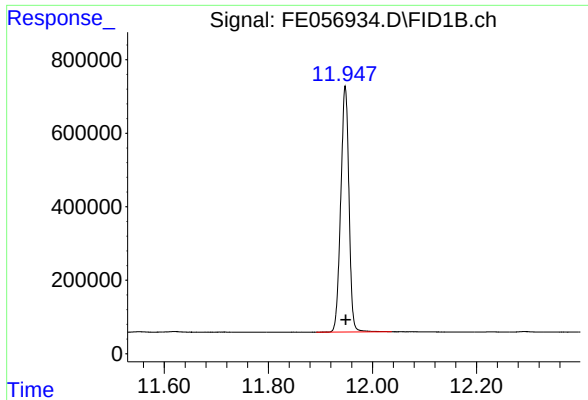
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
Data File : FE056934.D
Signal(s) : FID1B.ch
Acq On : 19 Nov 2025 14:09
Operator : YP\AJ
Sample : PB170632BL
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB170632BL

Integration File: sample.E
Quant Time: Nov 20 01:23:03 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
Quant Title : GC Extractables
QLast Update : Tue Nov 18 13:37:28 2025
Response via : Initial Calibration
Integrator: ChemStation

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

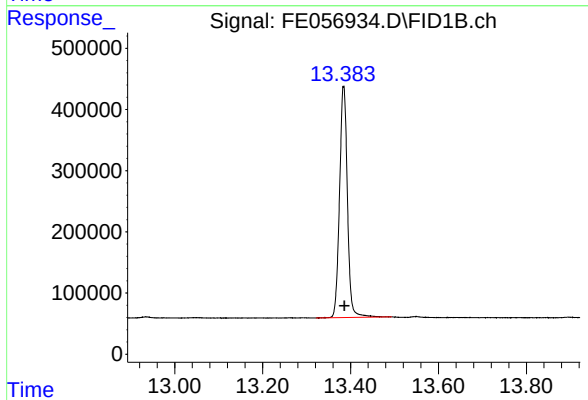




#9 ortho-Terphenyl (SURR)

R.T.: 11.948 min
Delta R.T.: 0.000 min
Response: 7320148
Conc: 35.04 ug/ml

Instrument :
FID_E
ClientSampleId :
PB170632BL



#12 1-chlorooctadecane (SURR)

R.T.: 13.384 min
Delta R.T.: -0.002 min
Response: 4691521
Conc: 29.12 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
Data File : FE056934.D
Signal(s) : FID1B.ch
Acq On : 19 Nov 2025 14:09
Sample : PB170632BL
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.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	11.948	11.892	12.037	BB	667910	7320148	100.00%	60.942%
2	13.384	13.322	13.494	BB	378582	4691521	64.09%	39.058%
Sum of corrected areas:						12011668		

Aliphatic EPH 103025.M Thu Nov 20 04:33:43 2025

Report of Analysis

Client:	HDR, Inc.	Date Collected:	
Project:	PVWC Linear Construction	Date Received:	
Client Sample ID:	PB170632BS	SDG No.:	Q3662
Lab Sample ID:	PB170632BS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.03 g	Test:	EPH_NF
Prep Method :		Final Vol:	2000 uL
		Prep Date :	11/19/25

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Datafile	Date Ana.	Prep BatchID
TARGETS										
Aliphatic C28-C40	Aliphatic C28-C40	24.5		1	1.18	2.00	mg/kg	FE056935.D	11/19/25 14:39	PB170632
Aliphatic C9-C28	Aliphatic C9-C28	68.9		1	0.91	3.99	mg/kg	FE056935.D	11/19/25 14:39	PB170632
Total AliphaticEPH	Total AliphaticEPH	93.4			2.09	5.99	mg/kg			
Total EPH	Total EPH	93.4			2.09	5.99	mg/kg			

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C40 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C40 concentration for the sample is reported as the Total EPH.

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:	HDR, Inc.		Date Collected:	
Project:	PVWC Linear Construction		Date Received:	
Client Sample ID:	PB170632BS		SDG No.:	Q3662
Lab Sample ID:	PB170632BS		Matrix:	Solid
Analytical Method:	NJEPH		% Solid:	100
Sample Wt/Vol:	30.03 g	Final Vol: 2000 uL	Test:	EPH_NF
Prep Method :		Prep Date 11/19/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS									
Aliphatic C9-C28	Aliphatic C9-C28	68.9	1		0.91	3.99	mg/kg	11/19/25	PB170632
Aliphatic C28-C40	Aliphatic C28-C40	24.5	1		1.18	2.00	mg/kg	11/19/25	PB170632
SURROGATES									
3383-33-2	1-chlorooctadecane (SURR)	30.1			40 - 140	60%	SPK: 50		
84-15-1	ortho-Terphenyl (SURR)	34.3			40 - 140	69%	SPK: 50		

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB170632BS	Acq On:	19 Nov 2025 14:39
Client Sample ID:	PB170632BS	Operator:	YP\AJ
Data file:	FE056935.D	Misc:	
Instrument:	FID_E	ALS Vial:	18
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.209	6.832	34744240	202.99	300	ug/ml
Aliphatic C12-C16	6.833	10.276	44613076	249.578	200	ug/ml
Aliphatic C16-C21	10.277	13.648	49316119	264.422	300	ug/ml
Aliphatic C21-C28	13.649	17.318	61401352	318.528	400	ug/ml
Aliphatic C28-C40	17.319	22.247	58526334	367.363	600	ug/ml
Aliphatic EPH	3.209	22.247	248601121	1400		ug/ml
ortho-Terphenyl (SURR)	11.946	11.946	7171296	34.33		ug/ml
1-chlorooctadecane (SURR)	13.383	13.383	4841612	30.05		ug/ml
Aliphatic C9-C28	3.209	17.318	190074787	1040	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
 Data File : FE056935.D
 Signal(s) : FID1B.ch
 Acq On : 19 Nov 2025 14:39
 Operator : YP\AJ
 Sample : PB170632BS
 Misc :
 ALS Vial : 18 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 PB170632BS

Integration File: sample.E
 Quant Time: Nov 20 01:23:20 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
 Quant Title : GC Extractables
 QLast Update : Tue Nov 18 13:37:28 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.946	7171296	34.327 ug/ml
Spiked Amount 50.000		Recovery =	68.65%
12) S 1-chlorooctadecane (S...	13.383	4841612	30.050 ug/ml
Spiked Amount 50.000		Recovery =	60.10%
Target Compounds			
1) T n-Nonane (C9)	3.316	5912631	35.202 ug/ml
2) T n-Decane (C10)	4.565	6402442	37.312 ug/ml
3) T A~Naphthalene (C11.7)	6.276	7844593	42.499 ug/ml
4) T n-Dodecane (C12)	6.732	6889880	39.613 ug/ml
5) T A~2-methylnaphthalene...	7.374	6995000	39.470 ug/ml
6) T n-Tetradecane (C14)	8.566	6971201	39.938 ug/ml
7) T n-Hexadecane (C16)	10.176	6818213	37.267 ug/ml
8) T n-Octadecane (C18)	11.624	6775165	35.796 ug/ml
10) T n-Eicosane (C20)	12.937	6728801	36.106 ug/ml
11) T n-Heneicosane (C21)	13.550	6594791	35.864 ug/ml
13) T n-Docosane (C22)	14.137	6521337	34.836 ug/ml
14) T n-Tetracosane (C24)	15.244	14112489	72.052 ug/ml
15) T n-Hexacosane (C26)	16.267	6289288	32.363 ug/ml
16) T n-Octacosane (C28)	17.217	6579759	33.976 ug/ml
17) T n-Tricontane (C30)	18.109	5978107	29.817 ug/ml
18) T n-Dotriacontane (C32)	18.941	5997515	30.498 ug/ml
19) T n-Tetratriacontane (C34)	19.727	5825672	33.751 ug/ml
20) T n-Hexatriacontane (C36)	20.467	5756724	39.796 ug/ml
21) T n-Octatriacontane (C38)	21.215	5845093	46.441 ug/ml
22) T n-Tetracontane (C40)	22.148	6010584	51.988 ug/ml

(f)=RT Delta > 1/2 Window

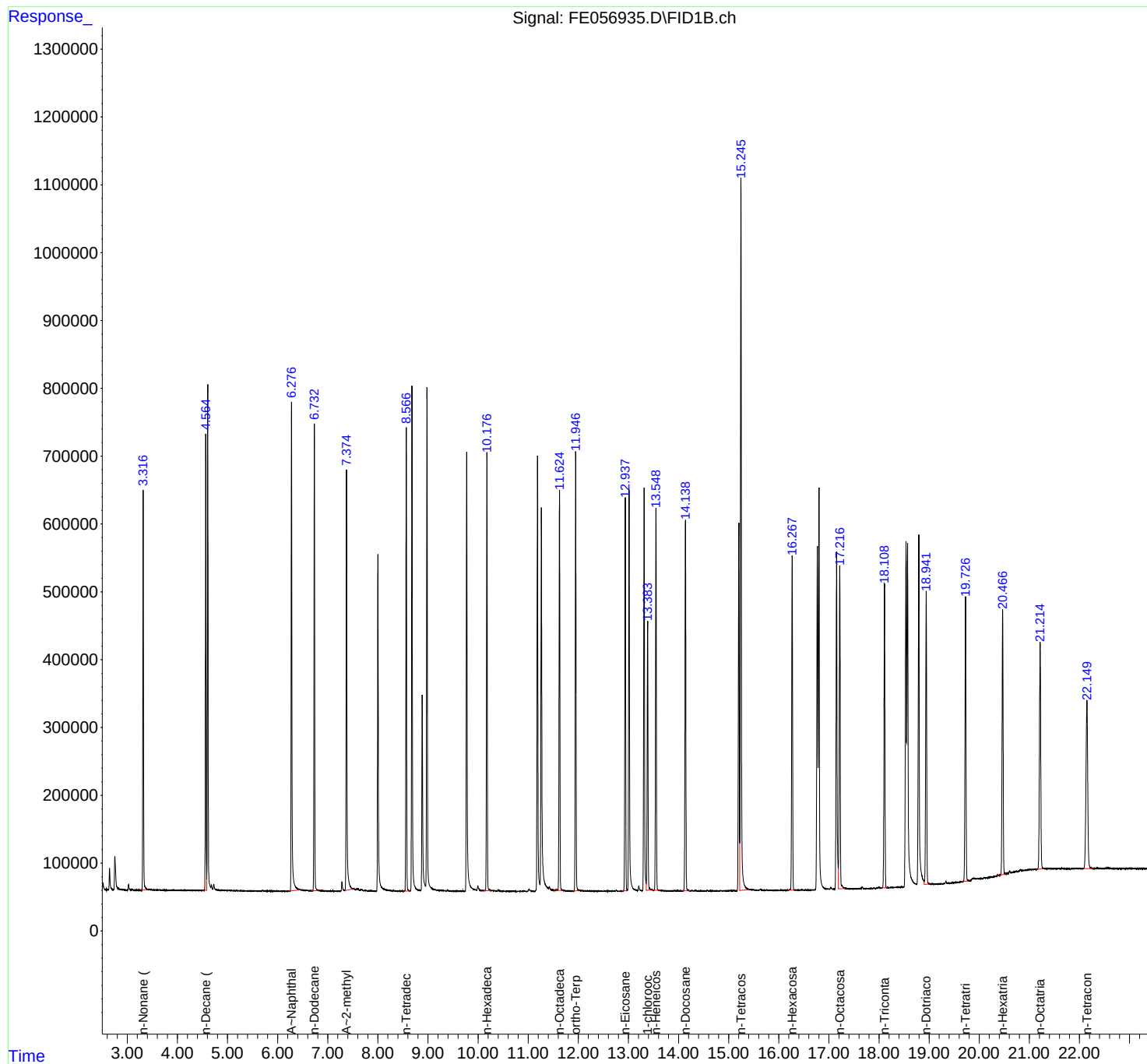
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
Data File : FE056935.D
Signal(s) : FID1B.ch
Acq On : 19 Nov 2025 14:39
Operator : YP\AJ
Sample : PB170632BS
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB170632BS

Integration File: sample.E
Quant Time: Nov 20 01:23:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
Quant Title : GC Extractables
QLast Update : Tue Nov 18 13:37:28 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\FE111925AL\
 Data File : FE056935.D
 Signal(s) : FID1B.ch
 Acq On : 19 Nov 2025 14:39
 Sample : PB170632BS
 Misc :
 ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.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	3.316	3.264	3.417	BB	589120	5912631	41.90%	2.269%
2	4.565	4.502	4.584	BV	671262	6402442	45.37%	2.457%
3	4.605	4.584	4.663	VV	747315	7694694	54.52%	2.953%
4	6.276	6.220	6.450	BB	720362	7844593	55.59%	3.010%
5	6.732	6.679	6.825	BB	687203	6889880	48.82%	2.644%
6	7.374	7.335	7.505	BV	618851	6995000	49.57%	2.684%
7	8.566	8.510	8.647	BB	685531	6971201	49.40%	2.675%
8	8.680	8.649	8.817	BB	746072	7967077	56.45%	3.057%
9	8.980	8.952	9.135	VB	739305	8075056	57.22%	3.098%
10	9.772	9.720	9.959	BB	648761	7786529	55.17%	2.988%
11	10.176	10.112	10.260	BB	647864	6818213	48.31%	2.616%
12	11.185	11.115	11.233	BV	639898	7265987	51.49%	2.788%
13	11.262	11.233	11.407	VV	564033	7475387	52.97%	2.868%
14	11.624	11.509	11.704	BB	585624	6775165	48.01%	2.600%
15	11.946	11.890	12.029	BB	647531	7171296	50.82%	2.752%
16	12.937	12.865	12.982	BV	580320	6728801	47.68%	2.582%
17	13.013	12.982	13.147	VB	591540	7288381	51.64%	2.797%
18	13.313	13.255	13.355	BV	595444	7187607	50.93%	2.758%
19	13.383	13.355	13.477	VB	397934	4841612	34.31%	1.858%
20	13.550	13.480	13.617	BB	557633	6594791	46.73%	2.530%
21	14.138	14.067	14.224	BB	544044	6521337	46.21%	2.502%
22	15.202	15.142	15.220	BV	539195	6652545	47.14%	2.553%
23	15.244	15.220	15.420	VB	1047184	14112489	100.00%	5.415%
24	16.267	16.175	16.324	BB	490863	6289288	44.57%	2.413%
25	16.770	16.702	16.785	BV	505431	6853001	48.56%	2.630%
26	16.803	16.785	16.937	VB	595683	7620569	54.00%	2.924%
27	17.154	17.100	17.188	BV	495533	6772364	47.99%	2.599%
28	17.217	17.188	17.327	VB	475321	6579759	46.62%	2.525%
29	18.109	18.039	18.169	BB	449149	5978107	42.36%	2.294%
30	18.538	18.464	18.551	BV	510545	6977897	49.44%	2.677%
31	18.568	18.551	18.752	VV	503250	8358567	59.23%	3.207%

					rteres				
32	18.794	18.752	18.900	VV	516927	7776175	55.10%	2.984%	
33	18.941	18.900	19.014	VB	432543	5997515	42.50%	2.301%	
34	19.727	19.650	19.789	BB	420008	5825672	41.28%	2.235%	
35	20.467	20.320	20.535	BB	390310	5756724	40.79%	2.209%	
36	21.215	21.132	21.300	BB	331749	5845093	41.42%	2.243%	
37	22.148	22.062	22.275	BB	248614	6010584	42.59%	2.306%	
Sum of corrected areas:						260614031			

Aliphatic EPH 103025.M Thu Nov 20 04:34:22 2025

Report of Analysis

Client:	HDR, Inc.	Date Collected:	
Project:	PVWC Linear Construction	Date Received:	
Client Sample ID:	PB170632BSD	SDG No.:	Q3662
Lab Sample ID:	PB170632BSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 g	Test:	EPH_NF
Prep Method :		Final Vol:	2000 uL
		Prep Date :	11/19/25

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Datafile	Date Ana.	Prep BatchID
TARGETS										
Aliphatic C28-C40	Aliphatic C28-C40	24.4		1	1.18	2.00	mg/kg	FE056936.D	11/19/25 15:09	PB170632
Aliphatic C9-C28	Aliphatic C9-C28	68.7		1	0.91	3.99	mg/kg	FE056936.D	11/19/25 15:09	PB170632
Total AliphaticEPH	Total AliphaticEPH	93.1			2.09	5.99	mg/kg			
Total EPH	Total EPH	93.1			2.09	5.99	mg/kg			

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C40 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C40 concentration for the sample is reported as the Total EPH.

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:	HDR, Inc.		Date Collected:	
Project:	PVWC Linear Construction		Date Received:	
Client Sample ID:	PB170632BSD		SDG No.:	Q3662
Lab Sample ID:	PB170632BSD		Matrix:	Solid
Analytical Method:	NJEPH		% Solid:	100
Sample Wt/Vol:	30.02 g	Final Vol: 2000 uL	Test:	EPH_NF
Prep Method :		Prep Date 11/19/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS									
Aliphatic C9-C28	Aliphatic C9-C28	68.7	1		0.91	3.99	mg/kg	11/19/25	PB170632
Aliphatic C28-C40	Aliphatic C28-C40	24.4	1		1.18	2.00	mg/kg	11/19/25	PB170632
SURROGATES									
3383-33-2	1-chlorooctadecane (SURR)	29.6			40 - 140	59%	SPK: 50		
84-15-1	ortho-Terphenyl (SURR)	33.7			40 - 140	67%	SPK: 50		

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB170632BSD	Acq On:	19 Nov 2025 15:09
Client Sample ID:	PB170632BSD	Operator:	YP\AJ
Data file:	FE056936.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	3.209	6.832	34487889	201.492	300	ug/ml
Aliphatic C12-C16	6.833	10.276	44535366	249.143	200	ug/ml
Aliphatic C16-C21	10.277	13.648	49205316	263.828	300	ug/ml
Aliphatic C21-C28	13.649	17.318	61155484	317.252	400	ug/ml
Aliphatic C28-C40	17.319	22.247	58352592	366.273	600	ug/ml
Aliphatic EPH	3.209	22.247	247736647	1400		ug/ml
ortho-Terphenyl (SURR)	11.946	11.946	7039398	33.7		ug/ml
1-chlorooctadecane (SURR)	13.382	13.382	4767113	29.59		ug/ml
Aliphatic C9-C28	3.209	17.318	189384055	1030	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
 Data File : FE056936.D
 Signal(s) : FID1B.ch
 Acq On : 19 Nov 2025 15:09
 Operator : YP\AJ
 Sample : PB170632BSD
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 PB170632BSD

Integration File: sample.E
 Quant Time: Nov 20 01:23:50 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
 Quant Title : GC Extractables
 QLast Update : Tue Nov 18 13:37:28 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.946	7039398	33.695 ug/ml
Spiked Amount 50.000		Recovery =	67.39%
12) S 1-chlorooctadecane (S...	13.382	4767113	29.588 ug/ml
Spiked Amount 50.000		Recovery =	59.18%
Target Compounds			
1) T n-Nonane (C9)	3.316	5873164	34.967 ug/ml
2) T n-Decane (C10)	4.564	6355244	37.036 ug/ml
3) T A~Naphthalene (C11.7)	6.276	7774930	42.121 ug/ml
4) T n-Dodecane (C12)	6.732	6843916	39.349 ug/ml
5) T A~2-methylnaphthalene...	7.374	6969760	39.328 ug/ml
6) T n-Tetradecane (C14)	8.566	6935375	39.733 ug/ml
7) T n-Hexadecane (C16)	10.176	6793839	37.134 ug/ml
8) T n-Octadecane (C18)	11.623	6774809	35.794 ug/ml
10) T n-Eicosane (C20)	12.936	6729238	36.108 ug/ml
11) T n-Heneicosane (C21)	13.548	6588790	35.832 ug/ml
13) T n-Docosane (C22)	14.136	6508426	34.767 ug/ml
14) T n-Tetracosane (C24)	15.242	14069327	71.832 ug/ml
15) T n-Hexacosane (C26)	16.266	6264201	32.234 ug/ml
16) T n-Octacosane (C28)	17.216	6551982	33.832 ug/ml
17) T n-Tricontane (C30)	18.108	5944027	29.647 ug/ml
18) T n-Dotriacontane (C32)	18.940	5965648	30.336 ug/ml
19) T n-Tetratriacontane (C34)	19.726	5788399	33.535 ug/ml
20) T n-Hexatriacontane (C36)	20.467	5717921	39.528 ug/ml
21) T n-Octatriacontane (C38)	21.214	5824643	46.278 ug/ml
22) T n-Tetracontane (C40)	22.145	6000394	51.900 ug/ml

(f)=RT Delta > 1/2 Window

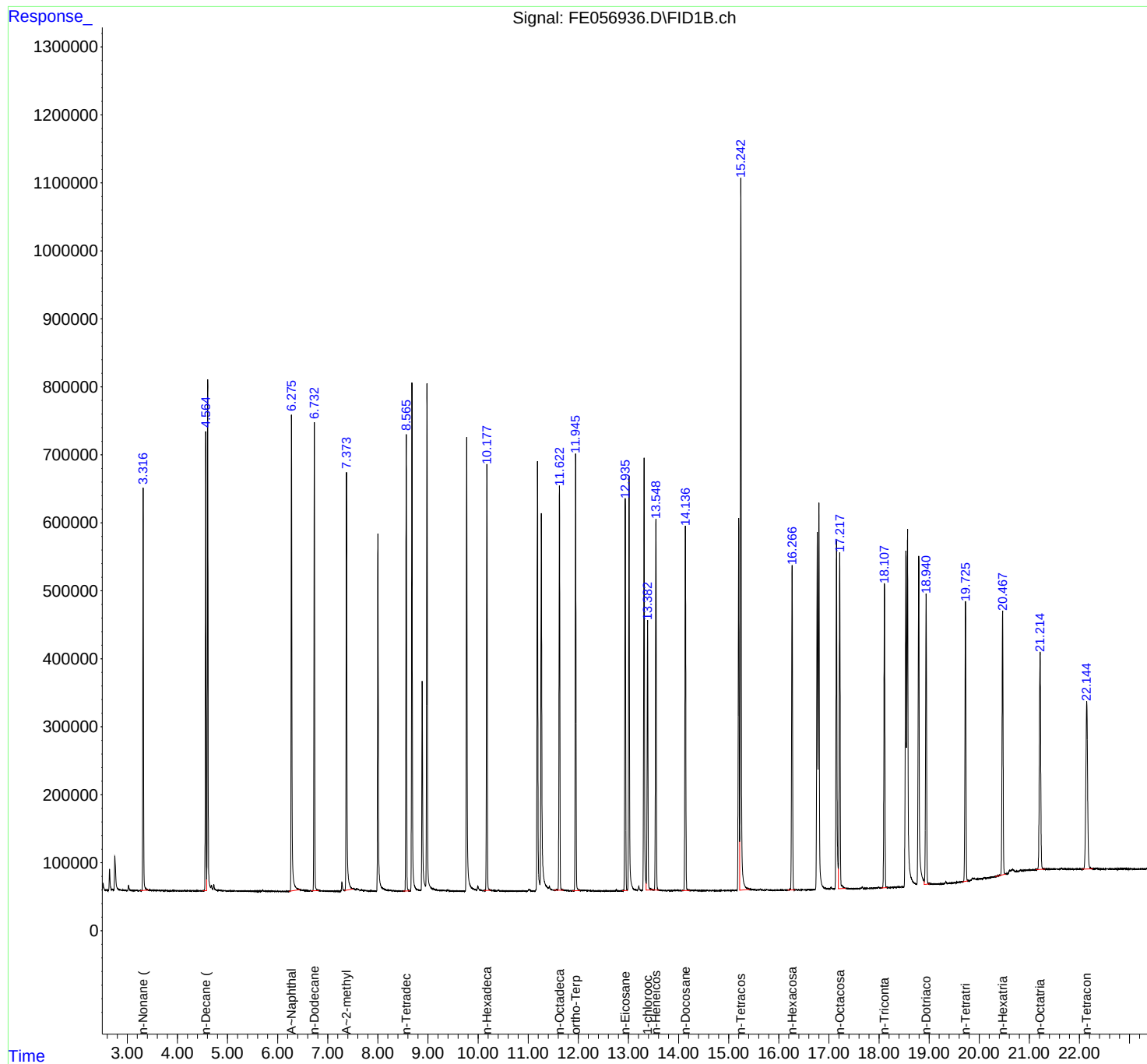
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
Data File : FE056936.D
Signal(s) : FID1B.ch
Acq On : 19 Nov 2025 15:09
Operator : YP\AJ
Sample : PB170632BSD
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB170632BSD

Integration File: sample.E
Quant Time: Nov 20 01:23:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
Quant Title : GC Extractables
QLast Update : Tue Nov 18 13:37:28 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\FE111925AL\
 Data File : FE056936.D
 Signal(s) : FID1B.ch
 Acq On : 19 Nov 2025 15:09
 Sample : PB170632BSD
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.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	3.316	3.259	3.422	BB	593065	5873164	41.74%	2.263%
2	4.564	4.502	4.584	BV	676750	6355244	45.17%	2.449%
3	4.604	4.584	4.663	VV	752484	7640635	54.31%	2.944%
4	6.276	6.222	6.440	BB	701374	7774930	55.26%	2.996%
5	6.732	6.667	6.825	BB	688021	6843916	48.64%	2.637%
6	7.374	7.334	7.504	BV	615190	6969760	49.54%	2.685%
7	8.566	8.502	8.642	BB	671502	6935375	49.29%	2.672%
8	8.680	8.649	8.827	BB	748426	7968037	56.63%	3.070%
9	8.980	8.950	9.140	VB	748228	8081556	57.44%	3.114%
10	9.772	9.710	9.960	BB	666542	7786799	55.35%	3.000%
11	10.176	10.112	10.252	BB	630837	6793839	48.29%	2.618%
12	11.184	11.119	11.233	BV	627627	7253210	51.55%	2.795%
13	11.261	11.233	11.404	VV	554726	7452608	52.97%	2.871%
14	11.623	11.509	11.709	BB	591923	6774809	48.15%	2.610%
15	11.946	11.882	12.037	BB	643074	7039398	50.03%	2.712%
16	12.936	12.875	12.980	BV	576537	6729238	47.83%	2.593%
17	13.013	12.980	13.154	VB	608712	7265808	51.64%	2.799%
18	13.313	13.255	13.353	BV	626304	7140853	50.75%	2.751%
19	13.382	13.353	13.479	VB	397302	4767113	33.88%	1.837%
20	13.548	13.479	13.615	BB	545311	6588790	46.83%	2.539%
21	14.136	14.065	14.222	BB	534288	6508426	46.26%	2.508%
22	15.200	15.139	15.218	BV	548036	6610310	46.98%	2.547%
23	15.242	15.218	15.424	VB	1045368	14069327	100.00%	5.421%
24	16.266	16.175	16.327	BB	472613	6264201	44.52%	2.414%
25	16.768	16.704	16.783	BV	525805	6816627	48.45%	2.626%
26	16.801	16.783	16.937	VB	569801	7587954	53.93%	2.924%
27	17.152	17.100	17.187	BV	510720	6746657	47.95%	2.599%
28	17.216	17.187	17.335	VB	496225	6551982	46.57%	2.524%
29	18.108	18.035	18.164	BB	448029	5944027	42.25%	2.290%
30	18.536	18.462	18.550	BV	494273	6925607	49.22%	2.668%
31	18.568	18.550	18.749	VV	518323	8411598	59.79%	3.241%

					rteres				
32	18.793	18.749	18.900	VV	480803	7774355	55.26%	2.995%	
33	18.940	18.900	19.012	VB	428979	5965648	42.40%	2.299%	
34	19.726	19.660	19.775	BB	410818	5788399	41.14%	2.230%	
35	20.467	20.320	20.529	BB	387766	5717921	40.64%	2.203%	
36	21.214	21.132	21.307	BB	319374	5824643	41.40%	2.244%	
37	22.145	22.050	22.274	BB	244953	6000394	42.65%	2.312%	
Sum of corrected areas:						259543157			

Aliphatic EPH 103025.M Thu Nov 20 04:34:59 2025

Report of Analysis

Client:	HDR, Inc.	Date Collected:	
Project:	PVWC Linear Construction	Date Received:	
Client Sample ID:	EO-01-11182025MS	SDG No.:	Q3662
Lab Sample ID:	Q3669-01MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	92.9
Sample Wt/Vol:	30.08 g	Test:	EPH_NF
Prep Method :		Final Vol:	2000 uL
		Prep Date :	11/19/25

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Datafile	Date Ana.	Prep BatchID
TARGETS										
Aliphatic C28-C40	Aliphatic C28-C40	106	E	1	1.27	2.15	mg/kg	FE056946.D	11/19/25 20:11	PB170632
Aliphatic C9-C28	Aliphatic C9-C28	118	E	1	0.98	4.29	mg/kg	FE056946.D	11/19/25 20:11	PB170632
Total AliphaticEPH	Total AliphaticEPH	224			2.25	6.44	mg/kg			
Total EPH	Total EPH	224			2.25	6.44	mg/kg			

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C40 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C40 concentration for the sample is reported as the Total EPH.

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:	HDR, Inc.		Date Collected:	
Project:	PVWC Linear Construction		Date Received:	
Client Sample ID:	EO-01-11182025MS		SDG No.:	Q3662
Lab Sample ID:	Q3669-01MS		Matrix:	Solid
Analytical Method:	NJEPH		% Solid:	92.9
Sample Wt/Vol:	30.08 g	Final Vol:	2000 uL	Test:
Prep Method :		Prep Date	11/19/25	EPH_NF

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS									
Aliphatic C9-C28	Aliphatic C9-C28	118	E	1	0.98	4.29	mg/kg	11/19/25	PB170632
Aliphatic C28-C40	Aliphatic C28-C40	106	E	1	1.27	2.15	mg/kg	11/19/25	PB170632
SURROGATES									
3383-33-2	1-chlorooctadecane (SURR)	55.7			40 - 140	111%	SPK: 50		
84-15-1	ortho-Terphenyl (SURR)	35.8			40 - 140	72%	SPK: 50		

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q3669-01MS	Acq On:	19 Nov 2025 20:11
Client Sample ID:	EO-01-11182025MS	Operator:	YP\AJ
Data file:	FE056946.D	Misc:	
Instrument:	FID_E	ALS Vial:	29
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.209	6.832	35037229	204.701	300	ug/ml
Aliphatic C12-C16	6.833	10.276	101230544	566.311	200	ug/ml
Aliphatic C16-C21	10.277	13.648	93808231	502.978	300	ug/ml
Aliphatic C21-C28	13.649	17.318	71532778	371.086	400	ug/ml
Aliphatic C28-C40	17.319	22.247	236893460	1490	600	ug/ml
Aliphatic EPH	3.209	22.247	538502242	3130		ug/ml
ortho-Terphenyl (SURR)	11.949	11.949	7470637	35.76		ug/ml
1-chlorooctadecane (SURR)	13.386	13.386	8980958	55.74		ug/ml
Aliphatic C9-C28	3.209	17.318	301608782	1650	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
 Data File : FE056946.D
 Signal(s) : FID1B.ch
 Acq On : 19 Nov 2025 20:11
 Operator : YP\AJ
 Sample : Q3669-01MS
 Misc :
 ALS Vial : 29 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 EO-01-11182025MS

Manual Integrations
 APPROVED

Reviewed By :Rahul Chavli 11/20/2025
 Supervised By :Sohil Jodhani 11/20/2025

Integration File: sample.E
 Quant Time: Nov 20 01:27:18 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
 Quant Title : GC Extractables
 QLast Update : Tue Nov 18 13:37:28 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.949	7470637	35.760 ug/mlm
Spiked Amount 50.000		Recovery =	71.52%
12) S 1-chlorooctadecane (S...	13.386	8980958	55.742 ug/ml
Spiked Amount 50.000		Recovery =	111.48%
Target Compounds			
1) T n-Nonane (C9)	3.305	3015718	17.955 ug/ml
2) T n-Decane (C10)	4.560	3875539	22.585 ug/ml
3) T A~Naphthalene (C11.7)	6.276	5263069	28.513 ug/ml
4) T n-Dodecane (C12)	6.734	6018984	34.606 ug/ml
5) T A~2-methylnaphthalene...	7.376	5763416	32.521 ug/ml
6) T n-Tetradecane (C14)	8.569	8351439	47.845 ug/ml
7) T n-Hexadecane (C16)	10.180	8163448	44.620 ug/ml
8) T n-Octadecane (C18)	11.626	7185489	37.964 ug/mlm
10) T n-Eicosane (C20)	12.940	6853481	36.775 ug/ml
11) T n-Heneicosane (C21)	13.553	6350751	34.537 ug/ml
13) T n-Docosane (C22)	14.141	6157949	32.895 ug/ml
14) T n-Tetracosane (C24)	15.247	11096143	56.652 ug/ml
15) T n-Hexacosane (C26)	16.272	5488896	28.244 ug/ml
16) T n-Octacosane (C28)	17.222	4955274	25.587 ug/ml
17) T n-Tricontane (C30)	18.114	5176024	25.816 ug/ml
18) T n-Dotriacontane (C32)	18.948	6585861	33.490 ug/mlm
19) T n-Tetratriacontane (C34)	19.737	5363717	31.074 ug/ml
20) T n-Hexatriacontane (C36)	20.479	4841007	33.466 ug/ml
21) T n-Octatriacontane (C38)	21.230	4754141	37.773 ug/ml
22) T n-Tetracontane (C40)	22.169	4965357	42.948 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
Data File : FE056946.D
Signal(s) : FID1B.ch
Acq On : 19 Nov 2025 20:11
Operator : YP\AJ
Sample : Q3669-01MS
Misc :
ALS Vial : 29 Sample Multiplier: 1

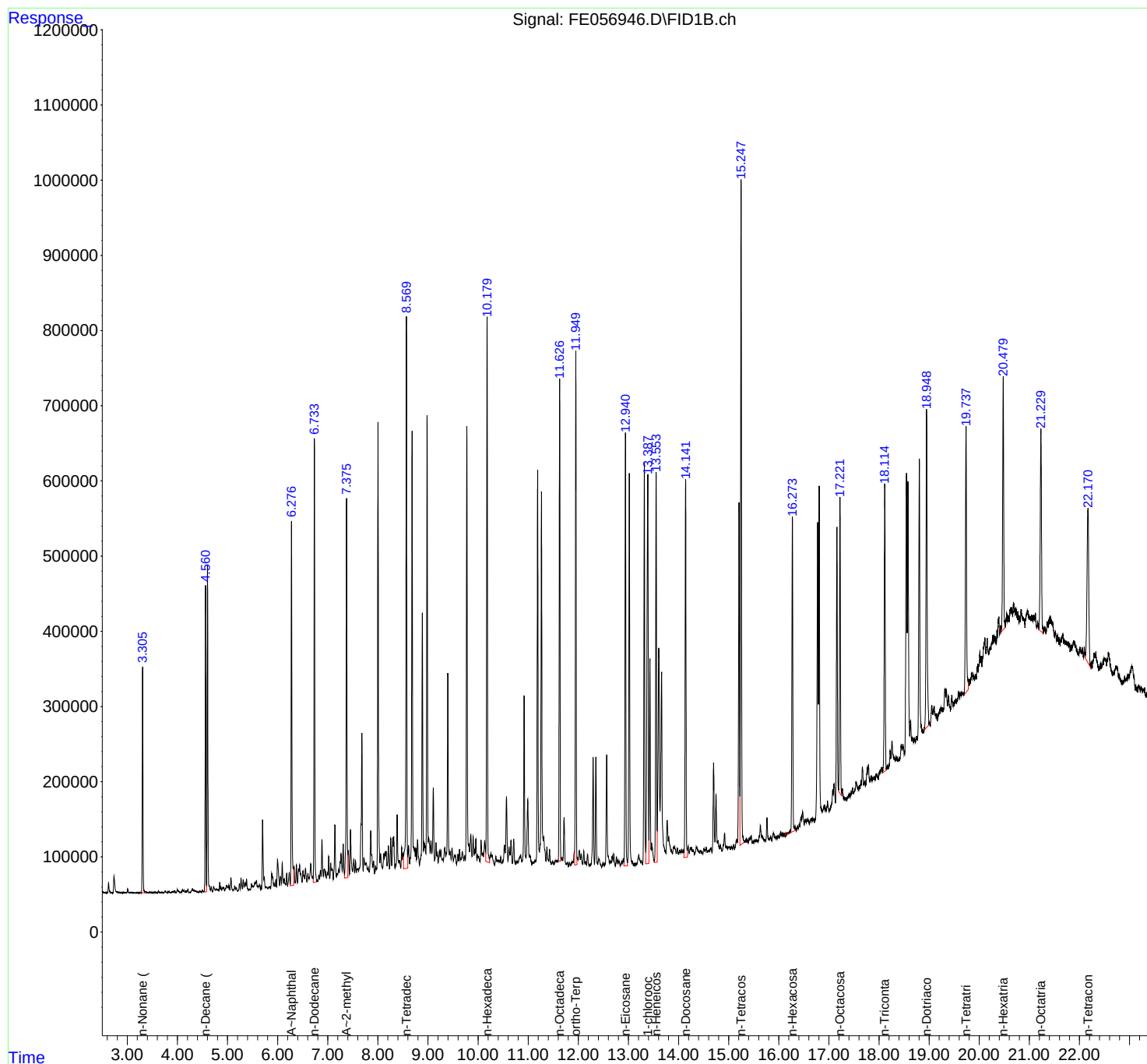
Instrument :
FID_E
ClientSampleId :
EO-01-11182025MS

Manual Integrations
APPROVED

Reviewed By :Rahul Chavli 11/20/2025
Supervised By :Sohil Jodhani 11/20/2025

Integration File: sample.E
Quant Time: Nov 20 01:27:18 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
Quant Title : GC Extractables
QLast Update : Tue Nov 18 13:37:28 2025
Response via : Initial Calibration
Integrator: ChemStation

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



Instrument :
FID_E
ClientSampleId :
EO-01-11182025MS

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE
Data File : FE056946.D
Signal(s) : FID1B.ch
Acq On : 19 Nov 2025 20:11
Sample : Q3669-01MS
Misc :
ALS Vial : 29 Sample Multiplier: 1

Reviewed By :Rahul Chavli 11/20/2025
Supervised By :Sohil Jodhani 11/20/2025

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.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	2.576	2.525	2.598	BV	194	1950	0.02%	0.000%
2	2.626	2.598	2.711	PV	13329	168349	1.48%	0.031%
3	2.734	2.711	2.833	VV	21657	392250	3.44%	0.071%
4	2.851	2.833	2.907	VV	706	17727	0.16%	0.003%
5	2.946	2.907	2.959	VV	515	9597	0.08%	0.002%
6	2.975	2.959	2.987	VV	390	5017	0.04%	0.001%
7	3.009	2.987	3.055	VV	4533	58250	0.51%	0.011%
8	3.088	3.055	3.109	VV	921	16665	0.15%	0.003%
9	3.117	3.109	3.145	VV	424	3957	0.03%	0.001%
10	3.175	3.145	3.215	PV	212	3145	0.03%	0.001%
11	3.232	3.215	3.249	PV	142	1708	0.01%	0.000%
12	3.305	3.249	3.404	VV	300288	3044210	26.71%	0.554%
13	3.416	3.404	3.433	VV	487	7784	0.07%	0.001%
14	3.450	3.433	3.468	VV	918	12641	0.11%	0.002%
15	3.481	3.468	3.501	VV	631	8010	0.07%	0.001%
16	3.518	3.501	3.534	VV	459	7164	0.06%	0.001%
17	3.548	3.534	3.573	VV	619	9001	0.08%	0.002%
18	3.588	3.573	3.602	VV	476	4703	0.04%	0.001%
19	3.621	3.602	3.661	VV	1538	25283	0.22%	0.005%
20	3.698	3.661	3.717	PV	610	13059	0.11%	0.002%
21	3.753	3.717	3.801	VV	2185	43032	0.38%	0.008%
22	3.835	3.801	3.871	VV	1413	32994	0.29%	0.006%
23	3.896	3.871	3.913	VV	1477	22895	0.20%	0.004%
24	3.940	3.913	3.970	VV	2239	33517	0.29%	0.006%
25	3.998	3.970	4.058	VV	3774	74967	0.66%	0.014%
26	4.101	4.058	4.116	PV	4360	59596	0.52%	0.011%
27	4.132	4.116	4.151	VV	3779	47336	0.42%	0.009%
28	4.169	4.151	4.191	VV	1759	31409	0.28%	0.006%
29	4.208	4.191	4.231	VV	4370	51864	0.46%	0.009%
30	4.244	4.231	4.257	VV	434	5443	0.05%	0.001%
31	4.299	4.257	4.316	VV	5012	92673	0.81%	0.017%

32	4.331	4.316	4.361	VV	3985	65876	0.58%	0.012%
33	4.371	4.361	4.416	VV	1985	3302		
34	4.452	4.416	4.478	PV	2300	3511		
35	4.501	4.478	4.526	VV	2969	4331		
36	4.560	4.526	4.580	VV	408230	388871		
37	4.600	4.580	4.658	VV	434808	4462421	39.15%	0.812%
38	4.674	4.658	4.700	VV	5500	79409	0.70%	0.014%
39	4.723	4.700	4.756	VV	7376	131683	1.16%	0.024%
40	4.772	4.756	4.797	VV	4040	70508	0.62%	0.013%
41	4.811	4.797	4.825	VV	3176	40470	0.36%	0.007%
42	4.843	4.825	4.858	VV	12226	124599	1.09%	0.023%
43	4.868	4.858	4.884	VV	6833	67604	0.59%	0.012%
44	4.903	4.884	4.913	VV	5458	67881	0.60%	0.012%
45	4.923	4.913	4.941	VV	6016	64409	0.57%	0.012%
46	4.981	4.941	5.010	VV	8192	202981	1.78%	0.037%
47	5.023	5.010	5.045	VV	8069	107666	0.94%	0.020%
48	5.069	5.045	5.112	VV	17804	260010	2.28%	0.047%
49	5.144	5.112	5.161	VV	6762	96555	0.85%	0.018%
50	5.174	5.161	5.201	VV	4445	54524	0.48%	0.010%
51	5.237	5.201	5.252	PV	9741	110894	0.97%	0.020%
52	5.269	5.252	5.296	VV	16745	217996	1.91%	0.040%
53	5.313	5.296	5.332	VV	14238	188288	1.65%	0.034%
54	5.351	5.332	5.365	VV	10432	150398	1.32%	0.027%
55	5.379	5.365	5.419	VV	15028	192494	1.69%	0.035%
56	5.434	5.419	5.457	PV	1334	19521	0.17%	0.004%
57	5.479	5.457	5.492	PV	8560	99098	0.87%	0.018%
58	5.502	5.492	5.513	VV	5764	61016	0.54%	0.011%
59	5.544	5.513	5.555	VV	10261	172673	1.51%	0.031%
60	5.576	5.555	5.614	VV	12432	263317	2.31%	0.048%
61	5.640	5.614	5.656	VV	7183	112887	0.99%	0.021%
62	5.667	5.656	5.677	VV	3018	25539	0.22%	0.005%
63	5.699	5.677	5.755	VV	91907	1312456	11.51%	0.239%
64	5.771	5.755	5.806	VV	3645	67187	0.59%	0.012%
65	5.827	5.806	5.840	VV	3509	40143	0.35%	0.007%
66	5.851	5.840	5.860	VV	3068	28345	0.25%	0.005%
67	5.882	5.860	5.918	VV	20560	420436	3.69%	0.077%
68	5.927	5.918	5.946	VV	7521	88722	0.78%	0.016%
69	5.964	5.946	5.977	VV	11728	126127	1.11%	0.023%
70	5.999	5.977	6.039	VV	37911	729247	6.40%	0.133%
71	6.056	6.039	6.075	VV	15458	239442	2.10%	0.044%
72	6.092	6.075	6.119	VV	33415	446439	3.92%	0.081%
73	6.132	6.119	6.161	VV	12222	201675	1.77%	0.037%
74	6.180	6.161	6.199	VV	19095	222941	1.96%	0.041%
75	6.231	6.199	6.251	VV	20056	352456	3.09%	0.064%
76	6.276	6.251	6.318	VV	485694	5368178	47.10%	0.977%
77	6.327	6.318	6.351	VV	27909	361001	3.17%	0.066%
78	6.375	6.351	6.397	VV	29885	406083	3.56%	0.074%
79	6.418	6.397	6.427	VV	24317	316023	2.77%	0.058%

Instrument :

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EO-01-11182025MS

Manual IntegrationsAPPROVED

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					rters			
80	6.439	6.427	6.488	VV	29464	639900	5.61%	0.116%
81	6.505	6.488	6.537	VV	21185	42106		
82	6.555	6.537	6.583	VV	23915	43905		
83	6.604	6.583	6.628	VV	16894	32104		
84	6.661	6.628	6.707	VV	30064	79226		
85	6.734	6.707	6.780	VV	594340	6248598	54.82%	1.137%
86	6.791	6.780	6.802	VV	8005	91949	0.81%	0.017%
87	6.823	6.802	6.837	VV	14377	216332	1.90%	0.039%
88	6.855	6.837	6.867	VV	20475	287730	2.52%	0.052%
89	6.885	6.867	6.911	VV	61072	829225	7.28%	0.151%
90	6.935	6.911	6.949	VV	21852	415309	3.64%	0.076%
91	6.958	6.949	6.974	VV	18084	210855	1.85%	0.038%
92	7.019	6.974	7.040	VV	38184	733865	6.44%	0.134%
93	7.060	7.040	7.111	VV	28305	795963	6.98%	0.145%
94	7.143	7.111	7.172	VV	79868	1197548	10.51%	0.218%
95	7.185	7.172	7.195	VV	14897	180690	1.59%	0.033%
96	7.217	7.195	7.229	VV	19970	341728	3.00%	0.062%
97	7.265	7.229	7.289	VV	40813	996189	8.74%	0.181%
98	7.308	7.289	7.334	VV	53413	801985	7.04%	0.146%
99	7.376	7.334	7.403	VV	513757	6114588	53.65%	1.113%
100	7.410	7.403	7.434	VV	44709	576450	5.06%	0.105%
101	7.454	7.434	7.494	VV	71358	1258244	11.04%	0.229%
102	7.520	7.494	7.538	VV	32118	611850	5.37%	0.111%
103	7.555	7.538	7.572	VV	30409	435491	3.82%	0.079%
104	7.587	7.572	7.614	VV	19511	454250	3.99%	0.083%
105	7.682	7.614	7.707	VV	198913	3466287	30.41%	0.631%
106	7.724	7.707	7.747	VV	32401	635918	5.58%	0.116%
107	7.767	7.747	7.793	VV	26647	637307	5.59%	0.116%
108	7.805	7.793	7.828	VV	19489	361718	3.17%	0.066%
109	7.858	7.828	7.896	VV	68659	1458025	12.79%	0.265%
110	7.913	7.896	7.932	VV	28375	458946	4.03%	0.084%
111	7.954	7.932	7.968	VV	21076	371180	3.26%	0.068%
112	8.055	8.040	8.094	VV	37081	859886	7.54%	0.157%
113	8.118	8.094	8.130	VV	37237	625799	5.49%	0.114%
114	8.143	8.130	8.153	VV	38312	491714	4.31%	0.090%
115	8.165	8.153	8.184	VV	40198	584466	5.13%	0.106%
116	8.210	8.184	8.231	VV	46911	847656	7.44%	0.154%
117	8.257	8.231	8.277	VV	56757	929762	8.16%	0.169%
118	8.298	8.277	8.306	VV	57282	729235	6.40%	0.133%
119	8.317	8.306	8.341	VV	59576	836520	7.34%	0.152%
120	8.384	8.341	8.422	VV	87896	1780241	15.62%	0.324%
121	8.434	8.422	8.455	VV	26739	459421	4.03%	0.084%
122	8.475	8.455	8.488	VV	43879	610498	5.36%	0.111%
123	8.501	8.488	8.512	VV	35689	463770	4.07%	0.084%
124	8.569	8.512	8.596	VV	741263	9138383	80.17%	1.663%
125	8.612	8.596	8.632	VV	46060	764715	6.71%	0.139%
126	8.683	8.632	8.745	VV	593465	7981015	70.02%	1.453%

Instrument :

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EO-01-11182025MS

Manual IntegrationsAPPROVED

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127	8.757	8.745	8.771	VV	41743	557386	4.89%	0.101%
128	8.791	8.771	8.830	VV	52573	121345		
129	8.925	8.914	8.955	VV	47903	103752		
130	8.982	8.955	9.043	VV	611598	805716		
131	9.059	9.043	9.077	VV	50376	84726		
132	9.106	9.077	9.133	VV	120078	2031539	17.82%	0.370%
133	9.159	9.133	9.176	VV	47322	905861	7.95%	0.165%
134	9.184	9.176	9.204	VV	32309	460040	4.04%	0.084%
135	9.227	9.204	9.242	VV	36083	698221	6.13%	0.127%
136	9.256	9.242	9.304	VV	37046	1046904	9.18%	0.191%
137	9.333	9.304	9.355	VV	39374	969965	8.51%	0.177%
138	9.396	9.355	9.428	VV	269664	3837236	33.67%	0.698%
139	9.440	9.428	9.462	VV	33801	594852	5.22%	0.108%
140	9.479	9.462	9.507	VV	38635	818728	7.18%	0.149%
141	9.530	9.507	9.570	VV	28916	931523	8.17%	0.170%
142	9.597	9.570	9.612	VV	29900	605546	5.31%	0.110%
143	9.629	9.612	9.663	VV	36099	820116	7.20%	0.149%
144	9.685	9.663	9.715	VV	32960	848375	7.44%	0.154%
145	9.731	9.715	9.745	VV	27210	432992	3.80%	0.079%
146	9.775	9.745	9.829	VV	595531	7832688	68.72%	1.426%
147	9.854	9.829	9.879	VV	55411	1233043	10.82%	0.224%
148	9.902	9.879	9.920	VV	52155	911140	7.99%	0.166%
149	9.932	9.920	9.940	VV	34856	382963	3.36%	0.070%
150	9.955	9.940	9.978	VV	48824	779509	6.84%	0.142%
151	9.992	9.978	10.038	VV	27120	837625	7.35%	0.152%
152	10.060	10.038	10.081	VV	46299	849155	7.45%	0.155%
153	10.091	10.081	10.106	VV	28856	408046	3.58%	0.074%
154	10.132	10.106	10.151	VV	45370	944440	8.29%	0.172%
155	10.180	10.151	10.227	VV	745426	8947336	78.50%	1.629%
156	10.257	10.227	10.271	VV	27220	655552	5.75%	0.119%
157	10.281	10.271	10.329	VV	25991	667858	5.86%	0.122%
158	10.355	10.329	10.376	VV	23929	532539	4.67%	0.097%
159	10.390	10.376	10.401	VV	18498	270258	2.37%	0.049%
160	10.409	10.401	10.434	VV	18211	343752	3.02%	0.063%
161	10.453	10.434	10.475	VV	21486	429571	3.77%	0.078%
162	10.525	10.475	10.541	VV	37873	933555	8.19%	0.170%
163	10.567	10.541	10.597	VV	102388	1829812	16.05%	0.333%
164	10.618	10.597	10.638	VV	34471	663020	5.82%	0.121%
165	10.656	10.638	10.684	VV	43892	787995	6.91%	0.143%
166	10.711	10.684	10.744	VV	45700	893320	7.84%	0.163%
167	10.767	10.744	10.779	VV	15213	291403	2.56%	0.053%
168	10.789	10.779	10.798	VV	14317	154382	1.35%	0.028%
169	10.851	10.798	10.877	VV	22756	873152	7.66%	0.159%
170	10.919	10.877	10.955	VV	233355	3191034	28.00%	0.581%
171	10.991	10.955	11.025	VV	97112	2006702	17.61%	0.365%
172	11.039	11.025	11.072	VV	21118	488084	4.28%	0.089%
173	11.136	11.072	11.149	VV	15519	596350	5.23%	0.109%
174	11.188	11.149	11.222	VV	532581	6458793	56.67%	1.176%

Instrument :

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EO-01-11182025MS

Manual IntegrationsAPPROVED

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175	11.264	11.222	11.298	VV	505204	6662011	58.45%	1.213%
176	11.308	11.298	11.353	VV	44981	101807		
177	11.373	11.353	11.407	VV	31532	64404		
178	11.427	11.407	11.465	VV	28439	55194		
179	11.488	11.465	11.514	VV	12133	30096		
180	11.538	11.514	11.552	VV	12682	250954	2.20%	0.046%
181	11.579	11.552	11.591	VV	12869	295787	2.60%	0.054%
182	11.627	11.591	11.661	VV	648519	7715726	67.69%	1.404%
183	11.672	11.661	11.689	VV	15334	241598	2.12%	0.044%
184	11.715	11.689	11.765	VV	69074	1204611	10.57%	0.219%
185	11.782	11.765	11.804	VV	9673	178855	1.57%	0.033%
186	11.821	11.804	11.841	VV	9028	154485	1.36%	0.028%
187	11.950	11.841	11.994	VV	693553	8392568	73.63%	1.528%
188	12.020	11.994	12.041	VV	24159	511866	4.49%	0.093%
189	12.057	12.041	12.087	VV	20146	350991	3.08%	0.064%
190	12.109	12.087	12.132	VV	23552	358679	3.15%	0.065%
191	12.145	12.132	12.161	VV	8831	131636	1.15%	0.024%
192	12.184	12.161	12.216	VV	18904	329981	2.90%	0.060%
193	12.237	12.216	12.251	VV	4760	94868	0.83%	0.017%
194	12.295	12.251	12.322	VV	147611	1996201	17.51%	0.363%
195	12.350	12.322	12.387	VV	147695	1901197	16.68%	0.346%
196	12.409	12.387	12.468	VV	11773	309319	2.71%	0.056%
197	12.494	12.468	12.513	VV	5043	93862	0.82%	0.017%
198	12.566	12.513	12.621	VV	148102	2200278	19.30%	0.400%
199	12.634	12.621	12.653	VV	7738	127870	1.12%	0.023%
200	12.676	12.653	12.693	VV	13657	232290	2.04%	0.042%
201	12.708	12.693	12.740	VV	16170	247359	2.17%	0.045%
202	12.761	12.740	12.777	VV	12581	154073	1.35%	0.028%
203	12.791	12.777	12.806	VV	8475	109887	0.96%	0.020%
204	12.815	12.806	12.836	VV	6719	80017	0.70%	0.015%
205	12.864	12.836	12.881	VV	5558	107593	0.94%	0.020%
206	12.897	12.881	12.909	VV	10210	121303	1.06%	0.022%
207	12.940	12.909	12.980	VV	580397	6857942	60.17%	1.248%
208	13.017	12.980	13.071	VV	521473	6377334	55.95%	1.161%
209	13.081	13.071	13.100	VV	5153	55942	0.49%	0.010%
210	13.114	13.100	13.131	PV	1808	19892	0.17%	0.004%
211	13.142	13.131	13.152	VV	1747	16647	0.15%	0.003%
212	13.159	13.152	13.164	VV	1303	8651	0.08%	0.002%
213	13.205	13.164	13.245	VV	12968	315200	2.77%	0.057%
214	13.260	13.245	13.281	VV	4972	63363	0.56%	0.012%
215	13.317	13.281	13.346	PV	535251	6161158	54.05%	1.121%
216	13.386	13.346	13.409	VV	506546	8978755	78.77%	1.634%
217	13.429	13.409	13.452	VV	271294	3269658	28.69%	0.595%
218	13.463	13.452	13.513	VV	26168	523867	4.60%	0.095%
219	13.553	13.513	13.574	VV	517937	6347998	55.69%	1.155%
220	13.606	13.574	13.631	VV	283942	5308098	46.57%	0.966%
221	13.661	13.631	13.748	VV	250847	5094043	44.69%	0.927%

Instrument :

FID_E

ClientSampleId :

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Manual IntegrationsAPPROVED

Reviewed By :Rahul Chavli 11/20/2025
Supervised By :Sohil Jodhani 11/20/2025

222	13.774	13.748	13.795	VV	52746	966157	8.48%	0.176%
223	13.805	13.795	13.848	VV	30800	67697		
224	13.857	13.848	13.878	VV	12140	19158		
225	13.903	13.878	13.957	VV	15936	59556		
226	13.977	13.957	14.000	VV	14061	25594		
227	14.026	14.000	14.047	VV	10160	234164	2.05%	0.043%
228	14.064	14.047	14.076	VV	10191	149442	1.31%	0.027%
229	14.094	14.076	14.107	VV	8842	145987	1.28%	0.027%
230	14.141	14.107	14.175	VV	502999	6149941	53.96%	1.119%
231	14.192	14.175	14.213	VV	13693	221934	1.95%	0.040%
232	14.239	14.213	14.276	VV	11716	337135	2.96%	0.061%
233	14.290	14.276	14.320	VV	8364	148169	1.30%	0.027%
234	14.359	14.320	14.416	VV	11160	381846	3.35%	0.070%
235	14.436	14.416	14.461	VV	5584	110313	0.97%	0.020%
236	14.467	14.461	14.482	VV	3582	27930	0.25%	0.005%
237	14.504	14.482	14.518	VV	7444	98036	0.86%	0.018%
238	14.553	14.518	14.573	VV	8608	178671	1.57%	0.033%
239	14.599	14.573	14.620	VV	3927	90247	0.79%	0.016%
240	14.647	14.620	14.666	VV	7117	126452	1.11%	0.023%
241	14.700	14.666	14.725	VV	119457	1651781	14.49%	0.301%
242	14.748	14.725	14.814	VV	75532	1364610	11.97%	0.248%
243	14.832	14.814	14.871	VV	8245	154223	1.35%	0.028%
244	14.918	14.871	14.942	VV	23821	428315	3.76%	0.078%
245	14.956	14.942	14.975	VV	6068	86386	0.76%	0.016%
246	15.012	14.975	15.038	VV	4394	114161	1.00%	0.021%
247	15.054	15.038	15.071	VV	4610	54953	0.48%	0.010%
248	15.098	15.071	15.116	VV	4999	75067	0.66%	0.014%
249	15.151	15.116	15.161	PV	10392	155711	1.37%	0.028%
250	15.206	15.161	15.224	VV	454672	5724002	50.22%	1.042%
251	15.247	15.224	15.326	VV	884353	11398178	100.00%	2.075%
252	15.349	15.326	15.363	VV	9070	175953	1.54%	0.032%
253	15.377	15.363	15.390	VV	6790	103648	0.91%	0.019%
254	15.410	15.390	15.422	VV	9387	146962	1.29%	0.027%
255	15.450	15.422	15.476	VV	11938	251428	2.21%	0.046%
256	15.526	15.476	15.544	VV	5204	160175	1.41%	0.029%
257	15.560	15.544	15.585	VV	5386	92308	0.81%	0.017%
258	15.632	15.585	15.661	VV	23148	516097	4.53%	0.094%
259	15.672	15.661	15.708	VV	8638	148786	1.31%	0.027%
260	15.713	15.708	15.738	VV	2655	37671	0.33%	0.007%
261	15.764	15.738	15.811	VV	31577	425020	3.73%	0.077%
262	15.840	15.811	15.857	VV	4696	70171	0.62%	0.013%
263	15.893	15.857	15.919	PV	8261	164576	1.44%	0.030%
264	15.942	15.919	15.965	VV	2483	44365	0.39%	0.008%
265	15.986	15.965	16.008	PV	2876	43443	0.38%	0.008%
266	16.031	16.008	16.071	PV	5233	120626	1.06%	0.022%
267	16.080	16.071	16.106	VV	2694	42283	0.37%	0.008%
268	16.117	16.106	16.131	VV	1299	13396	0.12%	0.002%
269	16.142	16.131	16.149	PV	1921	9789	0.09%	0.002%

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Manual IntegrationsAPPROVED

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					rtres			
270	16.219	16.149	16.227	VV	2631	65553	0.58%	0.012%
271	16.272	16.227	16.346	VV	417597	545632		
272	16.378	16.346	16.395	VV	4394	5613		
273	16.409	16.395	16.420	VV	5538	6029		
274	16.441	16.420	16.452	VV	14272	19175		
275	16.476	16.452	16.508	VV	19667	420656	3.69%	0.077%
276	16.529	16.508	16.546	VV	8165	135885	1.19%	0.025%
277	16.574	16.546	16.607	VV	6451	170449	1.50%	0.031%
278	16.646	16.607	16.668	VV	4450	105250	0.92%	0.019%
279	16.684	16.668	16.715	VV	4122	66361	0.58%	0.012%
280	16.776	16.715	16.791	PV	398450	5652919	49.59%	1.029%
281	16.807	16.791	16.876	VV	442788	5531417	48.53%	1.007%
282	16.916	16.876	16.931	VV	13768	353205	3.10%	0.064%
283	16.974	16.931	17.005	VV	16899	402014	3.53%	0.073%
284	17.077	17.005	17.087	VV	29252	609335	5.35%	0.111%
285	17.102	17.087	17.130	VV	35551	675709	5.93%	0.123%
286	17.161	17.130	17.195	VV	376875	5279010	46.31%	0.961%
287	17.222	17.195	17.253	VV	411611	5604970	49.17%	1.020%
288	17.267	17.253	17.298	VV	23220	459470	4.03%	0.084%
289	17.304	17.298	17.355	VV	10039	281510	2.47%	0.051%
290	17.403	17.355	17.423	VV	11511	355572	3.12%	0.065%
291	17.470	17.423	17.498	VV	16733	528007	4.63%	0.096%
292	17.544	17.498	17.591	VV	22946	856576	7.52%	0.156%
293	17.610	17.591	17.625	VV	15864	274326	2.41%	0.050%
294	17.642	17.625	17.650	VV	20558	259006	2.27%	0.047%
295	17.670	17.650	17.698	VV	38090	717071	6.29%	0.131%
296	17.712	17.698	17.729	VV	18036	279615	2.45%	0.051%
297	17.789	17.729	17.818	VV	36266	1281064	11.24%	0.233%
298	17.845	17.818	17.865	VV	19267	463670	4.07%	0.084%
299	17.906	17.865	17.924	VV	16075	522579	4.58%	0.095%
300	17.948	17.924	17.985	VV	18756	562954	4.94%	0.102%
301	18.012	17.985	18.028	VV	20141	442369	3.88%	0.081%
302	18.055	18.028	18.069	VV	23467	512683	4.50%	0.093%
303	18.114	18.069	18.147	VV	396402	5951965	52.22%	1.083%
304	18.160	18.147	18.174	VV	21830	329647	2.89%	0.060%
305	18.224	18.174	18.238	VV	38675	1004454	8.81%	0.183%
306	18.259	18.238	18.331	VV	51615	1866161	16.37%	0.340%
307	18.360	18.331	18.411	VV	26771	1140644	10.01%	0.208%
308	18.445	18.411	18.459	VV	39201	900381	7.90%	0.164%
309	18.478	18.459	18.505	VV	39177	929955	8.16%	0.169%
310	18.547	18.505	18.562	VV	400262	6190299	54.31%	1.127%
311	18.578	18.562	18.612	VV	383768	6159412	54.04%	1.121%
312	18.629	18.612	18.691	VV	65442	2191804	19.23%	0.399%
313	18.707	18.691	18.728	VV	38643	798576	7.01%	0.145%
314	18.746	18.728	18.764	VV	40195	824258	7.23%	0.150%
315	18.804	18.764	18.868	VV	406305	7665170	67.25%	1.395%
316	18.949	18.868	19.025	VV	469969	10827104	94.99%	1.971%

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317	19.052	19.025	19.073	VV	70754	1766762	15.50%	0.322%
318	19.099	19.073	19.145	VV	67873	257794		
319	19.151	19.145	19.163	VV	56210	56826		
320	19.236	19.163	19.261	VV	61766	333633		
321	19.269	19.261	19.284	VV	59332	77005		
322	19.314	19.284	19.331	VV	83238	2020163	17.72%	0.368%
323	19.343	19.331	19.370	VV	82123	1683174	14.77%	0.306%
324	19.385	19.370	19.425	VV	72391	2055039	18.03%	0.374%
325	19.453	19.425	19.475	VV	70398	1827654	16.03%	0.333%
326	19.485	19.475	19.495	VV	59460	684359	6.00%	0.125%
327	19.531	19.495	19.546	VV	62652	1845464	16.19%	0.336%
328	19.559	19.546	19.568	VV	61602	768569	6.74%	0.140%
329	19.598	19.568	19.645	VV	68129	2991551	26.25%	0.545%
330	19.651	19.645	19.659	VV	66275	555565	4.87%	0.101%
331	19.681	19.659	19.691	VV	65336	1259758	11.05%	0.229%
332	19.737	19.691	19.781	VV	418835	8843297	77.59%	1.610%
333	19.791	19.781	19.803	VV	79305	1008502	8.85%	0.184%
334	19.851	19.803	19.877	VV	85383	3530530	30.97%	0.643%
335	19.892	19.877	19.906	VV	81158	1356258	11.90%	0.247%
336	19.931	19.906	19.945	VV	80978	1796937	15.77%	0.327%
337	19.968	19.945	19.995	VV	92979	2626923	23.05%	0.478%
338	20.012	19.995	20.033	VV	107450	2280947	20.01%	0.415%
339	20.041	20.033	20.053	VV	100804	1169852	10.26%	0.213%
340	20.113	20.053	20.131	VV	122639	5054577	44.35%	0.920%
341	20.160	20.131	20.188	VV	121218	3646876	32.00%	0.664%
342	20.218	20.188	20.238	VV	108129	3130130	27.46%	0.570%
343	20.268	20.238	20.299	VV	118099	4210973	36.94%	0.766%
344	20.309	20.299	20.331	VV	118476	2198949	19.29%	0.400%
345	20.391	20.331	20.407	VV	140446	5649472	49.56%	1.028%
346	20.423	20.407	20.434	VV	129040	2014155	17.67%	0.367%
347	20.479	20.434	20.522	VV	454922	11224745	98.48%	2.043%
348	20.549	20.522	20.565	VV	139436	3401185	29.84%	0.619%
349	20.575	20.565	20.598	VV	137211	2653784	23.28%	0.483%
350	20.626	20.598	20.642	VV	144531	3672250	32.22%	0.668%
351	20.655	20.642	20.666	VV	144540	1970375	17.29%	0.359%
352	20.685	20.666	20.721	VV	149688	4718132	41.39%	0.859%
353	20.730	20.721	20.793	VV	140777	5638236	49.47%	1.026%
354	20.808	20.793	20.817	VV	127173	1799108	15.78%	0.327%
355	20.840	20.817	20.912	VV	135230	7021061	61.60%	1.278%
356	20.969	20.912	21.005	VV	128510	6851719	60.11%	1.247%
357	21.014	21.005	21.025	VV	120175	1362972	11.96%	0.248%
358	21.028	21.025	21.035	VV	118918	730359	6.41%	0.133%
359	21.044	21.035	21.071	VV	120552	2531861	22.21%	0.461%
360	21.088	21.071	21.148	VV	119171	5162383	45.29%	0.940%
361	21.165	21.148	21.187	VV	108187	2442600	21.43%	0.445%
362	21.230	21.187	21.278	VV	360756	9776603	85.77%	1.780%
363	21.308	21.278	21.330	VV	95509	2871553	25.19%	0.523%
364	21.357	21.330	21.376	VV	100943	2624480	23.03%	0.478%

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Manual IntegrationsAPPROVED

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Supervised By :Sohil Jodhani 11/20/2025

Clients Sampled : EO-01-11182025MS							rterres	
365	21.414	21.376	21.505	VV	105437	7318059	64.20%	1.332%
366	21.521	21.505	21.541	VV	81605	167237	Manual IntegrationsAPPR	
367	21.559	21.541	21.578	VV	75842	157501		
368	21.584	21.578	21.592	VV	72124	57128	Reviewed By :Rahul Chavli	
369	21.599	21.592	21.614	VV	69216	87184	Supervised By :Sohil Jodhani	
370	21.667	21.614	21.722	VV	72292	4227321	37.09%	0.769%
371	21.734	21.722	21.765	VV	61580	1522854	13.36%	0.277%
372	21.775	21.765	21.812	VV	59382	1546144	13.56%	0.281%
373	21.827	21.812	21.848	VV	53041	1049191	9.20%	0.191%
374	21.892	21.848	21.986	VV	56264	3889741	34.13%	0.708%
375	22.009	21.986	22.041	VV	42165	1271910	11.16%	0.232%
376	22.062	22.041	22.085	VV	40751	896767	7.87%	0.163%
377	22.097	22.085	22.110	VV	41247	524017	4.60%	0.095%
378	22.115	22.110	22.120	VV	32156	197448	1.73%	0.036%
379	22.169	22.120	22.227	VV	221667	6058181	53.15%	1.103%
380	22.242	22.227	22.253	VV	13101	183540	1.61%	0.033%
381	22.291	22.253	22.315	VV	25177	683983	6.00%	0.124%
382	22.328	22.315	22.379	VV	26786	550745	4.83%	0.100%
Sum of corrected areas:						549392639		

Report of Analysis

Client:	HDR, Inc.	Date Collected:	
Project:	PVWC Linear Construction	Date Received:	
Client Sample ID:	EO-01-11182025MSD	SDG No.:	Q3662
Lab Sample ID:	Q3669-01MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	92.9
Sample Wt/Vol:	30.04 g	Test:	EPH_NF
Prep Method :		Final Vol:	2000 uL
		Prep Date :	11/19/25

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Datafile	Date Ana.	Prep BatchID
TARGETS										
Aliphatic C28-C40	Aliphatic C28-C40	102	E	1	1.27	2.15	mg/kg	FE056947.D	11/19/25 20:41	PB170632
Aliphatic C9-C28	Aliphatic C9-C28	115	E	1	0.98	4.29	mg/kg	FE056947.D	11/19/25 20:41	PB170632
Total AliphaticEPH	Total AliphaticEPH	217			2.25	6.44	mg/kg			
Total EPH	Total EPH	217			2.25	6.44	mg/kg			

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C40 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C40 concentration for the sample is reported as the Total EPH.

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:	HDR, Inc.		Date Collected:	
Project:	PVWC Linear Construction		Date Received:	
Client Sample ID:	EO-01-11182025MSD		SDG No.:	Q3662
Lab Sample ID:	Q3669-01MSD		Matrix:	Solid
Analytical Method:	NJEPH		% Solid:	92.9
Sample Wt/Vol:	30.04 g	Final Vol:	2000 uL	Test:
Prep Method :		Prep Date	11/19/25	EPH_NF

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS									
Aliphatic C9-C28	Aliphatic C9-C28	115	E	1	0.98	4.29	mg/kg	11/19/25	PB170632
Aliphatic C28-C40	Aliphatic C28-C40	102	E	1	1.27	2.15	mg/kg	11/19/25	PB170632
SURROGATES									
3383-33-2	1-chlorooctadecane (SURR)	56.6			40 - 140	113%	SPK: 50		
84-15-1	ortho-Terphenyl (SURR)	36.4			40 - 140	73%	SPK: 50		

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q3669-01MSD	Acq On:	19 Nov 2025 20:41
Client Sample ID:	EO-01-11182025MSD	Operator:	YP\AJ
Data file:	FE056947.D	Misc:	
Instrument:	FID_E	ALS Vial:	30
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.209	6.832	35610764	208.052	300	ug/ml
Aliphatic C12-C16	6.833	10.276	102423455	572.985	200	ug/ml
Aliphatic C16-C21	10.277	13.648	82348812	441.536	300	ug/ml
Aliphatic C21-C28	13.649	17.318	72341816	375.283	400	ug/ml
Aliphatic C28-C40	17.319	22.247	226781799	1420	600	ug/ml
Aliphatic EPH	3.209	22.247	519506646	3020		ug/ml
ortho-Terphenyl (SURR)	11.951	11.951	7602978	36.39		ug/ml
1-chlorooctadecane (SURR)	13.388	13.388	9124954	56.64		ug/ml
Aliphatic C9-C28	3.209	17.318	292724847	1600	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
 Data File : FE056947.D
 Signal(s) : FID1B.ch
 Acq On : 19 Nov 2025 20:41
 Operator : YP\AJ
 Sample : Q3669-01MSD
 Misc :
 ALS Vial : 30 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 EO-01-11182025MSD

Manual Integrations
 APPROVED

Reviewed By :Rahul Chavli 11/20/2025
 Supervised By :Sohil Jodhani 11/20/2025

Integration File: sample.E
 Quant Time: Nov 20 01:27:45 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
 Quant Title : GC Extractables
 QLast Update : Tue Nov 18 13:37:28 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.951	7602978	36.393 ug/mlm
Spiked Amount 50.000		Recovery =	72.79%
12) S 1-chlorooctadecane (S...	13.388	9124954	56.636 ug/ml
Spiked Amount 50.000		Recovery =	113.27%
Target Compounds			
1) T n-Nonane (C9)	3.306	3047091	18.141 ug/ml
2) T n-Decane (C10)	4.561	3926331	22.881 ug/ml
3) T A~Naphthalene (C11.7)	6.277	5382862	29.162 ug/ml
4) T n-Dodecane (C12)	6.735	6122815	35.203 ug/ml
5) T A~2-methylnaphthalene...	7.377	6370614	35.947 ug/ml
6) T n-Tetradecane (C14)	8.570	8621119	49.390 ug/ml
7) T n-Hexadecane (C16)	10.181	8310258	45.422 ug/ml
8) T n-Octadecane (C18)	11.629	7540290	39.839 ug/ml
10) T n-Eicosane (C20)	12.941	6972621	37.414 ug/ml
11) T n-Heneicosane (C21)	13.554	6450636	35.080 ug/ml
13) T n-Docosane (C22)	14.143	6242356	33.346 ug/ml
14) T n-Tetracosane (C24)	15.250	11481522	58.620 ug/ml
15) T n-Hexacosane (C26)	16.273	5644230	29.043 ug/ml
16) T n-Octacosane (C28)	17.224	5060678	26.132 ug/ml
17) T n-Tricontane (C30)	18.117	5359937	26.733 ug/ml
18) T n-Dotriacontane (C32)	18.951	6879438	34.983 ug/mlm
19) T n-Tetratriacontane (C34)	19.737	5755907	33.346 ug/ml
20) T n-Hexatriacontane (C36)	20.481	5324325	36.807 ug/ml
21) T n-Octatriacontane (C38)	21.234	4757762	37.802 ug/mlm
22) T n-Tetracontane (C40)	22.172	5295921	45.807 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE111925AL\
Data File : FE056947.D
Signal(s) : FID1B.ch
Acq On : 19 Nov 2025 20:41
Operator : YP\AJ
Sample : Q3669-01MSD
Misc :
ALS Vial : 30 Sample Multiplier: 1

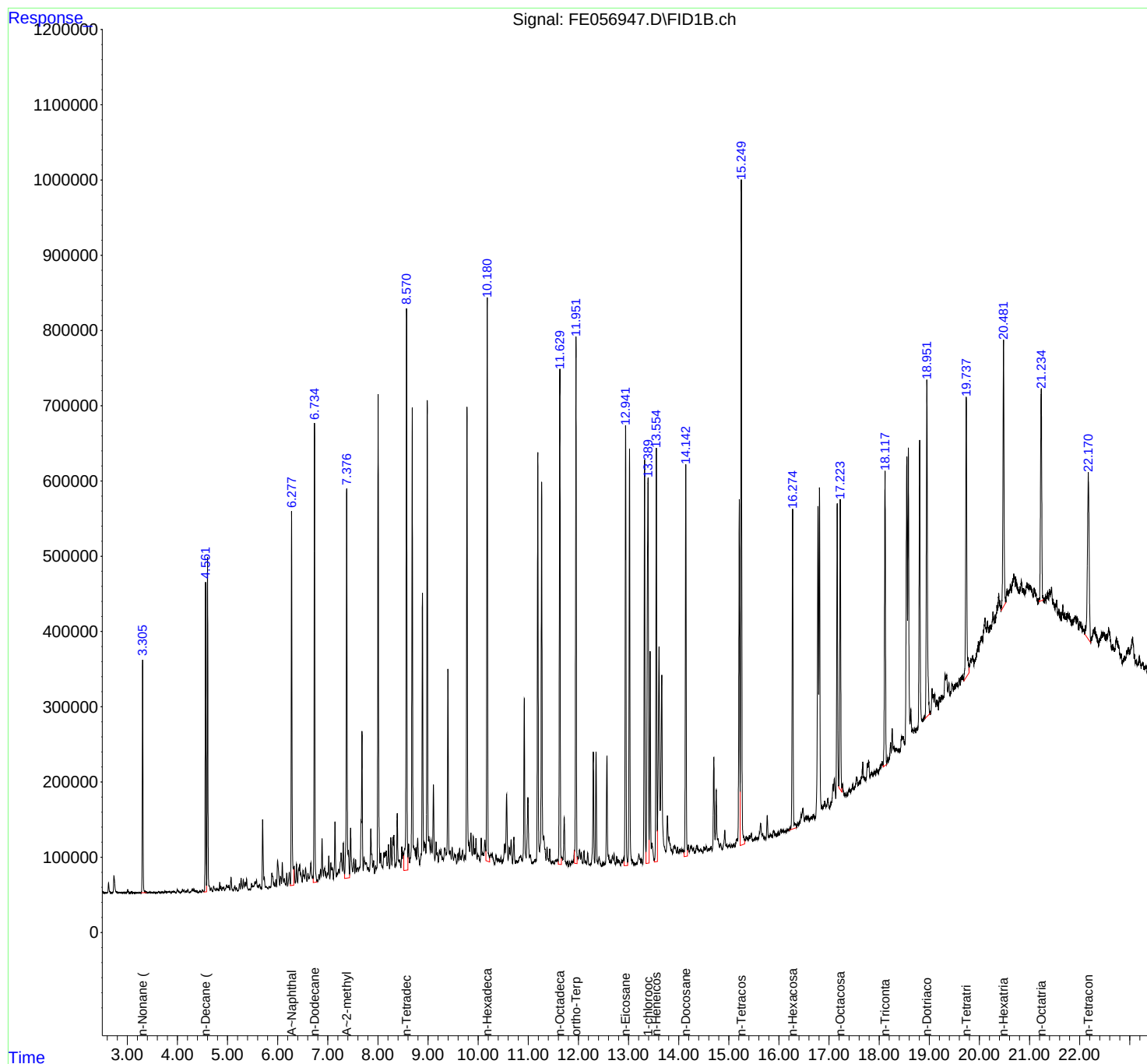
Instrument :
FID_E
ClientSampleId :
EO-01-11182025MSD

Manual Integrations
APPROVED

Reviewed By :Rahul Chavli 11/20/2025
Supervised By :Sohil Jodhani 11/20/2025

Integration File: sample.E
Quant Time: Nov 20 01:27:45 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.M
Quant Title : GC Extractables
QLast Update : Tue Nov 18 13:37:28 2025
Response via : Initial Calibration
Integrator: ChemStation

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



Instrument :

FID_E

ClientSampleId :

EO-01-11182025MSD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE

Data File : FE056947.D

Signal(s) : FID1B.ch

Acq On : 19 Nov 2025 20:41

Sample : Q3669-01MSD

Misc :

ALS Vial : 30 Sample Multiplier: 1

Reviewed By :Rahul Chavli 11/20/2025
Supervised By :Sohil Jodhani 11/20/2025

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 103025.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	2.575	2.524	2.594	BV	167	1133	0.01%	0.000%
2	2.625	2.594	2.707	PV	13390	168440	1.31%	0.031%
3	2.734	2.707	2.838	VV	22263	397024	3.09%	0.074%
4	2.851	2.838	2.901	VV	627	13782	0.11%	0.003%
5	2.926	2.901	2.933	VV	301	3374	0.03%	0.001%
6	2.946	2.933	2.964	VV	491	6456	0.05%	0.001%
7	2.977	2.964	2.987	VV	323	3873	0.03%	0.001%
8	3.009	2.987	3.051	VV	4691	56916	0.44%	0.011%
9	3.088	3.051	3.107	VV	847	15180	0.12%	0.003%
10	3.117	3.107	3.140	VV	392	3710	0.03%	0.001%
11	3.175	3.140	3.207	PV	181	2575	0.02%	0.000%
12	3.238	3.207	3.255	PV	158	2197	0.02%	0.000%
13	3.266	3.255	3.278	VV	168	1788	0.01%	0.000%
14	3.306	3.278	3.408	VV	308724	3075473	23.92%	0.570%
15	3.422	3.408	3.438	VV	522	7393	0.06%	0.001%
16	3.450	3.438	3.468	VV	880	11013	0.09%	0.002%
17	3.480	3.468	3.501	VV	660	7614	0.06%	0.001%
18	3.519	3.501	3.531	VV	462	6524	0.05%	0.001%
19	3.549	3.531	3.574	VV	605	9100	0.07%	0.002%
20	3.590	3.574	3.604	VV	436	4669	0.04%	0.001%
21	3.621	3.604	3.664	VV	1632	25954	0.20%	0.005%
22	3.678	3.664	3.718	VV	634	13281	0.10%	0.002%
23	3.753	3.718	3.804	VV	2336	48255	0.38%	0.009%
24	3.835	3.804	3.871	VV	1423	33164	0.26%	0.006%
25	3.896	3.871	3.911	VV	1623	24185	0.19%	0.004%
26	3.940	3.911	3.966	VV	2244	36195	0.28%	0.007%
27	3.997	3.966	4.056	VV	3970	79401	0.62%	0.015%
28	4.100	4.056	4.116	PV	4509	63884	0.50%	0.012%
29	4.132	4.116	4.152	VV	3904	48665	0.38%	0.009%
30	4.170	4.152	4.187	VV	1723	29426	0.23%	0.005%
31	4.209	4.187	4.231	VV	4344	57061	0.44%	0.011%

32	4.244	4.231	4.258	VV	521	6402	0.05%	0.001%
33	4.299	4.258	4.316	VV	5158	9648		
34	4.331	4.316	4.360	VV	4005	6622		
35	4.371	4.360	4.414	VV	1933	3506		
36	4.453	4.414	4.473	PV	2387	3609		
37	4.500	4.473	4.526	VV	3047	46498	0.36%	0.009%
38	4.561	4.526	4.581	VV	411586	3940524	30.65%	0.731%
39	4.601	4.581	4.657	VV	444739	4521545	35.17%	0.838%
40	4.674	4.657	4.701	VV	5632	81092	0.63%	0.015%
41	4.723	4.701	4.757	VV	7523	133583	1.04%	0.025%
42	4.773	4.757	4.801	VV	4059	78636	0.61%	0.015%
43	4.811	4.801	4.826	VV	3127	35442	0.28%	0.007%
44	4.844	4.826	4.858	VV	12481	125778	0.98%	0.023%
45	4.868	4.858	4.884	VV	7113	70039	0.54%	0.013%
46	4.903	4.884	4.913	VV	5578	69918	0.54%	0.013%
47	4.924	4.913	4.941	VV	6142	65037	0.51%	0.012%
48	4.981	4.941	5.011	VV	8589	209936	1.63%	0.039%
49	5.024	5.011	5.046	VV	8341	110629	0.86%	0.021%
50	5.069	5.046	5.112	VV	18224	264771	2.06%	0.049%
51	5.144	5.112	5.161	VV	7035	100645	0.78%	0.019%
52	5.175	5.161	5.201	VV	4480	55127	0.43%	0.010%
53	5.237	5.201	5.253	PV	9966	115200	0.90%	0.021%
54	5.270	5.253	5.296	VV	16924	224395	1.75%	0.042%
55	5.314	5.296	5.333	VV	14688	191197	1.49%	0.035%
56	5.351	5.333	5.365	VV	10944	154035	1.20%	0.029%
57	5.380	5.365	5.419	VV	15416	196921	1.53%	0.037%
58	5.435	5.419	5.457	VV	1373	20882	0.16%	0.004%
59	5.479	5.457	5.493	PV	8698	100385	0.78%	0.019%
60	5.503	5.493	5.514	VV	5951	63036	0.49%	0.012%
61	5.544	5.514	5.555	VV	10743	179301	1.39%	0.033%
62	5.577	5.555	5.615	VV	13005	267353	2.08%	0.050%
63	5.640	5.615	5.657	VV	7387	115661	0.90%	0.021%
64	5.667	5.657	5.677	VV	3152	26400	0.21%	0.005%
65	5.700	5.677	5.754	VV	92032	1329972	10.34%	0.247%
66	5.771	5.754	5.807	VV	3792	70352	0.55%	0.013%
67	5.827	5.807	5.840	VV	3531	41873	0.33%	0.008%
68	5.852	5.840	5.861	VV	3201	28728	0.22%	0.005%
69	5.884	5.861	5.918	VV	20707	426763	3.32%	0.079%
70	5.927	5.918	5.946	VV	7707	91426	0.71%	0.017%
71	5.964	5.946	5.978	VV	11737	128447	1.00%	0.024%
72	5.999	5.978	6.040	VV	37149	741187	5.76%	0.137%
73	6.056	6.040	6.076	VV	15581	243858	1.90%	0.045%
74	6.092	6.076	6.119	VV	34068	455028	3.54%	0.084%
75	6.133	6.119	6.164	VV	12726	211905	1.65%	0.039%
76	6.180	6.164	6.199	VV	19352	220549	1.72%	0.041%
77	6.232	6.199	6.252	VV	20580	360917	2.81%	0.067%
78	6.277	6.252	6.321	VV	498641	5505823	42.82%	1.021%
79	6.328	6.321	6.351	VV	27809	322023	2.50%	0.060%

Instrument :

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ClientSampleId :

EO-01-11182025MSD

Manual IntegrationsAPPROVED

Reviewed By :Rahul Chavli 11/20/2025
Supervised By :Sohil Jodhani 11/20/2025

80	6.376	6.351	6.397	VV	30618	412980	3.21%	0.077%
81	6.419	6.397	6.427	VV	24526	32026		
82	6.439	6.427	6.488	VV	29791	64992		
83	6.506	6.488	6.537	VV	21565	42795		
84	6.556	6.537	6.583	VV	24572	44475		
85	6.605	6.583	6.621	VV	17340	279145	2.17%	0.052%
86	6.661	6.621	6.692	VV	31074	747999	5.82%	0.139%
87	6.700	6.692	6.707	VV	12128	102856	0.80%	0.019%
88	6.734	6.707	6.781	VV	611625	6342654	49.33%	1.176%
89	6.792	6.781	6.803	VV	8158	94283	0.73%	0.017%
90	6.824	6.803	6.837	VV	14943	219680	1.71%	0.041%
91	6.856	6.837	6.868	VV	21038	292064	2.27%	0.054%
92	6.886	6.868	6.912	VV	62067	842331	6.55%	0.156%
93	6.936	6.912	6.974	VV	23099	634696	4.94%	0.118%
94	7.020	6.974	7.040	VV	38679	748119	5.82%	0.139%
95	7.061	7.040	7.112	VV	29400	809781	6.30%	0.150%
96	7.144	7.112	7.173	VV	83879	1216074	9.46%	0.225%
97	7.186	7.173	7.196	VV	15001	190337	1.48%	0.035%
98	7.218	7.196	7.230	VV	20213	345836	2.69%	0.064%
99	7.266	7.230	7.290	VV	41797	1022697	7.95%	0.190%
100	7.309	7.290	7.334	VV	54241	813382	6.33%	0.151%
101	7.377	7.334	7.434	VV	524273	6829832	53.12%	1.266%
102	7.455	7.434	7.495	VV	73696	1275472	9.92%	0.236%
103	7.520	7.495	7.539	VV	32582	623858	4.85%	0.116%
104	7.555	7.539	7.573	VV	31583	443540	3.45%	0.082%
105	7.590	7.573	7.614	VV	19931	454692	3.54%	0.084%
106	7.682	7.614	7.708	VV	200875	3532051	27.47%	0.655%
107	7.724	7.708	7.748	VV	33347	663520	5.16%	0.123%
108	7.768	7.748	7.793	VV	26288	630336	4.90%	0.117%
109	7.805	7.793	7.825	VV	19928	340688	2.65%	0.063%
110	7.859	7.825	7.896	VV	71226	1510456	11.75%	0.280%
111	7.914	7.896	7.933	VV	28826	473548	3.68%	0.088%
112	7.954	7.933	7.968	VV	21233	377465	2.94%	0.070%
113	8.055	8.041	8.098	VV	38303	895869	6.97%	0.166%
114	8.119	8.098	8.131	VV	38164	615958	4.79%	0.114%
115	8.145	8.131	8.155	VV	38267	504996	3.93%	0.094%
116	8.166	8.155	8.184	VV	40482	579777	4.51%	0.107%
117	8.211	8.184	8.232	VV	48768	865238	6.73%	0.160%
118	8.258	8.232	8.278	VV	57602	946633	7.36%	0.176%
119	8.298	8.278	8.307	VV	58255	755181	5.87%	0.140%
120	8.317	8.307	8.342	VV	60608	846022	6.58%	0.157%
121	8.385	8.342	8.422	VV	89395	1797094	13.98%	0.333%
122	8.435	8.422	8.457	VV	27509	493587	3.84%	0.092%
123	8.476	8.457	8.489	VV	44963	624067	4.85%	0.116%
124	8.501	8.489	8.512	VV	35850	455585	3.54%	0.084%
125	8.570	8.512	8.597	VV	763850	9326087	72.54%	1.729%
126	8.613	8.597	8.633	VV	47611	773602	6.02%	0.143%

Instrument :

FID_E

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EO-01-11182025MSD

Manual IntegrationsAPPROVED

Reviewed By :Rahul Chavli 11/20/2025
Supervised By :Sohil Jodhani 11/20/2025

127	8.684	8.633	8.746	VV	626471	8148728	63.38%	1.511%
128	8.758	8.746	8.773	VV	42446	57535		
129	8.792	8.773	8.831	VV	53856	123202		
130	8.926	8.915	8.956	VV	48081	105122		
131	8.984	8.956	9.008	VV	635173	717204		
132	9.016	9.008	9.044	VV	55644	1037579	8.07%	0.192%
133	9.059	9.044	9.079	VV	50830	869275	6.76%	0.161%
134	9.107	9.079	9.135	VV	123902	2083302	16.20%	0.386%
135	9.160	9.135	9.205	VV	47954	1372371	10.67%	0.254%
136	9.227	9.205	9.243	VV	36838	722240	5.62%	0.134%
137	9.257	9.243	9.306	VV	37580	1095249	8.52%	0.203%
138	9.333	9.306	9.358	VV	38449	1007759	7.84%	0.187%
139	9.396	9.358	9.429	VV	275701	3876724	30.15%	0.719%
140	9.441	9.429	9.462	VV	34782	608560	4.73%	0.113%
141	9.481	9.462	9.509	VV	38991	842728	6.55%	0.156%
142	9.531	9.509	9.541	VV	29001	521120	4.05%	0.097%
143	9.548	9.541	9.571	VV	28633	437003	3.40%	0.081%
144	9.598	9.571	9.613	VV	30623	606542	4.72%	0.112%
145	9.629	9.613	9.665	VV	37108	859302	6.68%	0.159%
146	9.687	9.665	9.716	VV	34094	852547	6.63%	0.158%
147	9.732	9.716	9.746	VV	27581	448713	3.49%	0.083%
148	9.777	9.746	9.830	VV	623158	7996307	62.20%	1.483%
149	9.855	9.830	9.881	VV	56964	1290002	10.03%	0.239%
150	9.902	9.881	9.920	VV	52577	893420	6.95%	0.166%
151	9.932	9.920	9.941	VV	35683	407116	3.17%	0.075%
152	9.956	9.941	9.979	VV	48822	794413	6.18%	0.147%
153	10.061	10.038	10.082	VV	48985	877366	6.82%	0.163%
154	10.092	10.082	10.108	VV	29183	444441	3.46%	0.082%
155	10.133	10.108	10.153	VV	46402	970393	7.55%	0.180%
156	10.181	10.153	10.226	VV	761715	9084771	70.66%	1.684%
157	10.257	10.226	10.272	VV	26937	694357	5.40%	0.129%
158	10.282	10.272	10.326	VV	26165	656306	5.10%	0.122%
159	10.398	10.389	10.422	VV	18858	363444	2.83%	0.067%
160	10.428	10.422	10.438	VV	17827	158457	1.23%	0.029%
161	10.454	10.438	10.478	VV	22130	442598	3.44%	0.082%
162	10.568	10.540	10.598	VV	104857	1903872	14.81%	0.353%
163	10.619	10.598	10.638	VV	34280	669967	5.21%	0.124%
164	10.713	10.685	10.745	VV	46980	919780	7.15%	0.171%
165	10.766	10.745	10.781	VV	16131	316646	2.46%	0.059%
166	10.850	10.781	10.872	VV	22770	999245	7.77%	0.185%
167	10.920	10.872	10.957	VV	231727	3327089	25.88%	0.617%
168	10.992	10.957	11.024	VV	98241	2033794	15.82%	0.377%
169	11.041	11.024	11.073	VV	22285	518167	4.03%	0.096%
170	11.137	11.073	11.151	VV	15746	630081	4.90%	0.117%
171	11.190	11.151	11.224	VV	556978	6585320	51.22%	1.221%
172	11.266	11.224	11.299	VV	512198	6780915	52.74%	1.257%
173	11.310	11.299	11.354	VV	46324	1044603	8.12%	0.194%
174	11.374	11.354	11.410	VV	32016	675160	5.25%	0.125%

Instrument :

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EO-01-11182025MSD

Manual IntegrationsAPPROVED

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175	11.428	11.410	11.464	VV	28784	542707	4.22%	0.101%
176	11.489	11.464	11.518	VV	12011	34266		
177	11.581	11.551	11.593	VV	13153	32185		
178	11.629	11.593	11.661	VV	657939	785542		
179	11.674	11.661	11.688	VV	16759	25168		
180	11.716	11.688	11.765	VV	69078	1253488	9.75%	0.232%
181	11.782	11.765	11.804	VV	10872	189560	1.47%	0.035%
182	11.822	11.804	11.841	VV	10292	162451	1.26%	0.030%
183	11.869	11.841	11.878	VV	10203	181104	1.41%	0.034%
184	11.951	11.878	11.997	VV	703012	8399231	65.33%	1.557%
185	12.023	11.997	12.043	VV	25017	523485	4.07%	0.097%
186	12.110	12.088	12.132	VV	23573	369404	2.87%	0.068%
187	12.148	12.132	12.162	VV	9485	144733	1.13%	0.027%
188	12.185	12.162	12.214	VV	20068	340055	2.64%	0.063%
189	12.297	12.214	12.323	VV	153627	2151530	16.73%	0.399%
190	12.411	12.387	12.466	VV	12786	326959	2.54%	0.061%
191	12.496	12.466	12.514	VV	5432	105130	0.82%	0.019%
192	12.568	12.514	12.622	VV	146849	2210004	17.19%	0.410%
193	12.637	12.622	12.653	VV	8227	127586	0.99%	0.024%
194	12.678	12.653	12.696	VV	13971	259441	2.02%	0.048%
195	12.711	12.696	12.744	VV	16899	256084	1.99%	0.047%
196	12.763	12.744	12.779	VV	12993	161379	1.26%	0.030%
197	12.793	12.779	12.804	VV	8534	106636	0.83%	0.020%
198	12.815	12.804	12.840	VV	6741	94083	0.73%	0.017%
199	12.867	12.840	12.881	VV	6098	109360	0.85%	0.020%
200	12.900	12.881	12.910	VV	10567	136606	1.06%	0.025%
201	12.941	12.910	12.981	VV	586309	6983888	54.32%	1.295%
202	13.019	12.981	13.071	VV	548157	6496739	50.53%	1.205%
203	13.082	13.071	13.104	VV	5369	70144	0.55%	0.013%
204	13.121	13.104	13.131	PV	1971	20608	0.16%	0.004%
205	13.157	13.131	13.167	VV	1863	30169	0.23%	0.006%
206	13.206	13.167	13.247	VV	13117	328738	2.56%	0.061%
207	13.261	13.247	13.281	VV	5757	68719	0.53%	0.013%
208	13.320	13.281	13.347	PV	538023	6274406	48.80%	1.163%
209	13.388	13.347	13.411	VV	507779	9127803	71.00%	1.692%
210	13.430	13.411	13.454	VV	282073	3319140	25.82%	0.615%
211	13.465	13.454	13.514	VV	25929	524274	4.08%	0.097%
212	13.554	13.514	13.576	VV	542486	6460112	50.25%	1.198%
213	13.608	13.576	13.633	VV	284003	5223022	40.62%	0.968%
214	13.663	13.633	13.747	VV	249374	4979929	38.73%	0.923%
215	13.776	13.747	13.798	VV	58076	1040600	8.09%	0.193%
216	13.807	13.798	13.854	VV	29622	686471	5.34%	0.127%
217	13.860	13.854	13.879	VV	11780	149088	1.16%	0.028%
218	13.913	13.879	13.960	VV	16539	603584	4.69%	0.112%
219	13.978	13.960	14.004	VV	14198	259179	2.02%	0.048%
220	14.026	14.004	14.048	VV	10862	223240	1.74%	0.041%
221	14.065	14.048	14.078	VV	10253	157121	1.22%	0.029%

Instrument :

FID_E

ClientSampleId :

EO-01-11182025MSD

Manual IntegrationsAPPROVED

Reviewed By :Rahul Chavli 11/20/2025
Supervised By :Sohil Jodhani 11/20/2025

222	14.095	14.078	14.111	VV	8470	148779	1.16%	0.028%
223	14.143	14.111	14.176	VV	522217	623371		
224	14.194	14.176	14.218	VV	14777	23452		
225	14.240	14.218	14.277	VV	11397	33144		
226	14.294	14.277	14.317	VV	8785	15293		
227	14.359	14.317	14.417	VV	11834	388515	3.02%	0.072%
228	14.437	14.417	14.484	VV	5901	150665	1.17%	0.028%
229	14.504	14.484	14.518	PV	8229	98171	0.76%	0.018%
230	14.553	14.518	14.573	VV	8172	184183	1.43%	0.034%
231	14.595	14.573	14.607	VV	4106	67677	0.53%	0.013%
232	14.646	14.607	14.667	VV	7342	156181	1.21%	0.029%
233	14.701	14.667	14.727	VV	125228	1736643	13.51%	0.322%
234	14.749	14.727	14.816	VV	81181	1441591	11.21%	0.267%
235	14.835	14.816	14.874	VV	8411	152541	1.19%	0.028%
236	14.920	14.874	14.944	VV	25214	440375	3.43%	0.082%
237	14.959	14.944	14.975	VV	5814	79191	0.62%	0.015%
238	15.017	14.975	15.037	VV	4644	110401	0.86%	0.020%
239	15.055	15.037	15.072	VV	4939	50821	0.40%	0.009%
240	15.099	15.072	15.118	VV	5046	72113	0.56%	0.013%
241	15.210	15.118	15.226	PV	461903	5977173	46.49%	1.108%
242	15.250	15.226	15.321	VV	884346	11552644	89.86%	2.142%
243	15.349	15.321	15.365	VV	11060	203882	1.59%	0.038%
244	15.378	15.365	15.392	VV	8792	113614	0.88%	0.021%
245	15.409	15.392	15.424	VV	10689	155857	1.21%	0.029%
246	15.449	15.424	15.478	VV	11847	246389	1.92%	0.046%
247	15.533	15.478	15.547	VV	5708	171032	1.33%	0.032%
248	15.560	15.547	15.584	VV	5765	93562	0.73%	0.017%
249	15.634	15.584	15.663	VV	22877	549897	4.28%	0.102%
250	15.676	15.663	15.704	VV	8556	138437	1.08%	0.026%
251	15.718	15.704	15.741	VV	4220	50377	0.39%	0.009%
252	15.766	15.741	15.808	PV	31148	438516	3.41%	0.081%
253	15.837	15.808	15.858	VV	4263	81871	0.64%	0.015%
254	15.895	15.858	15.959	PV	8252	197424	1.54%	0.037%
255	15.988	15.959	16.004	VV	3681	42329	0.33%	0.008%
256	16.034	16.004	16.049	PV	4686	72932	0.57%	0.014%
257	16.084	16.049	16.117	VV	3607	88505	0.69%	0.016%
258	16.134	16.117	16.148	VV	1871	17142	0.13%	0.003%
259	16.190	16.148	16.200	VV	2066	43391	0.34%	0.008%
260	16.219	16.200	16.229	VV	3407	38792	0.30%	0.007%
261	16.273	16.229	16.355	VV	427165	5633964	43.82%	1.045%
262	16.380	16.355	16.394	PV	4300	70545	0.55%	0.013%
263	16.412	16.394	16.421	VV	5804	70924	0.55%	0.013%
264	16.442	16.421	16.451	VV	14597	186828	1.45%	0.035%
265	16.475	16.451	16.509	VV	21241	466892	3.63%	0.087%
266	16.527	16.509	16.550	VV	7465	142989	1.11%	0.027%
267	16.579	16.550	16.606	VV	6488	166051	1.29%	0.031%
268	16.649	16.606	16.666	VV	4462	92889	0.72%	0.017%
269	16.685	16.666	16.709	VV	6000	77280	0.60%	0.014%

Instrument :

FID_E

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EO-01-11182025MSD

Manual IntegrationsAPPROVED

Reviewed By :Rahul Chavli 11/20/2025
Supervised By :Sohil Jodhani 11/20/2025

270	16.780	16.709	16.794	PV	413578	5772101	44.90%	1.070%
271	16.810	16.794	16.879	VV	436361	560032		
272	16.915	16.879	16.938	VV	14101	34708		
273	16.976	16.938	17.011	VV	16114	36309		
274	17.078	17.011	17.090	VV	30010	58378		
275	17.107	17.090	17.133	VV	37330	660282	5.14%	0.122%
276	17.163	17.133	17.194	VV	398993	5344370	41.57%	0.991%
277	17.224	17.194	17.256	VV	401560	5705021	44.37%	1.058%
278	17.268	17.256	17.303	VV	22966	453955	3.53%	0.084%
279	17.321	17.303	17.338	VV	8758	152906	1.19%	0.028%
280	17.469	17.338	17.496	VV	13779	752418	5.85%	0.140%
281	17.547	17.496	17.584	VV	20787	675058	5.25%	0.125%
282	17.674	17.584	17.732	VV	34920	1395277	10.85%	0.259%
283	17.767	17.732	17.777	VV	29519	548141	4.26%	0.102%
284	17.789	17.777	17.820	VV	33385	591107	4.60%	0.110%
285	17.848	17.820	17.874	VV	15389	417127	3.24%	0.077%
286	17.894	17.874	17.930	VV	14419	387789	3.02%	0.072%
287	17.951	17.930	17.983	VV	15220	389225	3.03%	0.072%
288	18.059	17.983	18.078	VV	20913	872237	6.78%	0.162%
289	18.117	18.078	18.151	VV	404407	5951893	46.29%	1.104%
290	18.167	18.151	18.181	VV	21156	324337	2.52%	0.060%
291	18.227	18.181	18.241	VV	39199	915265	7.12%	0.170%
292	18.260	18.241	18.281	VV	56603	987705	7.68%	0.183%
293	18.291	18.281	18.312	VV	31854	550469	4.28%	0.102%
294	18.321	18.312	18.341	VV	27506	450343	3.50%	0.084%
295	18.349	18.341	18.381	VV	26473	574814	4.47%	0.107%
296	18.395	18.381	18.405	VV	24462	328461	2.55%	0.061%
297	18.448	18.405	18.458	VV	37271	891184	6.93%	0.165%
298	18.482	18.458	18.510	VV	36432	1048336	8.15%	0.194%
299	18.551	18.510	18.565	VV	405924	6294355	48.96%	1.167%
300	18.581	18.565	18.615	VV	416666	6246745	48.59%	1.158%
301	18.631	18.615	18.654	VV	66802	1251529	9.73%	0.232%
302	18.674	18.654	18.689	VV	41112	778868	6.06%	0.144%
303	18.715	18.689	18.733	VV	37223	963120	7.49%	0.179%
304	18.808	18.733	18.878	VV	416032	8527310	66.33%	1.581%
305	18.951	18.878	19.017	VV	489125	10618357	82.59%	1.969%
306	19.055	19.017	19.069	VV	77308	1859571	14.46%	0.345%
307	19.077	19.069	19.092	VV	68105	925250	7.20%	0.172%
308	19.110	19.092	19.128	VV	67213	1340509	10.43%	0.249%
309	19.144	19.128	19.157	VV	58762	952362	7.41%	0.177%
310	19.168	19.157	19.182	VV	54767	761906	5.93%	0.141%
311	19.204	19.182	19.224	VV	59975	1426695	11.10%	0.265%
312	19.257	19.224	19.271	VV	60749	1619361	12.60%	0.300%
313	19.315	19.271	19.326	VV	86834	2293934	17.84%	0.425%
314	19.347	19.326	19.370	VV	83952	2010120	15.63%	0.373%
315	19.391	19.370	19.414	VV	71374	1681155	13.08%	0.312%
316	19.449	19.414	19.481	VV	68326	2491187	19.38%	0.462%

Instrument :

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Manual IntegrationsAPPROVED

Reviewed By :Rahul Chavli 11/20/2025
Supervised By :Sohil Jodhani 11/20/2025

317	19.506	19.481	19.518	VV	64696	1337095	10.40%	0.248%
318	19.597	19.518	19.618	VV	69182	379936		
319	19.642	19.618	19.654	VV	70609	149658		
320	19.665	19.654	19.687	VV	70942	131694		
321	19.737	19.687	19.794	VV	437633	998502		
322	19.863	19.794	19.891	VV	87729	4804718	37.37%	0.891%
323	19.978	19.891	19.989	VV	103029	5144313	40.01%	0.954%
324	20.036	19.989	20.067	VV	104921	4730527	36.79%	0.877%
325	20.111	20.067	20.142	VV	127889	5268324	40.98%	0.977%
326	20.232	20.211	20.241	VV	114177	2035957	15.84%	0.377%
327	20.309	20.294	20.322	VV	124837	2028597	15.78%	0.376%
328	20.386	20.322	20.429	VV	149357	8582416	66.75%	1.591%
329	20.481	20.429	20.527	VV	478887	12856693	100.00%	2.384%
330	20.616	20.527	20.638	VV	153489	9704921	75.49%	1.799%
331	20.685	20.638	20.714	VV	162931	7069999	54.99%	1.311%
332	20.836	20.788	20.888	VV	150196	8381219	65.19%	1.554%
333	20.948	20.888	20.981	VV	141508	7478110	58.17%	1.387%
334	21.012	21.004	21.078	VV	134847	5616064	43.68%	1.041%
335	21.093	21.078	21.191	VV	127594	7888616	61.36%	1.463%
336	21.233	21.191	21.301	VV	385252	11804654	91.82%	2.189%
337	21.317	21.301	21.330	VV	110372	1834668	14.27%	0.340%
338	21.358	21.330	21.380	VV	111442	3189638	24.81%	0.591%
339	21.440	21.380	21.507	VV	115645	7834108	60.93%	1.453%
340	21.516	21.507	21.527	VV	89478	1083651	8.43%	0.201%
341	21.540	21.527	21.567	VV	94905	2007971	15.62%	0.372%
342	21.664	21.638	21.690	VV	83752	2295818	17.86%	0.426%
343	21.740	21.727	21.751	VV	67944	947620	7.37%	0.176%
344	21.793	21.779	21.833	VV	66921	1916053	14.90%	0.355%
345	21.910	21.833	21.922	VV	59020	2903600	22.58%	0.538%
346	21.930	21.922	21.986	VV	57415	1901163	14.79%	0.353%
347	22.000	21.986	22.078	VV	47936	2175931	16.92%	0.403%
348	22.083	22.078	22.099	VV	33030	394725	3.07%	0.073%
349	22.113	22.099	22.121	VV	36974	438578	3.41%	0.081%
350	22.172	22.121	22.221	VV	238224	6281762	48.86%	1.165%
351	22.269	22.221	22.376	VV	24534	1595991	12.41%	0.296%
352	22.388	22.376	22.394	PV	6834	28446	0.22%	0.005%
Sum of corrected areas:						539330577		

Instrument :

FID_E

ClientSampleId :

EO-01-11182025MSD

Manual IntegrationsAPPROVED

Reviewed By :Rahul Chavli 11/20/2025
Supervised By :Sohil Jodhani 11/20/2025

Aliphatic EPH 103025.M Thu Nov 20 05:28:29 2025

Manual Integration Report

Sequence:

FE103025AL

Instrument

FID_e

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q3485-01	FE056583.D	ortho-Terphenyl (SURR)	rahul	10/31/2025 4:28:28 PM	yogesh	10/31/2025 4:28:57	Peak Integrated by Software
Q3485-02	FE056584.D	1-chlorooctadecane (SURR)	rahul	10/31/2025 4:28:31 PM	yogesh	10/31/2025 4:28:58	Peak Integrated by Software
Q3485-02	FE056584.D	ortho-Terphenyl (SURR)	rahul	10/31/2025 4:28:31 PM	yogesh	10/31/2025 4:28:58	Peak Integrated by Software
Q3490-01	FE056595.D	ortho-Terphenyl (SURR)	rahul	10/31/2025 4:28:34 PM	yogesh	10/31/2025 4:29:00	Peak Integrated by Software

Manual Integration Report

Sequence:	FE111925AL	Instrument	FID_e
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q3652-01DL2	FE056927.D	1-chlorooctadecane (SURR)	rahul	11/20/2025 9:06:13 AM	Sohil	11/20/2025 4:00:00	Peak Integrated by Software
Q3669-01	FE056944.D	ortho-Terphenyl (SURR)	rahul	11/20/2025 9:06:15 AM	Sohil	11/20/2025 4:00:10	Peak Integrated by Software
Q3669-01D	FE056945.D	ortho-Terphenyl (SURR)	rahul	11/20/2025 9:06:17 AM	Sohil	11/20/2025 4:00:12	Peak Integrated by Software
Q3669-01MS	FE056946.D	n-Dotriacontane (C32)	rahul	11/20/2025 9:06:21 AM	Sohil	11/20/2025 4:00:14	Peak Integrated by Software
Q3669-01MS	FE056946.D	n-Octadecane (C18)	rahul	11/20/2025 9:06:21 AM	Sohil	11/20/2025 4:00:14	Peak Integrated by Software
Q3669-01MS	FE056946.D	ortho-Terphenyl (SURR)	rahul	11/20/2025 9:06:21 AM	Sohil	11/20/2025 4:00:14	Peak Integrated by Software
Q3669-01MSD	FE056947.D	n-Dotriacontane (C32)	rahul	11/20/2025 9:06:28 AM	Sohil	11/20/2025 4:00:16	Peak Integrated by Software
Q3669-01MSD	FE056947.D	n-Octatriacontane (C38)	rahul	11/20/2025 9:06:28 AM	Sohil	11/20/2025 4:00:16	Peak Integrated by Software
Q3669-01MSD	FE056947.D	ortho-Terphenyl (SURR)	rahul	11/20/2025 9:06:28 AM	Sohil	11/20/2025 4:00:16	Peak Integrated by Software
Q3669-02	FE056948.D	ortho-Terphenyl (SURR)	rahul	11/20/2025 9:06:32 AM	Sohil	11/20/2025 4:00:17	Peak Integrated by Software

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE103025AL

Review By	yogesh	Review On	10/30/2025 10:43:15 AM
Supervise By	Sohil	Supervise On	10/30/2025 4:01:31 PM
SubDirectory	FE103025AL	HP Acquire Method	HP Processing Method FE103025AL
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	FE056573.D	30 Oct 2025 09:19	YP\AJ	Ok
2	I.BLK	FE056574.D	30 Oct 2025 09:49	YP\AJ	Ok
3	100 PPM ALIPHATIC HC STD1	FE056575.D	30 Oct 2025 10:20	YP\AJ	Ok
4	50 PPM ALIPHATIC HC STD2	FE056576.D	30 Oct 2025 10:50	YP\AJ	Ok
5	20 PPM ALIPHATIC HC STD3	FE056577.D	30 Oct 2025 11:20	YP\AJ	Ok
6	10 PPM ALIPHATIC HC STD4	FE056578.D	30 Oct 2025 11:51	YP\AJ	Ok
7	5 PPM ALIPHATIC HC STD5	FE056579.D	30 Oct 2025 12:21	YP\AJ	Ok
8	20 PPM ALIPHATIC HC STD ICV	FE056580.D	30 Oct 2025 12:51	YP\AJ	Ok
9	I.BLK	FE056581.D	30 Oct 2025 13:21	YP\AJ	Ok
10	20 PPM ALIPHATIC HC STD	FE056582.D	30 Oct 2025 13:52	YP\AJ	Ok
11	Q3485-01	FE056583.D	30 Oct 2025 14:52	YP\AJ	Ok,M
12	Q3485-02	FE056584.D	30 Oct 2025 15:23	YP\AJ	Ok,M
13	Q3486-01	FE056585.D	30 Oct 2025 15:53	YP\AJ	Ok
14	Q3486-02	FE056586.D	30 Oct 2025 16:25	YP\AJ	Ok
15	Q3486-03	FE056587.D	30 Oct 2025 16:56	YP\AJ	Dilution
16	Q3486-04	FE056588.D	30 Oct 2025 17:26	YP\AJ	Ok
17	Q3486-06	FE056589.D	30 Oct 2025 17:57	YP\AJ	Ok
18	Q3486-07	FE056590.D	30 Oct 2025 18:27	YP\AJ	ReRun
19	Q3486-08	FE056591.D	30 Oct 2025 18:58	YP\AJ	ReRun
20	Q3488-01	FE056592.D	30 Oct 2025 19:28	YP\AJ	Ok
21	Q3488-04	FE056593.D	30 Oct 2025 19:59	YP\AJ	Dilution

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE103025AL

Review By	yogesh	Review On	10/30/2025 10:43:15 AM
Supervise By	Sohil	Supervise On	10/30/2025 4:01:31 PM
SubDirectory	FE103025AL	HP Acquire Method	HP Processing Method FE103025AL
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		

22	Q3488-06	FE056594.D	30 Oct 2025 20:29	YP\AJ	Dilution
23	Q3490-01	FE056595.D	30 Oct 2025 21:00	YP\AJ	Dilution
24	Q3488-02	FE056596.D	30 Oct 2025 21:30	YP\AJ	Dilution
25	I.BLK	FE056597.D	30 Oct 2025 23:01	YP\AJ	Ok
26	20 PPM ALIPHATIC HC STD	FE056598.D	30 Oct 2025 23:32	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE111925AL

Review By	rahul	Review On	11/19/2025 3:03:33 PM
Supervise By	Sohil	Supervise On	11/20/2025 4:00:25 PM
SubDirectory	FE111925AL	HP Acquire Method	HP Processing Method FE103025AL
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	FE056923.D	19 Nov 2025 07:04	YP\AJ	Ok
2	I.BLK	FE056924.D	19 Nov 2025 07:35	YP\AJ	Ok
3	20 PPM ALIPHATIC HC STD	FE056925.D	19 Nov 2025 08:05	YP\AJ	Ok
4	Q3652-01DL	FE056926.D	19 Nov 2025 08:52	YP\AJ	Dilution
5	Q3652-01DL2	FE056927.D	19 Nov 2025 09:22	YP\AJ	Ok,M
6	Q3656-01DL	FE056928.D	19 Nov 2025 09:52	YP\AJ	Dilution
7	Q3656-01DL2	FE056929.D	19 Nov 2025 10:22	YP\AJ	Not Ok
8	Q3656-02DL	FE056930.D	19 Nov 2025 10:52	YP\AJ	Dilution
9	Q3656-02DL2	FE056931.D	19 Nov 2025 11:22	YP\AJ	Ok
10	I.BLK	FE056932.D	19 Nov 2025 12:22	YP\AJ	Ok
11	20 PPM ALIPHATIC HC STD	FE056933.D	19 Nov 2025 12:53	YP\AJ	Ok
12	PB170632BL	FE056934.D	19 Nov 2025 14:09	YP\AJ	Ok
13	PB170632BS	FE056935.D	19 Nov 2025 14:39	YP\AJ	Ok
14	PB170632BSD	FE056936.D	19 Nov 2025 15:09	YP\AJ	Ok
15	Q3662-04	FE056937.D	19 Nov 2025 15:39	YP\AJ	Ok
16	Q3664-01	FE056938.D	19 Nov 2025 16:09	YP\AJ	Ok
17	Q3664-02	FE056939.D	19 Nov 2025 16:40	YP\AJ	Ok
18	Q3664-03	FE056940.D	19 Nov 2025 17:10	YP\AJ	Ok
19	Q3664-04	FE056941.D	19 Nov 2025 17:40	YP\AJ	Ok
20	Q3664-05	FE056942.D	19 Nov 2025 18:10	YP\AJ	Ok
21	Q3664-06	FE056943.D	19 Nov 2025 18:40	YP\AJ	Ok

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE111925AL

Review By	rahul	Review On	11/19/2025 3:03:33 PM
Supervise By	Sohil	Supervise On	11/20/2025 4:00:25 PM
SubDirectory	FE111925AL	HP Acquire Method	HP Processing Method FE103025AL
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		

22	Q3669-01	FE056944.D	19 Nov 2025 19:11	YP\AJ	Dilution
23	Q3669-01D	FE056945.D	19 Nov 2025 19:40	YP\AJ	Ok,M
24	Q3669-01MS	FE056946.D	19 Nov 2025 20:11	YP\AJ	Ok,M
25	Q3669-01MSD	FE056947.D	19 Nov 2025 20:41	YP\AJ	Ok,M
26	Q3669-02	FE056948.D	19 Nov 2025 21:11	YP\AJ	Dilution
27	Q3656-01DL2	FE056949.D	19 Nov 2025 21:41	YP\AJ	Not Ok
28	I.BLK	FE056950.D	19 Nov 2025 22:42	YP\AJ	Ok
29	20 PPM ALIPHATIC HC STD	FE056951.D	19 Nov 2025 23:12	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE103025AL

Review By	yogesh	Review On	10/30/2025 10:43:15 AM
Supervise By	Sohil	Supervise On	10/30/2025 4:01:31 PM
SubDirectory	FE103025AL	HP Acquire Method	HP Processing Method FE103025AL

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	FE056573.D	30 Oct 2025 09:19		YPIAJ	Ok
2	I.BLK	I.BLK	FE056574.D	30 Oct 2025 09:49		YPIAJ	Ok
3	100 PPM ALIPHATIC HC	100 PPM ALIPHATIC HC	FE056575.D	30 Oct 2025 10:20		YPIAJ	Ok
4	50 PPM ALIPHATIC HC	50 PPM ALIPHATIC HC	FE056576.D	30 Oct 2025 10:50		YPIAJ	Ok
5	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE056577.D	30 Oct 2025 11:20		YPIAJ	Ok
6	10 PPM ALIPHATIC HC	10 PPM ALIPHATIC HC	FE056578.D	30 Oct 2025 11:51		YPIAJ	Ok
7	5 PPM ALIPHATIC HC	5 PPM ALIPHATIC HC	FE056579.D	30 Oct 2025 12:21		YPIAJ	Ok
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE056580.D	30 Oct 2025 12:51		YPIAJ	Ok
9	I.BLK	I.BLK	FE056581.D	30 Oct 2025 13:21		YPIAJ	Ok
10	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE056582.D	30 Oct 2025 13:52		YPIAJ	Ok
11	Q3485-01	TR-04-102925	FE056583.D	30 Oct 2025 14:52		YPIAJ	Ok,M
12	Q3485-02	TR-04-102925-E2	FE056584.D	30 Oct 2025 15:23		YPIAJ	Ok,M
13	Q3486-01	TP3	FE056585.D	30 Oct 2025 15:53		YPIAJ	Ok
14	Q3486-02	TP3-E2	FE056586.D	30 Oct 2025 16:25		YPIAJ	Ok
15	Q3486-03	TP4	FE056587.D	30 Oct 2025 16:56	Need 5X,Surrogate fail	YPIAJ	Dilution
16	Q3486-04	TP4-E2	FE056588.D	30 Oct 2025 17:26		YPIAJ	Ok
17	Q3486-06	TP5-E2	FE056589.D	30 Oct 2025 17:57		YPIAJ	Ok
18	Q3486-07	TP6	FE056590.D	30 Oct 2025 18:27	Surrogate fail	YPIAJ	ReRun

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE103025AL

Review By	yogesh	Review On	10/30/2025 10:43:15 AM
Supervise By	Sohil	Supervise On	10/30/2025 4:01:31 PM
SubDirectory	FE103025AL	HP Acquire Method	HP Processing Method FE103025AL
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	Q3486-08	TP6-E2	FE056591.D	30 Oct 2025 18:58	Surrogate fail	YP\AJ	ReRun
20	Q3488-01	MOO-25-0294-0298	FE056592.D	30 Oct 2025 19:28		YP\AJ	Ok
21	Q3488-04	MOO-25-0302-0310	FE056593.D	30 Oct 2025 19:59	Need 500X	YP\AJ	Dilution
22	Q3488-06	MOO-25-0311-0313	FE056594.D	30 Oct 2025 20:29	Need further 20X	YP\AJ	Dilution
23	Q3490-01	LAW-25-0151	FE056595.D	30 Oct 2025 21:00	Need further 10X	YP\AJ	Dilution
24	Q3488-02	MOO-25-0299	FE056596.D	30 Oct 2025 21:30	Need further 20X	YP\AJ	Dilution
25	I.BLK	I.BLK	FE056597.D	30 Oct 2025 23:01		YP\AJ	Ok
26	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE056598.D	30 Oct 2025 23:32		YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE111925AL

Review By	rahul	Review On	11/19/2025 3:03:33 PM
Supervise By	Sohil	Supervise On	11/20/2025 4:00:25 PM
SubDirectory	FE111925AL	HP Acquire Method	HP Processing Method
			FE103025AL

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	FE056923.D	19 Nov 2025 07:04		YPIAJ	Ok
2	I.BLK	I.BLK	FE056924.D	19 Nov 2025 07:35		YPIAJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE056925.D	19 Nov 2025 08:05		YPIAJ	Ok
4	Q3652-01DL	TP-1DL	FE056926.D	19 Nov 2025 08:52		YPIAJ	Dilution
5	Q3652-01DL2	TP-1DL2	FE056927.D	19 Nov 2025 09:22		YPIAJ	Ok,M
6	Q3656-01DL	T2-GRAVELDL	FE056928.D	19 Nov 2025 09:52		YPIAJ	Dilution
7	Q3656-01DL2	Q3656-01DL2	FE056929.D	19 Nov 2025 10:22	Need more dilution	YPIAJ	Not Ok
8	Q3656-02DL	T2-GRAVEL-E2DL	FE056930.D	19 Nov 2025 10:52		YPIAJ	Dilution
9	Q3656-02DL2	T2-GRAVEL-E2DL2	FE056931.D	19 Nov 2025 11:22		YPIAJ	Ok
10	I.BLK	I.BLK	FE056932.D	19 Nov 2025 12:22		YPIAJ	Ok
11	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE056933.D	19 Nov 2025 12:53		YPIAJ	Ok
12	PB170632BL	PB170632BL	FE056934.D	19 Nov 2025 14:09		YPIAJ	Ok
13	PB170632BS	PB170632BS	FE056935.D	19 Nov 2025 14:39		YPIAJ	Ok
14	PB170632BSD	PB170632BSD	FE056936.D	19 Nov 2025 15:09		YPIAJ	Ok
15	Q3662-04	B1-0.0-1.0-20251117	FE056937.D	19 Nov 2025 15:39		YPIAJ	Ok
16	Q3664-01	ARS20-0001	FE056938.D	19 Nov 2025 16:09		YPIAJ	Ok
17	Q3664-02	ARS20-0001-E2	FE056939.D	19 Nov 2025 16:40		YPIAJ	Ok
18	Q3664-03	ARS20-0013	FE056940.D	19 Nov 2025 17:10		YPIAJ	Ok

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE111925AL

Review By	rahul	Review On	11/19/2025 3:03:33 PM
Supervise By	Sohil	Supervise On	11/20/2025 4:00:25 PM
SubDirectory	FE111925AL	HP Acquire Method	HP Processing Method FE103025AL
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	Q3664-04	ARS20-0013-E2	FE056941.D	19 Nov 2025 17:40		YP\AJ	Ok
20	Q3664-05	291399	FE056942.D	19 Nov 2025 18:10		YP\AJ	Ok
21	Q3664-06	291399-E2	FE056943.D	19 Nov 2025 18:40		YP\AJ	Ok
22	Q3669-01	EO-01-11182025	FE056944.D	19 Nov 2025 19:11	Need 2X	YP\AJ	Dilution
23	Q3669-01D	Q3669-01D	FE056945.D	19 Nov 2025 19:40		YP\AJ	Ok,M
24	Q3669-01MS	EO-01-11182025MS	FE056946.D	19 Nov 2025 20:11	FE056944.D	YP\AJ	Ok,M
25	Q3669-01MSD	EO-01-11182025MSD	FE056947.D	19 Nov 2025 20:41	FE056944.D!FE056946.D	YP\AJ	Ok,M
26	Q3669-02	EO-01-11182025-E2	FE056948.D	19 Nov 2025 21:11	Need 5X	YP\AJ	Dilution
27	Q3656-01DL2	Q3656-01DL2	FE056949.D	19 Nov 2025 21:41	Carry over	YP\AJ	Not Ok
28	I.BLK	I.BLK	FE056950.D	19 Nov 2025 22:42		YP\AJ	Ok
29	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE056951.D	19 Nov 2025 23:12		YP\AJ	Ok

M : Manual Integration



PERCENT SOLID

Supervisor: Iwona
Analyst: JIGNESH
Date: 11/19/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:30
In Date: 11/18/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:35
Out Date: 11/19/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB137951

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
Q3662-01	B3-0.5-1.0-20251117	1	1.15	10.55	11.7	10.77	91.2	
Q3662-02	B3-0.0-1.0-20251117	2	1.19	10.67	11.86	10.23	84.7	
Q3662-03	B1-0.5-1.0-20251117	3	1.16	10.37	11.53	10.76	92.6	
Q3662-04	B1-0.0-1.0-20251117	4	1.17	10.62	11.79	10.53	88.1	
Q3663-01	2053	5	1.00	1.00	2.00	2.00	100.0	oil sample
Q3663-02	2054	6	1.00	1.00	2.00	2.00	100.0	oil sample
Q3664-01	ARS20-0001	7	1.00	1.00	2.00	2.00	100.0	Concrete sample
Q3664-02	ARS20-0001-E2	8	1.00	1.00	2.00	2.00	100.0	Concrete sample
Q3664-03	ARS20-0013	9	1.00	1.00	2.00	2.00	100.0	Concrete sample
Q3664-04	ARS20-0013-E2	10	1.00	1.00	2.00	2.00	100.0	Concrete sample
Q3664-05	291399	11	1.00	1.00	2.00	2.00	100.0	STONE SAMPLE, 100% SOLIDS
Q3664-06	291399-E2	12	1.00	1.00	2.00	2.00	100.0	STONE SAMPLE, 100% SOLIDS
Q3665-01	BUR-25-0101	13	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3666-01	BUR-25-0103	14	1.18	10.38	11.56	10.66	91.3	
Q3667-01	RIGHT-SIDE-WALL	15	1.00	1.00	2.00	2.00	100.0	Concrete sample
Q3667-03	LEFT-SIDE-WALL	16	1.00	1.00	2.00	2.00	100.0	Concrete sample
Q3667-05	LEFT-SIDE-FLOOR	17	1.00	1.00	2.00	2.00	100.0	Concrete sample
Q3667-07	ELEVATED-DIVIDE	18	1.00	1.00	2.00	2.00	100.0	Concrete sample
Q3668-01	2015	19	1.00	1.00	2.00	2.00	100.0	Concrete sample
Q3669-01	EO-01-11182025	20	1.11	10.43	11.54	10.8	92.9	
Q3669-02	EO-01-11182025-E2	21	1.15	9.98	11.13	10.33	92.0	
Q3669-02D	EO-01-11182025-E2DUP	22	1.19	9.96	11.15	10.35	92.0	

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

WORKLIST(Hardcopy Internal Chain)

137951

WorkList Name : %1-111825

WorkList ID : 193178

Department : Wet-Chemistry

Date : 11-18-2025 10:44:37

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3662-01	B3-0.5-1.0-20251117	Solid	Percent Solids	Cool 4 deg C	HDR108	D41	11/17/2025	Chemtech -SO
Q3662-02	B3-0.0-1.0-20251117	Solid	Percent Solids	Cool 4 deg C	HDR108	D41	11/17/2025	Chemtech -SO
Q3662-03	B3-0.5-1.0-20251117	Solid	Percent Solids	Cool 4 deg C	HDR108	D41	11/17/2025	Chemtech -SO
Q3662-04	B3-0.0-1.0-20251117	Solid	Percent Solids	Cool 4 deg C	HDR108	D41	11/17/2025	Chemtech -SO
Q3663-01	2053	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/18/2025	Chemtech -SO
Q3663-02	2054	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/18/2025	Chemtech -SO
Q3664-01	ARS20-0001	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/18/2025	Chemtech -SO
Q3664-02	ARS20-0001-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/18/2025	Chemtech -SO
Q3664-03	ARS20-0013	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/18/2025	Chemtech -SO
Q3664-04	ARS20-0013-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/18/2025	Chemtech -SO
Q3664-05	291399	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/18/2025	Chemtech -SO
Q3664-06	291399-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/18/2025	Chemtech -SO
Q3665-01	BUR-25-0101	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/18/2025	Chemtech -SO
Q3666-01	BUR-25-0103	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/18/2025	Chemtech -SO
Q3667-01	RIGHT-SIDE-WALL	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/18/2025	Chemtech -SO
Q3667-03	LEFT-SIDE-WALL	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/18/2025	Chemtech -SO
Q3667-05	LEFT-SIDE-FLOOR	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/18/2025	Chemtech -SO
Q3667-07	ELEVATED-DIVIDE	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/18/2025	Chemtech -SO
Q3668-01	2015	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/18/2025	Chemtech -SO
Q3669-01	EO-01-11182025	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	11/18/2025	Chemtech -SO
Q3669-02	EO-01-11182025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	11/18/2025	Chemtech -SO

Date/Time 11/18/25 15:35
 Raw Sample Received by: *SL WOC*
 Raw Sample Relinquished by: *SL WOC*

Date/Time 11/18/25 17:40
 Raw Sample Received by: *SL WOC*
 Raw Sample Relinquished by: *SL WOC*

SOP ID:	MNJDEP-EPH-8		
Clean Up SOP #:	N/A	Extraction Start Date :	11/19/2025
Matrix :	Solid	Extraction Start Time :	09:45
Weigh By:	EH	Extraction By:	RJ
Balance check:	EH	Filter By:	RJ
Balance ID:	EX-SC-2	Extraction End Date :	11/19/2025
pH Strip Lot#:	N/A	Extraction End Time :	13:55
		Concentration By:	EH
		Supervisor By :	RUPESH
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	PP25005
Surrogate	1.0ML	100 PPM	PP25012
Fractionation Surrogate	1.0ML	100 PPM	PP24994
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	EP2659
Baked Na2SO4	N/A	EP2655
Sand	N/A	E3951
Hexane	N/A	E3984
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:	N-EVAP-02
KD Bath Temperature:	N/A	Envap Temperature:	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11/19/25	RS (Ext-Lab)	R. Pesh/PCLab
14:00	Preparation Group	Analysis Group

Analytical Method: MNJDEP-EPH-8

Concentration Date: 11/19/2025

Sample ID	Client Sample ID	Test	g/mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB170632BL	PB170632BL	EPH_NF	30.01	N/A	ritesh	Evelyn	2			U3-1
PB170632BS	PB170632BS	EPH_NF	30.03	N/A	ritesh	Evelyn	2			2
PB170632BSD	PB170632BSD	EPH_NF	30.02	N/A	ritesh	Evelyn	2			3
Q3662-04	B3-0.0-1.0-20251117	EPH_NF	30.09	N/A	ritesh	Evelyn	2	A		4
Q3664-01	ARS20-0001	EPH_NF	30.08	N/A	ritesh	Evelyn	2	E	Concrete	5
Q3664-02	ARS20-0001-E2	EPH_NF	30.07	N/A	ritesh	Evelyn	2		Concrete	6
Q3664-03	ARS20-0013	EPH_NF	30.05	N/A	ritesh	Evelyn	2	E	Concrete	U4-1
Q3664-04	ARS20-0013-E2	EPH_NF	30.02	N/A	ritesh	Evelyn	2		Concrete	2
Q3664-05	291399	EPH_NF	30.03	N/A	ritesh	Evelyn	2	E	Concrete	3
Q3664-06	291399-E2	EPH_NF	30.06	N/A	ritesh	Evelyn	2		Concrete	4
Q3669-01	EO-01-11182025	EPH_NF	30.03	N/A	ritesh	Evelyn	2	F		5
Q3669-01DUP	EO-01-11182025DUP	EPH_NF	30.05	N/A	ritesh	Evelyn	2	F		6
Q3669-01MS	EO-01-11182025MS	EPH_NF	30.08	N/A	ritesh	Evelyn	2	F		U6-1
Q3669-01MSD	EO-01-11182025MSD	EPH_NF	30.04	N/A	ritesh	Evelyn	2	F		2
Q3669-02	EO-01-11182025-E2	EPH_NF	30.08	N/A	ritesh	Evelyn	2			3

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q3669 WorkList ID : 193212 Department : Extraction Date : 11-19-2025 08:42:31

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3662-04	B3-0.0-1.0-20251117	Solid	EPH_NF	Cool 4 deg C	HDR108	D41	11/17/2025	NJEPH
Q3664-01	ARS20-0001	Solid	EPH_NF	Cool 4 deg C	PSEG03	D31	11/18/2025	NJEPH
Q3664-02	ARS20-0001-E2	Solid	EPH_NF	Cool 4 deg C	PSEG03	D31	11/18/2025	NJEPH
Q3664-03	ARS20-0013	Solid	EPH_NF	Cool 4 deg C	PSEG03	D31	11/18/2025	NJEPH
Q3664-04	ARS20-0013-E2	Solid	EPH_NF	Cool 4 deg C	PSEG03	D31	11/18/2025	NJEPH
Q3664-05	291399	Solid	EPH_NF	Cool 4 deg C	PSEG03	D31	11/18/2025	NJEPH
Q3664-06	291399-E2	Solid	EPH_NF	Cool 4 deg C	PSEG03	D31	11/18/2025	NJEPH
Q3669-01	EO-01-11182025	Solid	EPH_NF	Cool 4 deg C	PSEG05	D41	11/18/2025	NJEPH
Q3669-02	EO-01-11182025-E2	Solid	EPH_NF	Cool 4 deg C	PSEG05	D41	11/18/2025	NJEPH

Date/Time 11/19/25 9:40
 Raw Sample Received by: RJ (GAG)
 Raw Sample Relinquished by: CP Sn

Date/Time 11/19/25 10:05
 Raw Sample Received by: CP Sn
 Raw Sample Relinquished by: RJ (GAG)

Prep Standard - Chemical Standard Summary

Order ID : Q3662

Test : EPH_NF

Prepbatch ID : PB170632,

Sequence ID/Qc Batch ID: FE111925AL,

Standard ID :

EP2655,EP2659,PP24768,PP24769,PP24770,PP24771,PP24772,PP24773,PP24774,PP24994,PP25005,PP25012,

Chemical ID :

E3875,E3951,E3956,E3974,E3979,E3980,E3982,E3984,P12364,P13280,P13281,P13620,P13690,P14033,P14034,P14035,P14036,P14037,P14127,P14128,P14129,P14130,P14131,P14132,P14133,P14134,P14135,P14136,P14151,P14152,P14153,P14154,P14155,P14170,P14171,P14172,P14173,P14195,P14196,P14197,P14198,P14199,P14200,P14201,P14202,P14203,P14204,W3234,

Extractions STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3923	Baked Sodium Sulfate	EP2655	10/24/2025	01/28/2026	RUPESHKUMAR SHAH	Extraction_SC ALE_2 (EX-SC-2)	None	Riteshkumar Patel 10/24/2025

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	EP2659	11/03/2025	04/16/2026	RUPESHKUMAR SHAH	None	None	Riteshkumar Patel 11/03/2025

FROM 8000.00000ml of E3980 + 8000.00000ml of E3982 = Final Quantity: 16000.000 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
<u>FROM</u> 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								

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>
783	50 PPM Aliphatic HC STD	PP24770	08/01/2025	02/01/2026	Yogesh Patel	None	None	Abdul Mirza
								08/19/2025

FROM 0.50000ml of W3234 + 0.50000ml 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>
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

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>
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

<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

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>
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

<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>
1331	100 PPM NJEPH Fractionating Surrogate	PP24994	10/09/2025	04/09/2026	Abdul Mirza	None	None	Yogesh Patel
								10/10/2025

FROM 1.25000ml of P14170 + 1.25000ml of P14171 + 1.25000ml of P14172 + 1.25000ml of P14173 + 195.00000ml of E3974 = Final Quantity: 200.000 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>
1330	100 PPM NJEPH Spike Solution	PP25005	10/22/2025	04/22/2026	Abdul Mirza	None	None	Yogesh Patel 11/04/2025
<u>FROM</u>	5.00000ml of P14127 + 5.00000ml of P14128 + 5.00000ml of P14129 + 5.00000ml of P14130 + 5.00000ml of P14131 + 5.00000ml of P14132 + 5.00000ml of P14133 + 5.00000ml of P14134 + 5.00000ml of P14135 + 5.00000ml of P14136 + 5.00000ml of P14195 + 5.00000ml of P14196 + 5.00000ml of P14197 + 5.00000ml of P14198 + 5.00000ml of P14199 + 5.00000ml of P14200 + 5.00000ml of P14201 + 5.00000ml of P14202 + 5.00000ml of P14203 + 5.00000ml of P14204 = Final Quantity: 100.000 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>
1339	100 PPM NJEPH Surrogate Spike	PP25012	10/27/2025	04/27/2026	Abdul Mirza	None	None	Yogesh Patel 11/04/2025
<u>FROM</u>	1.00000ml of P14033 + 1.00000ml of P14034 + 1.00000ml of P14035 + 1.00000ml of P14036 + 1.00000ml of P14037 + 1.00000ml of P14151 + 1.00000ml of P14152 + 1.00000ml of P14153 + 1.00000ml of P14154 + 1.00000ml of P14155 + 490.00000ml of E3979 = Final Quantity: 500.000 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	07/28/2026	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-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-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	25C0362006	04/10/2027	09/26/2025 / Riteshkumar	09/26/2025 / Riteshkumar	E3974

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)	24L1062001	10/04/2027	10/15/2025 / RITESHKUMAR	09/29/2025 / Riteshkumar	E3979

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	10/10/2025 / RUPESH	10/10/2025 / RUPESH	E3980

CHEMICAL RECEIPT LOG BOOK

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)	24L1062001	10/04/2027	10/31/2025 / RUPESH	10/31/2025 / RUPESH	E3982

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)	25C0362006	04/30/2026	/	11/05/2025 / RUPESH	E3984

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

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

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	02/01/2026	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	31098 / 1-Chlorooctadecane Standard	A0225485	04/27/2026	10/27/2025 / Abdul	06/02/2025 / Rahul	P14033

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0225485	04/27/2026	10/27/2025 / Abdul	06/02/2025 / Rahul	P14034

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0225485	04/27/2026	10/27/2025 / Abdul	06/02/2025 / Rahul	P14035

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0225485	04/27/2026	10/27/2025 / Abdul	06/02/2025 / Rahul	P14036

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0225485	04/27/2026	10/27/2025 / Abdul	06/02/2025 / Rahul	P14037

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	04/22/2026	10/22/2025 / Abdul	09/16/2025 / Abdul	P14127

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	07/31/2032	10/22/2025 / Abdul	09/16/2025 / Abdul	P14128

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	04/22/2026	10/22/2025 / Abdul	09/16/2025 / Abdul	P14129

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	04/22/2026	10/22/2025 / Abdul	09/16/2025 / Abdul	P14130

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	04/22/2026	10/22/2025 / Abdul	09/16/2025 / Abdul	P14131

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	04/22/2026	10/22/2025 / Abdul	09/16/2025 / Abdul	P14132

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	04/22/2026	10/22/2025 / Abdul	09/16/2025 / Abdul	P14133

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	04/22/2026	10/22/2025 / Abdul	09/16/2025 / Abdul	P14134

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	04/22/2026	10/22/2025 / Abdul	09/16/2025 / Abdul	P14135

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	04/22/2026	10/22/2025 / Abdul	09/16/2025 / Abdul	P14136

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	04/27/2026	10/27/2025 / Abdul	09/24/2025 / Abdul	P14151

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	04/27/2026	10/27/2025 / Abdul	09/24/2025 / Abdul	P14152

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	04/27/2026	10/27/2025 / Abdul	09/24/2025 / Abdul	P14153

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	04/27/2026	10/27/2025 / Abdul	09/24/2025 / Abdul	P14154

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	04/27/2026	10/27/2025 / Abdul	09/24/2025 / Abdul	P14155

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0227585	04/09/2026	10/09/2025 / Abdul	10/01/2025 / Abdul	P14170

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0227585	04/09/2026	10/09/2025 / Abdul	10/01/2025 / Abdul	P14171

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0227585	04/09/2026	10/09/2025 / Abdul	10/01/2025 / Abdul	P14172

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	A0227585	04/09/2026	10/09/2025 / Abdul	10/01/2025 / Abdul	P14173

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0231145	04/22/2026	10/22/2025 / Abdul	10/21/2025 / Abdul	P14195

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0231145	04/22/2026	10/22/2025 / Abdul	10/21/2025 / Abdul	P14196

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0231145	04/22/2026	10/22/2025 / Abdul	10/21/2025 / Abdul	P14197

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0231145	04/22/2026	10/22/2025 / Abdul	10/21/2025 / Abdul	P14198

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0231145	04/22/2026	10/22/2025 / Abdul	10/21/2025 / Abdul	P14199

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	A0231145	04/22/2026	10/22/2025 / Abdul	10/21/2025 / Abdul	P14200

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0231145	04/22/2026	10/22/2025 / Abdul	10/21/2025 / Abdul	P14201

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0231145	04/22/2026	10/22/2025 / Abdul	10/21/2025 / Abdul	P14202

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0231145	04/22/2026	10/22/2025 / Abdul	10/21/2025 / Abdul	P14203

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0231145	04/22/2026	10/22/2025 / Abdul	10/21/2025 / Abdul	P14204

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

n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis



Material No.: 9262-03

Batch No.: 25C0362006

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 Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	6
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	4
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	0.2 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 3974

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



**PRODUCTOS
QUÍMICOS
MONTERREY, S.A. DE C.V.**

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CP 64070
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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



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



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

 **avantors**™



Material No.: 9254-03

Batch No.: 24L1062001

Manufactured Date: 2024-10-04

Expiration Date: 2027-10-04

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	99.7 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.3 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (µeq/g)	<= 0.3	0.1
Titration Base (µeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	0.3 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E3979



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)



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_2Cl_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 ($\mu\text{eq/g}$)	≤ 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

REC. on 10/10/25
RJ

E3980

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

 **avantor**™



Material No.: 9254-03

Batch No.: 24L1062001

Manufactured Date: 2024-10-04

Expiration Date: 2027-10-04

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	99.7 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.3 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (µeq/g)	<= 0.3	0.1
Titration Base (µeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	0.3 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

Received on 10/29/25

E3982

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

n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis

 **avantorsTM**



Material No.: 9262-03

Batch No.: 25C0362006

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	4
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	0.2 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 11/5/25

E3984



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



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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

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P14141
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9/16/25

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



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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

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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



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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

P14127
P14141
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9/16/25

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



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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

P14127
P14141
15
9/16/25

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



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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

P14127
P14141
15
9/16/25

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



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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

P14127
P14141
15
9/16/25

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



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** 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

P14127
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15
9/16/25

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



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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

P14127
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15
9/16/25

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
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4	n-Tetradecane (C14)	629-59-4	STBL2522	99%	200.0 µg/mL	+/- 5.1667
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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
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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



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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

P14127
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9/16/25

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
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3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.0 µg/mL	+/- 5.1667
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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
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10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	200.0 µg/mL	+/- 5.1667
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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
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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

P14127
P14141
15
9/16/25

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
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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



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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)

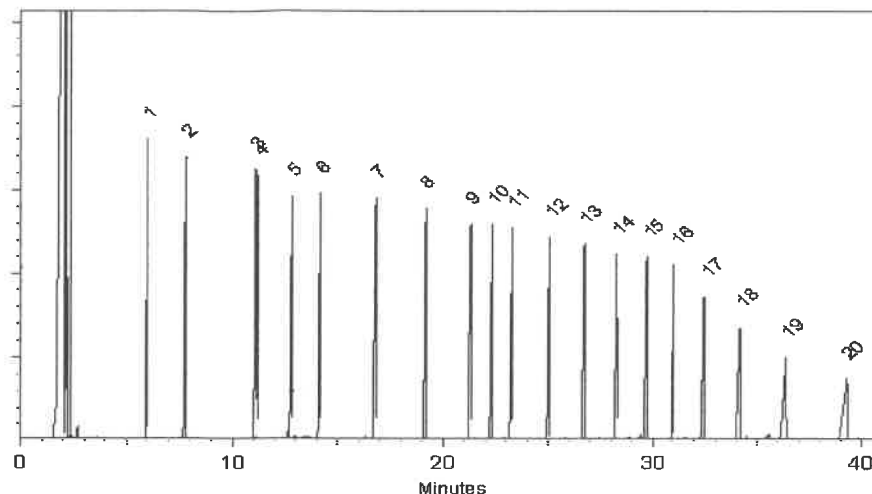
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

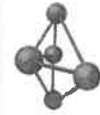
- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- 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

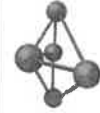
P13278
2
P13287
Y.P.
04/11/24

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.)	
																OSHA PEL (TWA)	
																CAS#	
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
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) orl-rat 1630mg/kg
3.	n-Nonane	95708	120222	1.00	25.00	1000.7	1000.7	1000	NA	NA	0.013	NA	NA	1000.0	4.2	111-84-2	200 ppm (1050mg/m ³ 8H) orl-rat 490mg/kg
4.	n-Decane	95708	120222	1.00	25.00	1000.9	1000.9	1000	NA	NA	0.013	NA	NA	1000.2	4.2	124-18-5	ivn-mus 218mg/kg
5.	n-Dodecane	95708	120222	1.00	25.00	1000.7	1000.7	1000	NA	NA	0.013	NA	NA	1000.0	4.2	112-40-3	N/A
6.	n-Tetradecane	95708	120222	1.00	25.00	1002.1	1002.1	1000	NA	NA	0.013	NA	NA	1001.3	4.2	629-59-4	ivn-mus 3494mg/kg
7.	n-Hexadecane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	NA	0.013	NA	NA	999.7	4.2	544-76-3	N/A
8.	n-Octadecane	95708	120222	1.00	25.00	1001.0	1001.0	1000	NA	NA	0.013	NA	NA	1000.3	4.1	583-45-3	N/A
9.	n-Eicosane	95708	120222	1.00	25.00	1001.0	1001.0	1000	NA	NA	0.013	NA	NA	1000.3	4.2	112-95-8	N/A
10.	n-Henicosane	95708	120222	1.00	25.00	1002.4	1002.4	1000	NA	NA	0.013	NA	NA	1001.6	4.2	629-94-7	N/A
11.	n-Docosane	95708	120222	1.00	25.00	1001.9	1001.9	1000	NA	NA	0.013	NA	NA	1001.2	4.2	629-97-0	N/A
12.	n-Tetracosane	95708	120222	1.00	25.00	1000.8	1000.8	1000	NA	NA	0.013	NA	NA	1000.1	4.2	646-31-1	N/A
13.	n-Hexacosane	95708	120222	1.00	25.00	1001.2	1001.2	1000	NA	NA	0.013	NA	NA	1000.4	4.2	630-01-3	N/A
14.	n-Octacosane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	NA	0.013	NA	NA	999.8	4.2	630-02-4	N/A
15.	n-Triacontane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	NA	0.013	NA	NA	999.8	4.2	638-68-6	N/A
16.	n-Dotriacontane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	NA	0.013	NA	NA	999.8	4.3	544-85-4	ivn-mus 100mg/kg
17.	n-Tetracontane	95708	120222	1.00	25.00	1000.4	1000.4	1000	NA	NA	0.013	NA	NA	999.7	4.2	14167-59-0	N/A
18.	n-Hexatriacontane	95708	120222	1.00	25.00	1001.5	1001.5	1000	NA	NA	0.013	NA	NA	1000.8	4.2	630-06-8	N/A
19.	n-Octatriacontane	95708	120222	1.00	25.00	1000.3	1000.3	1000	NA	NA	0.013	NA	NA	999.6	4.3	7184-86-6	N/A
20.	n-Tetracontane	95708	120222	1.00	25.00	1000.6	1000.6	1000	NA	NA	0.013	NA	NA	999.9	4.3	4181-95-7	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

• 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 Kuyal, 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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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. : 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:

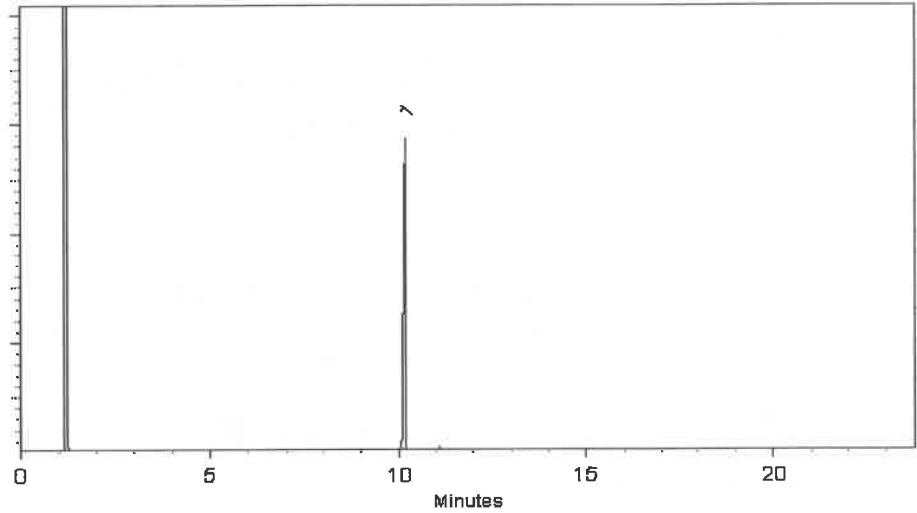
FID

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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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:

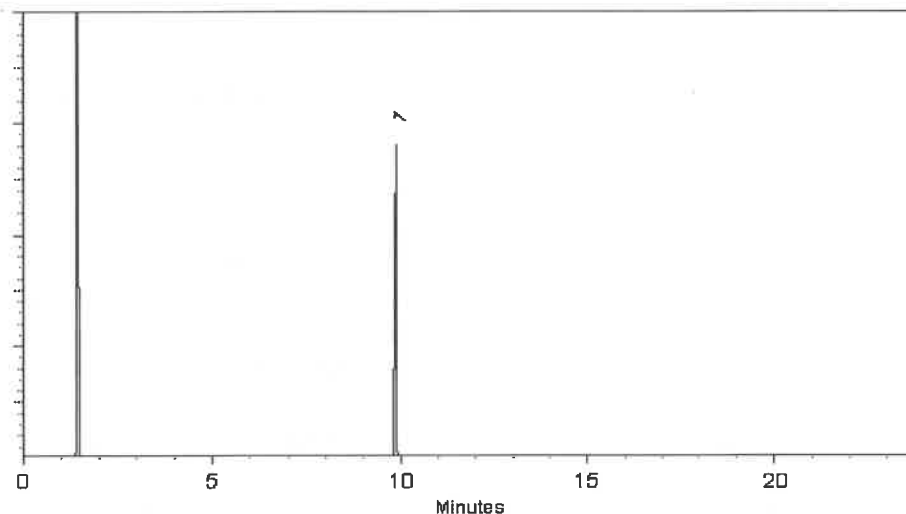
FID

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/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. : 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:

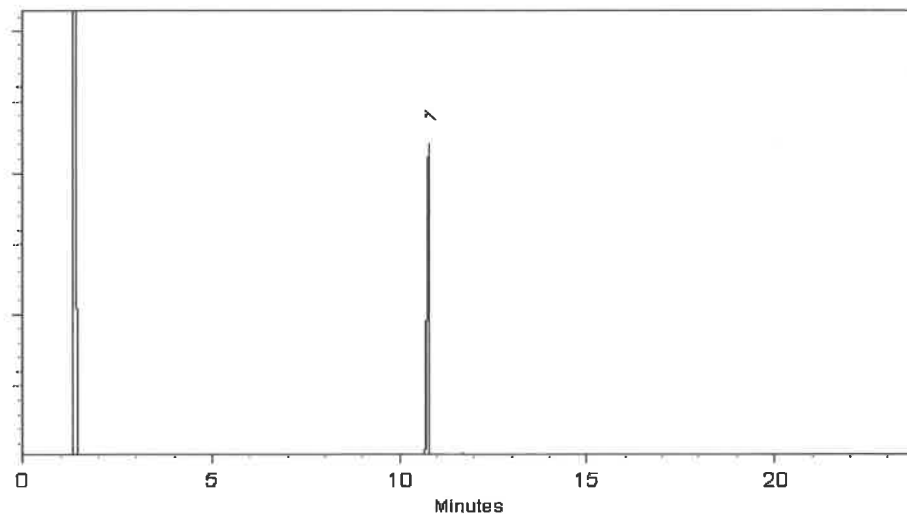
FID

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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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.:** 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:

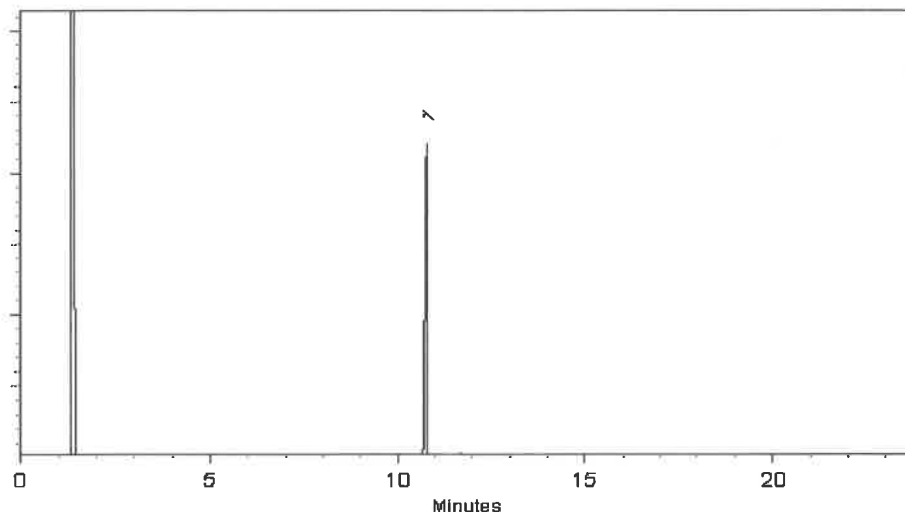
FID

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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CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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:

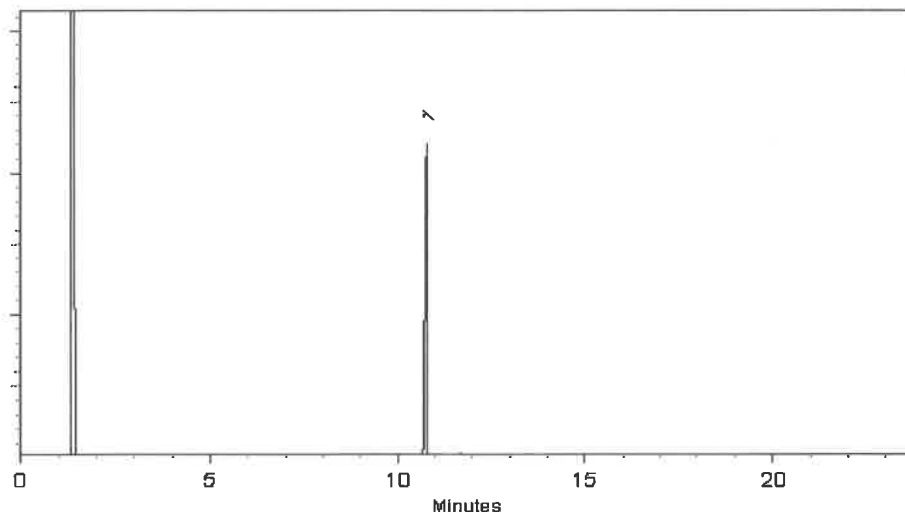
FID

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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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.:** 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:

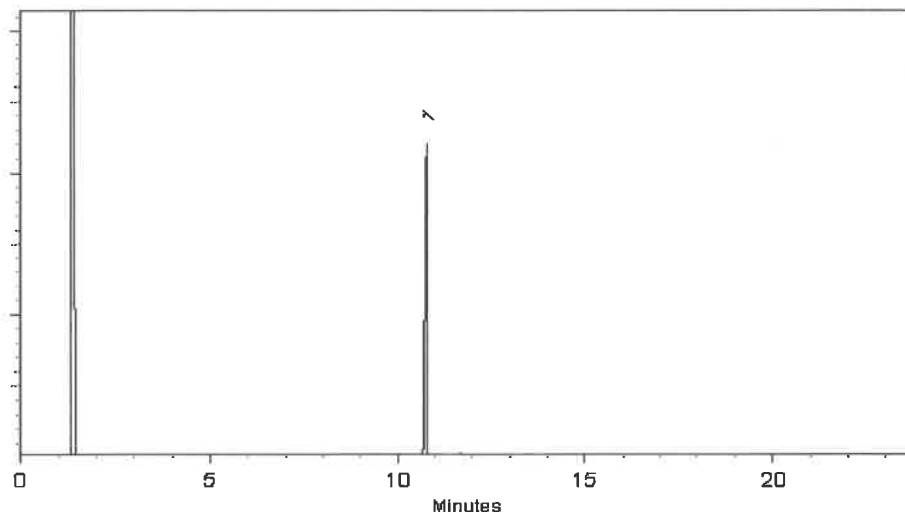
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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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

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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:

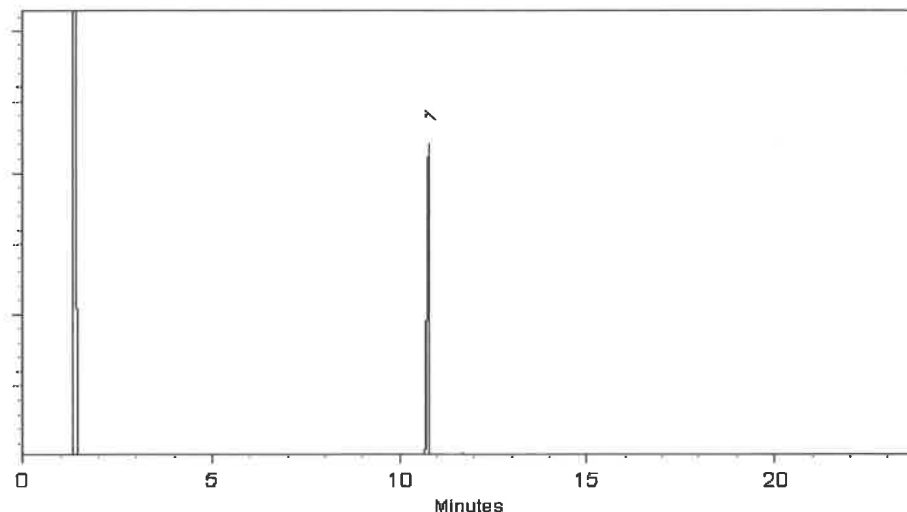
FID

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

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Catalog No. : 31480 **Lot No.:** A0227585

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 : June 30, 2031 **Storage:** 10°C or colder

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

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00024555	99%	4,006.0 µg/mL	+/- 180.4609
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,012.0 µg/mL	+/- 180.7312

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%

P14170
↓
P14189
/

10/3/2025



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Catalog No. : 31480 **Lot No.:** A0227585

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 : June 30, 2031 **Storage:** 10°C or colder

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

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00024555	99%	4,006.0 µg/mL	+/- 180.4609
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,012.0 µg/mL	+/- 180.7312

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%

P14170
↓
P14189
/

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

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

Expiration Date : June 30, 2031 **Storage:** 10°C or colder

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

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00024555	99%	4,006.0 µg/mL	+/- 180.4609
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,012.0 µg/mL	+/- 180.7312

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%

P14170
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P14189
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MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul

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

Expiration Date : June 30, 2031 **Storage:** 10°C or colder

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

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00024555	99%	4,006.0 µg/mL	+/- 180.4609
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,012.0 µg/mL	+/- 180.7312

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%

P14170
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P14189
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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.:** A0231145

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2031 **Storage:** 10°C or colder

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

P14195 } (40)
↓
P14234
RAUF
10/21/25

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%	200.7 µg/mL	+/- 9.0431
2	Naphthalene	91-20-3	STBK9311	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	200.6 µg/mL	+/- 9.0402
5	Acenaphthene	83-32-9	MKCV8166	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10246250	98%	201.1 µg/mL	+/- 9.0608
7	Phenanthrene	85-01-8	MKCV8193	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCV9141	99%	201.2 µg/mL	+/- 9.0655
9	Fluoranthene	206-44-0	A0458721	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCL8032	99%	200.8 µg/mL	+/- 9.0474
11	Benz(a)anthracene	56-55-3	I80012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP250926RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.8 µg/mL	+/- 9.0474
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.2 µg/mL	+/- 9.0655
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	17-YMK-40-2	99%	200.8 µg/mL	+/- 9.0474



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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.:** A0231145

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2031 **Storage:** 10°C or colder

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

P14195 } (40)
↓
P14234
RAU
10/21/25

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%	200.7 µg/mL	+/- 9.0431
2	Naphthalene	91-20-3	STBK9311	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	200.6 µg/mL	+/- 9.0402
5	Acenaphthene	83-32-9	MKCV8166	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10246250	98%	201.1 µg/mL	+/- 9.0608
7	Phenanthrene	85-01-8	MKCV8193	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCV9141	99%	201.2 µg/mL	+/- 9.0655
9	Fluoranthene	206-44-0	A0458721	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCL8032	99%	200.8 µg/mL	+/- 9.0474
11	Benz(a)anthracene	56-55-3	I80012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP250926RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.8 µg/mL	+/- 9.0474
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.2 µg/mL	+/- 9.0655
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	17-YMK-40-2	99%	200.8 µg/mL	+/- 9.0474



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Catalog No. : 30543 **Lot No.:** A0231145

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2031 **Storage:** 10°C or colder

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

P14195 } (40)
↓
P14234
↓
RAU
10/21/25

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%	200.7 µg/mL	+/- 9.0431
2	Naphthalene	91-20-3	STBK9311	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	200.6 µg/mL	+/- 9.0402
5	Acenaphthene	83-32-9	MKCV8166	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10246250	98%	201.1 µg/mL	+/- 9.0608
7	Phenanthrene	85-01-8	MKCV8193	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCV9141	99%	201.2 µg/mL	+/- 9.0655
9	Fluoranthene	206-44-0	A0458721	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCL8032	99%	200.8 µg/mL	+/- 9.0474
11	Benz(a)anthracene	56-55-3	I80012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP250926RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.8 µg/mL	+/- 9.0474
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.2 µg/mL	+/- 9.0655
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	17-YMK-40-2	99%	200.8 µg/mL	+/- 9.0474



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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.:** A0231145

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2031 **Storage:** 10°C or colder

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

P14195 } (40)
↓
P14234
↓
RAU
10/21/25

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%	200.7 µg/mL	+/- 9.0431
2	Naphthalene	91-20-3	STBK9311	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	200.6 µg/mL	+/- 9.0402
5	Acenaphthene	83-32-9	MKCV8166	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10246250	98%	201.1 µg/mL	+/- 9.0608
7	Phenanthrene	85-01-8	MKCV8193	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCV9141	99%	201.2 µg/mL	+/- 9.0655
9	Fluoranthene	206-44-0	A0458721	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCL8032	99%	200.8 µg/mL	+/- 9.0474
11	Benz(a)anthracene	56-55-3	I80012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP250926RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.8 µg/mL	+/- 9.0474
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.2 µg/mL	+/- 9.0655
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	17-YMK-40-2	99%	200.8 µg/mL	+/- 9.0474



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Catalog No. : 30543 **Lot No.:** A0231145

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2031 **Storage:** 10°C or colder

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

P14195 } (40)
↓
P14234
↓
RAU
10/21/25

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%	200.7 µg/mL	+/- 9.0431
2	Naphthalene	91-20-3	STBK9311	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	200.6 µg/mL	+/- 9.0402
5	Acenaphthene	83-32-9	MKCV8166	99%	200.0 µg/mL	+/- 9.0114
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12	Chrysene	218-01-9	RP250926RSR	99%	200.4 µg/mL	+/- 9.0294
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16	Indeno(1,2,3-cd)pyrene	193-39-5	17-YMK-40-2	99%	200.8 µg/mL	+/- 9.0474



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.

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NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

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Expiration Date : September 30, 2031 **Storage:** 10°C or colder

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

P14195 } (40)
↓
P14234
↓
RAU
10/21/25

CERTIFIED VALUES

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3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	200.6 µg/mL	+/- 9.0402
5	Acenaphthene	83-32-9	MKCV8166	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10246250	98%	201.1 µg/mL	+/- 9.0608
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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

COMPANY: HDR REPORT TO BE SENT TO:
ADDRESS: 50 Tice Blvd., Suite 210
CITY: Woodcliff Lake STATE: NJ ZIP: 07677
ATTENTION: Andrew Wadden
PHONE: 201-312-0752 FAX: _____

CLIENT PROJECT INFORMATION

PROJECT NAME: PVWC
PROJECT NO.: 10367568 LOCATION: Passaic, NJ
PROJECT MANAGER: Andrew Wadden
e-mail: Andrew.Wadden@HDRinc.com
PHONE: 201-312-0752 FAX: _____

CLIENT BILLING INFORMATION

BILL TO: HDR PO#: _____
ADDRESS: 50 Tice Blvd., Suite 210
CITY: Woodcliff Lake STATE: NJ ZIP: 07677
ATTENTION: Andrew Wadden PHONE: 201-312-0752

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): STANDARD TAT DAYS*
EDD: _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☒ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B
+ Raw Data ☐ Other _____
☐ EDD FORMAT _____

1. TEL VOCs
2. TEL SVOCs
3. Pesticides, Cyanide
4. PCBs, PAHs, Metals
5. TELD for Metals
6. Heavy Metals, BOD
7. Ignitability, Flammability
8. Volatiles, Tetrachloroethylene, P-dioxin
9. Soluble, chromophore, Paint, Fumes

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										COMMENTS ← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	B3-0.5-1.0-20251117	S		✓	11/17/25	0925	4	✓									
2.	B3-0.0-1.0-20251117	S		✓	11/17/25	0930	3		✓	✓	✓						
3.	B1-0.5-1.0-20251117	S		✓	11/17/25	1055	4	✓									
4.	B1-0.0-1.0-20251117	S		✓	11/17/25	1105	6		✓	✓	✓	✓	✓	✓	✓	✓	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: 1. <u>[Signature]</u>	DATE/TIME: <u>11/17/25 1315</u>	RECEIVED BY: 1. <u>[Signature]</u>	11/18/25 0957	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP <u>4.9°C</u>
RELINQUISHED BY SAMPLER: 2. _____	DATE/TIME:	RECEIVED BY: 2. _____		Comments: _____
RELINQUISHED BY SAMPLER: 3. <u>[Signature]</u>	DATE/TIME: <u>11/18/25</u>	RECEIVED BY: 3. _____		Page <u>1</u> of <u>1</u> 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 : Q3662	HDR108	Order Date : 11/18/2025 11:14:00 AM	Project Mgr :
Client Name : HDR, Inc.		Project Name : PVWC Linear Construction	Report Type : NJ Reduced
Client Contact : Andrew Wadden		Receive DateTime : 11/18/2025 ~~12:00:00~~ AM	EDD Type : Excel NJ
Invoice Name : HDR, Inc.		Purchase Order : 11:10	Hard Copy Date :
Invoice Contact : Andrew Wadden			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q3662-01	B3-0.5-1.0-20251117	Solid	11/17/2025	09:25					
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q3662-03	^{B1} ~~B3~~ -0.5-1.0-20251117	Solid	11/17/2025	10:55					
					VOC-TCLVOA-10		8260D	10 Bus. Days	

Relinquished By :

Date / Time : 11/18/25 1245

Received By :

Date / Time :

Storage Area : VOA Refridgerator Room