

DATA REPORTING QUALIFIERS- ORGANIC

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

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

LAB CHRONICLE

OrderID: Q2179	OrderDate: 6/2/2025 12:46:00 PM
Client: G Environmental	Project: DeCamp
Contact: Gary Landis	Location: N11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2179-01	D3	Solid	EPH_F2	NJEPH	06/02/25	06/03/25	06/03/25	06/02/25
Q2179-02	D4	Solid	EPH_F2	NJEPH	06/02/25	06/03/25	06/03/25	06/02/25
Q2179-03	D5	Solid	EPH_F2	NJEPH	06/02/25	06/03/25	06/03/25	06/02/25
Q2179-04	D6	Solid	EPH_F2	NJEPH	06/02/25	06/03/25	06/03/25	06/02/25



QC SUMMARY

SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: GENV01
Lab Code: CHEM CASE No.: Q2179 SAS No.: Q2179 SDG No.: Q2179
Run Number: FE060325AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)	ortho-Terphenyl (SURR)		TOT OUT
PB168239BL	84	80		0
PB168239BS	80	72		0
PB168239BSD	79	71		0
3MS	77	66		0
3MSD	72	62		0
D3	55	50		0
D4	62	56		0
D5	60	55		0
D6	71	65		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_F2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Chemtech</u>	Client:	<u>G Environmental</u>	
Lab Code:	<u>CHEM</u>	Cas No:	<u>Q2179</u>	SAS No : <u>Q2179</u> SDG No: <u>Q2179</u>
Sample No :	<u>Q2147-05MS</u>	Datafile:	<u>FE054155.D</u>	Client ID : <u>3MS</u>

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C28-C40	34.7	21.0	59.4	110		(40-140)
Aliphatic C9-C28	115.6	15.4	105	78		(40-140)

SOLID EPH_F2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Chemtech</u>	Client:	<u>G Environmental</u>	
Lab Code:	<u>CHEM</u>	Cas No:	<u>Q2179</u>	SAS No : <u>Q2179</u> SDG No: <u>Q2179</u>
Sample No :	<u>Q2147-05MSD</u>	Datafile:	<u>FE054156.D</u>	Client ID : <u>3MSD</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	34.7	21.0	56.7	102		7.55 (40-140) 50
Aliphatic C9-C28	115.6	15.4	99.5	73		6.3 (40-140) 50

SOLID EPH_F2 LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** G Environmental
Lab Code: CHEM **Cas No:** Q2179 **SAS No :** Q2179 **SDG No:** Q2179
Sample No : PB168239BS **Datafile:** FE054150.D **Client ID :** PB168239BS

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C28-C40	30.0	26.9	90		(40-140)
Aliphatic C9-C28	99.9	72.4	73		(40-140)

SOLID EPH_F2 LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Chemtech</u>	Client:	<u>G Environmental</u>		
Lab Code:	<u>CHEM</u>	Cas No:	<u>Q2179</u>	SAS No :	<u>Q2179</u>
				SDG No:	<u>Q2179</u>
Sample No :	<u>PB168239BSD</u>	Datafile:	<u>FE054151.D</u>	Client ID :	<u>PB168239BSD</u>

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS	QC Limit Of RPD
Aliphatic C28-C40	30.0	24.6	82		8.9 (40-140)	25
Aliphatic C9-C28	99.9	70.6	71		2.6 (40-140)	25

4B
METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168239BL

Lab Name: CHEMTECH

Contract: GENV01

Lab Code: CHEM Case No.: Q2179

SAS No.: Q2179 SDG NO.: Q2179

Instrument ID: FID_E

Lab Sample ID: PB168239BL

Matrix: (soil/water) Solid

Date Extracted: 6/3/2025 10:00:00 A

Level: (low/med) low

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

EPA SAMPLE NO.	LAB SAMPLE ID
PB168239BS	PB168239BS
PB168239BSD	PB168239BSD
3MS	Q2147-05MS
3MSD	Q2147-05MSD
D3	Q2179-01
D4	Q2179-02
D5	Q2179-03
D6	Q2179-04

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	G Environmental	Date Collected:	06/02/25
Project:	DeCamp	Date Received:	06/02/25
Client Sample ID:	D3	SDG No.:	Q2179
Lab Sample ID:	Q2179-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	93.6
Sample Wt/Vol:	30.05	Units:	g
Soil Aliquot Vol:		Final Vol:	2000 uL
Prep Method :		Test:	EPH_F2

Prep Date :	Date Analyzed :	Prep Batch ID
06/03/25 10:00	06/03/25 20:27	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	2.67	J	1	0.97	4.27	mg/kg	FE054162.D
Total EPH	Total EPH	2.67	J		0.97	4.27	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 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:	G Environmental	Date Collected:	06/02/25
Project:	DeCamp	Date Received:	06/02/25
Client Sample ID:	D3	SDG No.:	Q2179
Lab Sample ID:	Q2179-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	93.6
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE054162.D	1	06/03/25	06/03/25	PB168239

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	2.67	J	0.97	4.27	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	25.1		1.26	2.13	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	27.3		40 - 140	55%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	24.9		40 - 140	50%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2179-01	Acq On:	03 Jun 2025 20:27
Client Sample ID:	D3	Operator:	YP\AJ
Data file:	FE054162.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	3.085	6.730	331203	2.443	300	ug/ml
Aliphatic C12-C16	6.731	10.178	959626	7.111	200	ug/ml
Aliphatic C16-C21	10.179	13.552	1248366	9.464	300	ug/ml
Aliphatic C21-C28	13.553	17.220	2306953	18.578	400	ug/ml
Aliphatic C28-C40	17.221	22.091	40756169	353.079	600	ug/ml
Aliphatic EPH	3.085	22.091	45602317	390.675		ug/ml
ortho-Terphenyl (SURR)	11.837	11.837	4049157	24.92		ug/ml
1-chlorooctadecane (SURR)	13.282	13.282	3238630	27.32		ug/ml
Aliphatic C9-C28	3.085	17.220	4846148	37.596	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054162.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 20:27
Operator : YP\AJ
Sample : Q2179-01
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
D3

Integration File: autoint1.e
Quant Time: Jun 04 02:54:49 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 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)	11.837	4049157	24.916 ug/ml
Spiked Amount	50.000	Recovery	= 49.83%
12) S 1-chlorooctadecane (S...	13.282	3238630	27.319 ug/ml
Spiked Amount	50.000	Recovery	= 54.64%

Target Compounds

(f)=RT Delta > 1/2 Window

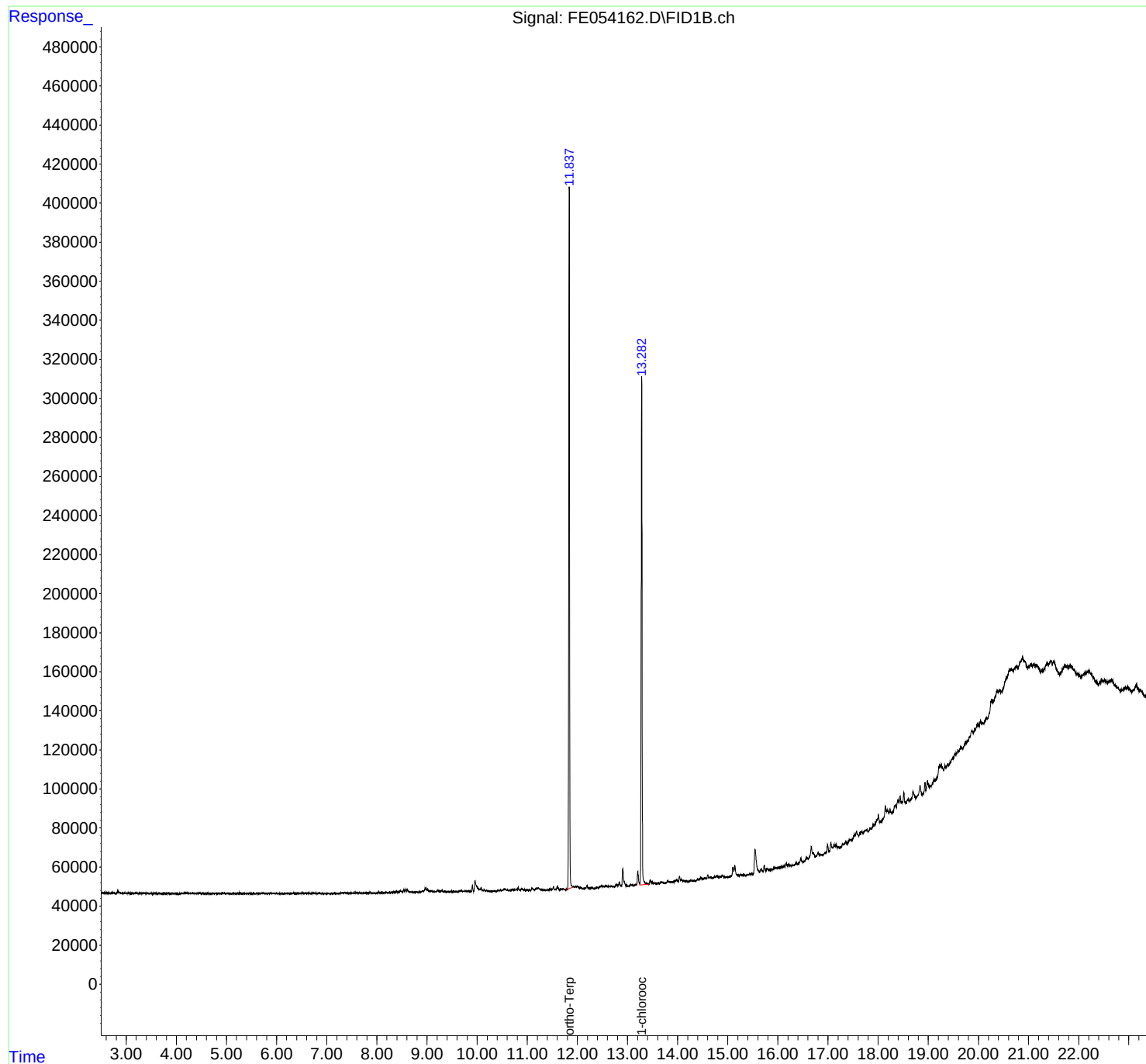
(m)=manual int.

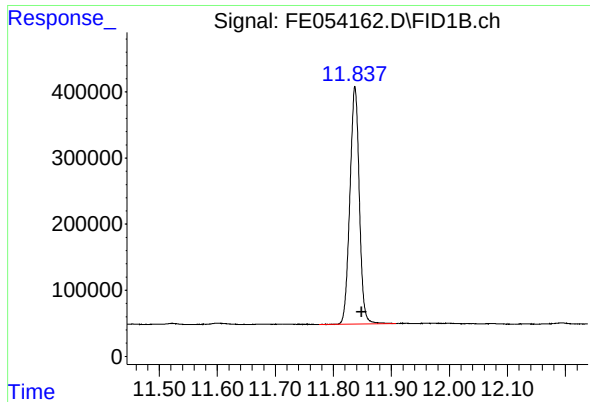
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054162.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 20:27
Operator : YP\AJ
Sample : Q2179-01
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
D3

Integration File: autoint1.e
Quant Time: Jun 04 02:54:49 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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

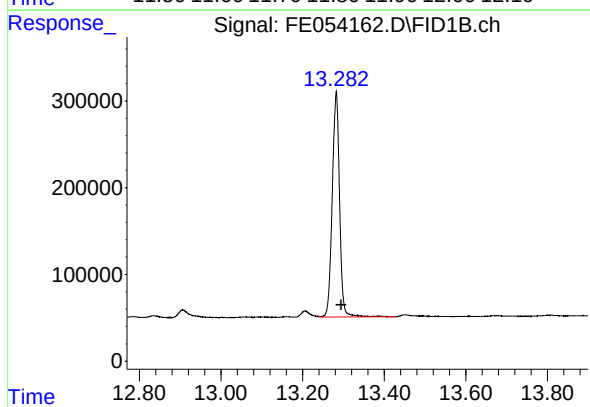




#9 ortho-Terphenyl (SURR)

R.T.: 11.837 min
Delta R.T.: -0.011 min
Response: 4049157
Conc: 24.92 ug/ml

Instrument :
FID_E
ClientSampleId :
D3



#12 1-chlorooctadecane (SURR)

R.T.: 13.282 min
Delta R.T.: -0.012 min
Response: 3238630
Conc: 27.32 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054162.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 20:27
Sample : Q2179-01
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	2.830	2.804	3.032	PH	1411	43525	0.90%	0.080%
2	3.048	3.032	3.072	PV	109	1665	0.03%	0.003%
3	3.085	3.072	3.108	PV	80	1109	0.02%	0.002%
4	3.113	3.108	3.154	PV	73	687	0.01%	0.001%
5	3.183	3.154	3.228	VV	264	4916	0.10%	0.009%
6	3.249	3.228	3.288	VV	178	3253	0.07%	0.006%
7	3.298	3.288	3.311	VV	75	424	0.01%	0.001%
8	3.316	3.311	3.348	VV	50	603	0.01%	0.001%
9	3.352	3.348	3.401	PV	66	1825	0.04%	0.003%
10	3.408	3.401	3.455	VV	102	3056	0.06%	0.006%
11	3.464	3.455	3.494	VV	160	1502	0.03%	0.003%
12	3.501	3.494	3.514	VV	114	763	0.02%	0.001%
13	3.549	3.514	3.562	VV	169	2084	0.04%	0.004%
14	3.579	3.562	3.614	VV	125	2400	0.05%	0.004%
15	3.625	3.614	3.631	PV	108	801	0.02%	0.001%
16	3.660	3.631	3.748	VV	280	6081	0.13%	0.011%
17	3.758	3.748	3.767	PV	56	691	0.01%	0.001%
18	3.779	3.767	3.814	VV	170	3017	0.06%	0.006%
19	3.836	3.814	3.868	VV	157	2589	0.05%	0.005%
20	3.872	3.868	3.900	VV	158	1460	0.03%	0.003%
21	3.912	3.900	3.932	VV	114	1305	0.03%	0.002%
22	3.941	3.932	3.968	PV	108	1404	0.03%	0.003%
23	3.982	3.968	4.003	VV	120	1961	0.04%	0.004%
24	4.018	4.003	4.040	VV	126	1554	0.03%	0.003%
25	4.059	4.040	4.068	PV	113	1344	0.03%	0.002%
26	4.111	4.068	4.118	VV	251	5793	0.12%	0.011%
27	4.126	4.118	4.142	VV	276	3583	0.07%	0.007%
28	4.171	4.142	4.209	VV	481	13333	0.28%	0.024%
29	4.215	4.209	4.228	VV	296	3272	0.07%	0.006%
30	4.256	4.228	4.354	VV	382	17492	0.36%	0.032%
31	4.366	4.354	4.373	VV	159	1414	0.03%	0.003%
32	4.380	4.373	4.394	VV	140	1561	0.03%	0.003%
33	4.399	4.394	4.427	VV	162	1992	0.04%	0.004%
34	4.448	4.427	4.469	VV	494	7199	0.15%	0.013%
35	4.482	4.469	4.549	VV	292	8116	0.17%	0.015%
36	4.574	4.549	4.608	VV	173	4174	0.09%	0.008%

					rteres			
37	4.626	4.608	4.669	VV	277	5747	0.12%	0.011%
38	4.708	4.669	4.851	VV	147	10422	0.22%	0.019%
39	4.954	4.851	4.985	VV	289	15518	0.32%	0.028%
40	5.008	4.985	5.056	VV	231	6435	0.13%	0.012%
41	5.071	5.056	5.090	VV	135	2018	0.04%	0.004%
42	5.118	5.090	5.194	VV	230	6710	0.14%	0.012%
43	5.205	5.194	5.228	VV	119	1632	0.03%	0.003%
44	5.422	5.228	5.528	VV	307	19409	0.40%	0.036%
45	5.592	5.528	5.642	VV	328	7759	0.16%	0.014%
46	5.712	5.642	5.828	PV	331	21257	0.44%	0.039%
47	5.885	5.828	5.911	VV	344	10997	0.23%	0.020%
48	5.929	5.911	6.054	VV	251	16112	0.33%	0.030%
49	6.080	6.054	6.136	VV	228	4593	0.10%	0.008%
50	6.190	6.136	6.244	VV	294	11977	0.25%	0.022%
51	6.279	6.244	6.298	VV	203	5565	0.12%	0.010%
52	6.341	6.298	6.461	VV	414	22289	0.46%	0.041%
53	6.484	6.461	6.511	VV	502	10464	0.22%	0.019%
54	6.521	6.511	6.571	VV	486	11425	0.24%	0.021%
55	6.577	6.571	6.602	VV	304	4322	0.09%	0.008%
56	6.635	6.602	6.672	VV	354	11311	0.23%	0.021%
57	6.701	6.672	6.753	VV	481	12483	0.26%	0.023%
58	6.778	6.753	6.819	VV	300	8169	0.17%	0.015%
59	6.835	6.819	6.898	VV	226	7075	0.15%	0.013%
60	6.912	6.898	7.008	VV	137	5818	0.12%	0.011%
61	7.036	7.008	7.061	VV	115	2149	0.04%	0.004%
62	7.139	7.061	7.181	PV	209	8123	0.17%	0.015%
63	7.198	7.181	7.231	VV	223	5588	0.12%	0.010%
64	7.351	7.231	7.398	VV	447	28042	0.58%	0.051%
65	7.413	7.398	7.438	VV	339	6237	0.13%	0.011%
66	7.464	7.438	7.494	VV	313	8007	0.17%	0.015%
67	7.517	7.494	7.548	VV	257	7693	0.16%	0.014%
68	7.581	7.548	7.618	VV	394	11313	0.23%	0.021%
69	7.651	7.618	7.684	VV	388	9903	0.21%	0.018%
70	7.715	7.684	7.734	VV	325	5984	0.12%	0.011%
71	7.756	7.734	7.830	VV	288	8273	0.17%	0.015%
72	7.862	7.830	7.929	VV	628	10922	0.23%	0.020%
73	7.952	7.929	7.978	VV	138	1461	0.03%	0.003%
74	8.034	7.978	8.088	PV	909	18878	0.39%	0.035%
75	8.190	8.088	8.263	VV	496	26117	0.54%	0.048%
76	8.285	8.263	8.308	VV	340	7162	0.15%	0.013%
77	8.383	8.308	8.418	VV	661	30956	0.64%	0.057%
78	8.470	8.418	8.511	VV	1181	38273	0.79%	0.070%
79	8.536	8.511	8.555	VV	1509	27090	0.56%	0.050%
80	8.579	8.555	8.765	VV	1769	82024	1.70%	0.150%
81	8.792	8.765	8.821	VV	390	6735	0.14%	0.012%
82	8.975	8.821	9.068	VV	1994	131250	2.72%	0.241%
83	9.080	9.068	9.169	VV	591	27634	0.57%	0.051%
84	9.209	9.169	9.267	VV	1014	34977	0.72%	0.064%
85	9.295	9.267	9.424	VV	1133	35946	0.74%	0.066%
86	9.481	9.424	9.514	VV	393	12760	0.26%	0.023%
87	9.538	9.514	9.554	VV	309	5678	0.12%	0.010%
88	9.588	9.554	9.614	VV	381	9560	0.20%	0.018%
89	9.681	9.614	9.731	VV	736	26897	0.56%	0.049%

					rteres			
90	9.753	9.731	9.804	VV	497	13157	0.27%	0.024%
91	9.821	9.804	9.874	VV	333	9610	0.20%	0.018%
92	9.906	9.874	9.928	VV	3231	38800	0.80%	0.071%
93	9.960	9.928	10.052	VV	5471	179820	3.72%	0.330%
94	10.076	10.052	10.121	VV	2006	44207	0.92%	0.081%
95	10.143	10.121	10.164	VV	1127	17338	0.36%	0.032%
96	10.182	10.164	10.218	VV	503	10311	0.21%	0.019%
97	10.240	10.218	10.328	VV	259	7169	0.15%	0.013%
98	10.342	10.328	10.380	VV	173	3147	0.07%	0.006%
99	10.418	10.380	10.438	PV	768	11845	0.25%	0.022%
100	10.463	10.438	10.487	VV	677	12481	0.26%	0.023%
101	10.546	10.487	10.589	VV	1192	45673	0.95%	0.084%
102	10.604	10.589	10.644	VV	701	14458	0.30%	0.027%
103	10.697	10.644	10.720	VV	888	23793	0.49%	0.044%
104	10.740	10.720	10.758	VV	641	12956	0.27%	0.024%
105	10.817	10.758	10.861	VV	1607	47270	0.98%	0.087%
106	10.888	10.861	10.924	VV	1193	24857	0.51%	0.046%
107	10.944	10.924	10.998	VV	722	14845	0.31%	0.027%
108	11.037	10.998	11.068	VV	371	7730	0.16%	0.014%
109	11.093	11.068	11.148	VV	1263	31588	0.65%	0.058%
110	11.217	11.148	11.368	VV	1487	75479	1.56%	0.138%
111	11.390	11.368	11.421	VV	235	5047	0.10%	0.009%
112	11.453	11.421	11.481	VV	845	14114	0.29%	0.026%
113	11.522	11.481	11.561	VV	1731	30410	0.63%	0.056%
114	11.602	11.561	11.650	VV	2043	39662	0.82%	0.073%
115	11.679	11.650	11.698	PV	551	8370	0.17%	0.015%
116	11.717	11.698	11.773	VV	640	10543	0.22%	0.019%
117	11.837	11.773	11.941	VV	361736	4123394	85.40%	7.563%
118	11.964	11.941	12.054	VV	1447	77624	1.61%	0.142%
119	12.072	12.054	12.110	VV	894	17558	0.36%	0.032%
120	12.131	12.110	12.148	VV	427	5544	0.11%	0.010%
121	12.193	12.148	12.231	VV	1860	33284	0.69%	0.061%
122	12.246	12.231	12.268	VV	291	4202	0.09%	0.008%
123	12.288	12.268	12.344	VV	734	11975	0.25%	0.022%
124	12.389	12.344	12.420	PV	546	11719	0.24%	0.021%
125	12.465	12.420	12.528	VV	968	44723	0.93%	0.082%
126	12.563	12.528	12.598	VV	1110	33014	0.68%	0.061%
127	12.613	12.598	12.631	VV	679	11965	0.25%	0.022%
128	12.653	12.631	12.732	VV	692	27854	0.58%	0.051%
129	12.785	12.732	12.809	VV	1446	37282	0.77%	0.068%
130	12.835	12.809	12.871	VV	2491	45523	0.94%	0.083%
131	12.907	12.871	13.018	VV	8974	184130	3.81%	0.338%
132	13.059	13.018	13.077	PV	610	11789	0.24%	0.022%
133	13.094	13.077	13.141	VV	599	12950	0.27%	0.024%
134	13.161	13.141	13.181	VV	856	11104	0.23%	0.020%
135	13.207	13.181	13.241	VV	7124	115247	2.39%	0.211%
136	13.282	13.241	13.368	VV	256674	3239460	67.09%	5.942%
137	13.385	13.368	13.428	VV	854	22405	0.46%	0.041%
138	13.452	13.428	13.568	VV	2352	76726	1.59%	0.141%
139	13.606	13.568	13.631	VV	408	10952	0.23%	0.020%
140	13.675	13.631	13.738	VV	1009	30965	0.64%	0.057%
141	13.806	13.738	13.848	VV	1257	40993	0.85%	0.075%

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142	13.986	13.848	14.010	VV	1654	75031	1.55%	0.138%
143	14.036	14.010	14.061	VV	3005	50296	1.04%	0.092%
144	14.077	14.061	14.104	VV	1474	27796	0.58%	0.051%
145	14.122	14.104	14.211	VV	878	24292	0.50%	0.045%
146	14.255	14.211	14.288	PV	582	17114	0.35%	0.031%
147	14.306	14.288	14.316	VV	387	5415	0.11%	0.010%
148	14.331	14.316	14.354	VV	341	5338	0.11%	0.010%
149	14.399	14.354	14.421	PV	848	17931	0.37%	0.033%
150	14.470	14.421	14.504	VV	1394	47692	0.99%	0.087%
151	14.541	14.504	14.571	VV	1202	33846	0.70%	0.062%
152	14.601	14.571	14.624	VV	2550	44789	0.93%	0.082%
153	14.654	14.624	14.691	VV	1351	39470	0.82%	0.072%
154	14.737	14.691	14.761	VV	1132	37793	0.78%	0.069%
155	14.783	14.761	14.824	VV	1548	39901	0.83%	0.073%
156	14.847	14.824	14.867	VV	1203	22200	0.46%	0.041%
157	14.892	14.867	14.958	VV	1648	44119	0.91%	0.081%
158	14.983	14.958	15.024	VV	489	14412	0.30%	0.026%
159	15.103	15.024	15.121	VV	4872	99074	2.05%	0.182%
160	15.141	15.121	15.224	VV	5738	131213	2.72%	0.241%
161	15.260	15.224	15.282	VV	957	22371	0.46%	0.041%
162	15.302	15.282	15.354	VV	605	16066	0.33%	0.029%
163	15.450	15.354	15.504	PV	610	23596	0.49%	0.043%
164	15.544	15.504	15.638	PV	12374	347950	7.21%	0.638%
165	15.665	15.638	15.698	VV	1813	41494	0.86%	0.076%
166	15.727	15.698	15.753	VV	3520	52933	1.10%	0.097%
167	15.780	15.753	15.845	VV	1495	45061	0.93%	0.083%
168	15.931	15.845	16.014	VV	1053	62516	1.29%	0.115%
169	16.069	16.014	16.084	VV	812	23327	0.48%	0.043%
170	16.166	16.084	16.211	VV	1983	67479	1.40%	0.124%
171	16.228	16.211	16.260	VV	728	13487	0.28%	0.025%
172	16.299	16.260	16.318	VV	302	6836	0.14%	0.013%
173	16.366	16.318	16.394	PV	1027	19607	0.41%	0.036%
174	16.457	16.394	16.504	VV	2370	49411	1.02%	0.091%
175	16.569	16.504	16.598	VV	1780	46245	0.96%	0.085%
176	16.665	16.598	16.748	VV	6592	227562	4.71%	0.417%
177	16.802	16.748	16.838	VV	2277	61139	1.27%	0.112%
178	16.852	16.838	16.888	VV	834	13798	0.29%	0.025%
179	16.989	16.888	17.028	PV	4485	91572	1.90%	0.168%
180	17.055	17.028	17.093	VV	4582	94888	1.97%	0.174%
181	17.121	17.093	17.144	VV	2739	64827	1.34%	0.119%
182	17.157	17.144	17.228	VV	2373	54156	1.12%	0.099%
183	17.296	17.228	17.311	PV	986	17027	0.35%	0.031%
184	17.353	17.311	17.381	VV	1453	32219	0.67%	0.059%
185	17.444	17.381	17.467	PV	1196	35896	0.74%	0.066%
186	17.567	17.467	17.612	VV	3575	151511	3.14%	0.278%
187	17.673	17.612	17.696	VV	2191	69390	1.44%	0.127%
188	17.768	17.696	17.808	VV	1393	69267	1.43%	0.127%
189	17.901	17.808	17.916	PV	1885	57079	1.18%	0.105%
190	18.003	17.916	18.061	VV	5392	197746	4.10%	0.363%
191	18.143	18.061	18.216	VV	7488	314470	6.51%	0.577%
192	18.236	18.216	18.264	VV	4107	88824	1.84%	0.163%
193	18.339	18.264	18.358	VV	4912	175366	3.63%	0.322%
194	18.394	18.358	18.414	VV	6339	174383	3.61%	0.320%

					rteres			
195	18.436	18.414	18.484	VV	7690	220315	4.56%	0.404%
196	18.510	18.484	18.557	VV	8377	196350	4.07%	0.360%
197	18.594	18.557	18.638	VV	3415	135062	2.80%	0.248%
198	18.694	18.638	18.741	VV	6135	217243	4.50%	0.398%
199	18.834	18.741	18.880	VV	6794	251683	5.21%	0.462%
200	18.934	18.880	18.956	VV	6411	139721	2.89%	0.256%
201	18.983	18.956	19.024	VV	6488	175181	3.63%	0.321%
202	19.115	19.024	19.131	VV	5318	233647	4.84%	0.429%
203	19.259	19.131	19.308	VV	10473	798697	16.54%	1.465%
204	19.332	19.308	19.358	VV	8982	236481	4.90%	0.434%
205	19.389	19.358	19.406	VV	8456	230303	4.77%	0.422%
206	19.592	19.406	19.607	VV	12420	1230610	25.49%	2.257%
207	19.647	19.607	19.680	VV	13199	530208	10.98%	0.972%
208	19.741	19.680	19.758	VV	14287	601473	12.46%	1.103%
209	19.867	19.758	19.904	VV	17718	1359218	28.15%	2.493%
210	19.979	19.904	20.008	VV	19065	1105102	22.89%	2.027%
211	20.041	20.008	20.099	VV	19699	1014638	21.01%	1.861%
212	20.160	20.099	20.184	VV	19325	953592	19.75%	1.749%
213	20.266	20.184	20.289	VV	27062	1471005	30.47%	2.698%
214	20.382	20.289	20.400	VV	29704	1839611	38.10%	3.374%
215	20.430	20.400	20.451	VV	29280	892209	18.48%	1.636%
216	20.660	20.451	20.694	VV	36748	4828367	100.00%	8.856%
217	20.760	20.694	20.794	VV	36154	2131051	44.14%	3.909%
218	20.879	20.794	20.984	VV	38592	4090543	84.72%	7.503%
219	21.044	20.984	21.071	VV	32477	1648366	34.14%	3.023%
220	21.100	21.071	21.127	VV	31531	1049499	21.74%	1.925%
221	21.163	21.127	21.248	VV	30508	2056573	42.59%	3.772%
222	21.376	21.248	21.398	VV	27182	2349783	48.67%	4.310%
223	21.449	21.398	21.474	VV	27673	1239526	25.67%	2.273%
224	21.508	21.474	21.618	VV	26139	1926345	39.90%	3.533%
225	21.741	21.618	21.796	VV	20722	2059665	42.66%	3.778%
226	21.829	21.796	22.041	VV	19046	2160924	44.75%	3.963%
227	22.211	22.041	22.388	VV	9867	1510298	31.28%	2.770%
Sum of corrected areas:					54520648			

Aliphatic EPH 051425.M Wed Jun 04 04:38:22 2025

Report of Analysis

Client:	G Environmental	Date Collected:	06/02/25
Project:	DeCamp	Date Received:	06/02/25
Client Sample ID:	D4	SDG No.:	Q2179
Lab Sample ID:	Q2179-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	91.6
Sample Wt/Vol:	30.04	Units:	g
Soil Aliquot Vol:			uL
Prep Method :		Test:	EPH_F2

Prep Date :	Date Analyzed :	Prep Batch ID
06/03/25 10:00	06/03/25 20:57	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	6.48		1	0.99	4.36	mg/kg	FE054163.D
Total EPH	Total EPH	6.48			0.99	4.36	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 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:	G Environmental	Date Collected:	06/02/25
Project:	DeCamp	Date Received:	06/02/25
Client Sample ID:	D4	SDG No.:	Q2179
Lab Sample ID:	Q2179-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	91.6
Sample Wt/Vol:	30.04	Units:	g
Soil Aliquot Vol:		Final Vol:	2000 uL
Prep Method :		Test:	EPH_F2

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE054163.D	1	06/03/25	06/03/25	PB168239

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	6.48		0.99	4.36	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	44.2	E	1.29	2.18	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	31.0		40 - 140	62%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	27.9		40 - 140	56%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2179-02	Acq On:	03 Jun 2025 20:57
Client Sample ID:	D4	Operator:	YP\AJ
Data file:	FE054163.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	3.085	6.730	488884	3.606	300	ug/ml
Aliphatic C12-C16	6.731	10.178	1245227	9.228	200	ug/ml
Aliphatic C16-C21	10.179	13.552	3691389	27.984	300	ug/ml
Aliphatic C21-C28	13.553	17.220	6013115	48.424	400	ug/ml
Aliphatic C28-C40	17.221	22.091	70244617	608.543	600	ug/ml
Aliphatic EPH	3.085	22.091	81683232	697.785		ug/ml
ortho-Terphenyl (SURR)	11.838	11.838	4535667	27.91		ug/ml
1-chlorooctadecane (SURR)	13.283	13.283	3675264	31		ug/ml
Aliphatic C9-C28	3.085	17.220	11438615	89.242	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054163.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 20:57
 Operator : YP\AJ
 Sample : Q2179-02
 Misc :
 ALS Vial : 20 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 D4

Integration File: autoint1.e
 Quant Time: Jun 04 02:55:04 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 12:15:41 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)	11.838	4535667	27.910 ug/ml
Spiked Amount	50.000	Recovery	= 55.82%
12) S 1-chlorooctadecane (S...	13.283	3675264	31.002 ug/ml
Spiked Amount	50.000	Recovery	= 62.00%

Target Compounds

(f)=RT Delta > 1/2 Window

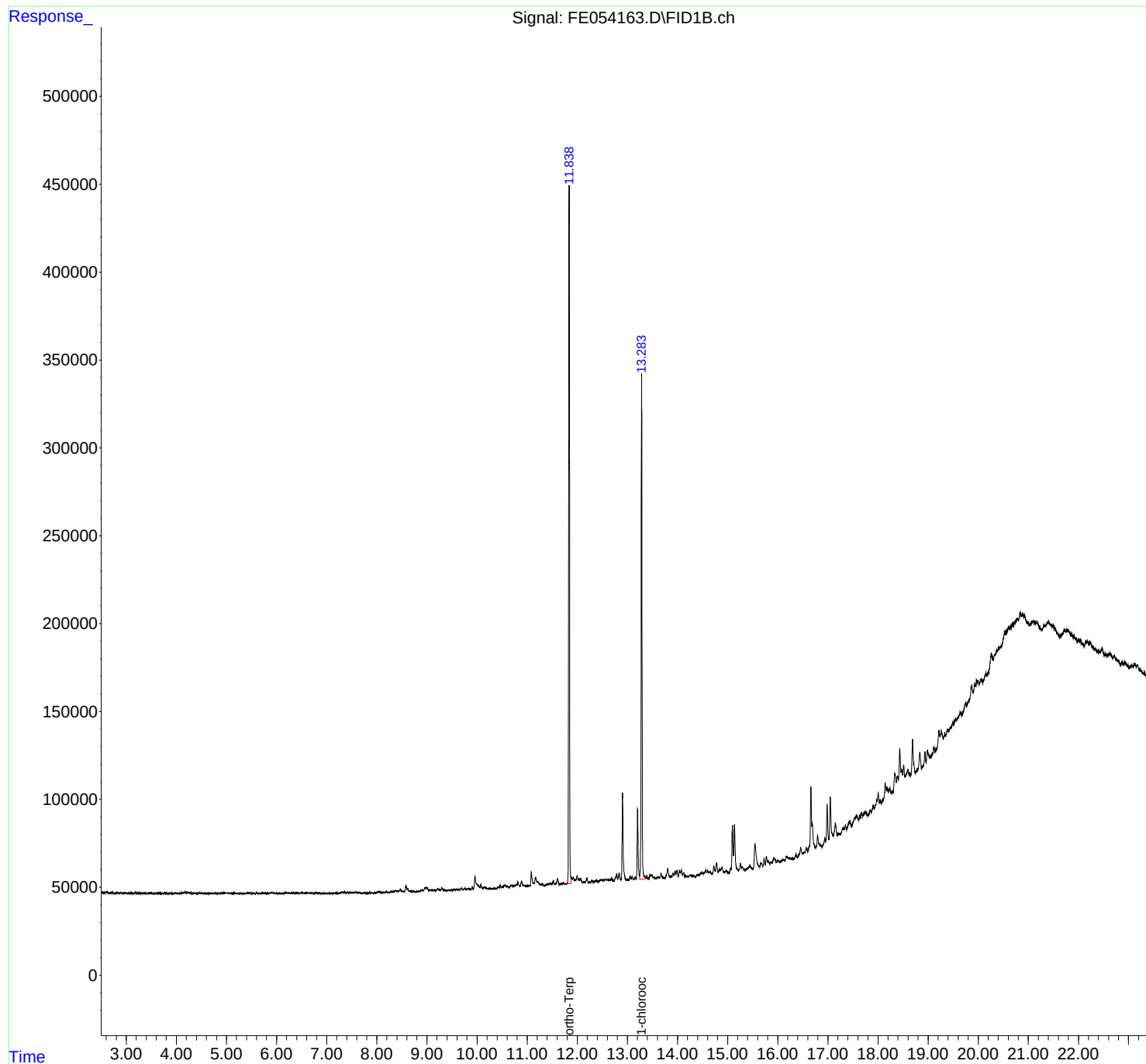
(m)=manual int.

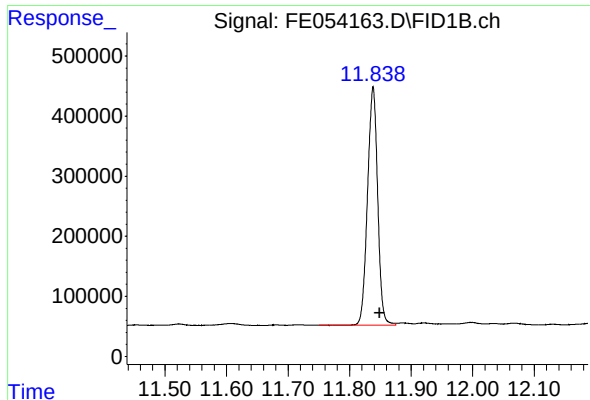
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054163.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 20:57
Operator : YP\AJ
Sample : Q2179-02
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
D4

Integration File: autoint1.e
Quant Time: Jun 04 02:55:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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

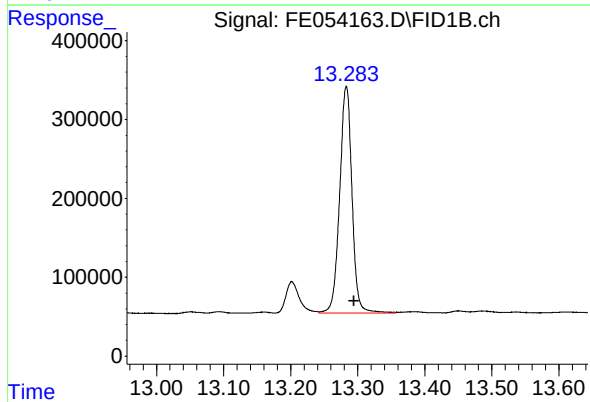




#9 ortho-Terphenyl (SURR)

R.T.: 11.838 min
Delta R.T.: -0.011 min
Response: 4535667
Conc: 27.91 ug/ml

Instrument :
FID_E
ClientSampleId :
D4



#12 1-chlorooctadecane (SURR)

R.T.: 13.283 min
Delta R.T.: -0.012 min
Response: 3675264
Conc: 31.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054163.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 20:57
 Sample : Q2179-02
 Misc :
 ALS Vial : 20 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	2.817	2.804	2.849	PV	176	2735	0.06%	0.003%
2	2.878	2.849	2.906	PV	374	5340	0.12%	0.006%
3	2.915	2.906	2.921	PV	113	603	0.01%	0.001%
4	2.942	2.921	3.022	VV	211	6956	0.15%	0.008%
5	3.041	3.022	3.082	VV	168	2766	0.06%	0.003%
6	3.092	3.082	3.138	PV	90	1640	0.04%	0.002%
7	3.144	3.138	3.154	VV	85	375	0.01%	0.000%
8	3.183	3.154	3.243	PV	633	9669	0.21%	0.010%
9	3.250	3.243	3.291	VV	118	1526	0.03%	0.002%
10	3.317	3.291	3.378	VV	121	2796	0.06%	0.003%
11	3.426	3.378	3.506	VV	172	6712	0.15%	0.007%
12	3.515	3.506	3.598	VV	170	4979	0.11%	0.005%
13	3.649	3.598	3.671	PV	262	5195	0.11%	0.006%
14	3.691	3.671	3.699	VV	172	1705	0.04%	0.002%
15	3.711	3.699	3.761	VV	132	2112	0.05%	0.002%
16	3.775	3.761	3.836	VV	285	8488	0.19%	0.009%
17	3.876	3.836	3.898	VV	292	4917	0.11%	0.005%
18	3.908	3.898	3.967	VV	109	3596	0.08%	0.004%
19	3.982	3.967	4.005	VV	307	3893	0.09%	0.004%
20	4.014	4.005	4.035	VV	178	1905	0.04%	0.002%
21	4.171	4.035	4.208	VV	917	38943	0.85%	0.042%
22	4.224	4.208	4.298	VV	513	22507	0.49%	0.024%
23	4.305	4.298	4.349	VV	337	8381	0.18%	0.009%
24	4.359	4.349	4.399	VV	225	6337	0.14%	0.007%
25	4.411	4.399	4.428	VV	211	2836	0.06%	0.003%
26	4.448	4.428	4.470	VV	750	10101	0.22%	0.011%
27	4.487	4.470	4.551	VV	374	10948	0.24%	0.012%
28	4.573	4.551	4.589	VV	259	4022	0.09%	0.004%
29	4.627	4.589	4.661	VV	318	8330	0.18%	0.009%
30	4.726	4.661	4.742	VV	284	9874	0.22%	0.011%
31	4.748	4.742	4.754	VV	205	1414	0.03%	0.002%
32	4.764	4.754	4.832	VV	284	8685	0.19%	0.009%
33	4.844	4.832	4.858	VV	186	2076	0.05%	0.002%
34	4.870	4.858	4.898	VV	205	3861	0.08%	0.004%
35	4.961	4.898	4.999	VV	514	22356	0.49%	0.024%
36	5.007	4.999	5.025	VV	357	5494	0.12%	0.006%

					rteres			
37	5.033	5.025	5.051	VV	345	4178	0.09%	0.005%
38	5.067	5.051	5.100	VV	242	5983	0.13%	0.006%
39	5.115	5.100	5.144	VV	288	5786	0.13%	0.006%
40	5.161	5.144	5.189	VV	295	5562	0.12%	0.006%
41	5.202	5.189	5.224	VV	218	2843	0.06%	0.003%
42	5.241	5.224	5.255	VV	187	2497	0.05%	0.003%
43	5.267	5.255	5.278	VV	193	2130	0.05%	0.002%
44	5.284	5.278	5.302	VV	189	1714	0.04%	0.002%
45	5.310	5.302	5.324	VV	88	885	0.02%	0.001%
46	5.356	5.324	5.375	VV	134	3347	0.07%	0.004%
47	5.382	5.375	5.394	VV	146	1406	0.03%	0.002%
48	5.432	5.394	5.530	VV	447	19954	0.44%	0.022%
49	5.542	5.530	5.578	VV	184	2362	0.05%	0.003%
50	5.596	5.578	5.651	PV	568	12133	0.27%	0.013%
51	5.655	5.651	5.674	VV	160	1748	0.04%	0.002%
52	5.712	5.674	5.761	VV	499	15981	0.35%	0.017%
53	5.768	5.761	5.774	VV	309	2237	0.05%	0.002%
54	5.786	5.774	5.838	VV	346	9150	0.20%	0.010%
55	5.882	5.838	5.906	VV	546	14464	0.32%	0.016%
56	5.927	5.906	5.964	VV	443	13493	0.30%	0.015%
57	5.974	5.964	6.042	VV	352	9430	0.21%	0.010%
58	6.054	6.042	6.100	VV	179	4700	0.10%	0.005%
59	6.118	6.100	6.135	VV	211	2686	0.06%	0.003%
60	6.188	6.135	6.250	VV	632	26743	0.59%	0.029%
61	6.270	6.250	6.303	VV	418	10030	0.22%	0.011%
62	6.315	6.303	6.323	VV	369	3708	0.08%	0.004%
63	6.339	6.323	6.381	VV	601	13224	0.29%	0.014%
64	6.389	6.381	6.413	VV	332	5821	0.13%	0.006%
65	6.426	6.413	6.464	VV	362	8061	0.18%	0.009%
66	6.493	6.464	6.509	VV	489	11131	0.24%	0.012%
67	6.519	6.509	6.585	VV	499	15276	0.33%	0.017%
68	6.591	6.585	6.613	VV	291	4168	0.09%	0.005%
69	6.632	6.613	6.674	VV	501	11960	0.26%	0.013%
70	6.710	6.674	6.748	VV	298	8420	0.18%	0.009%
71	6.781	6.748	6.806	VV	473	8502	0.19%	0.009%
72	6.814	6.806	6.848	VV	263	3390	0.07%	0.004%
73	6.861	6.848	6.872	VV	102	1096	0.02%	0.001%
74	6.891	6.872	6.904	VV	115	1227	0.03%	0.001%
75	6.915	6.904	6.936	VV	147	1558	0.03%	0.002%
76	6.962	6.936	7.011	PV	83	2745	0.06%	0.003%
77	7.043	7.011	7.070	VV	119	2806	0.06%	0.003%
78	7.087	7.070	7.106	VV	123	1635	0.04%	0.002%
79	7.205	7.106	7.224	VV	296	9070	0.20%	0.010%
80	7.230	7.224	7.238	VV	112	960	0.02%	0.001%
81	7.288	7.238	7.304	VV	623	14691	0.32%	0.016%
82	7.315	7.304	7.334	VV	651	9890	0.22%	0.011%
83	7.351	7.334	7.387	VV	845	16495	0.36%	0.018%
84	7.412	7.387	7.444	VV	652	15031	0.33%	0.016%
85	7.460	7.444	7.504	VV	487	14453	0.32%	0.016%
86	7.525	7.504	7.568	VV	372	12448	0.27%	0.013%
87	7.581	7.568	7.636	VV	634	15988	0.35%	0.017%
88	7.650	7.636	7.683	VV	396	7129	0.16%	0.008%
89	7.702	7.683	7.718	VV	167	3222	0.07%	0.003%

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90	7.724	7.718	7.733	VV	175	994	0.02%	0.001%
91	7.755	7.733	7.827	VV	290	5856	0.13%	0.006%
92	7.863	7.827	7.937	VV	610	13060	0.29%	0.014%
93	7.955	7.937	7.973	PV	226	2625	0.06%	0.003%
94	8.035	7.973	8.093	VV	937	28047	0.61%	0.030%
95	8.113	8.093	8.138	VV	381	7457	0.16%	0.008%
96	8.191	8.138	8.241	VV	678	22438	0.49%	0.024%
97	8.282	8.241	8.311	VV	921	19995	0.44%	0.022%
98	8.385	8.311	8.411	VV	1056	44225	0.97%	0.048%
99	8.435	8.411	8.444	VV	743	14262	0.31%	0.015%
100	8.467	8.444	8.551	VV	1669	51799	1.14%	0.056%
101	8.580	8.551	8.700	VV	3808	120223	2.64%	0.130%
102	8.716	8.700	8.771	VV	384	9241	0.20%	0.010%
103	8.791	8.771	8.808	VV	342	3524	0.08%	0.004%
104	8.846	8.808	8.859	PV	368	6784	0.15%	0.007%
105	8.887	8.859	8.903	VV	955	18287	0.40%	0.020%
106	8.916	8.903	8.929	VV	851	11440	0.25%	0.012%
107	8.981	8.929	8.994	VV	2571	68316	1.50%	0.074%
108	9.003	8.994	9.064	VV	2185	46544	1.02%	0.050%
109	9.083	9.064	9.108	VV	789	16377	0.36%	0.018%
110	9.115	9.108	9.131	VV	605	7629	0.17%	0.008%
111	9.152	9.131	9.174	VV	678	13690	0.30%	0.015%
112	9.210	9.174	9.271	VV	1220	44364	0.97%	0.048%
113	9.295	9.271	9.323	VV	1777	30667	0.67%	0.033%
114	9.335	9.323	9.399	VV	561	14679	0.32%	0.016%
115	9.447	9.399	9.462	PV	507	9756	0.21%	0.011%
116	9.487	9.462	9.511	VV	676	12188	0.27%	0.013%
117	9.538	9.511	9.563	VV	605	12204	0.27%	0.013%
118	9.591	9.563	9.610	VV	583	11777	0.26%	0.013%
119	9.629	9.610	9.650	VV	569	9297	0.20%	0.010%
120	9.682	9.650	9.728	VV	1342	34106	0.75%	0.037%
121	9.753	9.728	9.778	VV	1045	20010	0.44%	0.022%
122	9.821	9.778	9.871	VV	852	26866	0.59%	0.029%
123	9.906	9.871	9.926	VV	1767	24920	0.55%	0.027%
124	9.959	9.926	10.053	VV	7622	233332	5.12%	0.253%
125	10.076	10.053	10.123	VV	2948	62333	1.37%	0.067%
126	10.143	10.123	10.164	VV	1464	23579	0.52%	0.026%
127	10.183	10.164	10.215	VV	809	15145	0.33%	0.016%
128	10.246	10.215	10.317	VV	368	13974	0.31%	0.015%
129	10.343	10.317	10.361	PV	381	5056	0.11%	0.005%
130	10.371	10.361	10.381	VV	171	1844	0.04%	0.002%
131	10.421	10.381	10.441	VV	1085	20082	0.44%	0.022%
132	10.464	10.441	10.487	VV	1685	28745	0.63%	0.031%
133	10.550	10.487	10.586	VV	1752	65367	1.43%	0.071%
134	10.608	10.586	10.634	VV	1221	24306	0.53%	0.026%
135	10.697	10.634	10.714	VV	1384	43612	0.96%	0.047%
136	10.742	10.714	10.759	VV	1285	28784	0.63%	0.031%
137	10.780	10.759	10.796	VV	1642	29610	0.65%	0.032%
138	10.817	10.796	10.857	VV	2766	57584	1.26%	0.062%
139	10.888	10.857	10.928	VV	3403	71388	1.57%	0.077%
140	10.944	10.928	10.997	VV	1175	29851	0.65%	0.032%
141	11.008	10.997	11.018	VV	505	5689	0.12%	0.006%

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142	11.038	11.018	11.058	VV	755	14247	0.31%	0.015%
143	11.085	11.058	11.142	VV	8234	170563	3.74%	0.185%
144	11.166	11.142	11.204	VV	5141	124407	2.73%	0.135%
145	11.215	11.204	11.261	VV	2747	60077	1.32%	0.065%
146	11.269	11.261	11.338	VV	1143	33979	0.74%	0.037%
147	11.350	11.338	11.364	VV	312	4332	0.09%	0.005%
148	11.421	11.364	11.431	VV	770	23537	0.52%	0.025%
149	11.454	11.431	11.476	VV	1428	27232	0.60%	0.029%
150	11.523	11.476	11.556	VV	2867	60453	1.33%	0.065%
151	11.607	11.556	11.660	VV	3553	87822	1.93%	0.095%
152	11.680	11.660	11.697	VV	1036	13813	0.30%	0.015%
153	11.717	11.697	11.767	VV	1191	27052	0.59%	0.029%
154	11.838	11.767	11.875	VV	395757	4561252	100.00%	4.938%
155	11.886	11.875	11.904	VV	4110	60591	1.33%	0.066%
156	11.921	11.904	11.948	VV	3982	78161	1.71%	0.085%
157	11.998	11.948	12.020	VV	4660	126024	2.76%	0.136%
158	12.035	12.020	12.049	VV	2840	41531	0.91%	0.045%
159	12.067	12.049	12.110	VV	3204	64769	1.42%	0.070%
160	12.131	12.110	12.150	VV	1365	19495	0.43%	0.021%
161	12.192	12.150	12.231	VV	3033	65559	1.44%	0.071%
162	12.250	12.231	12.263	VV	545	8833	0.19%	0.010%
163	12.290	12.263	12.342	VV	1456	38125	0.84%	0.041%
164	12.365	12.342	12.420	VV	1318	40437	0.89%	0.044%
165	12.458	12.420	12.479	VV	1620	39103	0.86%	0.042%
166	12.494	12.479	12.528	VV	1591	38589	0.85%	0.042%
167	12.561	12.528	12.590	VV	1672	48456	1.06%	0.052%
168	12.608	12.590	12.651	VV	1685	45577	1.00%	0.049%
169	12.678	12.651	12.727	VV	1760	48215	1.06%	0.052%
170	12.784	12.727	12.808	VV	4210	102329	2.24%	0.111%
171	12.835	12.808	12.874	VV	4506	98849	2.17%	0.107%
172	12.903	12.874	12.981	VV	50008	749722	16.44%	0.812%
173	12.989	12.981	13.021	VV	836	14790	0.32%	0.016%
174	13.052	13.021	13.075	VV	2454	43510	0.95%	0.047%
175	13.093	13.075	13.136	VV	2549	48972	1.07%	0.053%
176	13.160	13.136	13.175	VV	1877	29812	0.65%	0.032%
177	13.202	13.175	13.242	VV	40466	573189	12.57%	0.621%
178	13.283	13.242	13.359	VV	289751	3711981	81.38%	4.019%
179	13.384	13.359	13.427	VV	2009	51839	1.14%	0.056%
180	13.451	13.427	13.468	VV	3012	45717	1.00%	0.049%
181	13.486	13.468	13.514	VV	2665	54005	1.18%	0.058%
182	13.536	13.514	13.568	VV	1445	26639	0.58%	0.029%
183	13.611	13.568	13.643	VV	1238	33848	0.74%	0.037%
184	13.671	13.643	13.737	VV	3086	72757	1.60%	0.079%
185	13.803	13.737	13.847	VV	5311	137448	3.01%	0.149%
186	13.864	13.847	13.887	VV	1248	23266	0.51%	0.025%
187	13.911	13.887	13.928	VV	2789	44783	0.98%	0.048%
188	13.949	13.928	13.968	VV	4005	65946	1.45%	0.071%
189	13.987	13.968	14.012	VV	4421	74520	1.63%	0.081%
190	14.037	14.012	14.055	VV	4269	72705	1.59%	0.079%
191	14.075	14.055	14.100	VV	4258	80808	1.77%	0.087%
192	14.119	14.100	14.164	VV	2797	56006	1.23%	0.061%
193	14.178	14.164	14.198	VV	663	11151	0.24%	0.012%
194	14.248	14.198	14.286	VV	1256	40599	0.89%	0.044%

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195	14.307	14.286	14.355	VV	801	19355	0.42%	0.021%
196	14.399	14.355	14.421	PV	1149	23933	0.52%	0.026%
197	14.472	14.421	14.497	VV	1749	57347	1.26%	0.062%
198	14.513	14.497	14.528	VV	1415	25661	0.56%	0.028%
199	14.561	14.528	14.583	VV	3183	72371	1.59%	0.078%
200	14.601	14.583	14.621	VV	2719	47119	1.03%	0.051%
201	14.641	14.621	14.688	VV	2051	56084	1.23%	0.061%
202	14.723	14.688	14.751	VV	4583	92165	2.02%	0.100%
203	14.778	14.751	14.815	VV	6519	130129	2.85%	0.141%
204	14.841	14.815	14.857	VV	2650	51003	1.12%	0.055%
205	14.881	14.857	14.928	VV	3276	92127	2.02%	0.100%
206	14.935	14.928	14.954	VV	1034	13109	0.29%	0.014%
207	14.973	14.954	15.029	VV	1519	32644	0.72%	0.035%
208	15.059	15.029	15.071	PV	2113	31882	0.70%	0.035%
209	15.094	15.071	15.114	VV	26608	384487	8.43%	0.416%
210	15.134	15.114	15.220	VV	27064	517757	11.35%	0.561%
211	15.253	15.220	15.274	VV	4338	72759	1.60%	0.079%
212	15.291	15.274	15.354	VV	2363	54885	1.20%	0.059%
213	15.442	15.354	15.508	VV	2686	95849	2.10%	0.104%
214	15.544	15.508	15.634	PV	14061	401572	8.80%	0.435%
215	15.663	15.634	15.701	VV	2299	56928	1.25%	0.062%
216	15.726	15.701	15.748	VV	4341	62870	1.38%	0.068%
217	15.772	15.748	15.797	VV	5311	92619	2.03%	0.100%
218	15.810	15.797	15.844	VV	2558	48678	1.07%	0.053%
219	15.867	15.844	15.887	VV	1301	26147	0.57%	0.028%
220	15.924	15.887	15.984	VV	3137	116849	2.56%	0.127%
221	16.000	15.984	16.040	VV	1523	35379	0.78%	0.038%
222	16.061	16.040	16.078	VV	725	13579	0.30%	0.015%
223	16.106	16.078	16.144	VV	1099	30348	0.67%	0.033%
224	16.169	16.144	16.217	VV	2312	68121	1.49%	0.074%
225	16.232	16.217	16.263	VV	1395	25986	0.57%	0.028%
226	16.299	16.263	16.314	VV	567	12486	0.27%	0.014%
227	16.365	16.314	16.394	PV	2119	39486	0.87%	0.043%
228	16.458	16.394	16.494	PV	4810	120881	2.65%	0.131%
229	16.529	16.494	16.536	VV	1456	29048	0.64%	0.031%
230	16.566	16.536	16.598	VV	3183	81855	1.79%	0.089%
231	16.660	16.598	16.756	VV	37038	891734	19.55%	0.965%
232	16.795	16.756	16.848	VV	7424	170586	3.74%	0.185%
233	16.855	16.848	16.878	VV	1398	15190	0.33%	0.016%
234	16.939	16.878	16.957	PV	3743	71646	1.57%	0.078%
235	16.984	16.957	17.019	VV	22087	335903	7.36%	0.364%
236	17.047	17.019	17.101	VV	25101	448050	9.82%	0.485%
237	17.149	17.101	17.181	VV	8338	210764	4.62%	0.228%
238	17.193	17.181	17.208	VV	1860	21907	0.48%	0.024%
239	17.233	17.208	17.257	VV	893	20236	0.44%	0.022%
240	17.294	17.257	17.307	VV	2888	50097	1.10%	0.054%
241	17.320	17.307	17.331	VV	2116	28951	0.63%	0.031%
242	17.353	17.331	17.371	VV	3517	52158	1.14%	0.056%
243	17.437	17.371	17.473	VV	3796	142577	3.13%	0.154%
244	17.570	17.473	17.615	VV	4819	257451	5.64%	0.279%
245	17.635	17.615	17.651	VV	3881	55026	1.21%	0.060%
246	17.673	17.651	17.695	VV	4596	88763	1.95%	0.096%

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247	17.738	17.695	17.750	VV	3157	93064	2.04%	0.101%
248	17.762	17.750	17.794	VV	3162	52241	1.15%	0.057%
249	17.801	17.794	17.811	VV	1191	7649	0.17%	0.008%
250	17.848	17.811	17.868	PV	2595	58038	1.27%	0.063%
251	17.904	17.868	17.928	VV	4351	95857	2.10%	0.104%
252	18.004	17.928	18.028	VV	9516	307569	6.74%	0.333%
253	18.044	18.028	18.074	VV	4822	97594	2.14%	0.106%
254	18.144	18.074	18.168	VV	12378	357891	7.85%	0.387%
255	18.179	18.168	18.214	VV	9388	218253	4.78%	0.236%
256	18.232	18.214	18.258	VV	7412	168874	3.70%	0.183%
257	18.275	18.258	18.294	VV	5225	106341	2.33%	0.115%
258	18.336	18.294	18.366	VV	14109	415041	9.10%	0.449%
259	18.389	18.366	18.407	VV	11495	250083	5.48%	0.271%
260	18.434	18.407	18.463	VV	26581	585175	12.83%	0.634%
261	18.473	18.463	18.492	VV	13615	218901	4.80%	0.237%
262	18.512	18.492	18.553	VV	15642	409765	8.98%	0.444%
263	18.596	18.553	18.619	VV	11440	385932	8.46%	0.418%
264	18.630	18.619	18.651	VV	8180	153218	3.36%	0.166%
265	18.688	18.651	18.744	VV	26983	753996	16.53%	0.816%
266	18.833	18.744	18.874	VV	16433	747814	16.39%	0.810%
267	18.936	18.874	18.958	VV	15022	483293	10.60%	0.523%
268	18.986	18.958	19.052	VV	14833	644460	14.13%	0.698%
269	19.112	19.052	19.134	VV	14120	572605	12.55%	0.620%
270	19.217	19.134	19.239	VV	21915	958070	21.00%	1.037%
271	19.265	19.239	19.308	VV	20534	743803	16.31%	0.805%
272	19.332	19.308	19.351	VV	18174	434820	9.53%	0.471%
273	19.385	19.351	19.406	VV	19100	589449	12.92%	0.638%
274	19.489	19.406	19.504	VV	20911	1127570	24.72%	1.221%
275	19.653	19.504	19.672	VV	23925	2210041	48.45%	2.393%
276	19.748	19.672	19.768	VV	27396	1411595	30.95%	1.528%
277	19.869	19.768	19.900	VV	34352	2317682	50.81%	2.509%
278	19.931	19.900	19.944	VV	34623	875058	19.18%	0.947%
279	19.975	19.944	19.985	VV	35472	835668	18.32%	0.905%
280	19.996	19.985	20.028	VV	35343	874915	19.18%	0.947%
281	20.060	20.028	20.088	VV	34561	1224343	26.84%	1.325%
282	20.152	20.088	20.178	VV	36304	1862033	40.82%	2.016%
283	20.199	20.178	20.207	VV	36072	620013	13.59%	0.671%
284	20.265	20.207	20.301	VV	45817	2327270	51.02%	2.520%
285	20.382	20.301	20.390	VV	45545	2327867	51.04%	2.520%
286	20.422	20.390	20.444	VV	46466	1490587	32.68%	1.614%
287	20.535	20.444	20.544	VV	52744	2928172	64.20%	3.170%
288	20.564	20.544	20.574	VV	53036	941577	20.64%	1.019%
289	20.603	20.574	20.635	VV	53821	1919741	42.09%	2.078%
290	20.655	20.635	20.665	VV	53561	978020	21.44%	1.059%
291	20.685	20.665	20.706	VV	54320	1319172	28.92%	1.428%
292	20.770	20.706	20.798	VV	55474	2990272	65.56%	3.237%
293	20.830	20.798	20.853	VV	58278	1870498	41.01%	2.025%
294	20.887	20.853	20.911	VV	56378	1928110	42.27%	2.087%
295	20.926	20.911	20.991	VV	55047	2483497	54.45%	2.689%
296	20.997	20.991	21.017	VV	49248	767242	16.82%	0.831%
297	21.031	21.017	21.038	VV	47660	577714	12.67%	0.625%
298	21.065	21.038	21.080	VV	48126	1208702	26.50%	1.309%
299	21.096	21.080	21.124	VV	48085	1258903	27.60%	1.363%

					rteres			
300	21.161	21.124	21.266	VV	46891	3721826	81.60%	4.029%
301	21.314	21.266	21.336	VV	41831	1718538	37.68%	1.861%
302	21.408	21.336	21.438	VV	42087	2486994	54.52%	2.692%
303	21.452	21.438	21.475	VV	39202	875528	19.19%	0.948%
304	21.490	21.475	21.644	VV	38550	3364791	73.77%	3.643%
305	21.672	21.644	21.687	VV	29960	770408	16.89%	0.834%
306	21.720	21.687	21.738	VV	31175	917888	20.12%	0.994%
307	21.741	21.738	21.752	VV	30273	250872	5.50%	0.272%
308	21.762	21.752	21.771	VV	29929	343681	7.53%	0.372%
309	21.783	21.771	21.856	VV	29685	1416823	31.06%	1.534%
310	21.868	21.856	21.891	VV	25652	534344	11.71%	0.578%
311	21.907	21.891	21.919	VV	24128	397214	8.71%	0.430%
312	21.923	21.919	21.941	VV	22953	293231	6.43%	0.317%
313	21.952	21.941	21.981	VV	22202	498679	10.93%	0.540%
314	21.997	21.981	22.030	VV	20665	582037	12.76%	0.630%
315	22.048	22.030	22.108	VV	19192	790446	17.33%	0.856%
316	22.153	22.108	22.231	VV	16074	1101248	24.14%	1.192%
317	22.240	22.231	22.283	VV	13973	384902	8.44%	0.417%
318	22.295	22.283	22.324	VV	10796	233232	5.11%	0.253%
319	22.340	22.324	22.368	VV	8449	196212	4.30%	0.212%
320	22.381	22.368	22.394	VV	6481	96668	2.12%	0.105%
321	22.405	22.394	22.447	VV	5973	169306	3.71%	0.183%
322	22.476	22.447	22.534	VV	5568	191087	4.19%	0.207%
323	22.542	22.534	22.571	VV	1609	20961	0.46%	0.023%
Sum of corrected areas:						92368484		

Aliphatic EPH 051425.M Wed Jun 04 04:39:09 2025

Report of Analysis

Client:	G Environmental	Date Collected:	06/02/25
Project:	DeCamp	Date Received:	06/02/25
Client Sample ID:	D5	SDG No.:	Q2179
Lab Sample ID:	Q2179-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	93.8
Sample Wt/Vol:	30.01	Units:	g
Soil Aliquot Vol:		Final Vol:	2000 uL
Prep Method :		Test:	EPH_F2

Prep Date :	Date Analyzed :	Prep Batch ID
06/03/25 10:00	06/03/25 21:27	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	3.34	J	1	0.97	4.27	mg/kg	FE054164.D
Total EPH	Total EPH	3.34	J		0.97	4.27	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 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:	G Environmental	Date Collected:	06/02/25
Project:	DeCamp	Date Received:	06/02/25
Client Sample ID:	D5	SDG No.:	Q2179
Lab Sample ID:	Q2179-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	93.8
Sample Wt/Vol:	30.01	Units:	g
Soil Aliquot Vol:		Final Vol:	2000 uL
Prep Method :		Test:	EPH_F2

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE054164.D	1	06/03/25	06/03/25	PB168239

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	3.34	J	0.97	4.27	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	41.0		1.26	2.13	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	30.1		40 - 140	60%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	27.6		40 - 140	55%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2179-03	Acq On:	03 Jun 2025 21:27
Client Sample ID:	D5	Operator:	YP\AJ
Data file:	FE054164.D	Misc:	
Instrument:	FID_E	ALS Vial:	21
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.085	6.730	402110	2.966	300	ug/ml
Aliphatic C12-C16	6.731	10.178	1277067	9.464	200	ug/ml
Aliphatic C16-C21	10.179	13.552	1622918	12.303	300	ug/ml
Aliphatic C21-C28	13.553	17.220	2766106	22.276	400	ug/ml
Aliphatic C28-C40	17.221	22.091	66633456	577.259	600	ug/ml
Aliphatic EPH	3.085	22.091	72701657	624.268		ug/ml
ortho-Terphenyl (SURR)	11.837	11.837	4492472	27.64		ug/ml
1-chlorooctadecane (SURR)	13.282	13.282	3574630	30.15		ug/ml
Aliphatic C9-C28	3.085	17.220	6068201	47.009	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054164.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 21:27
 Operator : YP\AJ
 Sample : Q2179-03
 Misc :
 ALS Vial : 21 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 D5

Integration File: autoint1.e
 Quant Time: Jun 04 02:55:20 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 12:15:41 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)	11.837	4492472	27.644 ug/ml
Spiked Amount	50.000	Recovery	= 55.29%
12) S 1-chlorooctadecane (S...	13.282	3574630	30.153 ug/ml
Spiked Amount	50.000	Recovery	= 60.31%

Target Compounds

(f)=RT Delta > 1/2 Window

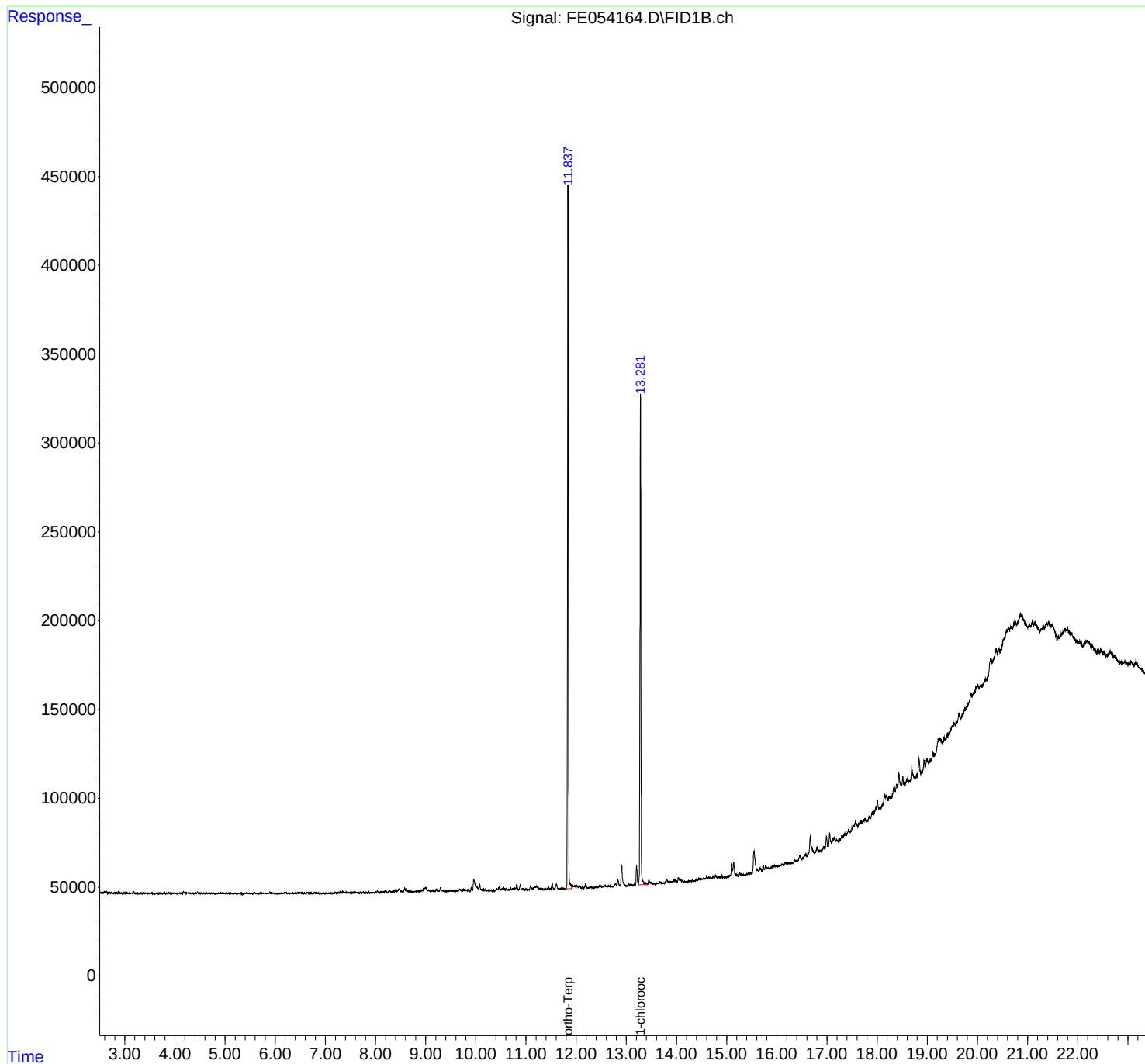
(m)=manual int.

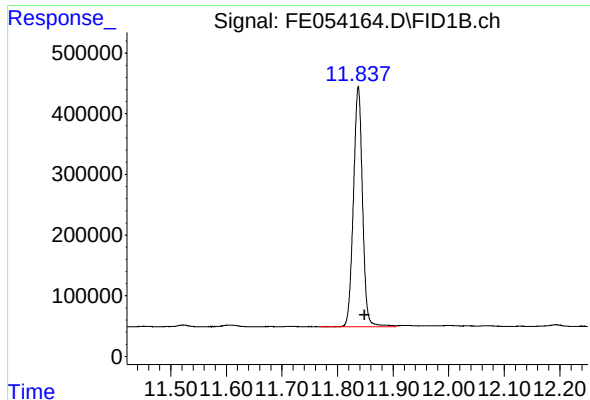
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054164.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 21:27
Operator : YP\AJ
Sample : Q2179-03
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
D5

Integration File: autoint1.e
Quant Time: Jun 04 02:55:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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

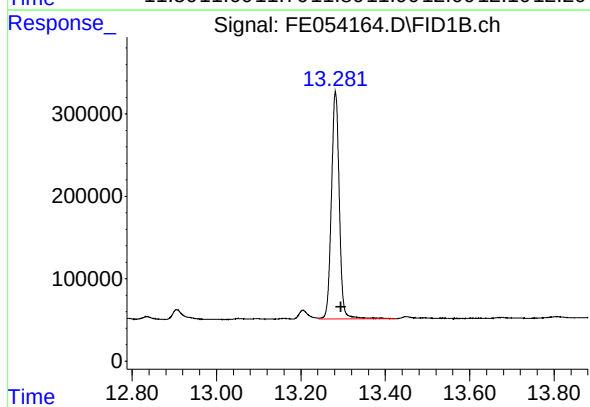




#9 ortho-Terphenyl (SURR)

R.T.: 11.837 min
Delta R.T.: -0.011 min
Response: 4492472
Conc: 27.64 ug/ml

Instrument :
FID_E
ClientSampleId :
D5



#12 1-chlorooctadecane (SURR)

R.T.: 13.282 min
Delta R.T.: -0.013 min
Response: 3574630
Conc: 30.15 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054164.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 21:27
 Sample : Q2179-03
 Misc :
 ALS Vial : 21 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	2.817	2.804	2.853	PH	193	2757	0.06%	0.003%
2	2.878	2.853	2.944	PV	389	4726	0.10%	0.006%
3	2.959	2.944	2.978	VV	121	1424	0.03%	0.002%
4	2.984	2.978	3.016	VV	70	978	0.02%	0.001%
5	3.025	3.016	3.031	PV	69	348	0.01%	0.000%
6	3.041	3.031	3.104	VV	105	1485	0.03%	0.002%
7	3.147	3.104	3.159	VV	115	1577	0.03%	0.002%
8	3.183	3.159	3.241	PV	712	11505	0.24%	0.014%
9	3.249	3.241	3.275	VV	94	1091	0.02%	0.001%
10	3.302	3.275	3.349	PV	135	2970	0.06%	0.004%
11	3.358	3.349	3.394	PV	83	1456	0.03%	0.002%
12	3.423	3.394	3.474	VV	228	4640	0.10%	0.006%
13	3.497	3.474	3.511	VV	170	2229	0.05%	0.003%
14	3.520	3.511	3.565	VV	143	2387	0.05%	0.003%
15	3.577	3.565	3.621	VV	95	1526	0.03%	0.002%
16	3.643	3.621	3.670	PV	162	2987	0.06%	0.004%
17	3.681	3.670	3.704	VV	113	1551	0.03%	0.002%
18	3.708	3.704	3.736	VV	119	1208	0.03%	0.001%
19	3.778	3.736	3.855	VV	387	10280	0.21%	0.012%
20	3.875	3.855	3.902	PV	346	4485	0.09%	0.005%
21	3.910	3.902	3.934	VV	171	1491	0.03%	0.002%
22	3.981	3.934	4.004	VV	268	5498	0.11%	0.007%
23	4.018	4.004	4.044	VV	194	2708	0.06%	0.003%
24	4.092	4.044	4.110	VV	299	6896	0.14%	0.008%
25	4.125	4.110	4.140	VV	282	4550	0.09%	0.005%
26	4.172	4.140	4.228	VV	934	23654	0.49%	0.028%
27	4.240	4.228	4.295	VV	412	11537	0.24%	0.014%
28	4.307	4.295	4.378	VV	223	9246	0.19%	0.011%
29	4.382	4.378	4.419	VV	208	3779	0.08%	0.005%
30	4.447	4.419	4.469	VV	737	12214	0.25%	0.015%
31	4.488	4.469	4.505	VV	460	5915	0.12%	0.007%
32	4.527	4.505	4.554	VV	220	4775	0.10%	0.006%
33	4.569	4.554	4.608	VV	182	4623	0.10%	0.006%
34	4.626	4.608	4.687	VV	315	8531	0.18%	0.010%
35	4.703	4.687	4.801	VV	278	10817	0.22%	0.013%
36	4.810	4.801	4.821	VV	125	1416	0.03%	0.002%

					rteres			
37	4.829	4.821	4.850	VV	96	1683	0.03%	0.002%
38	4.876	4.850	4.891	VV	259	4531	0.09%	0.005%
39	4.951	4.891	5.014	VV	380	17206	0.36%	0.021%
40	5.026	5.014	5.051	VV	203	3643	0.08%	0.004%
41	5.059	5.051	5.071	VV	139	1488	0.03%	0.002%
42	5.082	5.071	5.095	VV	168	1615	0.03%	0.002%
43	5.118	5.095	5.138	VV	195	3619	0.08%	0.004%
44	5.158	5.138	5.178	VV	233	3578	0.07%	0.004%
45	5.200	5.178	5.227	VV	199	3439	0.07%	0.004%
46	5.242	5.227	5.268	VV	162	2920	0.06%	0.004%
47	5.273	5.268	5.322	VV	195	2527	0.05%	0.003%
48	5.334	5.322	5.359	VV	214	1621	0.03%	0.002%
49	5.431	5.359	5.458	VV	305	10671	0.22%	0.013%
50	5.471	5.458	5.528	VV	201	5136	0.11%	0.006%
51	5.538	5.528	5.561	VV	95	1241	0.03%	0.001%
52	5.594	5.561	5.681	PV	691	14223	0.30%	0.017%
53	5.710	5.681	5.748	VV	307	9383	0.19%	0.011%
54	5.763	5.748	5.778	VV	205	3354	0.07%	0.004%
55	5.783	5.778	5.788	VV	249	1320	0.03%	0.002%
56	5.795	5.788	5.841	VV	280	5986	0.12%	0.007%
57	5.844	5.841	5.850	VV	188	898	0.02%	0.001%
58	5.881	5.850	5.974	VV	491	22312	0.46%	0.027%
59	5.982	5.974	6.032	VV	332	6925	0.14%	0.008%
60	6.042	6.032	6.054	VV	133	1442	0.03%	0.002%
61	6.073	6.054	6.104	VV	210	3745	0.08%	0.004%
62	6.118	6.104	6.151	VV	218	3502	0.07%	0.004%
63	6.184	6.151	6.254	VV	481	19175	0.40%	0.023%
64	6.274	6.254	6.295	VV	302	5207	0.11%	0.006%
65	6.340	6.295	6.381	VV	497	14669	0.30%	0.018%
66	6.395	6.381	6.404	VV	278	2827	0.06%	0.003%
67	6.412	6.404	6.417	VV	232	1676	0.03%	0.002%
68	6.440	6.417	6.464	VV	256	6451	0.13%	0.008%
69	6.495	6.464	6.504	VV	380	7027	0.15%	0.008%
70	6.522	6.504	6.574	VV	427	12780	0.27%	0.015%
71	6.588	6.574	6.611	VV	297	5251	0.11%	0.006%
72	6.630	6.611	6.689	VV	699	16158	0.34%	0.019%
73	6.707	6.689	6.734	VV	264	5339	0.11%	0.006%
74	6.744	6.734	6.758	VV	175	2116	0.04%	0.003%
75	6.782	6.758	6.804	VV	463	7836	0.16%	0.009%
76	6.821	6.804	6.896	VV	206	6903	0.14%	0.008%
77	6.916	6.896	6.944	VV	213	3313	0.07%	0.004%
78	6.954	6.944	7.003	VV	191	3653	0.08%	0.004%
79	7.034	7.003	7.070	PV	202	4605	0.10%	0.006%
80	7.081	7.070	7.104	VV	146	1922	0.04%	0.002%
81	7.159	7.104	7.181	VV	241	6686	0.14%	0.008%
82	7.204	7.181	7.234	VV	369	6351	0.13%	0.008%
83	7.252	7.234	7.261	VV	355	3901	0.08%	0.005%
84	7.311	7.261	7.333	VV	625	21736	0.45%	0.026%
85	7.351	7.333	7.391	VV	939	18105	0.38%	0.022%
86	7.412	7.391	7.437	VV	648	12327	0.26%	0.015%
87	7.454	7.437	7.504	VV	352	12651	0.26%	0.015%
88	7.525	7.504	7.538	VV	325	5943	0.12%	0.007%
89	7.581	7.538	7.632	VV	1060	28733	0.60%	0.034%

					rteres			
90	7.648	7.632	7.701	VV	503	11370	0.24%	0.014%
91	7.707	7.701	7.734	VV	208	3210	0.07%	0.004%
92	7.754	7.734	7.790	VV	410	7866	0.16%	0.009%
93	7.810	7.790	7.833	VV	145	2149	0.04%	0.003%
94	7.862	7.833	7.902	PV	647	10565	0.22%	0.013%
95	7.916	7.902	7.934	VV	246	3165	0.07%	0.004%
96	7.949	7.934	7.981	VV	222	3546	0.07%	0.004%
97	8.007	7.981	8.017	VV	514	7357	0.15%	0.009%
98	8.035	8.017	8.094	VV	1029	22903	0.48%	0.027%
99	8.105	8.094	8.128	VV	351	5966	0.12%	0.007%
100	8.154	8.128	8.168	VV	414	7461	0.15%	0.009%
101	8.189	8.168	8.238	VV	826	20877	0.43%	0.025%
102	8.282	8.238	8.312	VV	1177	24713	0.51%	0.030%
103	8.331	8.312	8.341	VV	720	10534	0.22%	0.013%
104	8.348	8.341	8.354	VV	635	4517	0.09%	0.005%
105	8.389	8.354	8.409	VV	970	27395	0.57%	0.033%
106	8.465	8.409	8.547	VV	2059	79972	1.66%	0.096%
107	8.581	8.547	8.600	VV	2188	43062	0.89%	0.052%
108	8.612	8.600	8.663	VV	1870	41105	0.85%	0.049%
109	8.679	8.663	8.698	VV	571	10832	0.22%	0.013%
110	8.710	8.698	8.774	VV	573	15352	0.32%	0.018%
111	8.793	8.774	8.808	VV	412	5954	0.12%	0.007%
112	8.847	8.808	8.863	VV	620	13297	0.28%	0.016%
113	8.914	8.863	8.930	VV	1174	32016	0.66%	0.038%
114	8.980	8.930	8.991	VV	2228	61405	1.27%	0.074%
115	9.005	8.991	9.068	VV	2644	60155	1.25%	0.072%
116	9.078	9.068	9.097	VV	718	10540	0.22%	0.013%
117	9.121	9.097	9.131	VV	576	10867	0.23%	0.013%
118	9.151	9.131	9.172	VV	705	14354	0.30%	0.017%
119	9.211	9.172	9.274	VV	1144	42402	0.88%	0.051%
120	9.295	9.274	9.357	VV	2315	48751	1.01%	0.058%
121	9.375	9.357	9.403	VV	476	9256	0.19%	0.011%
122	9.446	9.403	9.458	VV	443	9068	0.19%	0.011%
123	9.488	9.458	9.511	VV	547	11926	0.25%	0.014%
124	9.537	9.511	9.558	VV	386	9078	0.19%	0.011%
125	9.582	9.558	9.611	VV	561	12922	0.27%	0.015%
126	9.625	9.611	9.644	VV	394	5940	0.12%	0.007%
127	9.677	9.644	9.723	VV	972	29525	0.61%	0.035%
128	9.749	9.723	9.781	VV	856	19578	0.41%	0.023%
129	9.828	9.781	9.844	VV	558	16873	0.35%	0.020%
130	9.852	9.844	9.881	VV	479	6822	0.14%	0.008%
131	9.906	9.881	9.926	VV	1763	21320	0.44%	0.026%
132	9.959	9.926	10.054	VV	6805	224677	4.66%	0.269%
133	10.076	10.054	10.121	VV	3539	66885	1.39%	0.080%
134	10.143	10.121	10.167	VV	1237	22758	0.47%	0.027%
135	10.183	10.167	10.214	VV	658	11456	0.24%	0.014%
136	10.247	10.214	10.324	VV	260	8522	0.18%	0.010%
137	10.346	10.324	10.370	PV	190	2422	0.05%	0.003%
138	10.419	10.370	10.437	PV	936	15253	0.32%	0.018%
139	10.465	10.437	10.492	VV	1982	33624	0.70%	0.040%
140	10.552	10.492	10.588	VV	1329	48528	1.01%	0.058%
141	10.608	10.588	10.631	VV	994	16761	0.35%	0.020%

					rteres			
142	10.697	10.631	10.715	VV	1024	28456	0.59%	0.034%
143	10.741	10.715	10.761	VV	937	19981	0.41%	0.024%
144	10.782	10.761	10.791	VV	967	14766	0.31%	0.018%
145	10.817	10.791	10.857	VV	3250	56524	1.17%	0.068%
146	10.887	10.857	10.925	VV	3247	57990	1.20%	0.070%
147	10.945	10.925	10.992	VV	724	15959	0.33%	0.019%
148	11.035	10.992	11.060	VV	447	9409	0.20%	0.011%
149	11.091	11.060	11.124	VV	1949	39639	0.82%	0.048%
150	11.171	11.124	11.201	VV	1661	54697	1.13%	0.066%
151	11.216	11.201	11.253	VV	1886	39838	0.83%	0.048%
152	11.270	11.253	11.313	VV	704	19191	0.40%	0.023%
153	11.325	11.313	11.360	VV	412	6141	0.13%	0.007%
154	11.392	11.360	11.408	PV	322	5957	0.12%	0.007%
155	11.453	11.408	11.480	VV	934	19687	0.41%	0.024%
156	11.522	11.480	11.556	VV	3103	50489	1.05%	0.061%
157	11.607	11.556	11.657	VV	2847	58020	1.20%	0.070%
158	11.679	11.657	11.696	PV	488	4827	0.10%	0.006%
159	11.717	11.696	11.740	VV	599	7529	0.16%	0.009%
160	11.760	11.740	11.778	VV	199	2664	0.06%	0.003%
161	11.837	11.778	11.904	VV	396389	4499637	93.34%	5.393%
162	11.925	11.904	11.945	VV	1961	40147	0.83%	0.048%
163	12.000	11.945	12.022	VV	1899	66121	1.37%	0.079%
164	12.034	12.022	12.051	VV	1221	17436	0.36%	0.021%
165	12.069	12.051	12.108	VV	1263	26084	0.54%	0.031%
166	12.129	12.108	12.151	VV	522	6815	0.14%	0.008%
167	12.193	12.151	12.226	VV	3006	48484	1.01%	0.058%
168	12.244	12.226	12.266	VV	272	4918	0.10%	0.006%
169	12.288	12.266	12.350	VV	593	12521	0.26%	0.015%
170	12.387	12.350	12.418	PV	553	10754	0.22%	0.013%
171	12.464	12.418	12.522	VV	835	33147	0.69%	0.040%
172	12.564	12.522	12.594	VV	1120	31241	0.65%	0.037%
173	12.608	12.594	12.625	VV	781	11396	0.24%	0.014%
174	12.681	12.625	12.728	VV	610	29344	0.61%	0.035%
175	12.787	12.728	12.808	VV	1914	46233	0.96%	0.055%
176	12.835	12.808	12.876	VV	3785	67417	1.40%	0.081%
177	12.906	12.876	13.021	VV	12236	227098	4.71%	0.272%
178	13.054	13.021	13.077	PV	985	17674	0.37%	0.021%
179	13.094	13.077	13.121	VV	833	13668	0.28%	0.016%
180	13.127	13.121	13.136	VV	386	2612	0.05%	0.003%
181	13.160	13.136	13.179	VV	1043	14993	0.31%	0.018%
182	13.205	13.179	13.243	VV	10958	169570	3.52%	0.203%
183	13.282	13.243	13.424	VV	276243	3600405	74.68%	4.316%
184	13.450	13.424	13.481	VV	2587	46549	0.97%	0.056%
185	13.491	13.481	13.521	VV	1058	19429	0.40%	0.023%
186	13.537	13.521	13.569	VV	570	10937	0.23%	0.013%
187	13.607	13.569	13.642	VV	419	11037	0.23%	0.013%
188	13.675	13.642	13.735	VV	1172	30349	0.63%	0.036%
189	13.806	13.735	13.847	VV	1952	52970	1.10%	0.063%
190	13.880	13.847	13.894	VV	606	14014	0.29%	0.017%
191	13.916	13.894	13.934	VV	961	16451	0.34%	0.020%
192	13.953	13.934	13.971	VV	1494	24848	0.52%	0.030%
193	13.987	13.971	14.010	VV	1749	26769	0.56%	0.032%
194	14.036	14.010	14.059	VV	2777	47897	0.99%	0.057%

					rteres			
195	14.077	14.059	14.104	VV	1954	35002	0.73%	0.042%
196	14.121	14.104	14.217	VV	1096	27592	0.57%	0.033%
197	14.244	14.217	14.292	PV	517	14647	0.30%	0.018%
198	14.304	14.292	14.321	VV	301	3882	0.08%	0.005%
199	14.334	14.321	14.346	VV	185	1910	0.04%	0.002%
200	14.400	14.346	14.421	VV	855	14944	0.31%	0.018%
201	14.473	14.421	14.494	VV	1263	38286	0.79%	0.046%
202	14.509	14.494	14.521	VV	766	11439	0.24%	0.014%
203	14.539	14.521	14.558	VV	932	17285	0.36%	0.021%
204	14.601	14.558	14.623	VV	2039	43430	0.90%	0.052%
205	14.653	14.623	14.681	VV	1214	30637	0.64%	0.037%
206	14.738	14.681	14.758	VV	1363	39252	0.81%	0.047%
207	14.781	14.758	14.822	VV	2019	45404	0.94%	0.054%
208	14.845	14.822	14.867	VV	959	19398	0.40%	0.023%
209	14.892	14.867	14.934	VV	1807	37548	0.78%	0.045%
210	14.946	14.934	14.964	VV	416	5492	0.11%	0.007%
211	14.979	14.964	15.031	VV	548	11744	0.24%	0.014%
212	15.061	15.031	15.074	PV	989	14816	0.31%	0.018%
213	15.099	15.074	15.119	VV	7608	119766	2.48%	0.144%
214	15.139	15.119	15.212	VV	8056	174768	3.63%	0.209%
215	15.256	15.212	15.277	VV	1469	28576	0.59%	0.034%
216	15.295	15.277	15.361	VV	805	21441	0.44%	0.026%
217	15.450	15.361	15.496	PV	790	31946	0.66%	0.038%
218	15.544	15.496	15.638	PV	12477	356156	7.39%	0.427%
219	15.663	15.638	15.700	VV	2002	43972	0.91%	0.053%
220	15.728	15.700	15.753	VV	3229	48697	1.01%	0.058%
221	15.778	15.753	15.851	VV	2270	67879	1.41%	0.081%
222	15.877	15.851	15.894	VV	887	16344	0.34%	0.020%
223	15.929	15.894	15.941	VV	1507	32170	0.67%	0.039%
224	15.955	15.941	15.982	VV	1153	25312	0.53%	0.030%
225	16.001	15.982	16.024	VV	808	16302	0.34%	0.020%
226	16.127	16.024	16.141	VV	746	43041	0.89%	0.052%
227	16.169	16.141	16.211	VV	1849	41821	0.87%	0.050%
228	16.234	16.211	16.255	VV	793	15827	0.33%	0.019%
229	16.297	16.255	16.316	VV	607	13954	0.29%	0.017%
230	16.369	16.316	16.390	PV	1073	25577	0.53%	0.031%
231	16.457	16.390	16.491	VV	2991	68995	1.43%	0.083%
232	16.507	16.491	16.521	VV	568	7933	0.16%	0.010%
233	16.564	16.521	16.601	VV	2121	60011	1.24%	0.072%
234	16.664	16.601	16.754	VV	11089	342060	7.10%	0.410%
235	16.800	16.754	16.831	VV	3265	79563	1.65%	0.095%
236	16.846	16.831	16.886	VV	1048	22848	0.47%	0.027%
237	16.938	16.886	16.961	PV	1812	40689	0.84%	0.049%
238	16.988	16.961	17.028	VV	6801	115212	2.39%	0.138%
239	17.052	17.028	17.098	VV	7410	144173	2.99%	0.173%
240	17.155	17.098	17.180	VV	2985	111559	2.31%	0.134%
241	17.195	17.180	17.215	VV	968	12471	0.26%	0.015%
242	17.296	17.215	17.325	PV	1389	26646	0.55%	0.032%
243	17.352	17.325	17.384	VV	1620	33584	0.70%	0.040%
244	17.435	17.384	17.470	PV	2061	56450	1.17%	0.068%
245	17.570	17.470	17.614	VV	4610	187222	3.88%	0.224%
246	17.635	17.614	17.651	VV	1799	29880	0.62%	0.036%

					rteres			
247	17.679	17.651	17.708	VV	2451	55779	1.16%	0.067%
248	17.762	17.708	17.791	VV	2084	71168	1.48%	0.085%
249	17.846	17.791	17.869	PV	1539	32385	0.67%	0.039%
250	17.901	17.869	17.916	VV	3301	51026	1.06%	0.061%
251	18.003	17.916	18.044	VV	7916	282066	5.85%	0.338%
252	18.048	18.044	18.071	VV	2919	38276	0.79%	0.046%
253	18.142	18.071	18.158	VV	8730	234192	4.86%	0.281%
254	18.176	18.158	18.217	VV	7296	215945	4.48%	0.259%
255	18.237	18.217	18.259	VV	5404	118252	2.45%	0.142%
256	18.272	18.259	18.290	VV	4752	79077	1.64%	0.095%
257	18.339	18.290	18.360	VV	8688	271334	5.63%	0.325%
258	18.393	18.360	18.411	VV	9202	242035	5.02%	0.290%
259	18.434	18.411	18.462	VV	14675	331139	6.87%	0.397%
260	18.472	18.462	18.490	VV	7919	130011	2.70%	0.156%
261	18.511	18.490	18.534	VV	11193	220804	4.58%	0.265%
262	18.552	18.534	18.561	VV	6819	106721	2.21%	0.128%
263	18.599	18.561	18.617	VV	7916	234877	4.87%	0.282%
264	18.691	18.617	18.741	VV	12677	585623	12.15%	0.702%
265	18.750	18.741	18.759	VV	6388	66349	1.38%	0.080%
266	18.836	18.759	18.871	VV	14955	561482	11.65%	0.673%
267	18.886	18.871	18.897	VV	6667	96521	2.00%	0.116%
268	18.935	18.897	18.961	VV	12352	338036	7.01%	0.405%
269	18.991	18.961	19.026	VV	11996	393893	8.17%	0.472%
270	19.115	19.026	19.134	VV	12848	672870	13.96%	0.807%
271	19.152	19.134	19.160	VV	11715	171649	3.56%	0.206%
272	19.236	19.160	19.255	VV	18534	905244	18.78%	1.085%
273	19.264	19.255	19.299	VV	18228	438487	9.10%	0.526%
274	19.335	19.299	19.352	VV	17215	498016	10.33%	0.597%
275	19.376	19.352	19.386	VV	16697	335136	6.95%	0.402%
276	19.458	19.386	19.466	VV	18956	852830	17.69%	1.022%
277	19.536	19.466	19.560	VV	21558	1139815	23.64%	1.366%
278	19.585	19.560	19.593	VV	21308	410710	8.52%	0.492%
279	19.628	19.593	19.681	VV	25224	1201769	24.93%	1.440%
280	19.703	19.681	19.710	VV	22838	395892	8.21%	0.475%
281	19.746	19.710	19.756	VV	25352	655036	13.59%	0.785%
282	19.872	19.756	19.898	VV	31534	2349048	48.73%	2.816%
283	20.002	19.898	20.034	VV	34073	2603438	54.00%	3.121%
284	20.068	20.034	20.090	VV	32499	1076222	22.32%	1.290%
285	20.105	20.090	20.123	VV	32052	622199	12.91%	0.746%
286	20.171	20.123	20.178	VV	33694	1096316	22.74%	1.314%
287	20.259	20.178	20.295	VV	43086	2683641	55.67%	3.217%
288	20.370	20.295	20.404	VV	46881	2879679	59.73%	3.452%
289	20.426	20.404	20.446	VV	45874	1130434	23.45%	1.355%
290	20.459	20.446	20.468	VV	44447	563195	11.68%	0.675%
291	20.594	20.468	20.603	VV	53197	4026099	83.51%	4.826%
292	20.632	20.603	20.641	VV	52966	1198606	24.86%	1.437%
293	20.663	20.641	20.697	VV	53411	1782685	36.98%	2.137%
294	20.725	20.697	20.747	VV	54878	1590030	32.98%	1.906%
295	20.761	20.747	20.778	VV	54701	989010	20.52%	1.185%
296	20.861	20.778	20.925	VV	56580	4820822	100.00%	5.778%
297	20.933	20.925	20.968	VV	52307	1325589	27.50%	1.589%
298	20.977	20.968	21.016	VV	48493	1363403	28.28%	1.634%
299	21.041	21.016	21.053	VV	47048	1046308	21.70%	1.254%

					rteres			
300	21.099	21.053	21.121	VV	48730	1898685	39.39%	2.276%
301	21.143	21.121	21.248	VV	47146	3310995	68.68%	3.969%
302	21.324	21.248	21.338	VV	40775	2187075	45.37%	2.621%
303	21.381	21.338	21.397	VV	41837	1449877	30.08%	1.738%
304	21.419	21.397	21.468	VV	41336	1700877	35.28%	2.039%
305	21.486	21.468	21.583	VV	38688	2410608	50.00%	2.889%
306	21.614	21.583	21.639	VV	29607	979334	20.31%	1.174%
307	21.747	21.639	21.771	VV	31417	2391698	49.61%	2.867%
308	21.797	21.771	21.831	VV	30327	1055688	21.90%	1.265%
309	21.836	21.831	21.922	VV	28305	1399963	29.04%	1.678%
310	21.934	21.922	21.978	VV	22516	708668	14.70%	0.849%
311	21.986	21.978	22.016	VV	20211	437682	9.08%	0.525%
312	22.035	22.016	22.091	VV	18714	787355	16.33%	0.944%
313	22.136	22.091	22.151	VV	16223	558692	11.59%	0.670%
314	22.179	22.151	22.218	VV	16341	629376	13.06%	0.754%
315	22.226	22.218	22.265	VV	14864	372861	7.73%	0.447%
316	22.288	22.265	22.388	VV	11461	629035	13.05%	0.754%
317	22.412	22.388	22.436	VV	5909	163520	3.39%	0.196%
318	22.457	22.436	22.471	VV	5799	111075	2.30%	0.133%
319	22.476	22.471	22.517	VV	5136	101392	2.10%	0.122%
320	22.527	22.517	22.562	VV	2734	43944	0.91%	0.053%
321	22.575	22.562	22.588	VV	615	5652	0.12%	0.007%
			Sum of corrected areas:				83428968	

Aliphatic EPH 051425.M Wed Jun 04 04:39:36 2025

Report of Analysis

Client:	G Environmental	Date Collected:	06/02/25
Project:	DeCamp	Date Received:	06/02/25
Client Sample ID:	D6	SDG No.:	Q2179
Lab Sample ID:	Q2179-04	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	96.1
Sample Wt/Vol:	30.07	Units:	g
Soil Aliquot Vol:			uL
Prep Method :		Test:	EPH_F2

Prep Date :	Date Analyzed :	Prep Batch ID
06/03/25 10:00	06/03/25 21:57	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	1.59	J	1	0.94	4.15	mg/kg	FE054165.D
Total EPH	Total EPH	1.59	J		0.94	4.15	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 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:	G Environmental	Date Collected:	06/02/25
Project:	DeCamp	Date Received:	06/02/25
Client Sample ID:	D6	SDG No.:	Q2179
Lab Sample ID:	Q2179-04	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	96.1
Sample Wt/Vol:	30.07 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE054165.D	1	06/03/25	06/03/25	PB168239

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	1.59	J	0.94	4.15	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	19.0		1.23	2.08	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	35.5		40 - 140	71%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	32.3		40 - 140	65%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2179-04	Acq On:	03 Jun 2025 21:57
Client Sample ID:	D6	Operator:	YP\AJ
Data file:	FE054165.D	Misc:	
Instrument:	FID_E	ALS Vial:	22
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.085	6.730	275299	2.031	300	ug/ml
Aliphatic C12-C16	6.731	10.178	728623	5.4	200	ug/ml
Aliphatic C16-C21	10.179	13.552	833155	6.316	300	ug/ml
Aliphatic C21-C28	13.553	17.220	1403326	11.301	400	ug/ml
Aliphatic C28-C40	17.221	22.091	31679958	274.45	600	ug/ml
Aliphatic EPH	3.085	22.091	34920361	299.497		ug/ml
ortho-Terphenyl (SURR)	11.838	11.838	5254557	32.33		ug/ml
1-chlorooctadecane (SURR)	13.283	13.283	4213897	35.55		ug/ml
Aliphatic C9-C28	3.085	17.220	3240403	25.048	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054165.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 21:57
Operator : YP\AJ
Sample : Q2179-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
D6

Integration File: autoint1.e
Quant Time: Jun 04 02:55:36 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 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)	11.838	5254557	32.333 ug/ml
Spiked Amount	50.000	Recovery	= 64.67%
12) S 1-chlorooctadecane (S...	13.283	4213897	35.545 ug/ml
Spiked Amount	50.000	Recovery	= 71.09%

Target Compounds

(f)=RT Delta > 1/2 Window

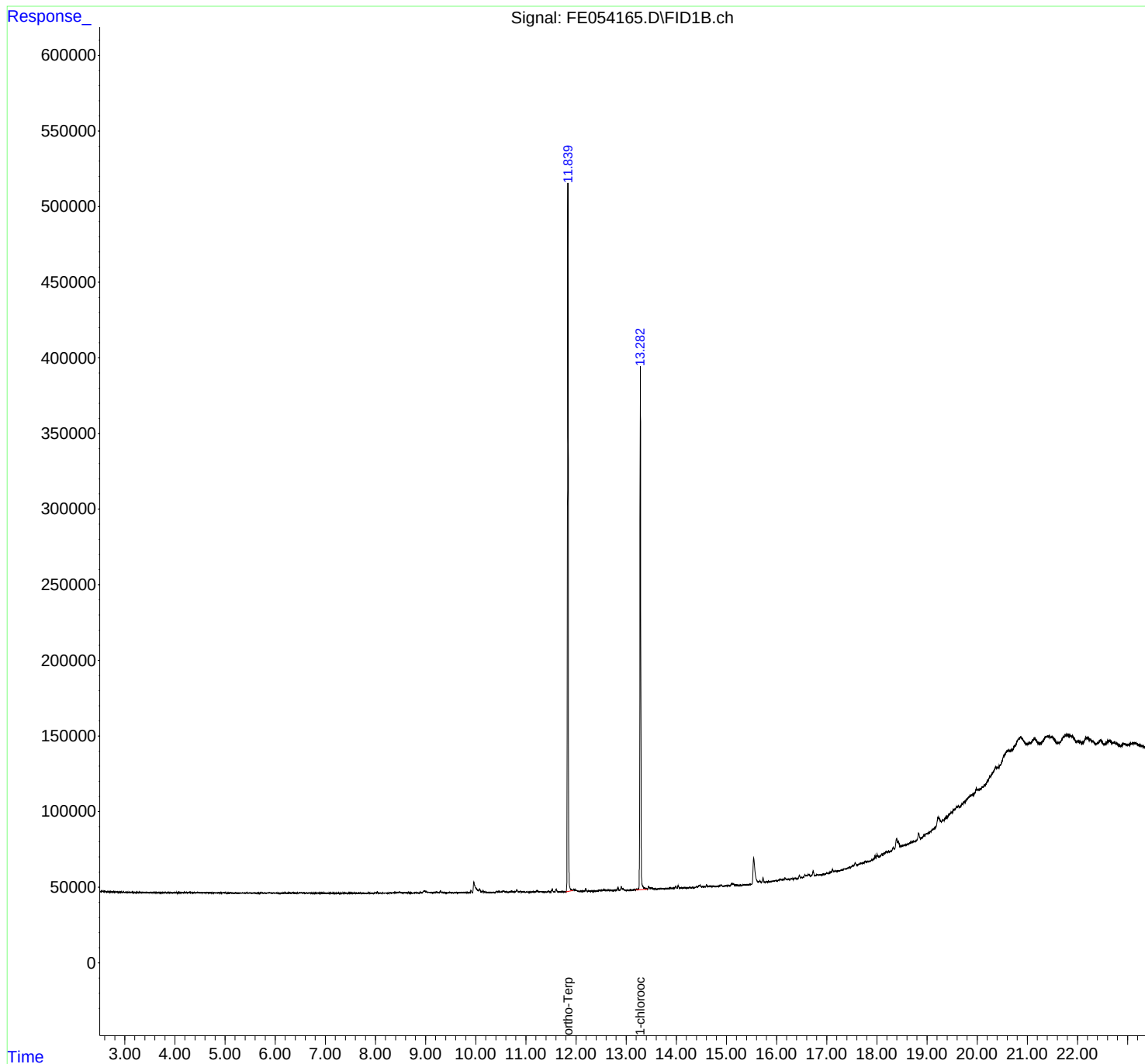
(m)=manual int.

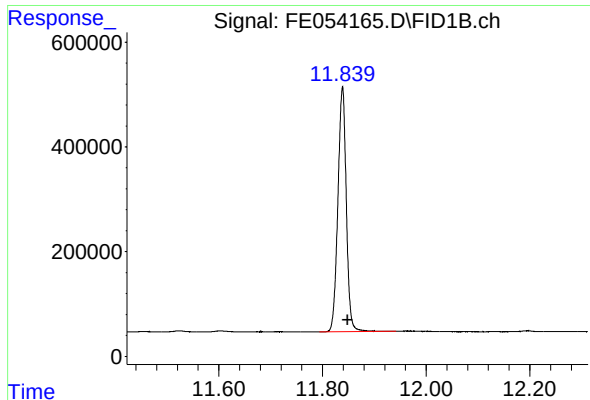
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054165.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 21:57
Operator : YP\AJ
Sample : Q2179-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
D6

Integration File: autoint1.e
Quant Time: Jun 04 02:55:36 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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

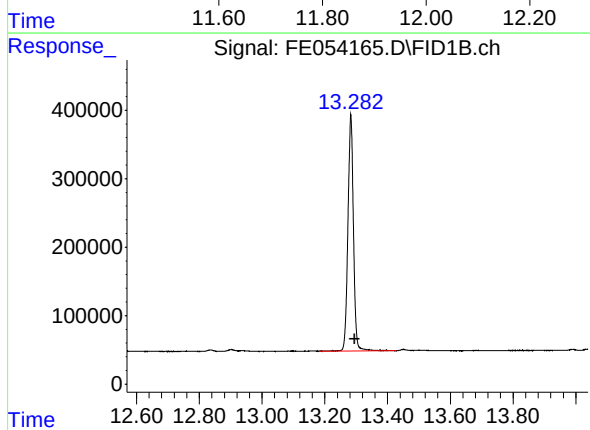




#9 ortho-Terphenyl (SURR)

R.T.: 11.838 min
Delta R.T.: -0.010 min
Response: 5254557
Conc: 32.33 ug/ml

Instrument :
FID_E
ClientSampleId :
D6



#12 1-chlorooctadecane (SURR)

R.T.: 13.283 min
Delta R.T.: -0.012 min
Response: 4213897
Conc: 35.55 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054165.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 21:57
 Sample : Q2179-04
 Misc :
 ALS Vial : 22 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	2.866	2.858	2.886	PV	87	982	0.01%	0.002%
2	2.895	2.886	3.089	VV	82	5761	0.08%	0.013%
3	3.101	3.089	3.138	VV	127	1951	0.03%	0.004%
4	3.150	3.138	3.160	VV	70	621	0.01%	0.001%
5	3.186	3.160	3.272	VV	135	4002	0.06%	0.009%
6	3.286	3.272	3.331	VV	107	1762	0.02%	0.004%
7	3.364	3.331	3.379	PV	118	1934	0.03%	0.004%
8	3.398	3.379	3.418	VV	84	1443	0.02%	0.003%
9	3.425	3.418	3.475	VV	100	2341	0.03%	0.005%
10	3.488	3.475	3.578	VV	100	4370	0.06%	0.009%
11	3.585	3.578	3.594	VV	121	688	0.01%	0.001%
12	3.605	3.594	3.664	VV	123	2544	0.03%	0.006%
13	3.669	3.664	3.708	PV	87	1501	0.02%	0.003%
14	3.717	3.708	3.726	VV	73	518	0.01%	0.001%
15	3.742	3.726	3.764	VV	75	1146	0.02%	0.002%
16	3.774	3.764	3.792	VV	138	1150	0.02%	0.002%
17	3.804	3.792	3.834	PV	111	1426	0.02%	0.003%
18	3.856	3.834	3.922	VV	126	3860	0.05%	0.008%
19	3.935	3.922	3.978	VV	85	1736	0.02%	0.004%
20	3.985	3.978	3.994	VV	87	525	0.01%	0.001%
21	4.005	3.994	4.040	VV	100	1678	0.02%	0.004%
22	4.099	4.040	4.124	PV	241	8040	0.11%	0.017%
23	4.138	4.124	4.151	VV	268	4169	0.06%	0.009%
24	4.166	4.151	4.174	VV	326	3688	0.05%	0.008%
25	4.186	4.174	4.231	VV	336	7859	0.11%	0.017%
26	4.260	4.231	4.286	VV	258	6916	0.10%	0.015%
27	4.293	4.286	4.374	VV	233	9204	0.13%	0.020%
28	4.450	4.374	4.551	VV	377	17802	0.24%	0.039%
29	4.576	4.551	4.588	VV	168	2847	0.04%	0.006%
30	4.627	4.588	4.674	VV	371	9381	0.13%	0.020%
31	4.683	4.674	4.765	VV	179	6527	0.09%	0.014%
32	4.777	4.765	4.801	VV	160	2443	0.03%	0.005%
33	4.812	4.801	4.819	VV	162	1086	0.01%	0.002%
34	4.927	4.819	5.029	VV	233	17506	0.24%	0.038%
35	5.041	5.029	5.078	VV	112	2922	0.04%	0.006%
36	5.081	5.078	5.095	VV	112	996	0.01%	0.002%

					rteres			
37	5.119	5.095	5.183	VV	164	6279	0.09%	0.014%
38	5.198	5.183	5.282	VV	126	5149	0.07%	0.011%
39	5.298	5.282	5.336	VV	108	2035	0.03%	0.004%
40	5.428	5.336	5.481	PV	197	8850	0.12%	0.019%
41	5.488	5.481	5.584	VV	150	4860	0.07%	0.011%
42	5.599	5.584	5.641	VV	108	2390	0.03%	0.005%
43	5.648	5.641	5.666	VV	64	579	0.01%	0.001%
44	5.715	5.666	5.817	VV	179	12168	0.17%	0.026%
45	5.888	5.817	5.964	VV	323	15729	0.22%	0.034%
46	5.984	5.964	6.091	VV	187	7449	0.10%	0.016%
47	6.115	6.091	6.141	PV	98	2123	0.03%	0.005%
48	6.170	6.141	6.285	VV	261	13910	0.19%	0.030%
49	6.340	6.285	6.378	VV	404	12333	0.17%	0.027%
50	6.522	6.378	6.571	VV	337	26647	0.37%	0.058%
51	6.586	6.571	6.612	VV	232	5174	0.07%	0.011%
52	6.632	6.612	6.681	VV	260	8123	0.11%	0.018%
53	6.685	6.681	6.741	VV	221	4919	0.07%	0.011%
54	6.758	6.741	6.777	VV	154	2157	0.03%	0.005%
55	6.805	6.777	6.851	VV	143	4598	0.06%	0.010%
56	6.865	6.851	6.892	VV	164	2874	0.04%	0.006%
57	6.915	6.892	7.020	VV	207	5494	0.08%	0.012%
58	7.082	7.020	7.097	PV	64	1866	0.03%	0.004%
59	7.116	7.097	7.148	VV	99	1779	0.02%	0.004%
60	7.347	7.148	7.438	VV	235	23334	0.32%	0.051%
61	7.451	7.438	7.507	VV	131	4732	0.07%	0.010%
62	7.582	7.507	7.638	VV	298	13217	0.18%	0.029%
63	7.652	7.638	7.684	VV	262	4714	0.06%	0.010%
64	7.699	7.684	7.761	VV	153	3586	0.05%	0.008%
65	7.766	7.761	7.834	VV	91	1519	0.02%	0.003%
66	7.863	7.834	7.941	PV	551	10310	0.14%	0.022%
67	8.034	7.941	8.071	PV	821	20666	0.28%	0.045%
68	8.078	8.071	8.138	VV	175	5905	0.08%	0.013%
69	8.210	8.138	8.244	VV	158	6903	0.09%	0.015%
70	8.286	8.244	8.302	VV	215	4578	0.06%	0.010%
71	8.388	8.302	8.407	VV	346	15500	0.21%	0.034%
72	8.473	8.407	8.557	VV	862	35974	0.49%	0.078%
73	8.597	8.557	8.642	VV	294	11007	0.15%	0.024%
74	8.681	8.642	8.761	VV	176	8522	0.12%	0.018%
75	8.792	8.761	8.841	VV	395	7794	0.11%	0.017%
76	8.848	8.841	8.864	VV	179	1570	0.02%	0.003%
77	8.898	8.864	8.918	VV	581	10163	0.14%	0.022%
78	8.970	8.918	9.138	VV	1335	85428	1.17%	0.185%
79	9.154	9.138	9.175	VV	334	5457	0.08%	0.012%
80	9.209	9.175	9.256	VV	606	19172	0.26%	0.042%
81	9.297	9.256	9.447	VV	1221	35845	0.49%	0.078%
82	9.478	9.447	9.508	VV	420	6241	0.09%	0.014%
83	9.525	9.508	9.554	VV	81	1332	0.02%	0.003%
84	9.584	9.554	9.614	PV	157	1930	0.03%	0.004%
85	9.678	9.614	9.722	VV	339	11232	0.15%	0.024%
86	9.755	9.722	9.784	VV	308	7979	0.11%	0.017%
87	9.801	9.784	9.841	VV	258	5906	0.08%	0.013%
88	9.854	9.841	9.884	VV	167	3497	0.05%	0.008%
89	9.907	9.884	9.931	VV	1650	19733	0.27%	0.043%

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90	9.965	9.931	10.054	VV	7090	222909	3.06%	0.484%
91	10.078	10.054	10.124	VV	2646	59799	0.82%	0.130%
92	10.143	10.124	10.234	VV	1201	33401	0.46%	0.072%
93	10.246	10.234	10.331	VV	203	6930	0.10%	0.015%
94	10.343	10.331	10.378	VV	182	3002	0.04%	0.007%
95	10.422	10.378	10.441	PV	904	16248	0.22%	0.035%
96	10.464	10.441	10.493	VV	728	16946	0.23%	0.037%
97	10.550	10.493	10.598	VV	1015	38642	0.53%	0.084%
98	10.607	10.598	10.651	VV	508	10960	0.15%	0.024%
99	10.697	10.651	10.763	VV	773	30444	0.42%	0.066%
100	10.819	10.763	10.862	VV	1871	45810	0.63%	0.099%
101	10.888	10.862	10.911	VV	890	15548	0.21%	0.034%
102	10.944	10.911	10.988	VV	568	14523	0.20%	0.032%
103	11.038	10.988	11.068	VV	327	7718	0.11%	0.017%
104	11.150	11.068	11.174	VV	397	11561	0.16%	0.025%
105	11.220	11.174	11.257	VV	1049	27036	0.37%	0.059%
106	11.274	11.257	11.363	VV	493	17701	0.24%	0.038%
107	11.394	11.363	11.423	PV	165	4080	0.06%	0.009%
108	11.455	11.423	11.488	VV	706	12262	0.17%	0.027%
109	11.524	11.488	11.574	VV	2164	36329	0.50%	0.079%
110	11.604	11.574	11.664	VV	1944	33473	0.46%	0.073%
111	11.681	11.664	11.698	PV	382	4827	0.07%	0.010%
112	11.717	11.698	11.741	VV	416	5845	0.08%	0.013%
113	11.838	11.741	11.940	VV	465376	5300136	72.86%	11.503%
114	11.964	11.940	12.060	VV	1509	62748	0.86%	0.136%
115	12.078	12.060	12.114	VV	317	7380	0.10%	0.016%
116	12.131	12.114	12.150	VV	378	5840	0.08%	0.013%
117	12.195	12.150	12.231	VV	1974	36431	0.50%	0.079%
118	12.247	12.231	12.271	VV	427	7501	0.10%	0.016%
119	12.288	12.271	12.364	VV	418	11636	0.16%	0.025%
120	12.390	12.364	12.429	PV	426	9461	0.13%	0.021%
121	12.469	12.429	12.526	VV	783	32879	0.45%	0.071%
122	12.564	12.526	12.631	VV	1013	42340	0.58%	0.092%
123	12.652	12.631	12.727	VV	633	23534	0.32%	0.051%
124	12.778	12.727	12.803	VV	528	18247	0.25%	0.040%
125	12.836	12.803	12.878	VV	2383	39986	0.55%	0.087%
126	12.902	12.878	13.044	VV	2809	70240	0.97%	0.152%
127	13.092	13.044	13.118	PV	272	7944	0.11%	0.017%
128	13.160	13.118	13.181	VV	541	9839	0.14%	0.021%
129	13.283	13.181	13.423	VV	344131	4249504	58.42%	9.223%
130	13.451	13.423	13.481	VV	2136	40743	0.56%	0.088%
131	13.501	13.481	13.637	VV	1175	46521	0.64%	0.101%
132	13.681	13.637	13.742	VV	480	17116	0.24%	0.037%
133	13.802	13.742	13.844	VV	347	13534	0.19%	0.029%
134	13.888	13.844	13.914	VV	511	13462	0.19%	0.029%
135	13.991	13.914	14.013	VV	1671	33199	0.46%	0.072%
136	14.037	14.013	14.111	VV	1850	37526	0.52%	0.081%
137	14.155	14.111	14.216	VV	419	13763	0.19%	0.030%
138	14.274	14.216	14.324	PV	359	14527	0.20%	0.032%
139	14.330	14.324	14.350	VV	246	2557	0.04%	0.006%
140	14.401	14.350	14.424	VV	635	14733	0.20%	0.032%
141	14.471	14.424	14.534	VV	1510	52078	0.72%	0.113%

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142	14.548	14.534	14.573	VV	463	8331	0.11%	0.018%
143	14.603	14.573	14.628	VV	1461	23294	0.32%	0.051%
144	14.659	14.628	14.734	VV	589	25328	0.35%	0.055%
145	14.753	14.734	14.784	VV	373	8106	0.11%	0.018%
146	14.893	14.784	14.946	VV	916	31356	0.43%	0.068%
147	14.998	14.946	15.058	VV	431	15771	0.22%	0.034%
148	15.107	15.058	15.168	VV	1597	58114	0.80%	0.126%
149	15.190	15.168	15.234	VV	779	14801	0.20%	0.032%
150	15.245	15.234	15.306	VV	193	4899	0.07%	0.011%
151	15.375	15.306	15.400	PV	164	6904	0.09%	0.015%
152	15.543	15.400	15.640	PV	17076	489397	6.73%	1.062%
153	15.665	15.640	15.698	VV	1672	39647	0.55%	0.086%
154	15.728	15.698	15.770	VV	3480	58989	0.81%	0.128%
155	15.791	15.770	15.821	VV	412	10269	0.14%	0.022%
156	15.980	15.821	16.011	VV	418	37051	0.51%	0.080%
157	16.072	16.011	16.111	VV	888	32023	0.44%	0.070%
158	16.167	16.111	16.208	VV	1434	39623	0.54%	0.086%
159	16.230	16.208	16.254	VV	335	6654	0.09%	0.014%
160	16.296	16.254	16.318	VV	409	7098	0.10%	0.015%
161	16.370	16.318	16.400	PV	372	8780	0.12%	0.019%
162	16.455	16.400	16.488	VV	1915	29982	0.41%	0.065%
163	16.567	16.488	16.597	VV	1654	47891	0.66%	0.104%
164	16.645	16.597	16.681	VV	1391	51772	0.71%	0.112%
165	16.730	16.681	16.767	VV	3234	60033	0.83%	0.130%
166	16.810	16.767	16.881	VV	839	20480	0.28%	0.044%
167	17.003	16.881	17.021	PV	304	2055	0.03%	0.004%
168	17.117	17.021	17.144	PV	1924	38817	0.53%	0.084%
169	17.163	17.144	17.213	VV	820	13366	0.18%	0.029%
170	17.566	17.213	17.608	PV	2258	40195	0.55%	0.087%
171	17.770	17.608	17.788	PV	542	15126	0.21%	0.033%
172	17.965	17.788	17.981	PV	1186	-8156	-0.11%	-0.018%
173	18.006	17.981	18.036	VV	1782	27342	0.38%	0.059%
174	18.101	18.036	18.116	PV	729	8884	0.12%	0.019%
175	18.182	18.116	18.214	VV	1221	39561	0.54%	0.086%
176	18.235	18.214	18.254	VV	628	10729	0.15%	0.023%
177	18.326	18.254	18.349	VV	1837	39464	0.54%	0.086%
178	18.392	18.349	18.504	VV	6541	260282	3.58%	0.565%
179	18.833	18.504	18.878	VV	4151	95694	1.32%	0.208%
180	19.232	18.878	19.287	PV	7690	591996	8.14%	1.285%
181	19.624	19.287	19.644	VV	8773	1380331	18.98%	2.996%
182	19.984	19.644	20.008	VV	14082	2299838	31.62%	4.991%
183	20.028	20.008	20.043	VV	12849	269829	3.71%	0.586%
184	20.631	20.043	20.651	VV	28491	7274377	100.00%	15.788%
185	20.873	20.651	20.979	VV	32842	5890168	80.97%	12.784%
186	21.140	20.979	21.258	VV	27533	4323191	59.43%	9.383%
187	21.407	21.258	21.604	VV	24814	4632866	63.69%	10.055%
188	21.621	21.604	21.634	VV	16530	288425	3.96%	0.626%
189	21.799	21.634	21.844	VV	18765	2288279	31.46%	4.966%
190	21.854	21.844	21.988	VV	17492	1280294	17.60%	2.779%
191	22.016	21.988	22.090	VV	11188	631243	8.68%	1.370%
192	22.195	22.090	22.361	VV	10379	1296561	17.82%	2.814%
193	22.463	22.361	22.539	VV	4221	302034	4.15%	0.656%
Sum of corrected areas:					46075342			

rteres

Aliphatic EPH 051425.M Wed Jun 04 04:39:59 2025



CALIBRATION SUMMARY

Initial Calibration Report for SequenceID : FE051425AL

AreaCount

Parameter Range	FE053808.D	FE053809.D	FE053810.D	FE053811.D	FE053812.D	
Aliphatic C9-C12	39959813.000	19674422.000	8359998.000	4302314.000	1960657.000	
Aliphatic C12-C16	26366047.000	13009283.000	5535375.000	2847096.000	1320454.000	
Aliphatic C16-C21	38070913.000	18853668.000	8070214.000	4192256.000	1990718.000	
Aliphatic C21-C28	47420227.000	23538252.000	10118575.000	5271396.000	2527516.000	
Aliphatic C28-C40	66668035.000	32845865.000	13960092.000	7254782.000	3579221.000	
Aliphatic EPH	218485035.000	107921490.000	46044254.000	23867844.000	11378566.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aliphatic C9-C12	135563.2846662	4.112				
Aliphatic C12-C16	134941.528	3.858				
Aliphatic C16-C21	131910.8259996	4.362				
Aliphatic C21-C28	124176.943	4.794				
Aliphatic C28-C40	115430.8216662	4.329				
Aliphatic EPH	125644.338333	4.08				

Concentration

Parameter Range	FE053808.D	FE053809.D	FE053810.D	FE053811.D	FE053812.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	FE053808.D	FE053809.D	FE053810.D	FE053811.D	FE053812.D	
Aliphatic C9-C12	133199.376666	131162.813333	139333.300000	143410.466666	130710.466666	
Aliphatic C12-C16	131830.235000	130092.830000	138384.375000	142354.800000	132045.400000	
Aliphatic C16-C21	126903.043333	125691.120000	134503.566666	139741.866666	132714.533333	

Initial Calibration Report for SequenceID : FE051425AL

Aliphatic C21-C28	118550.567500	117691.260000	126482.187500	131784.900000	126375.800000	
Aliphatic C28-C40	111113.391666	109486.216666	116334.100000	120913.033333	119307.366666	
Aliphatic EPH	121380.575000	119912.766666	127900.705555	132599.133333	126428.511111	

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
 Data File : FE053808.D
 Signal(s) : FID1B.ch
 Acq On : 14 May 2025 09:48
 Operator : YP\AJ
 Sample : 100 PPM ALIPHATIC HC STD1
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
 Quant Time: May 14 11:25:12 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 11:25:04 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)	11.859	15622587	97.090 ug/ml
Spiked Amount 50.000		Recovery =	194.18%
12) S 1-chlorooctadecane (S...	13.301	11527656	97.613 ug/ml
Spiked Amount 50.000		Recovery =	195.23%
Target Compounds			
1) T n-Nonane (C9)	3.207	13229979	97.672 ug/ml
2) T n-Decane (C10)	4.467	13310707	97.863 ug/ml
3) T A~Naphthalene (C11.7)	6.178	14593700	98.691 ug/ml
4) T n-Dodecane (C12)	6.648	13419127	97.713 ug/ml
5) T A~2-methylnaphthalene...	7.281	14358544	99.848 ug/ml
6) T n-Tetradecane (C14)	8.483	13205545	97.636 ug/ml
7) T n-Hexadecane (C16)	10.095	13160502	97.513 ug/ml
8) T n-Octadecane (C18)	11.545	12994768	97.106 ug/ml
10) T n-Eicosane (C20)	12.856	12623579	97.039 ug/ml
11) T n-Heneicosane (C21)	13.470	12452566	97.133 ug/ml
13) T n-Docosane (C22)	14.057	12254031	97.017 ug/ml
14) T n-Tetracosane (C24)	15.162	11992847	96.920 ug/ml
15) T n-Hexacosane (C26)	16.185	11715780	96.770 ug/ml
16) T n-Octacosane (C28)	17.137	11457569	96.322 ug/ml
17) T n-Tricontane (C30)	18.026	11534739	95.965 ug/ml
18) T n-Dotriacontane (C32)	18.861	11494537	95.725 ug/ml
19) T n-Tetratriacontane (C34)	19.646	11142260	96.303 ug/ml
20) T n-Hexatriacontane (C36)	20.389	11127425	97.592 ug/ml
21) T n-Octatriacontane (C38)	21.121	10825017	99.117 ug/ml
22) T n-Tetracontane (C40)	22.020	10544057	102.240 ug/ml

(f)=RT Delta > 1/2 Window

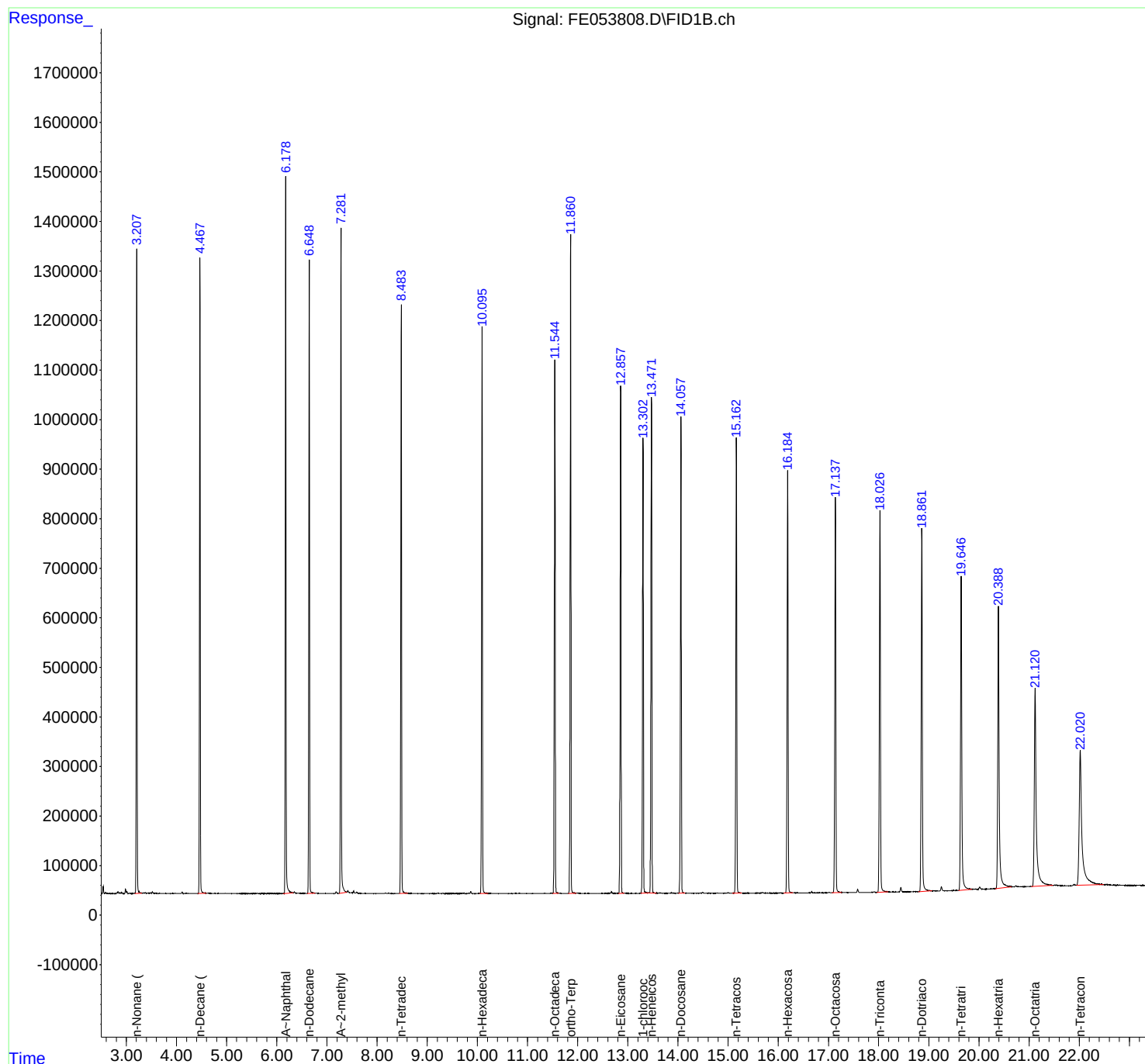
(m)=manual int.

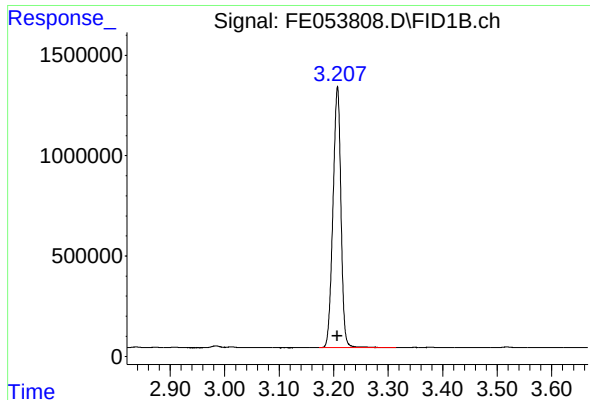
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053808.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 09:48
Operator : YP\AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: May 14 11:25:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 11:25:04 2025
Response via : Initial Calibration
Integrator: ChemStation

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





#1 n-Nonane (C9)

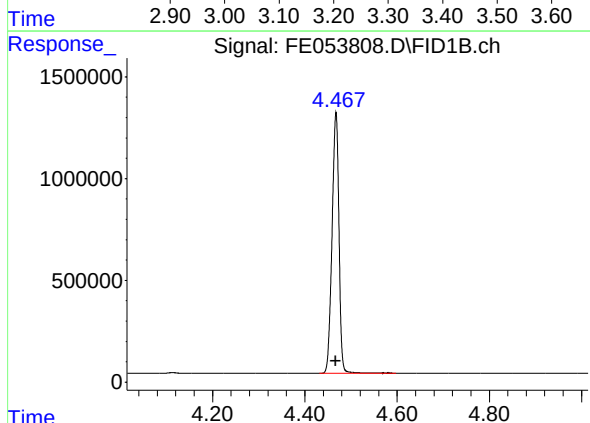
R.T.: 3.207 min
Delta R.T.: 0.000 min
Response: 13229979
Conc: 97.67 ug/ml

Instrument :

FID_E

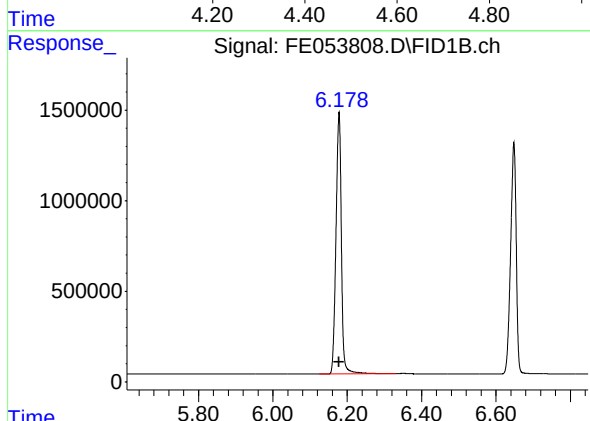
ClientSampleId :

100 PPM ALIPHATIC HC STD1



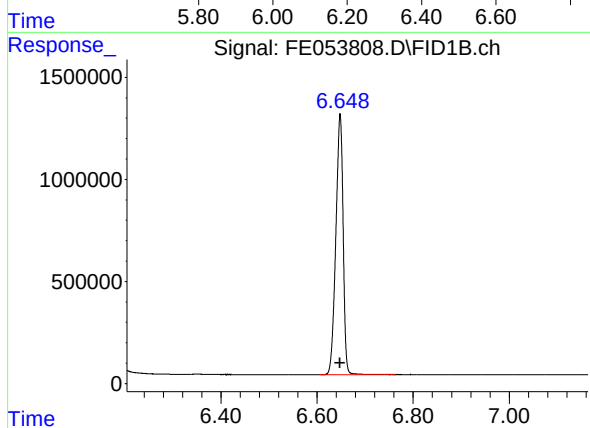
#2 n-Decane (C10)

R.T.: 4.467 min
Delta R.T.: 0.000 min
Response: 13310707
Conc: 97.86 ug/ml



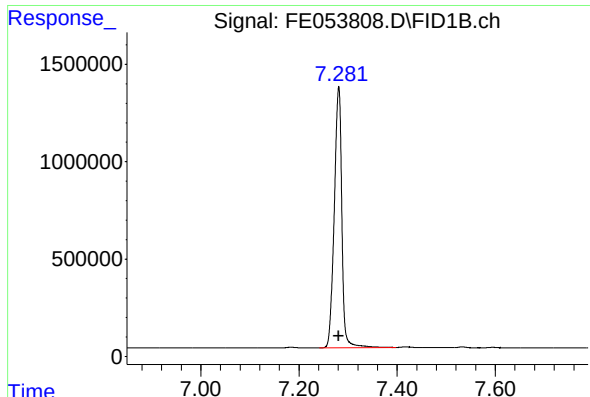
#3 A~Naphthalene (C11.7)

R.T.: 6.178 min
Delta R.T.: 0.000 min
Response: 14593700
Conc: 98.69 ug/ml



#4 n-Dodecane (C12)

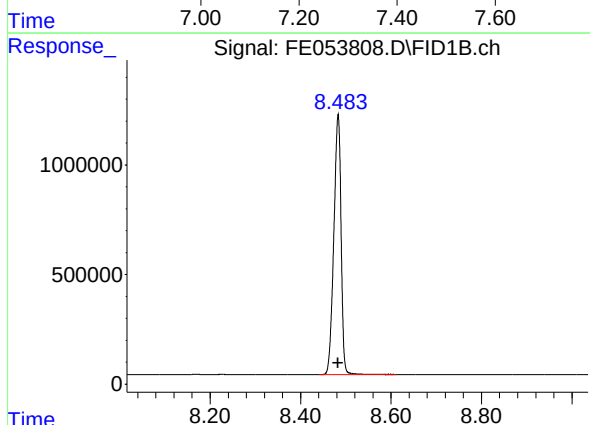
R.T.: 6.648 min
Delta R.T.: 0.000 min
Response: 13419127
Conc: 97.71 ug/ml



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

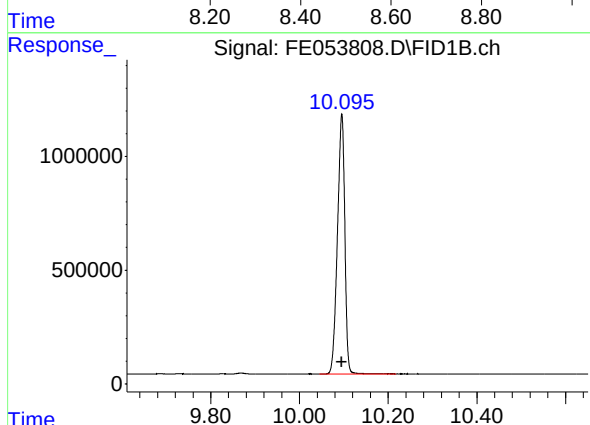
R.T.: 7.281 min
Delta R.T.: 0.000 min
Response: 14358544
Conc: 99.85 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



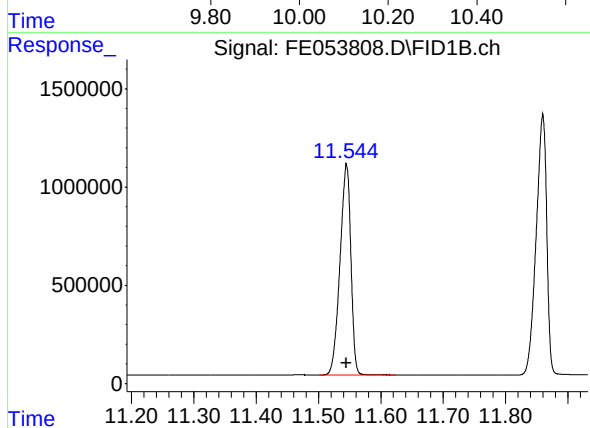
#6 n-Tetradecane (C14)

R.T.: 8.483 min
Delta R.T.: 0.000 min
Response: 13205545
Conc: 97.64 ug/ml



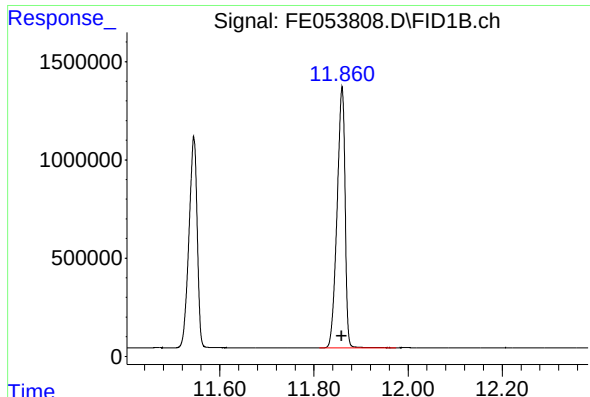
#7 n-Hexadecane (C16)

R.T.: 10.095 min
Delta R.T.: 0.000 min
Response: 13160502
Conc: 97.51 ug/ml



#8 n-Octadecane (C18)

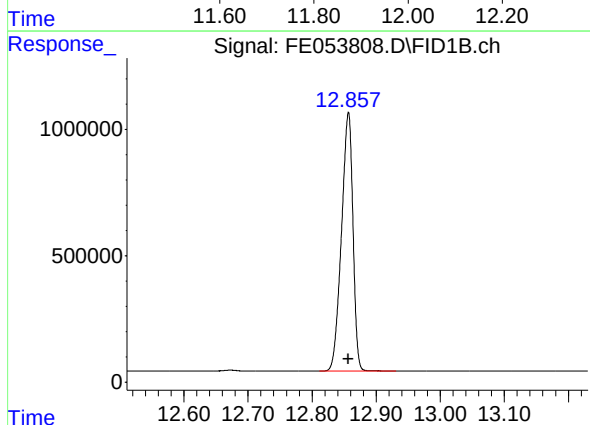
R.T.: 11.545 min
Delta R.T.: 0.000 min
Response: 12994768
Conc: 97.11 ug/ml



#9 ortho-Terphenyl (SURR)

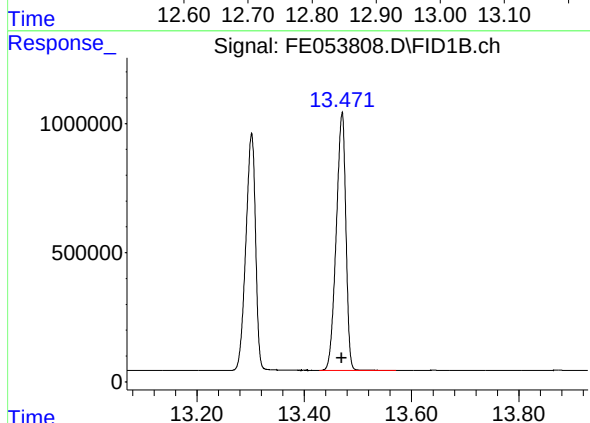
R.T.: 11.859 min
Delta R.T.: 0.000 min
Response: 15622587
Conc: 97.09 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



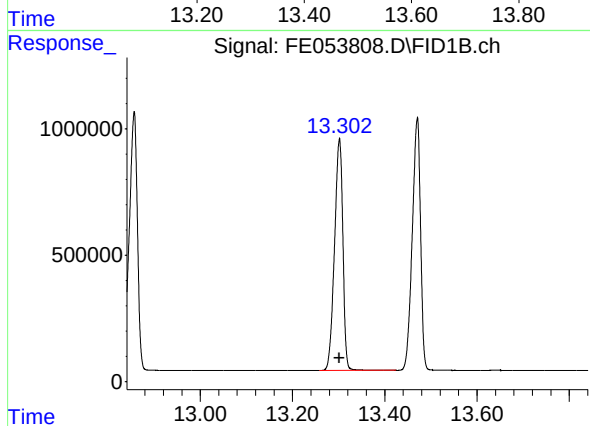
#10 n-Eicosane (C20)

R.T.: 12.856 min
Delta R.T.: 0.000 min
Response: 12623579
Conc: 97.04 ug/ml



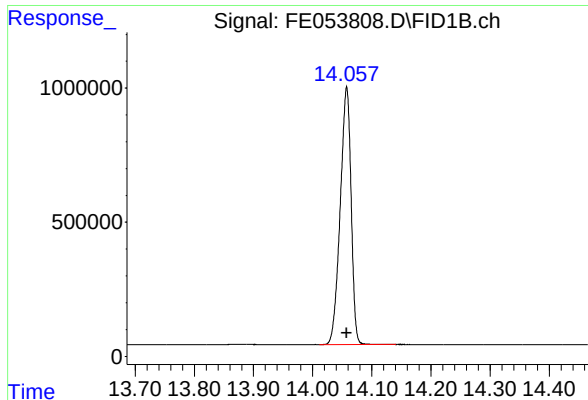
#11 n-Heneicosane (C21)

R.T.: 13.470 min
Delta R.T.: 0.000 min
Response: 12452566
Conc: 97.13 ug/ml



#12 1-chlorooctadecane (SURR)

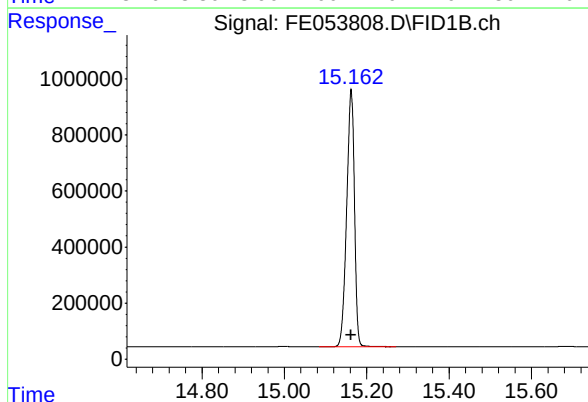
R.T.: 13.301 min
Delta R.T.: 0.000 min
Response: 11527656
Conc: 97.61 ug/ml



#13 n-Docosane (C22)

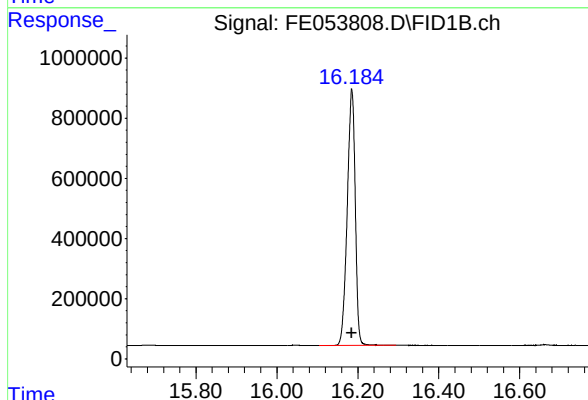
R.T.: 14.057 min
Delta R.T.: 0.000 min
Response: 12254031
Conc: 97.02 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



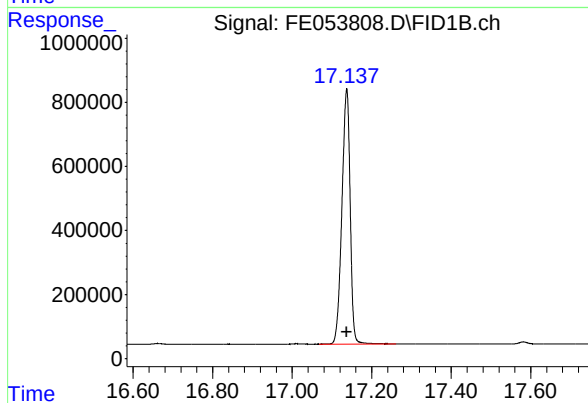
#14 n-Tetracosane (C24)

R.T.: 15.162 min
Delta R.T.: 0.000 min
Response: 11992847
Conc: 96.92 ug/ml



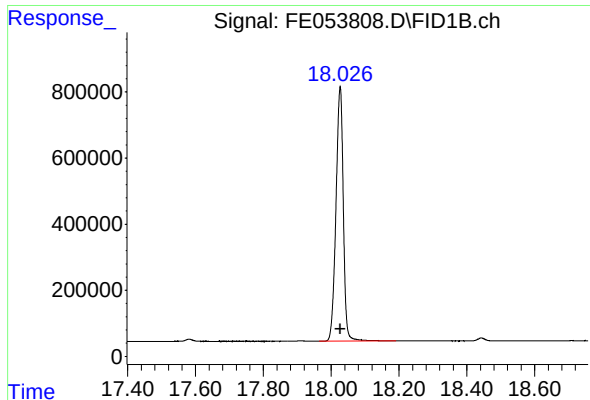
#15 n-Hexacosane (C26)

R.T.: 16.185 min
Delta R.T.: 0.000 min
Response: 11715780
Conc: 96.77 ug/ml



#16 n-Octacosane (C28)

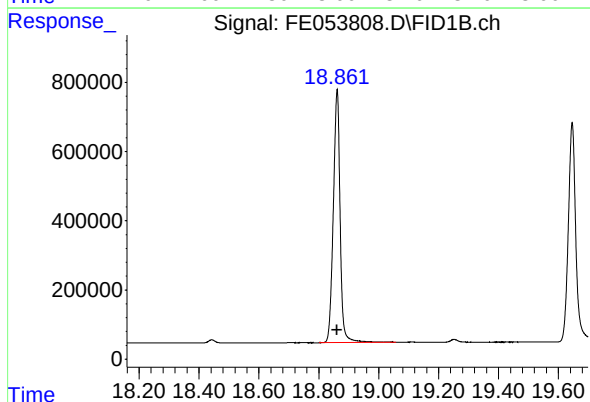
R.T.: 17.137 min
Delta R.T.: 0.000 min
Response: 11457569
Conc: 96.32 ug/ml



#17 n-Tricontane (C30)

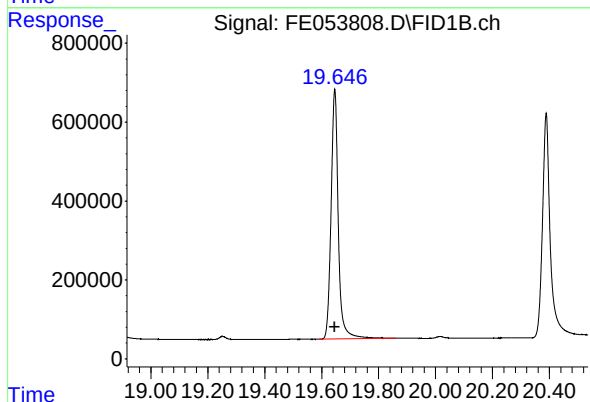
R.T.: 18.026 min
Delta R.T.: 0.000 min
Response: 11534739
Conc: 95.96 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



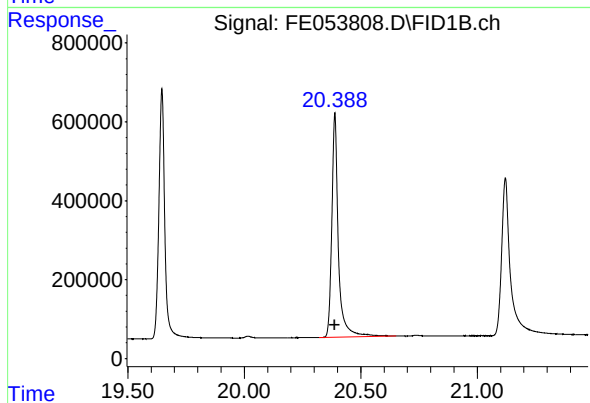
#18 n-Dotriacontane (C32)

R.T.: 18.861 min
Delta R.T.: 0.000 min
Response: 11494537
Conc: 95.72 ug/ml



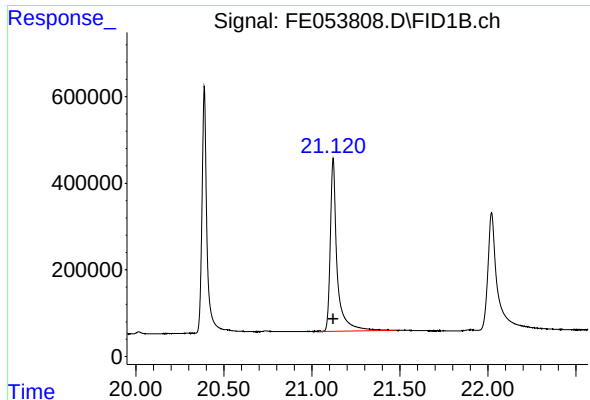
#19 n-Tetratriacontane (C34)

R.T.: 19.646 min
Delta R.T.: 0.000 min
Response: 11142260
Conc: 96.30 ug/ml



#20 n-Hexatriacontane (C36)

R.T.: 20.389 min
Delta R.T.: 0.000 min
Response: 11127425
Conc: 97.59 ug/ml



#21 n-Octatriacontane (C38)

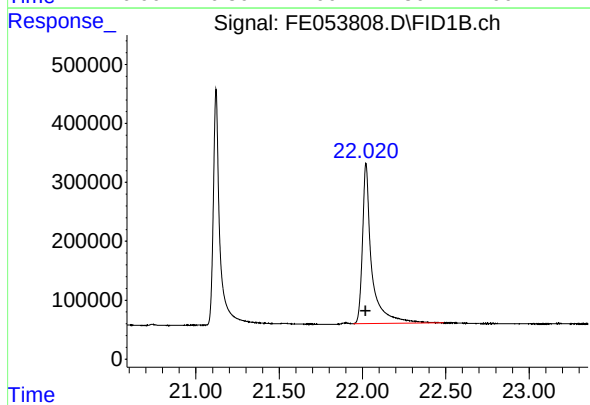
R.T.: 21.121 min
Delta R.T.: 0.000 min
Response: 10825017
Conc: 99.12 ug/ml

Instrument :

FID_E

ClientSampleId :

100 PPM ALIPHATIC HC STD1



#22 n-Tetracontane (C40)

R.T.: 22.020 min
Delta R.T.: 0.000 min
Response: 10544057
Conc: 102.24 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
 Data File : FE053808.D
 Signal(s) : FID1B.ch
 Acq On : 14 May 2025 09:48
 Sample : 100 PPM ALIPHATIC HC STD1
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	3.207	3.173	3.314	VB	1307587	13229979	84.68%	4.818%
2	4.467	4.431	4.598	BB	1286918	13310707	85.20%	4.848%
3	6.178	6.124	6.331	BV	1440540	14593700	93.41%	5.315%
4	6.648	6.604	6.764	BB	1276013	13419127	85.90%	4.887%
5	7.281	7.241	7.398	BV	1343925	14358544	91.91%	5.229%
6	8.483	8.441	8.611	BB	1198037	13205545	84.53%	4.809%
7	10.095	10.044	10.218	BB	1136738	13160502	84.24%	4.793%
8	11.545	11.501	11.624	BB	1071894	12994768	83.18%	4.732%
9	11.859	11.811	11.974	BB	1336882	15622587	100.00%	5.689%
10	12.856	12.811	12.931	BB	1033517	12623579	80.80%	4.597%
11	13.301	13.258	13.424	BB	915097	11527656	73.79%	4.198%
12	13.470	13.428	13.571	BB	1006797	12452566	79.71%	4.535%
13	14.057	14.011	14.141	BB	961072	12254031	78.44%	4.463%
14	15.162	15.084	15.271	BB	912379	11992847	76.77%	4.368%
15	16.185	16.104	16.294	BB	851447	11715780	74.99%	4.267%
16	17.137	17.068	17.261	BB	799170	11457569	73.34%	4.173%
17	18.026	17.964	18.191	BB	775081	11534739	73.83%	4.201%
18	18.861	18.801	19.058	BB	732486	11494537	73.58%	4.186%
19	19.646	19.591	19.861	BB	635241	11142260	71.32%	4.058%
20	20.389	20.321	20.651	BB	567956	11127425	71.23%	4.052%
21	21.121	21.041	21.478	BB	400264	10825017	69.29%	3.942%
22	22.020	21.944	22.488	BB	272238	10544057	67.49%	3.840%
Sum of corrected areas:						274587521		

Aliphatic EPH 051425.M Wed May 14 13:24:57 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
 Data File : FE053809.D
 Signal(s) : FID1B.ch
 Acq On : 14 May 2025 10:18
 Operator : YP\AJ
 Sample : 50 PPM ALIPHATIC HC STD2
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
 Quant Time: May 14 11:26:49 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 11:26:41 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)	11.854	7743091	48.732 ug/ml
Spiked Amount 50.000		Recovery =	97.46%
12) S 1-chlorooctadecane (S...	13.298	5688678	48.765 ug/ml
Spiked Amount 50.000		Recovery =	97.53%
Target Compounds			
1) T n-Nonane (C9)	3.203	6521797	48.750 ug/ml
2) T n-Decane (C10)	4.464	6543240	48.722 ug/ml
3) T A~Naphthalene (C11.7)	6.175	7153409	48.905 ug/ml
4) T n-Dodecane (C12)	6.644	6609385	48.735 ug/ml
5) T A~2-methylnaphthalene...	7.277	6992834	49.077 ug/ml
6) T n-Tetradecane (C14)	8.480	6512008	48.749 ug/ml
7) T n-Hexadecane (C16)	10.092	6497275	48.746 ug/ml
8) T n-Octadecane (C18)	11.539	6432292	48.694 ug/ml
10) T n-Eicosane (C20)	12.852	6253018	48.695 ug/ml
11) T n-Heneicosane (C21)	13.466	6168358	48.727 ug/ml
13) T n-Docosane (C22)	14.053	6073373	48.706 ug/ml
14) T n-Tetracosane (C24)	15.158	5946887	48.690 ug/ml
15) T n-Hexacosane (C26)	16.181	5815252	48.671 ug/ml
16) T n-Octacosane (C28)	17.132	5702740	48.609 ug/ml
17) T n-Tricontane (C30)	18.021	5742679	48.496 ug/ml
18) T n-Dotriacontane (C32)	18.855	5718405	48.389 ug/ml
19) T n-Tetratriacontane (C34)	19.641	5539154	48.563 ug/ml
20) T n-Hexatriacontane (C36)	20.383	5509173	48.866 ug/ml
21) T n-Octatriacontane (C38)	21.116	5288032	48.935 ug/ml
22) T n-Tetracontane (C40)	22.013	5048422	49.296 ug/ml

(f)=RT Delta > 1/2 Window

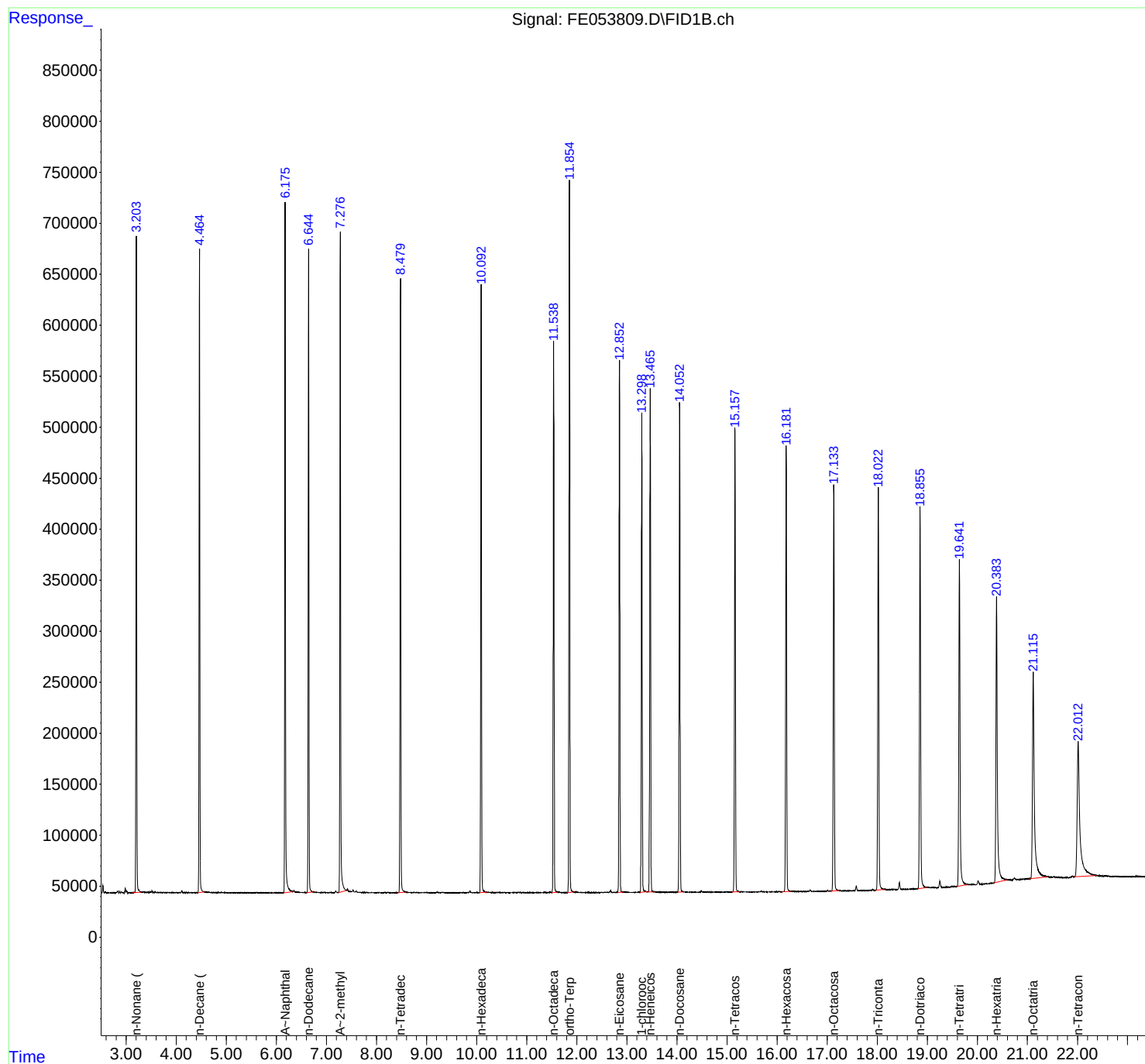
(m)=manual int.

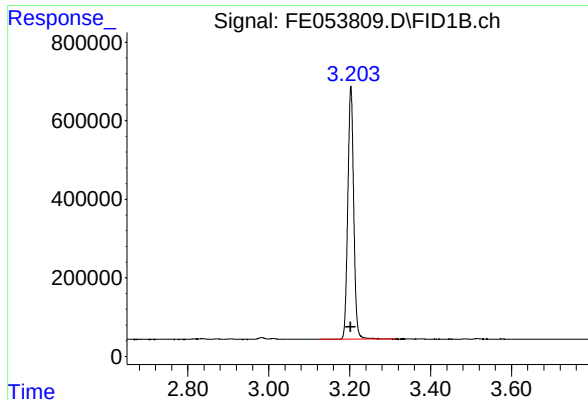
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053809.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 10:18
Operator : YP\AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: May 14 11:26:49 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 11:26:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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

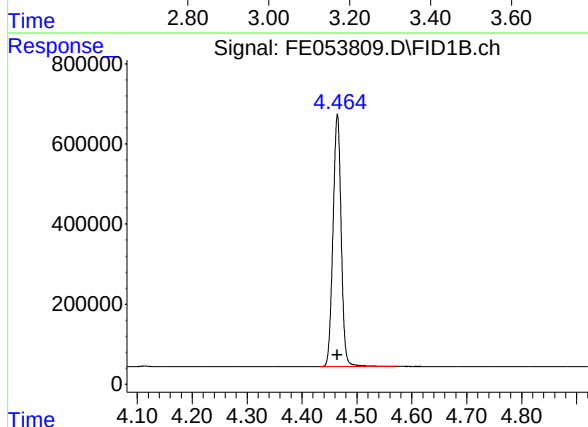




#1 n-Nonane (C9)

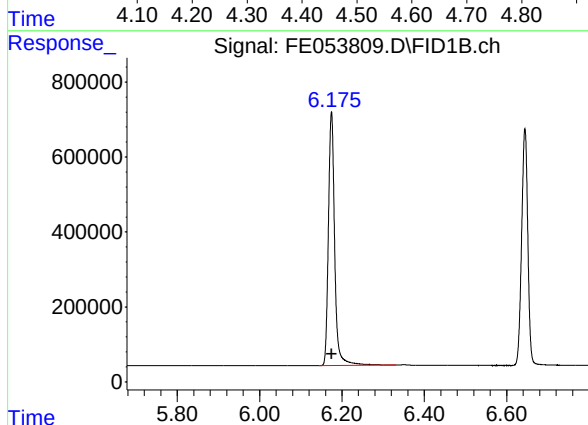
R.T.: 3.203 min
Delta R.T.: 0.000 min
Response: 6521797
Conc: 48.75 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



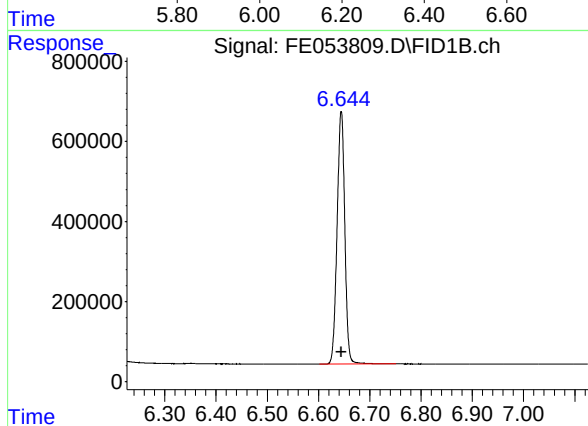
#2 n-Decane (C10)

R.T.: 4.464 min
Delta R.T.: 0.000 min
Response: 6543240
Conc: 48.72 ug/ml



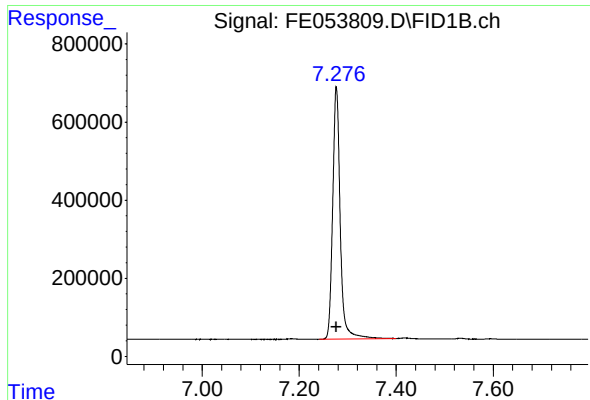
#3 A~Naphthalene (C11.7)

R.T.: 6.175 min
Delta R.T.: 0.000 min
Response: 7153409
Conc: 48.91 ug/ml



#4 n-Dodecane (C12)

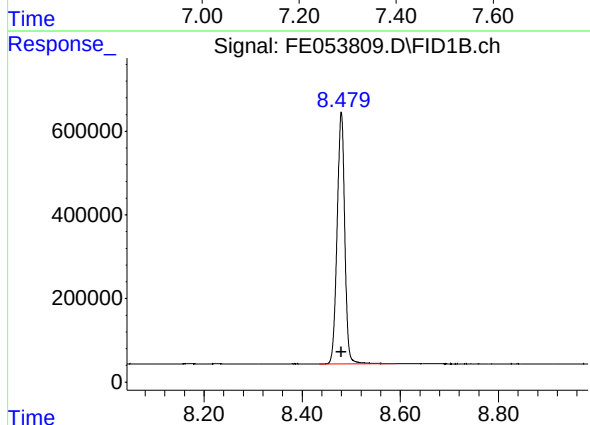
R.T.: 6.644 min
Delta R.T.: 0.000 min
Response: 6609385
Conc: 48.74 ug/ml



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

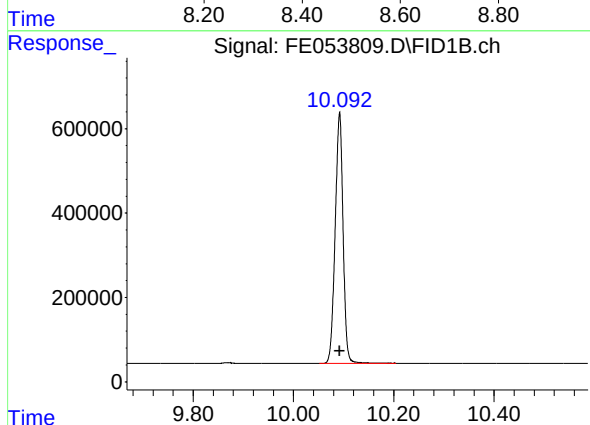
R.T.: 7.277 min
Delta R.T.: 0.000 min
Response: 6992834
Conc: 49.08 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



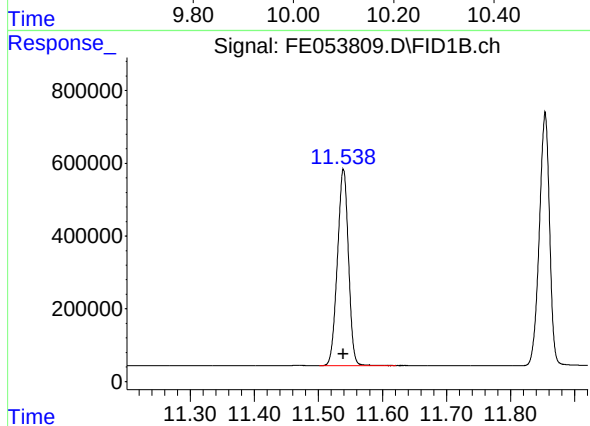
#6 n-Tetradecane (C14)

R.T.: 8.480 min
Delta R.T.: 0.000 min
Response: 6512008
Conc: 48.75 ug/ml



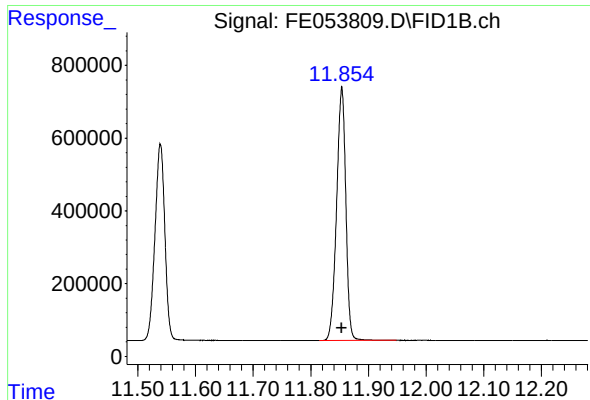
#7 n-Hexadecane (C16)

R.T.: 10.092 min
Delta R.T.: 0.000 min
Response: 6497275
Conc: 48.75 ug/ml



#8 n-Octadecane (C18)

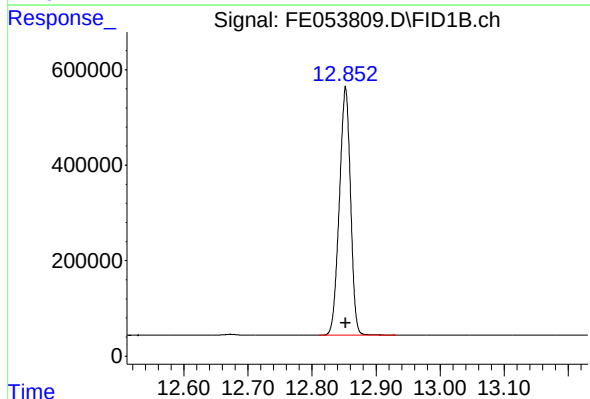
R.T.: 11.539 min
Delta R.T.: 0.000 min
Response: 6432292
Conc: 48.69 ug/ml



#9 ortho-Terphenyl (SURR)

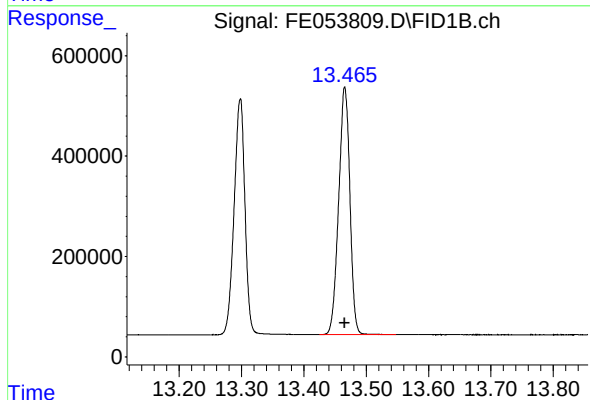
R.T.: 11.854 min
Delta R.T.: 0.000 min
Response: 7743091
Conc: 48.73 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



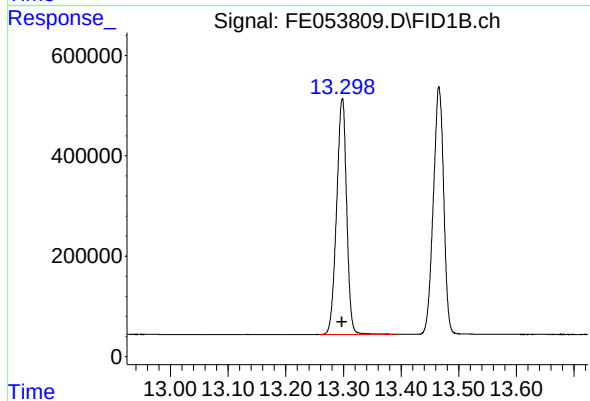
#10 n-Eicosane (C20)

R.T.: 12.852 min
Delta R.T.: 0.000 min
Response: 6253018
Conc: 48.69 ug/ml



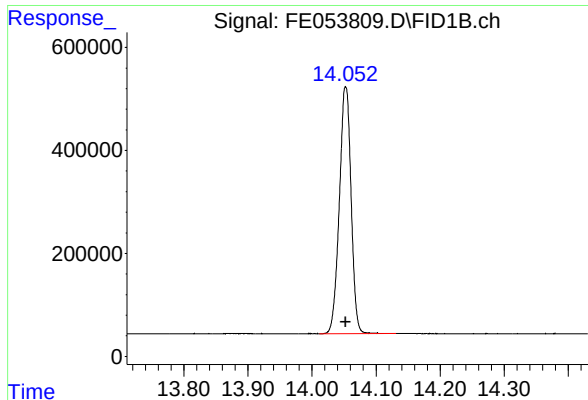
#11 n-Heneicosane (C21)

R.T.: 13.466 min
Delta R.T.: 0.000 min
Response: 6168358
Conc: 48.73 ug/ml



#12 1-chlorooctadecane (SURR)

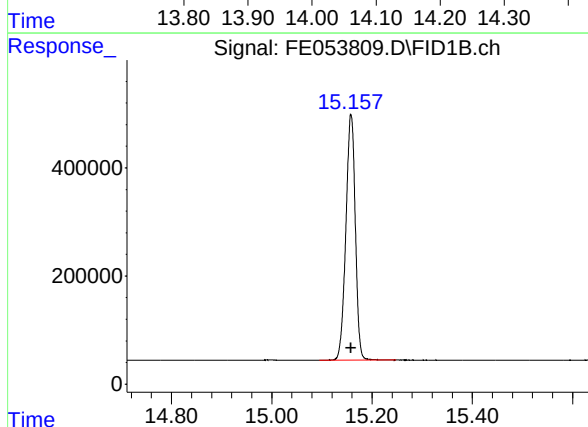
R.T.: 13.298 min
Delta R.T.: 0.000 min
Response: 5688678
Conc: 48.77 ug/ml



#13 n-Docosane (C22)

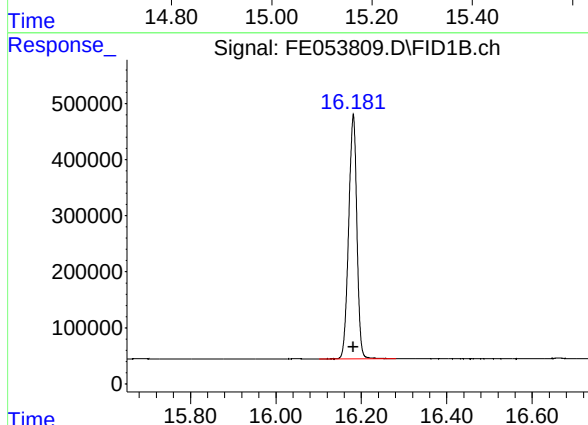
R.T.: 14.053 min
Delta R.T.: 0.000 min
Response: 6073373
Conc: 48.71 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



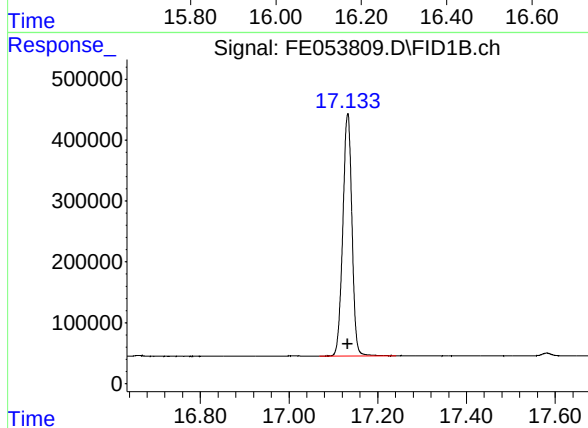
#14 n-Tetracosane (C24)

R.T.: 15.158 min
Delta R.T.: 0.000 min
Response: 5946887
Conc: 48.69 ug/ml



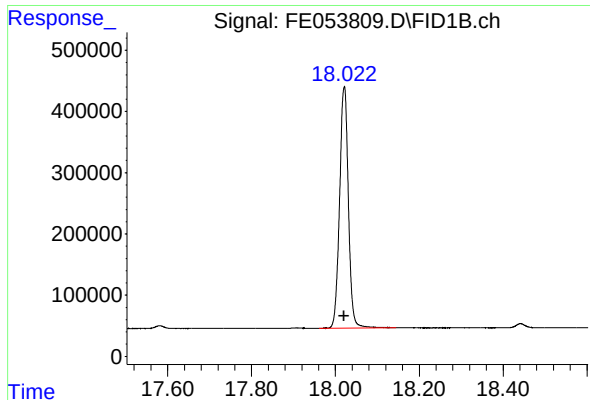
#15 n-Hexacosane (C26)

R.T.: 16.181 min
Delta R.T.: 0.000 min
Response: 5815252
Conc: 48.67 ug/ml



#16 n-Octacosane (C28)

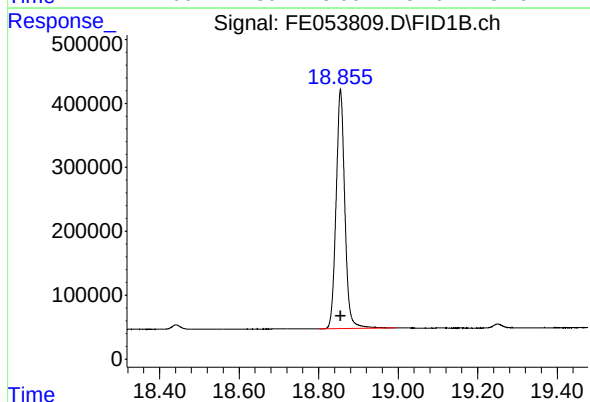
R.T.: 17.132 min
Delta R.T.: 0.000 min
Response: 5702740
Conc: 48.61 ug/ml



#17 n-Tricontane (C30)

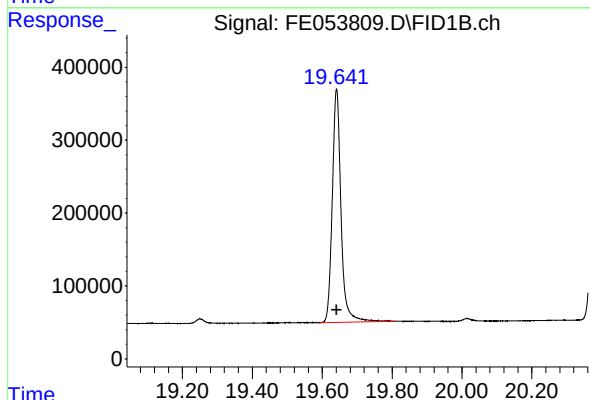
R.T.: 18.021 min
Delta R.T.: 0.000 min
Response: 5742679
Conc: 48.50 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



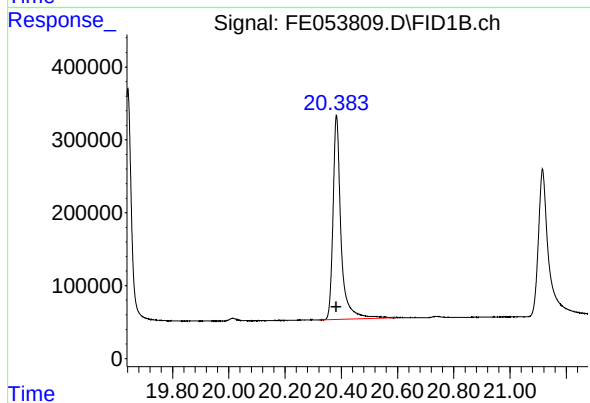
#18 n-Dotriacontane (C32)

R.T.: 18.855 min
Delta R.T.: 0.000 min
Response: 5718405
Conc: 48.39 ug/ml



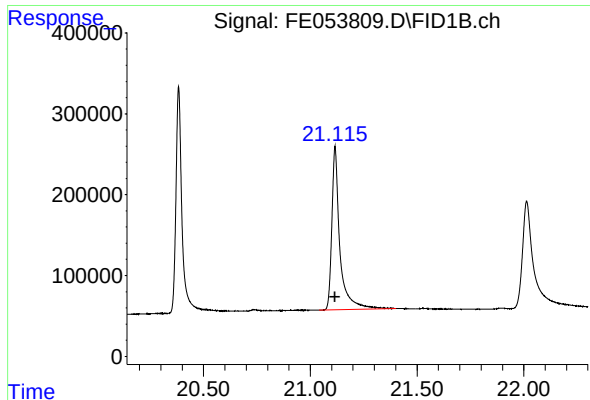
#19 n-Tetatriacontane (C34)

R.T.: 19.641 min
Delta R.T.: 0.000 min
Response: 5539154
Conc: 48.56 ug/ml



#20 n-Hexatriacontane (C36)

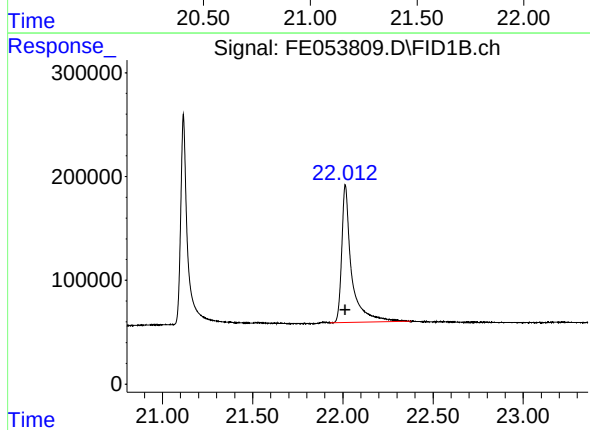
R.T.: 20.383 min
Delta R.T.: 0.000 min
Response: 5509173
Conc: 48.87 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.116 min
Delta R.T.: 0.000 min
Response: 5288032
Conc: 48.93 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



#22 n-Tetracontane (C40)

R.T.: 22.013 min
Delta R.T.: 0.000 min
Response: 5048422
Conc: 49.30 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053809.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 10:18
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	3.203	3.124	3.314	BB	642641	6521797	84.23%	4.813%
2	4.464	4.431	4.571	BB	630453	6543240	84.50%	4.829%
3	6.175	6.144	6.331	BV	677050	7153409	92.38%	5.279%
4	6.644	6.601	6.751	BB	633922	6609385	85.36%	4.878%
5	7.277	7.241	7.400	BV	642838	6992834	90.31%	5.161%
6	8.480	8.434	8.591	BB	604116	6512008	84.10%	4.806%
7	10.092	10.051	10.204	BB	588608	6497275	83.91%	4.795%
8	11.539	11.501	11.621	BB	539951	6432292	83.07%	4.747%
9	11.854	11.814	11.948	BB	696859	7743091	100.00%	5.714%
10	12.852	12.811	12.931	BB	514054	6253018	80.76%	4.615%
11	13.298	13.258	13.391	BB	470997	5688678	73.47%	4.198%
12	13.466	13.424	13.548	BB	493882	6168358	79.66%	4.552%
13	14.053	14.011	14.131	BB	484012	6073373	78.44%	4.482%
14	15.158	15.094	15.248	BB	456245	5946887	76.80%	4.389%
15	16.181	16.101	16.281	BB	435935	5815252	75.10%	4.292%
16	17.132	17.068	17.241	BB	397356	5702740	73.65%	4.209%
17	18.021	17.961	18.144	BB	394605	5742679	74.17%	4.238%
18	18.855	18.801	18.994	BB	373623	5718405	73.85%	4.220%
19	19.641	19.591	19.811	BB	320283	5539154	71.54%	4.088%
20	20.383	20.321	20.594	BB	279445	5509173	71.15%	4.066%
21	21.116	21.041	21.401	BB	202000	5288032	68.29%	3.903%
22	22.013	21.928	22.378	BB	132474	5048422	65.20%	3.726%
Sum of corrected areas:						135499500		

Aliphatic EPH 051425.M Wed May 14 13:24:29 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
 Data File : FE053810.D
 Signal(s) : FID1B.ch
 Acq On : 14 May 2025 10:48
 Operator : YP\AJ
 Sample : 20 PPM ALIPHATIC HC STD3
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
 Quant Time: May 14 11:15:28 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 11:15:08 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)	11.850	3311788	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
12) S 1-chlorooctadecane (S...	13.295	2418280	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
Target Compounds			
1) T n-Nonane (C9)	3.202	2772120	20.000 ug/ml
2) T n-Decane (C10)	4.463	2778404	20.000 ug/ml
3) T A~Naphthalene (C11.7)	6.174	2996176	20.000 ug/ml
4) T n-Dodecane (C12)	6.642	2809474	20.000 ug/ml
5) T A~2-methylnaphthalene...	7.276	2880461	20.000 ug/ml
6) T n-Tetradecane (C14)	8.477	2769021	20.000 ug/ml
7) T n-Hexadecane (C16)	10.090	2766354	20.000 ug/ml
8) T n-Octadecane (C18)	11.536	2753858	20.000 ug/ml
10) T n-Eicosane (C20)	12.850	2678807	20.000 ug/ml
11) T n-Heneicosane (C21)	13.463	2637549	20.000 ug/ml
13) T n-Docosane (C22)	14.051	2601518	20.000 ug/ml
14) T n-Tetracosane (C24)	15.156	2551002	20.000 ug/ml
15) T n-Hexacosane (C26)	16.178	2499556	20.000 ug/ml
16) T n-Octacosane (C28)	17.130	2466499	20.000 ug/ml
17) T n-Tricontane (C30)	18.019	2500963	20.000 ug/ml
18) T n-Dotriacontane (C32)	18.853	2504263	20.000 ug/ml
19) T n-Tetratriacontane (C34)	19.639	2399569	20.000 ug/ml
20) T n-Hexatriacontane (C36)	20.381	2335320	20.000 ug/ml
21) T n-Octatriacontane (C38)	21.112	2203566	20.000 ug/ml
22) T n-Tetracontane (C40)	22.008	2016411	20.000 ug/ml

(f)=RT Delta > 1/2 Window

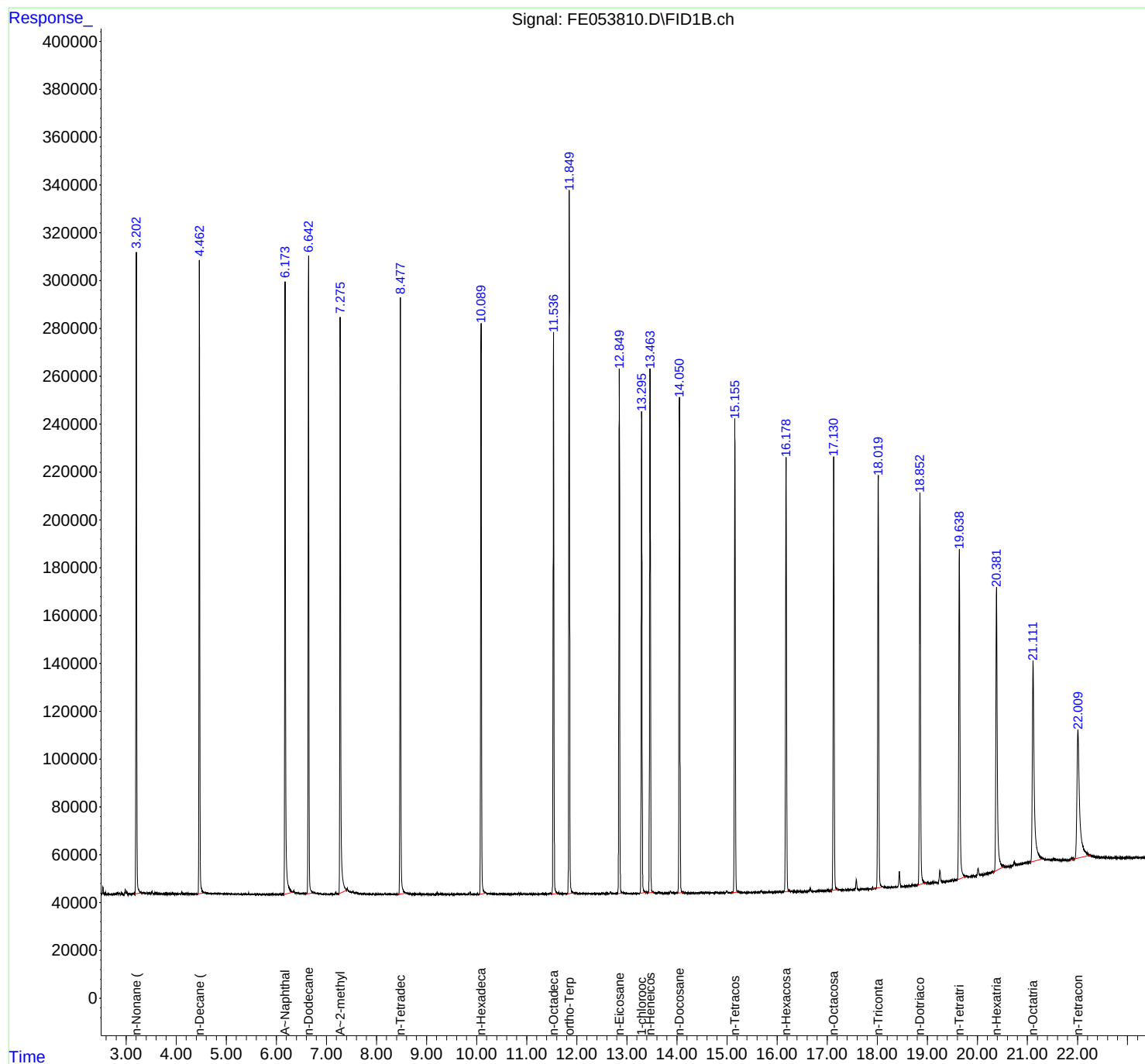
(m)=manual int.

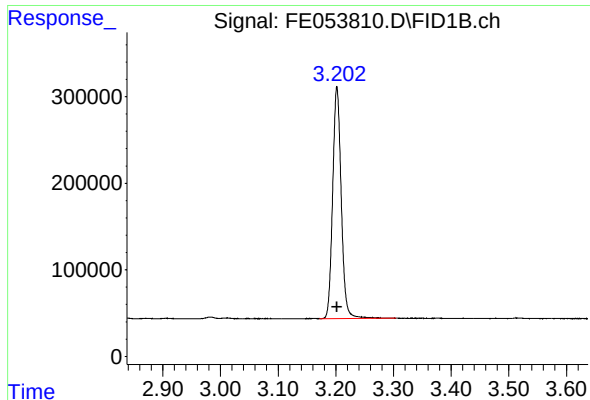
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053810.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 10:48
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: May 14 11:15:28 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 11:15:08 2025
Response via : Initial Calibration
Integrator: ChemStation

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

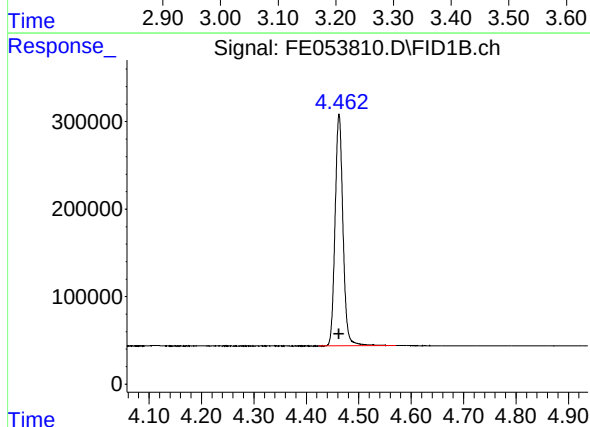




#1 n-Nonane (C9)

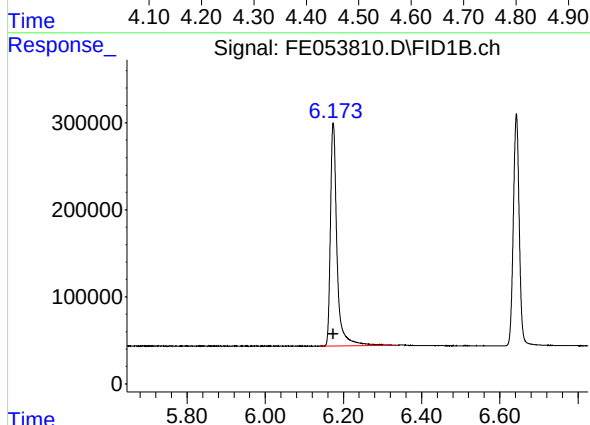
R.T.: 3.202 min
Delta R.T.: 0.000 min
Response: 2772120
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



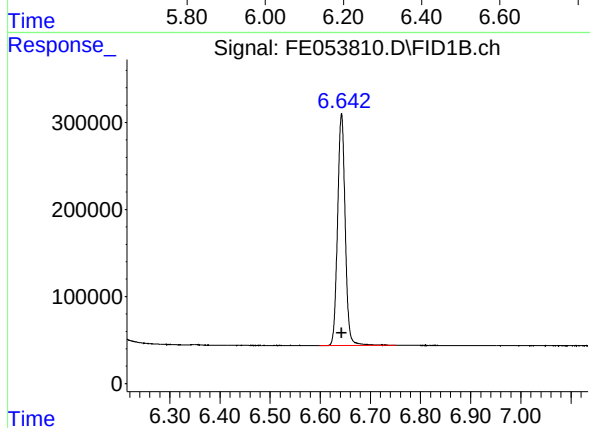
#2 n-Decane (C10)

R.T.: 4.463 min
Delta R.T.: 0.000 min
Response: 2778404
Conc: 20.00 ug/ml



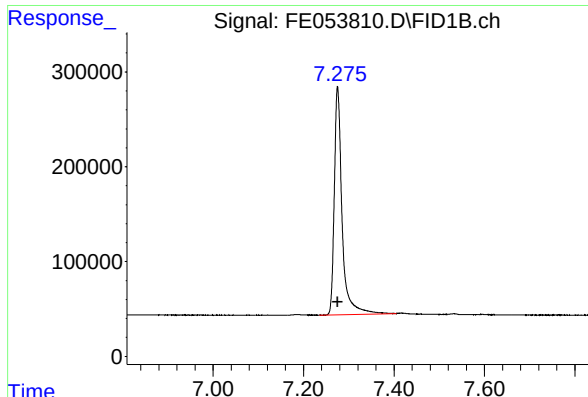
#3 A~Naphthalene (C11.7)

R.T.: 6.174 min
Delta R.T.: 0.000 min
Response: 2996176
Conc: 20.00 ug/ml



#4 n-Dodecane (C12)

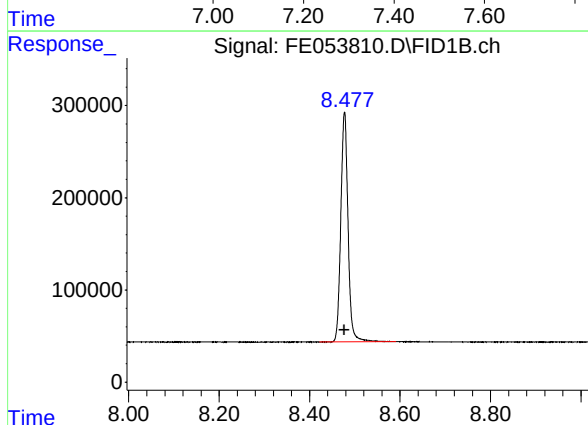
R.T.: 6.642 min
Delta R.T.: 0.000 min
Response: 2809474
Conc: 20.00 ug/ml



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

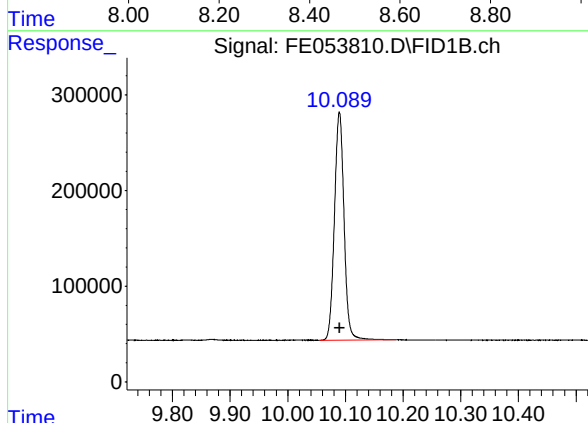
R.T.: 7.276 min
Delta R.T.: 0.000 min
Response: 2880461
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



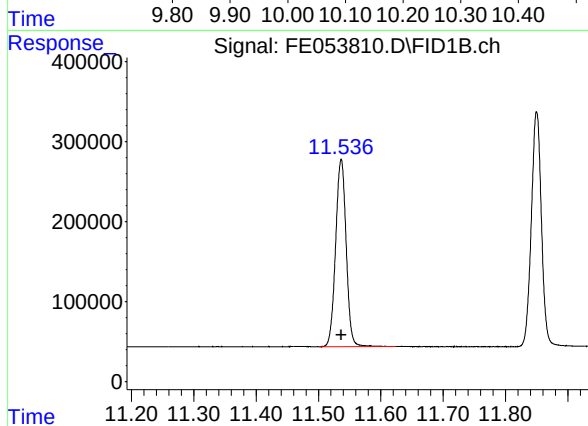
#6 n-Tetradecane (C14)

R.T.: 8.477 min
Delta R.T.: 0.000 min
Response: 2769021
Conc: 20.00 ug/ml



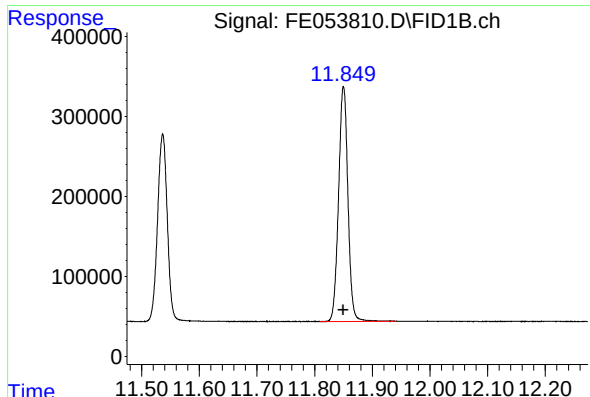
#7 n-Hexadecane (C16)

R.T.: 10.090 min
Delta R.T.: 0.000 min
Response: 2766354
Conc: 20.00 ug/ml



#8 n-Octadecane (C18)

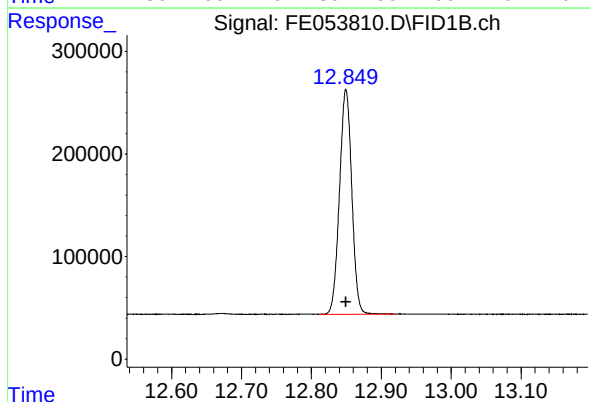
R.T.: 11.536 min
Delta R.T.: 0.000 min
Response: 2753858
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURR)

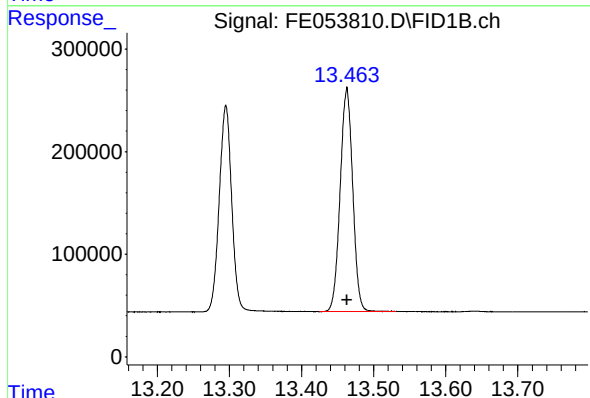
R.T.: 11.850 min
Delta R.T.: 0.000 min
Response: 3311788
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



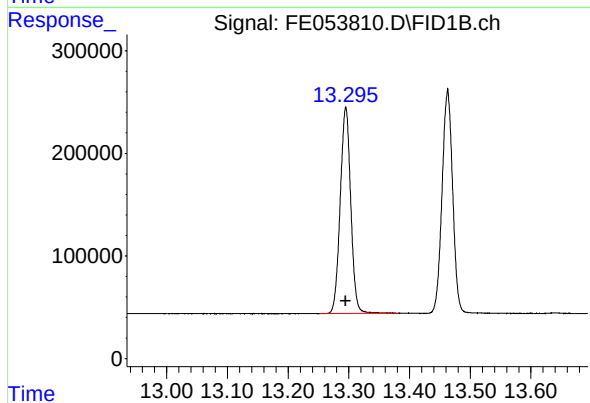
#10 n-Eicosane (C20)

R.T.: 12.850 min
Delta R.T.: 0.000 min
Response: 2678807
Conc: 20.00 ug/ml



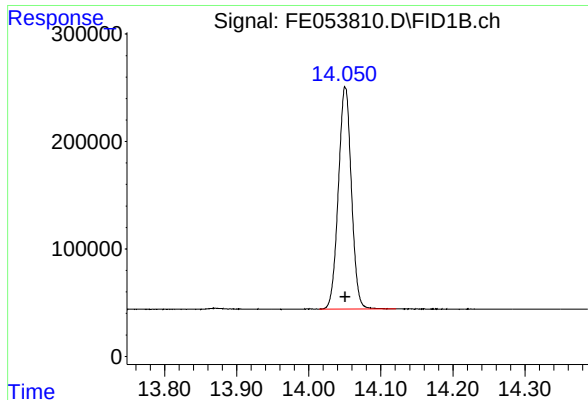
#11 n-Heneicosane (C21)

R.T.: 13.463 min
Delta R.T.: 0.000 min
Response: 2637549
Conc: 20.00 ug/ml



#12 1-chlorooctadecane (SURR)

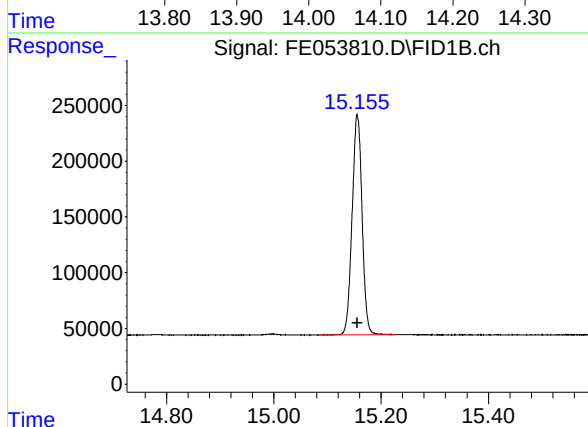
R.T.: 13.295 min
Delta R.T.: 0.000 min
Response: 2418280
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

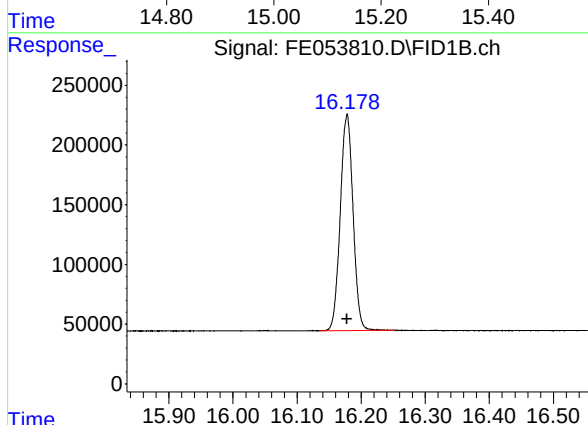
R.T.: 14.051 min
Delta R.T.: 0.000 min
Response: 2601518
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



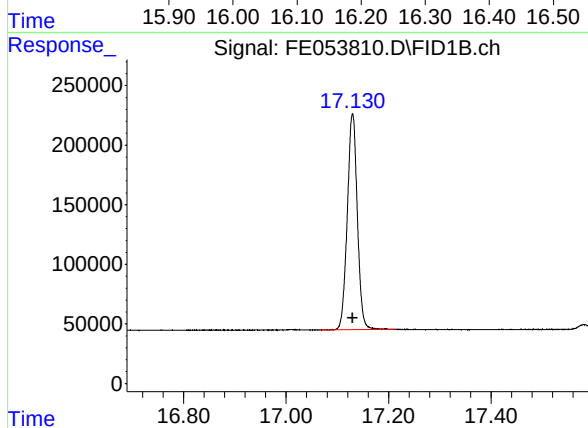
#14 n-Tetracosane (C24)

R.T.: 15.156 min
Delta R.T.: 0.000 min
Response: 2551002
Conc: 20.00 ug/ml



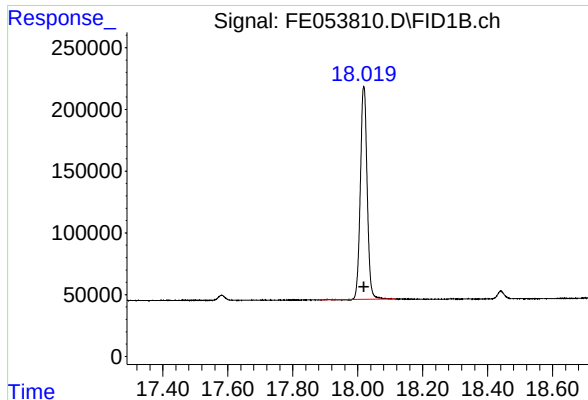
#15 n-Hexacosane (C26)

R.T.: 16.178 min
Delta R.T.: 0.000 min
Response: 2499556
Conc: 20.00 ug/ml



#16 n-Octacosane (C28)

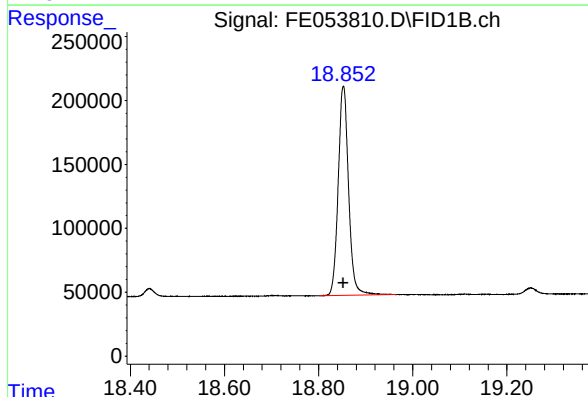
R.T.: 17.130 min
Delta R.T.: 0.000 min
Response: 2466499
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

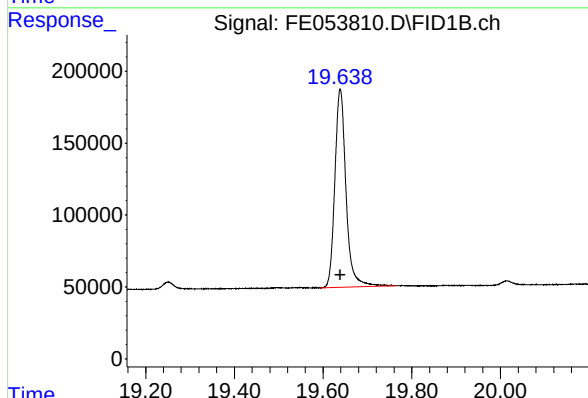
R.T.: 18.019 min
Delta R.T.: 0.000 min
Response: 2500963
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



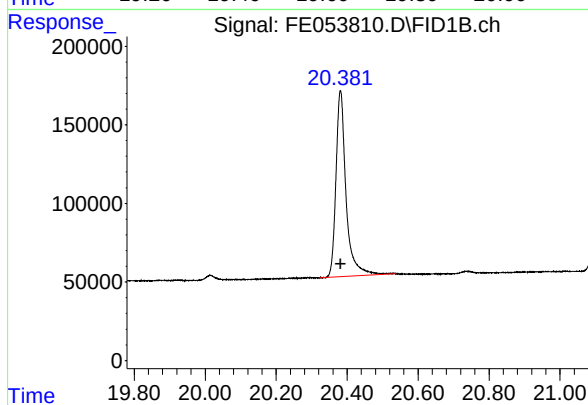
#18 n-Dotriacontane (C32)

R.T.: 18.853 min
Delta R.T.: 0.000 min
Response: 2504263
Conc: 20.00 ug/ml



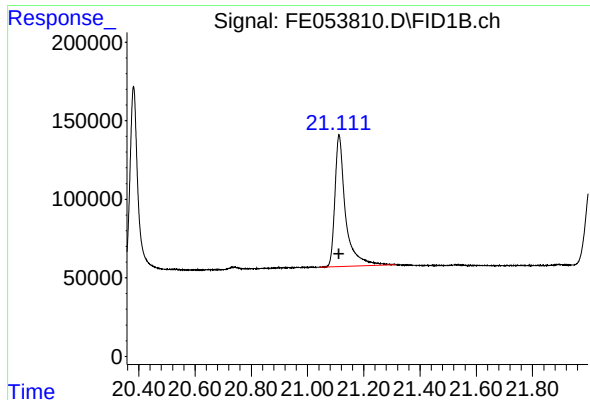
#19 n-Tetatriacontane (C34)

R.T.: 19.639 min
Delta R.T.: 0.000 min
Response: 2399569
Conc: 20.00 ug/ml



#20 n-Hexatriacontane (C36)

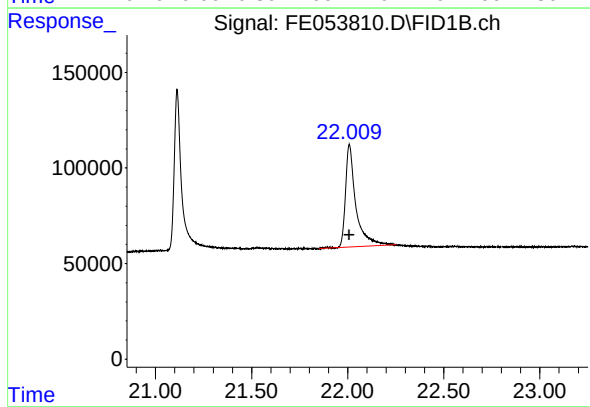
R.T.: 20.381 min
Delta R.T.: 0.000 min
Response: 2335320
Conc: 20.00 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.112 min
Delta R.T.: 0.000 min
Response: 2203566
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



#22 n-Tetracontane (C40)

R.T.: 22.008 min
Delta R.T.: 0.000 min
Response: 2016411
Conc: 20.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
 Data File : FE053810.D
 Signal(s) : FID1B.ch
 Acq On : 14 May 2025 10:48
 Sample : 20 PPM ALIPHATIC HC STD3
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	3.202	3.171	3.304	BB	266944	2772120	83.70%	4.808%
2	4.463	4.424	4.571	BB	263210	2778404	83.89%	4.819%
3	6.174	6.138	6.334	BB	255229	2996176	90.47%	5.197%
4	6.642	6.598	6.751	BB	264529	2809474	84.83%	4.873%
5	7.276	7.234	7.404	BV	240820	2880461	86.98%	4.996%
6	8.477	8.421	8.591	BB	250175	2769021	83.61%	4.803%
7	10.090	10.054	10.188	BB	238658	2766354	83.53%	4.798%
8	11.536	11.501	11.624	BB	235260	2753858	83.15%	4.777%
9	11.850	11.808	11.941	BB	294328	3311788	100.00%	5.745%
10	12.850	12.811	12.921	BB	217958	2678807	80.89%	4.647%
11	13.295	13.251	13.378	BB	200598	2418280	73.02%	4.195%
12	13.463	13.424	13.531	BB	216778	2637549	79.64%	4.575%
13	14.051	14.014	14.121	BB	207307	2601518	78.55%	4.513%
14	15.156	15.084	15.228	BB	197865	2551002	77.03%	4.425%
15	16.178	16.134	16.254	BB	180346	2499556	75.47%	4.336%
16	17.130	17.064	17.214	BB	181883	2466499	74.48%	4.278%
17	18.019	17.881	18.118	BB	172763	2500963	75.52%	4.338%
18	18.853	18.801	18.964	BB	164448	2504263	75.62%	4.344%
19	19.639	19.591	19.764	BB	138056	2399569	72.46%	4.162%
20	20.381	20.321	20.538	BB	118542	2335320	70.52%	4.051%
21	21.112	21.041	21.314	BB	83955	2203566	66.54%	3.822%
22	22.008	21.851	22.251	BB	53587	2016411	60.89%	3.498%
Sum of corrected areas:							57650958	

Aliphatic EPH 051425.M Wed May 14 13:23:24 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
 Data File : FE053811.D
 Signal(s) : FID1B.ch
 Acq On : 14 May 2025 11:18
 Operator : YP\AJ
 Sample : 10 PPM ALIPHATIC HC STD4
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
 Quant Time: May 14 11:58:34 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 11:58:25 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)	11.848	1724522	10.627 ug/ml
Spiked Amount 50.000		Recovery =	21.25%
12) S 1-chlorooctadecane (S...	13.294	1252547	10.543 ug/ml
Spiked Amount 50.000		Recovery =	21.09%
Target Compounds			
1) T n-Nonane (C9)	3.202	1431091	10.514 ug/ml
2) T n-Decane (C10)	4.462	1429763	10.477 ug/ml
3) T A~Naphthalene (C11.7)	6.175	1487017	10.124 ug/ml
4) T n-Dodecane (C12)	6.642	1441460	10.464 ug/ml
5) T A~2-methylnaphthalene...	7.277	1432714	10.041 ug/ml
6) T n-Tetradecane (C14)	8.477	1421009	10.471 ug/ml
7) T n-Hexadecane (C16)	10.089	1426087	10.515 ug/ml
8) T n-Octadecane (C18)	11.536	1425081	10.580 ug/ml
10) T n-Eicosane (C20)	12.849	1392391	10.619 ug/ml
11) T n-Heneicosane (C21)	13.462	1374784	10.632 ug/ml
13) T n-Docosane (C22)	14.050	1350709	10.611 ug/ml
14) T n-Tetracosane (C24)	15.155	1328348	10.643 ug/ml
15) T n-Hexacosane (C26)	16.178	1299643	10.644 ug/ml
16) T n-Octacosane (C28)	17.129	1292696	10.745 ug/ml
17) T n-Tricontane (C30)	18.018	1326771	10.877 ug/ml
18) T n-Dotriacontane (C32)	18.852	1329611	10.910 ug/ml
19) T n-Tetratriacontane (C34)	19.637	1261085	10.772 ug/ml
20) T n-Hexatriacontane (C36)	20.380	1211680	10.550 ug/ml
21) T n-Octatriacontane (C38)	21.111	1130035	10.339 ug/ml
22) T n-Tetracontane (C40)	22.006	995600	9.790 ug/ml

(f)=RT Delta > 1/2 Window

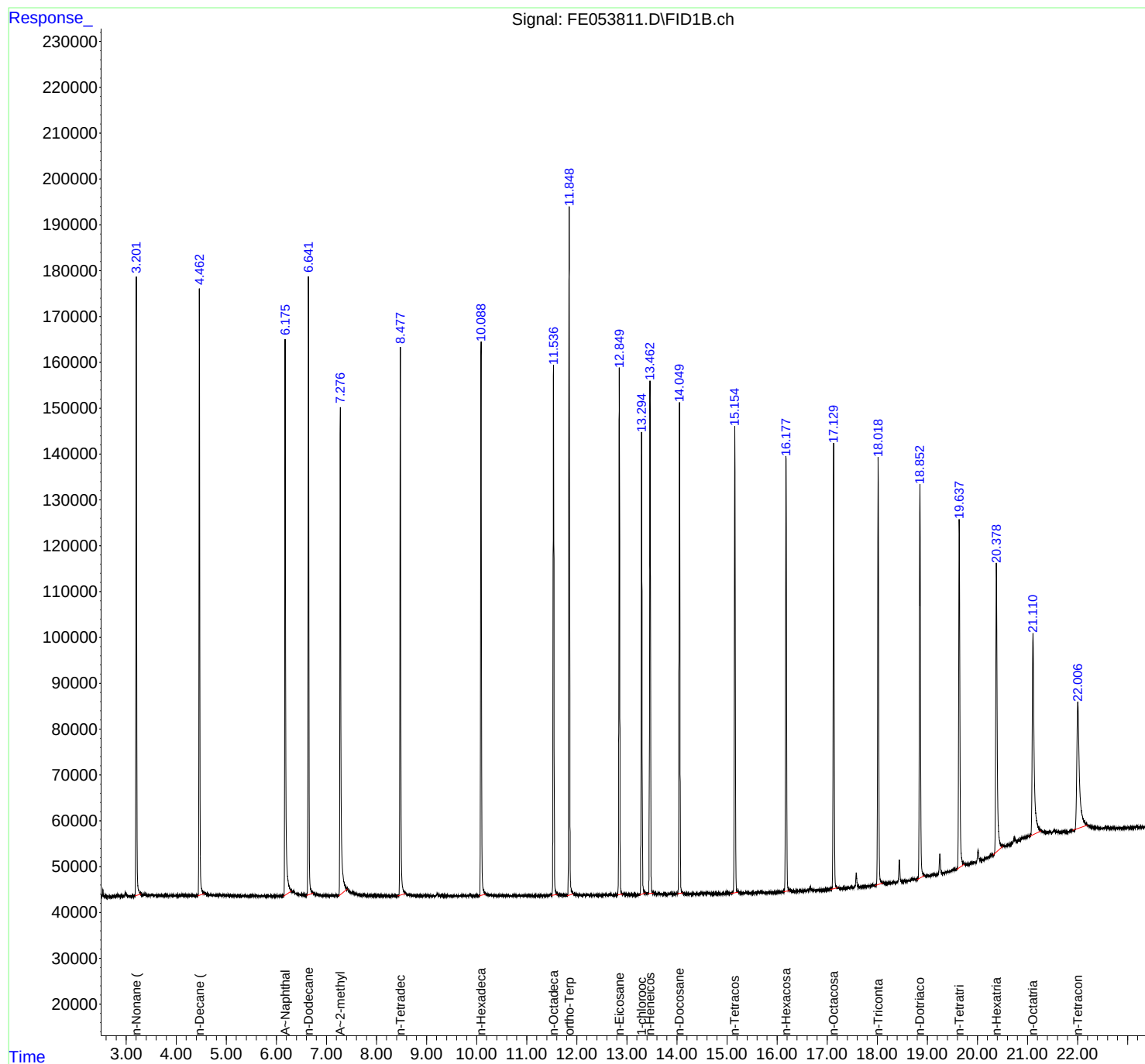
(m)=manual int.

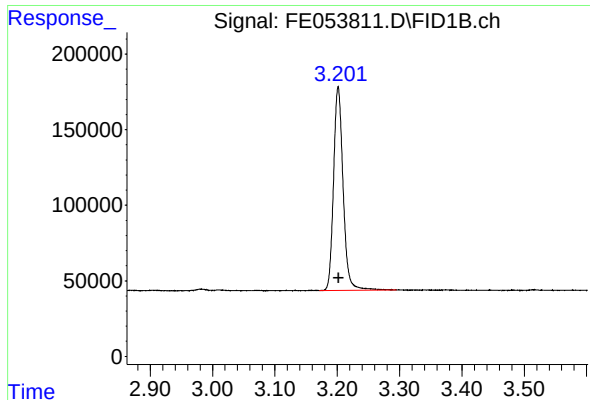
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053811.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 11:18
Operator : YP\AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
Quant Time: May 14 11:58:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 11:58:25 2025
Response via : Initial Calibration
Integrator: ChemStation

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

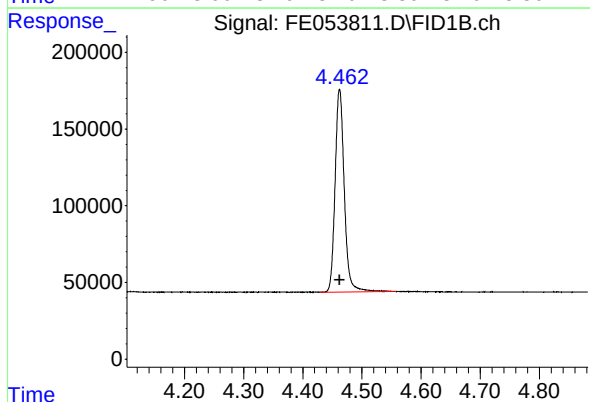




#1 n-Nonane (C9)

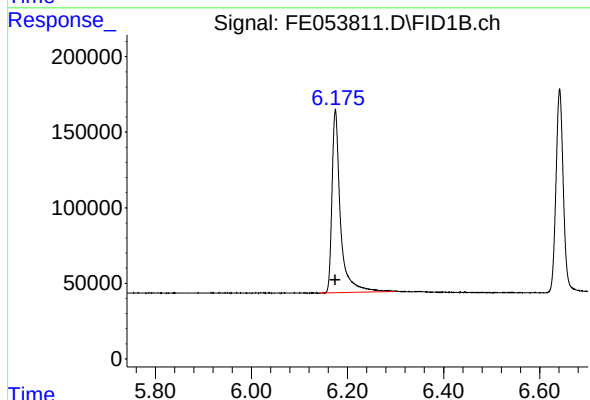
R.T.: 3.202 min
Delta R.T.: 0.000 min
Response: 1431091
Conc: 10.51 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



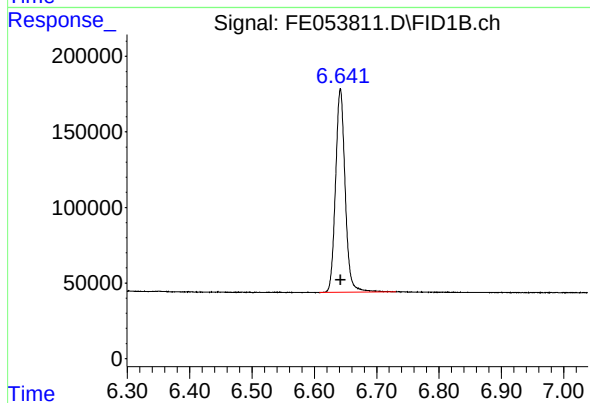
#2 n-Decane (C10)

R.T.: 4.462 min
Delta R.T.: 0.000 min
Response: 1429763
Conc: 10.48 ug/ml



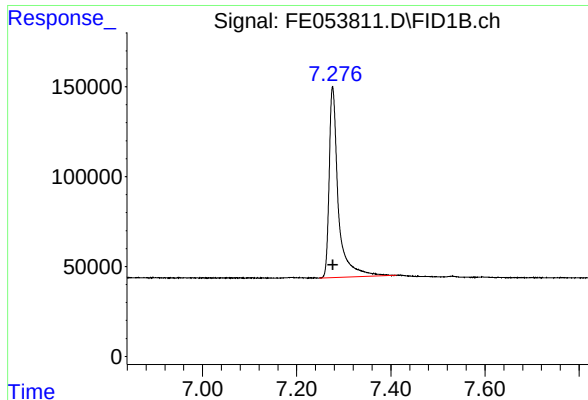
#3 A~Naphthalene (C11.7)

R.T.: 6.175 min
Delta R.T.: 0.000 min
Response: 1487017
Conc: 10.12 ug/ml



#4 n-Dodecane (C12)

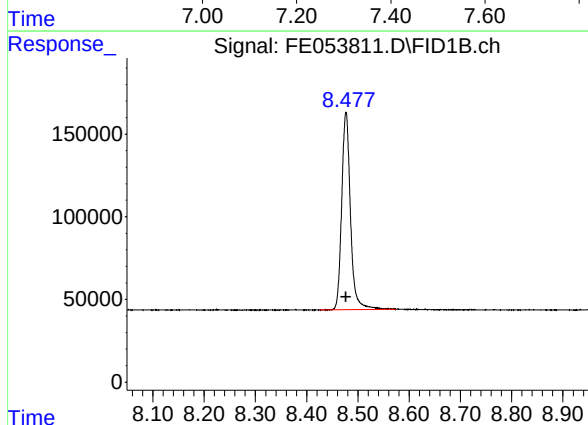
R.T.: 6.642 min
Delta R.T.: 0.000 min
Response: 1441460
Conc: 10.46 ug/ml



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

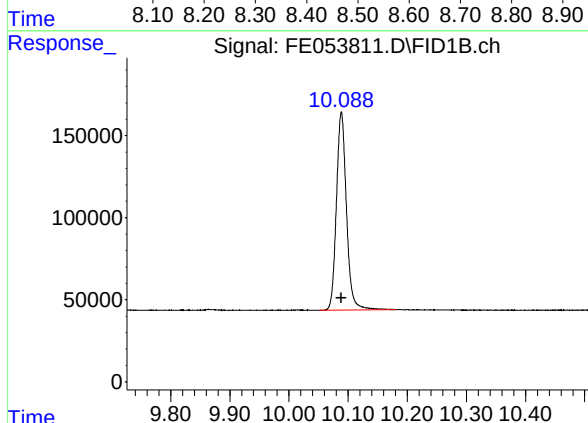
R.T.: 7.277 min
Delta R.T.: 0.000 min
Response: 1432714
Conc: 10.04 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



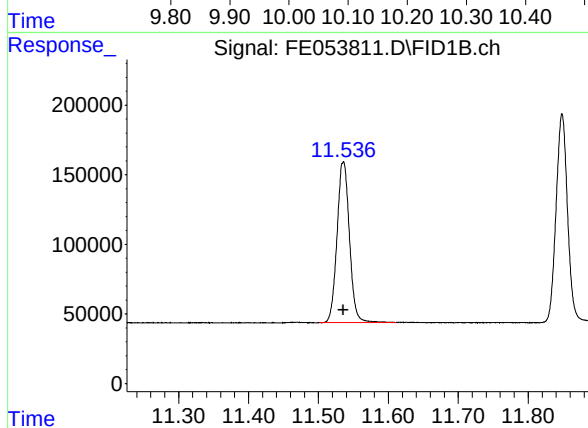
#6 n-Tetradecane (C14)

R.T.: 8.477 min
Delta R.T.: 0.000 min
Response: 1421009
Conc: 10.47 ug/ml



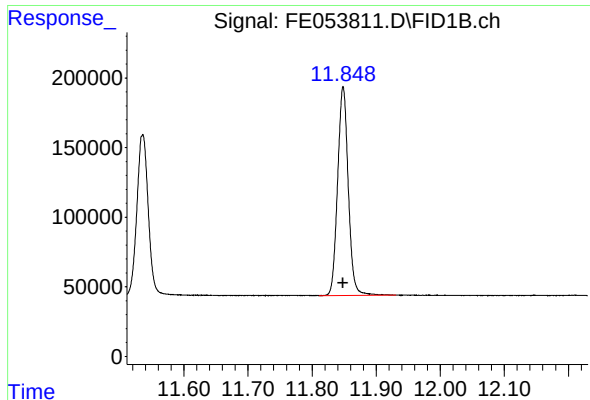
#7 n-Hexadecane (C16)

R.T.: 10.089 min
Delta R.T.: 0.000 min
Response: 1426087
Conc: 10.52 ug/ml



#8 n-Octadecane (C18)

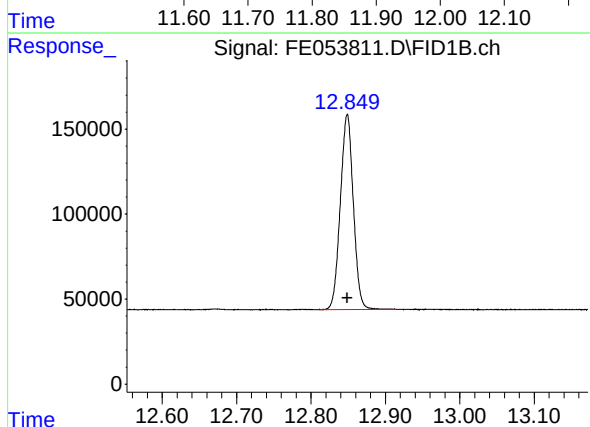
R.T.: 11.536 min
Delta R.T.: 0.000 min
Response: 1425081
Conc: 10.58 ug/ml



#9 ortho-Terphenyl (SURR)

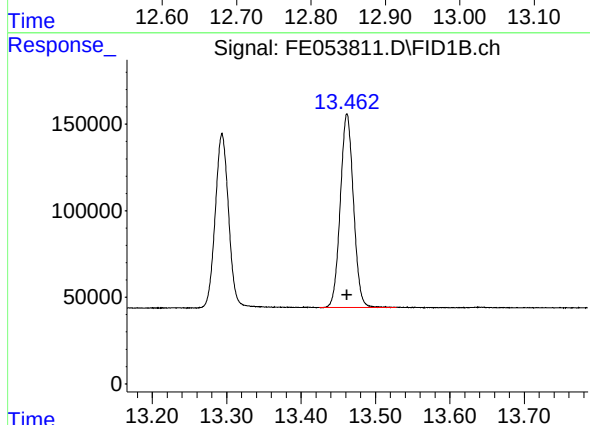
R.T.: 11.848 min
Delta R.T.: 0.000 min
Response: 1724522
Conc: 10.63 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



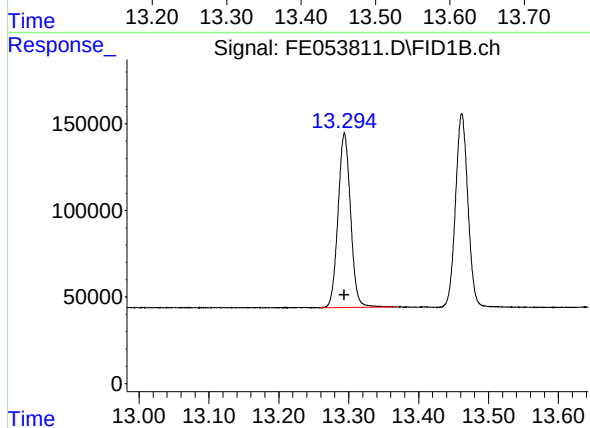
#10 n-Eicosane (C20)

R.T.: 12.849 min
Delta R.T.: 0.000 min
Response: 1392391
Conc: 10.62 ug/ml



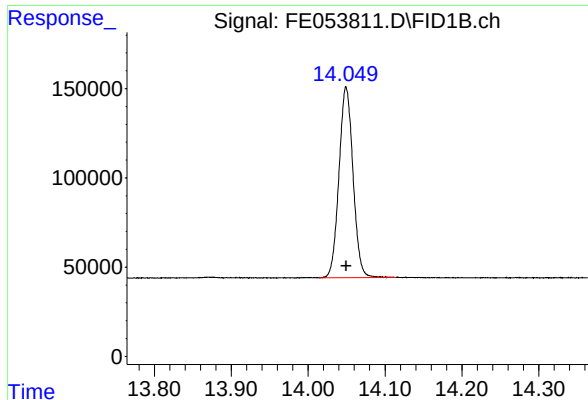
#11 n-Heneicosane (C21)

R.T.: 13.462 min
Delta R.T.: 0.000 min
Response: 1374784
Conc: 10.63 ug/ml



#12 1-chlorooctadecane (SURR)

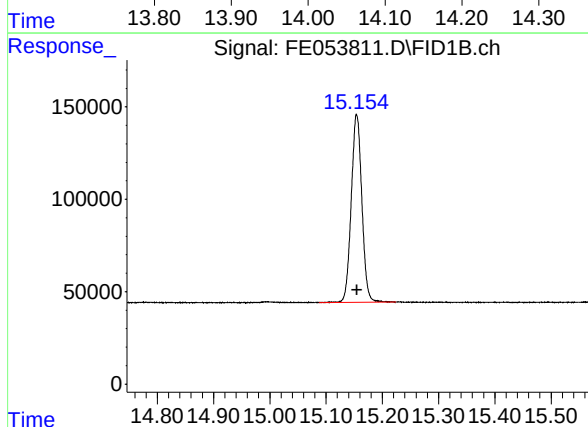
R.T.: 13.294 min
Delta R.T.: 0.000 min
Response: 1252547
Conc: 10.54 ug/ml



#13 n-Docosane (C22)

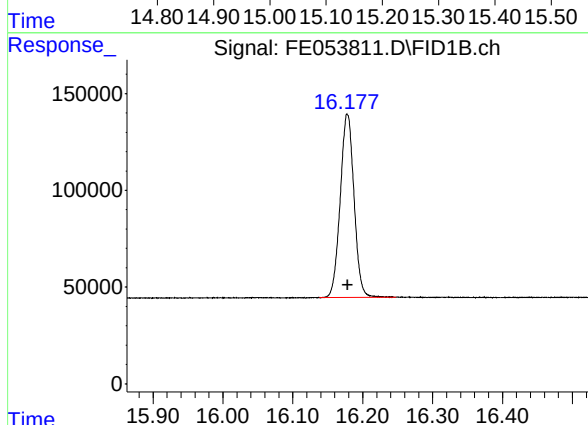
R.T.: 14.050 min
Delta R.T.: 0.000 min
Response: 1350709
Conc: 10.61 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



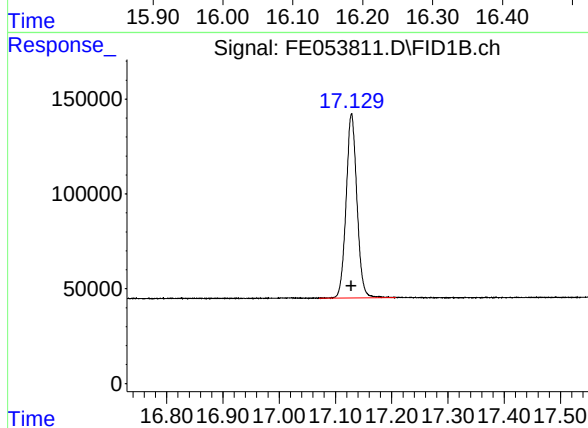
#14 n-Tetracosane (C24)

R.T.: 15.155 min
Delta R.T.: 0.000 min
Response: 1328348
Conc: 10.64 ug/ml



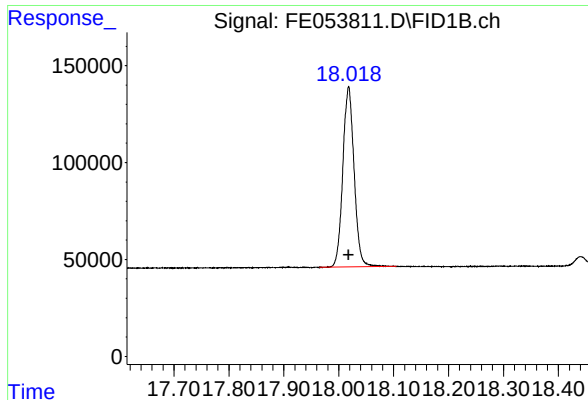
#15 n-Hexacosane (C26)

R.T.: 16.178 min
Delta R.T.: 0.000 min
Response: 1299643
Conc: 10.64 ug/ml



#16 n-Octacosane (C28)

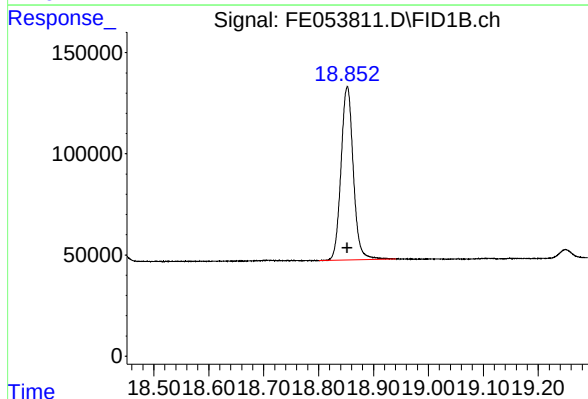
R.T.: 17.129 min
Delta R.T.: 0.000 min
Response: 1292696
Conc: 10.75 ug/ml



#17 n-Tricontane (C30)

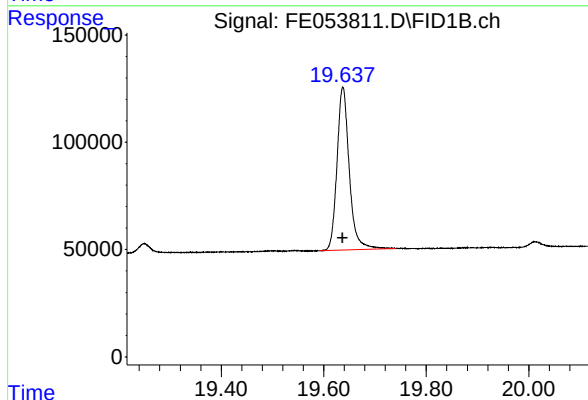
R.T.: 18.018 min
Delta R.T.: 0.000 min
Response: 1326771
Conc: 10.88 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



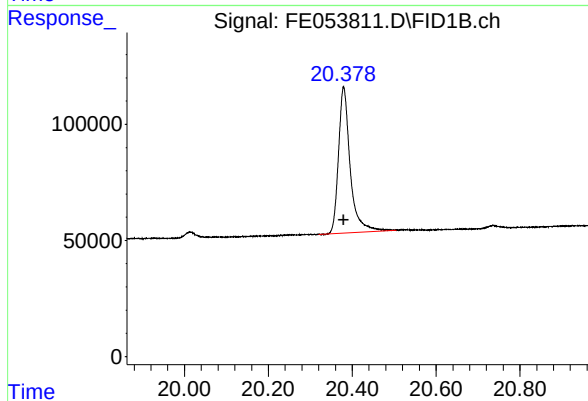
#18 n-Dotriacontane (C32)

R.T.: 18.852 min
Delta R.T.: 0.000 min
Response: 1329611
Conc: 10.91 ug/ml



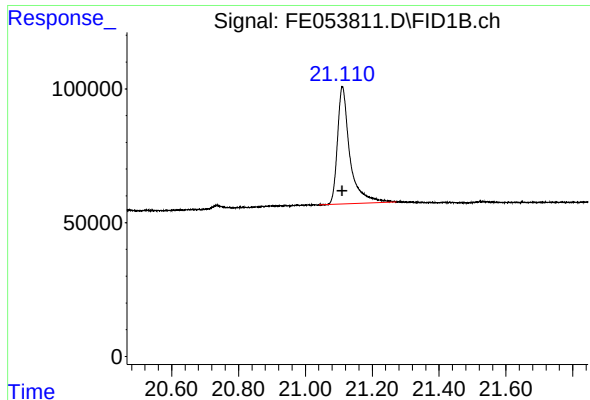
#19 n-Tetratriacontane (C34)

R.T.: 19.637 min
Delta R.T.: 0.000 min
Response: 1261085
Conc: 10.77 ug/ml



#20 n-Hexatriacontane (C36)

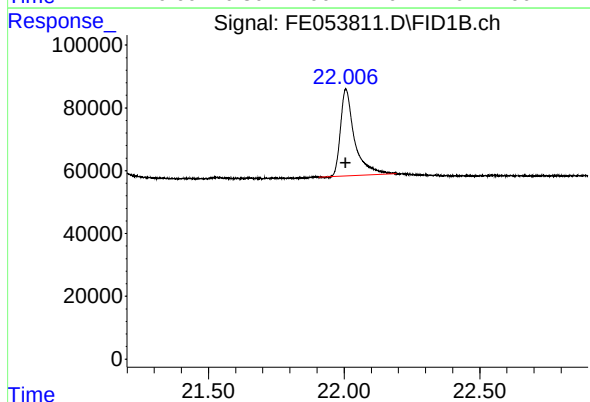
R.T.: 20.380 min
Delta R.T.: 0.000 min
Response: 1211680
Conc: 10.55 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.111 min
Delta R.T.: 0.000 min
Response: 1130035
Conc: 10.34 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



#22 n-Tetracontane (C40)

R.T.: 22.006 min
Delta R.T.: 0.000 min
Response: 995600
Conc: 9.79 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053811.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 11:18
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	3.202	3.171	3.294	BB	134446	1431091	82.98%	4.808%
2	4.462	4.428	4.558	BB	132296	1429763	82.91%	4.804%
3	6.175	6.141	6.301	BB	120530	1487017	86.23%	4.996%
4	6.642	6.608	6.731	BB	133898	1441460	83.59%	4.843%
5	7.277	7.248	7.411	BB	105064	1432714	83.08%	4.813%
6	8.477	8.424	8.574	BB	119722	1421009	82.40%	4.774%
7	10.089	10.051	10.181	BB	120238	1426087	82.69%	4.791%
8	11.536	11.501	11.611	BB	116417	1425081	82.64%	4.788%
9	11.848	11.811	11.931	BB	149735	1724522	100.00%	5.794%
10	12.849	12.811	12.914	BB	114291	1392391	80.74%	4.678%
11	13.294	13.258	13.368	BB	100347	1252547	72.63%	4.208%
12	13.462	13.424	13.528	BB	111556	1374784	79.72%	4.619%
13	14.050	14.014	14.114	BB	106118	1350709	78.32%	4.538%
14	15.155	15.088	15.224	BB	101796	1328348	77.03%	4.463%
15	16.178	16.138	16.248	BB	95046	1299643	75.36%	4.366%
16	17.129	17.071	17.208	BB	96868	1292696	74.96%	4.343%
17	18.018	17.964	18.104	BB	92718	1326771	76.94%	4.458%
18	18.852	18.801	18.941	BB	85504	1329611	77.10%	4.467%
19	19.637	19.591	19.741	BB	76012	1261085	73.13%	4.237%
20	20.380	20.321	20.504	BB	62689	1211680	70.26%	4.071%
21	21.111	21.041	21.271	BB	43942	1130035	65.53%	3.797%
22	22.006	21.908	22.191	BB	27595	995600	57.73%	3.345%
Sum of corrected areas:							29764644	

Aliphatic EPH 051425.M Wed May 14 13:23:05 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
 Data File : FE053812.D
 Signal(s) : FID1B.ch
 Acq On : 14 May 2025 11:48
 Operator : YP\AJ
 Sample : 5 PPM ALIPHATIC HC STD5
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
 Quant Time: May 14 12:15:06 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 12:14:37 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)	11.849	817153	5.028 ug/ml
Spiked Amount 50.000		Recovery =	10.06%
12) S 1-chlorooctadecane (S...	13.295	587641	4.957 ug/ml
Spiked Amount 50.000		Recovery =	9.91%
Target Compounds			
1) T n-Nonane (C9)	3.202	656566	4.858 ug/ml
2) T n-Decane (C10)	4.462	648937	4.802 ug/ml
3) T A~Naphthalene (C11.7)	6.178	655292	4.560 ug/ml
4) T n-Dodecane (C12)	6.642	655154	4.803 ug/ml
5) T A~2-methylnaphthalene...	7.280	614016	4.427 ug/ml
6) T n-Tetradecane (C14)	8.477	659483	4.887 ug/ml
7) T n-Hexadecane (C16)	10.090	660971	4.898 ug/ml
8) T n-Octadecane (C18)	11.536	672526	4.994 ug/ml
10) T n-Eicosane (C20)	12.849	663340	5.047 ug/ml
11) T n-Heneicosane (C21)	13.462	654852	5.051 ug/ml
13) T n-Docosane (C22)	14.049	643626	5.045 ug/ml
14) T n-Tetracosane (C24)	15.155	631655	5.049 ug/ml
15) T n-Hexacosane (C26)	16.178	619264	5.057 ug/ml
16) T n-Octacosane (C28)	17.129	632971	5.207 ug/ml
17) T n-Tricontane (C30)	18.018	674483	5.415 ug/ml
18) T n-Dotriacontane (C32)	18.852	688933	5.509 ug/ml
19) T n-Tetratriacontane (C34)	19.638	636572	5.344 ug/ml
20) T n-Hexatriacontane (C36)	20.380	597732	5.162 ug/ml
21) T n-Octatriacontane (C38)	21.111	534678	4.913 ug/ml
22) T n-Tetracontane (C40)	22.007	446823	4.503 ug/ml

(f)=RT Delta > 1/2 Window

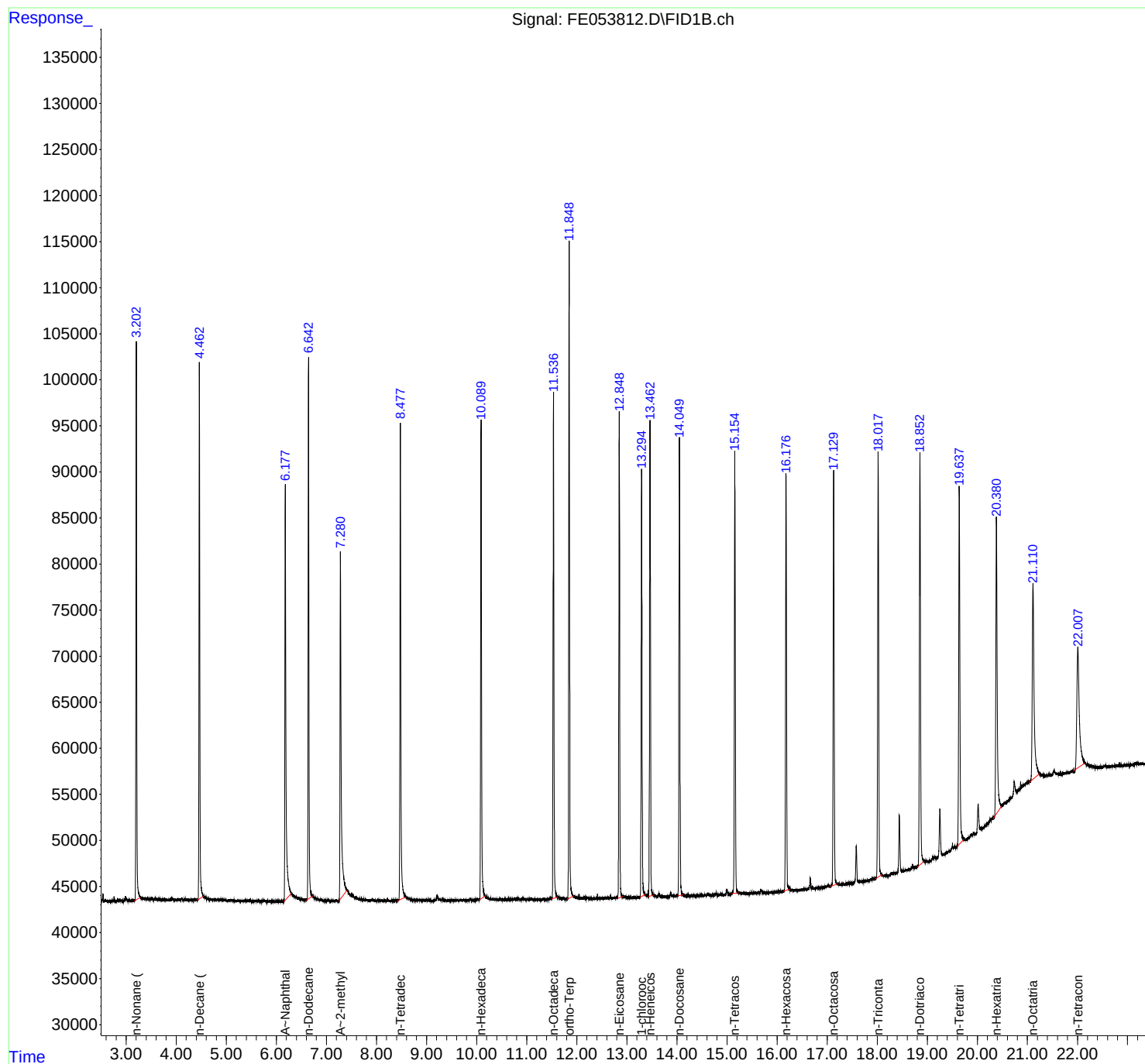
(m)=manual int.

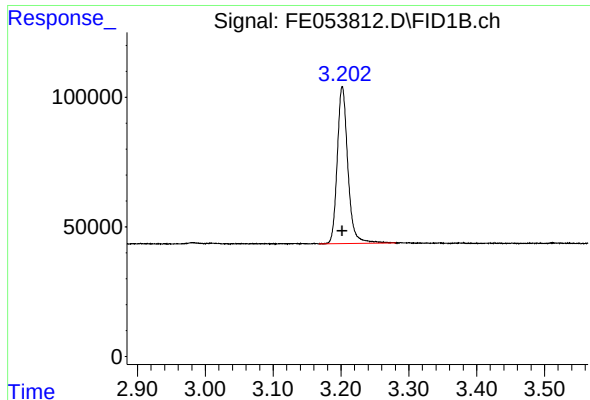
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053812.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 11:48
Operator : YP\AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
Quant Time: May 14 12:15:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:14:37 2025
Response via : Initial Calibration
Integrator: ChemStation

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

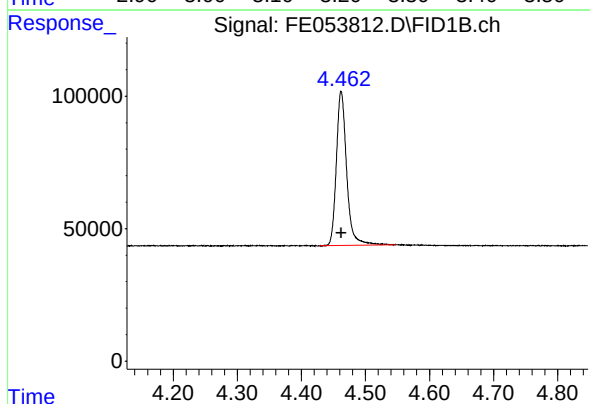




#1 n-Nonane (C9)

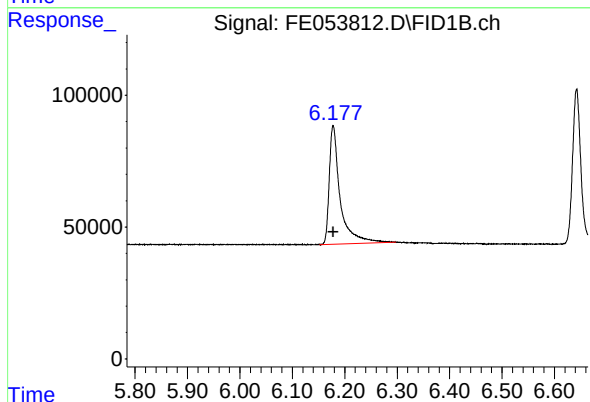
R.T.: 3.202 min
Delta R.T.: 0.000 min
Response: 656566
Conc: 4.86 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



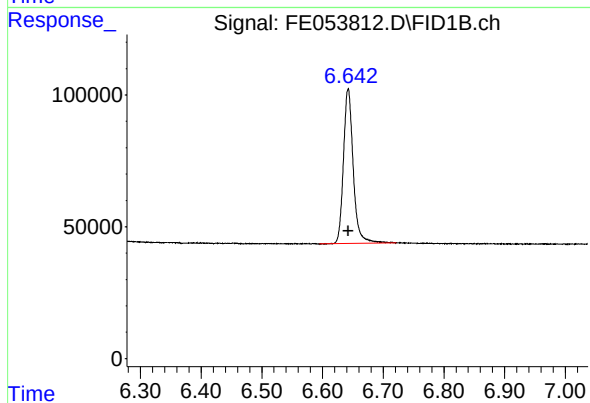
#2 n-Decane (C10)

R.T.: 4.462 min
Delta R.T.: 0.000 min
Response: 648937
Conc: 4.80 ug/ml



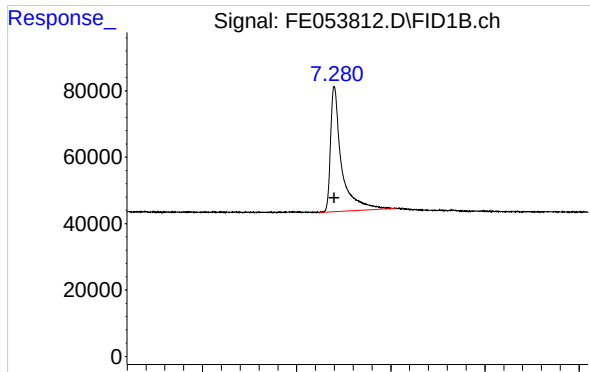
#3 A~Naphthalene (C11.7)

R.T.: 6.178 min
Delta R.T.: 0.000 min
Response: 655292
Conc: 4.56 ug/ml



#4 n-Dodecane (C12)

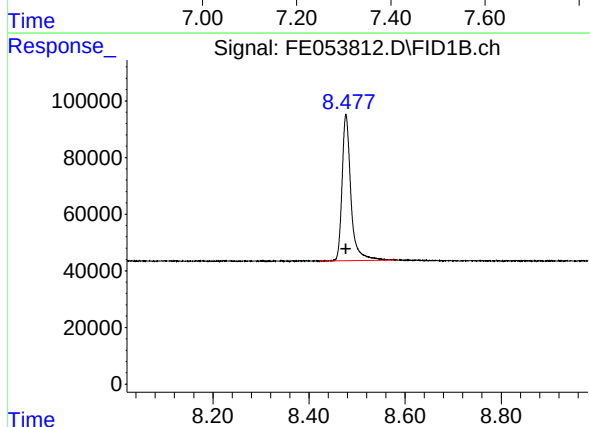
R.T.: 6.642 min
Delta R.T.: 0.000 min
Response: 655154
Conc: 4.80 ug/ml



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

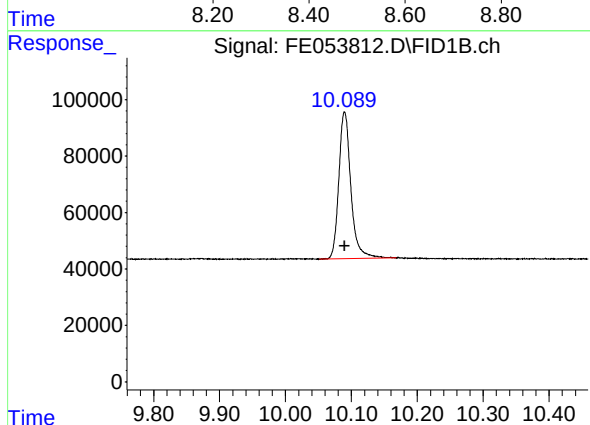
R.T.: 7.280 min
Delta R.T.: 0.000 min
Response: 614016
Conc: 4.43 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



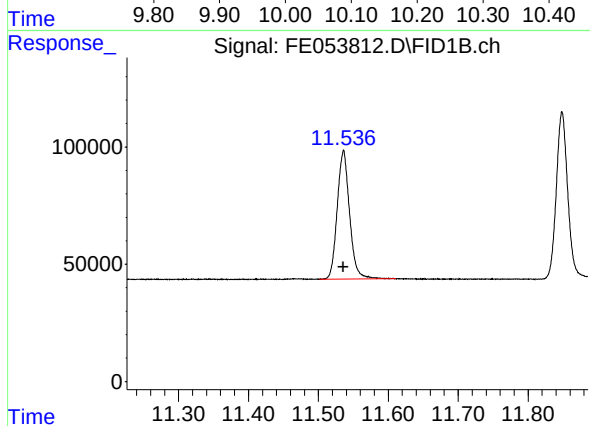
#6 n-Tetradecane (C14)

R.T.: 8.477 min
Delta R.T.: 0.000 min
Response: 659483
Conc: 4.89 ug/ml



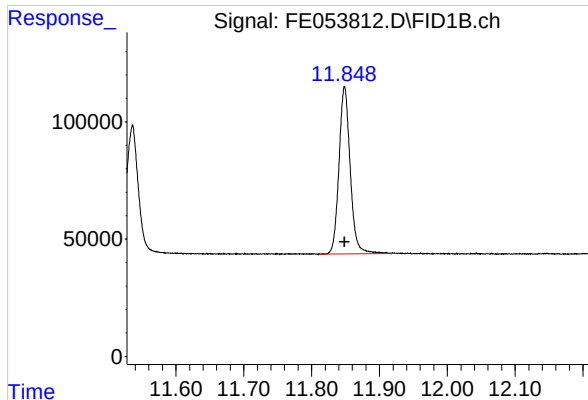
#7 n-Hexadecane (C16)

R.T.: 10.090 min
Delta R.T.: 0.000 min
Response: 660971
Conc: 4.90 ug/ml



#8 n-Octadecane (C18)

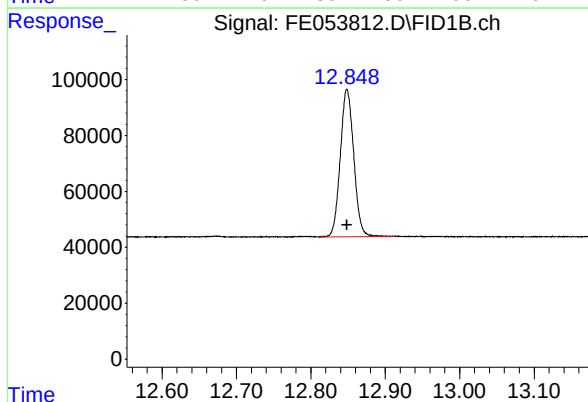
R.T.: 11.536 min
Delta R.T.: 0.000 min
Response: 672526
Conc: 4.99 ug/ml



#9 ortho-Terphenyl (SURR)

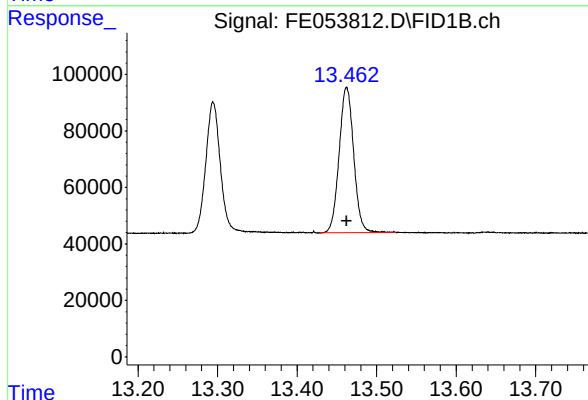
R.T.: 11.849 min
Delta R.T.: 0.000 min
Response: 817153
Conc: 5.03 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



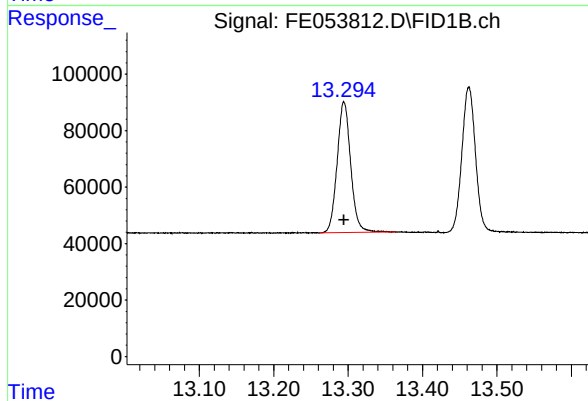
#10 n-Eicosane (C20)

R.T.: 12.849 min
Delta R.T.: 0.000 min
Response: 663340
Conc: 5.05 ug/ml



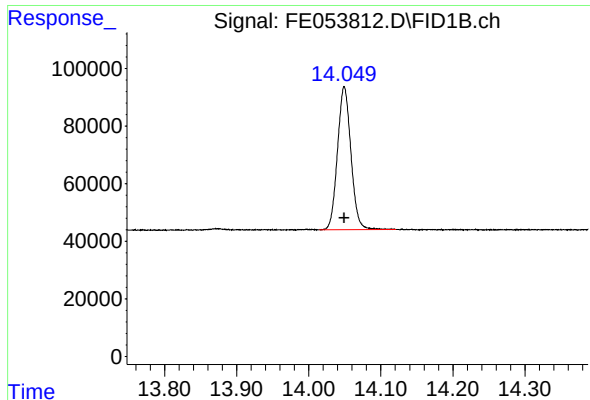
#11 n-Heneicosane (C21)

R.T.: 13.462 min
Delta R.T.: 0.000 min
Response: 654852
Conc: 5.05 ug/ml



#12 1-chlorooctadecane (SURR)

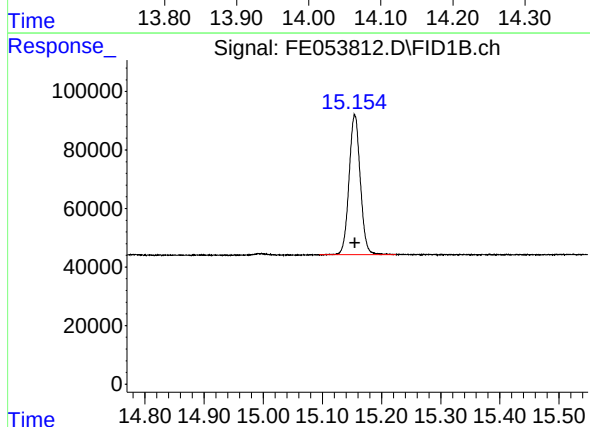
R.T.: 13.295 min
Delta R.T.: 0.000 min
Response: 587641
Conc: 4.96 ug/ml



#13 n-Docosane (C22)

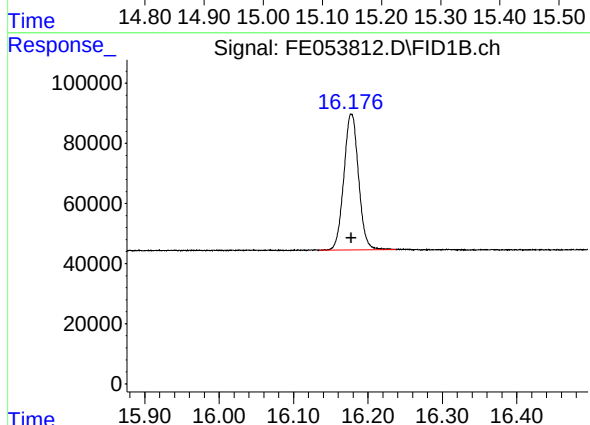
R.T.: 14.049 min
Delta R.T.: 0.000 min
Response: 643626
Conc: 5.05 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



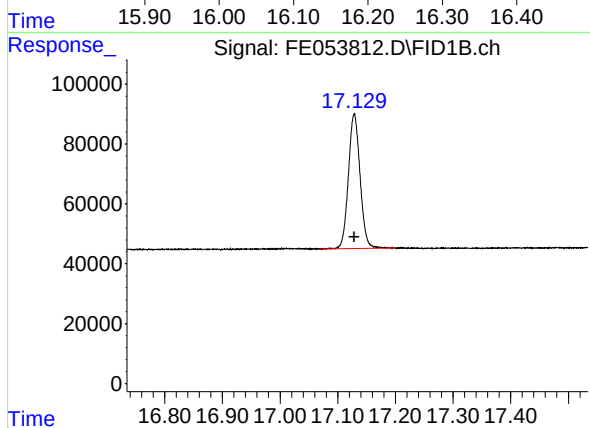
#14 n-Tetracosane (C24)

R.T.: 15.155 min
Delta R.T.: 0.000 min
Response: 631655
Conc: 5.05 ug/ml



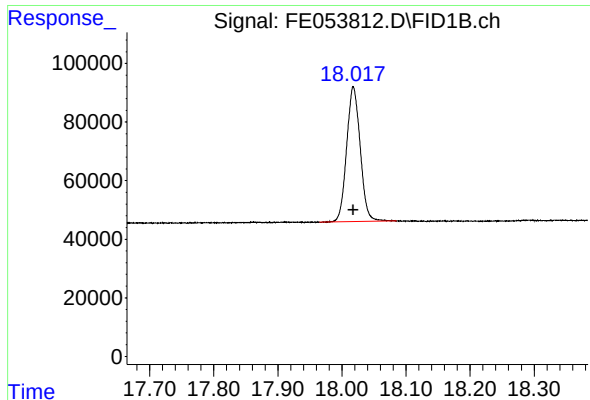
#15 n-Hexacosane (C26)

R.T.: 16.178 min
Delta R.T.: 0.000 min
Response: 619264
Conc: 5.06 ug/ml



#16 n-Octacosane (C28)

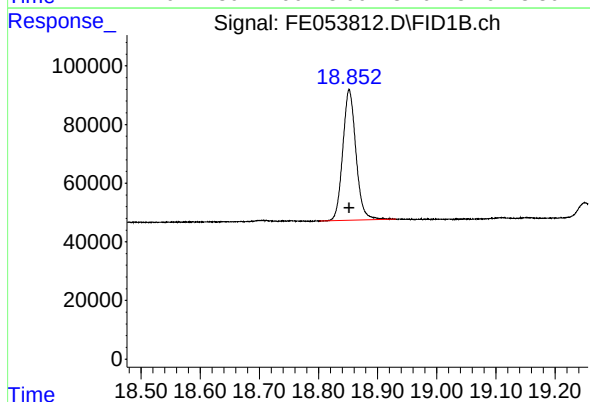
R.T.: 17.129 min
Delta R.T.: 0.000 min
Response: 632971
Conc: 5.21 ug/ml



#17 n-Tricontane (C30)

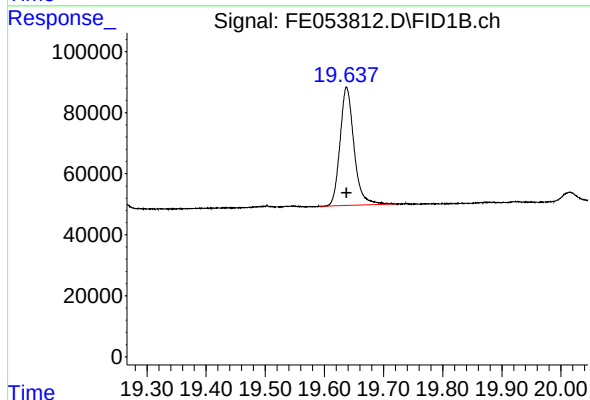
R.T.: 18.018 min
Delta R.T.: 0.000 min
Response: 674483
Conc: 5.41 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



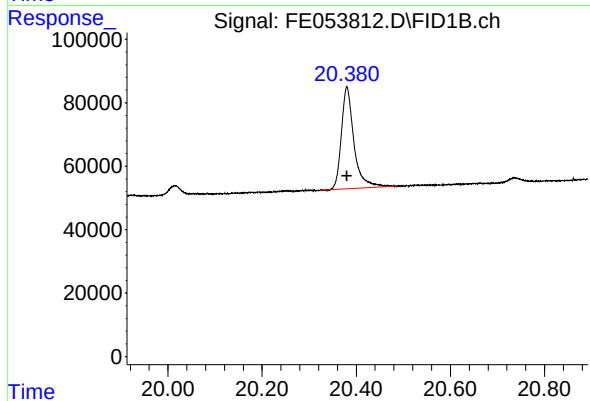
#18 n-Dotriacontane (C32)

R.T.: 18.852 min
Delta R.T.: 0.000 min
Response: 688933
Conc: 5.51 ug/ml



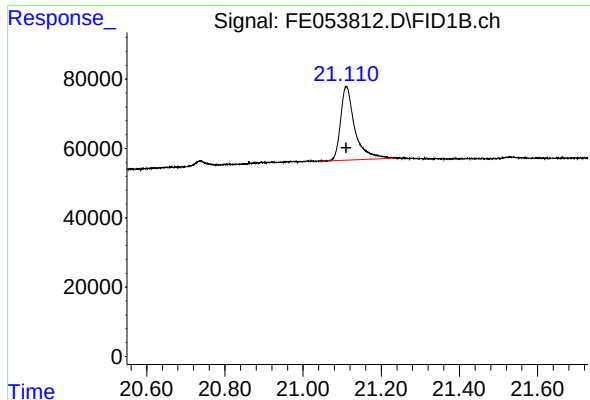
#19 n-Tetratriacontane (C34)

R.T.: 19.638 min
Delta R.T.: 0.000 min
Response: 636572
Conc: 5.34 ug/ml



#20 n-Hexatriacontane (C36)

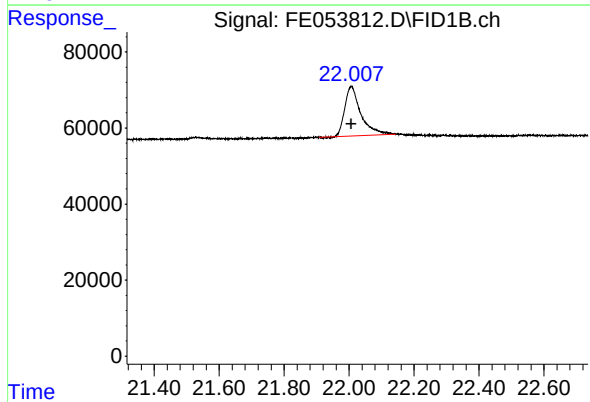
R.T.: 20.380 min
Delta R.T.: 0.000 min
Response: 597732
Conc: 5.16 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.111 min
Delta R.T.: 0.000 min
Response: 534678
Conc: 4.91 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



#22 n-Tetracontane (C40)

R.T.: 22.007 min
Delta R.T.: 0.000 min
Response: 446823
Conc: 4.50 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
 Data File : FE053812.D
 Signal(s) : FID1B.ch
 Acq On : 14 May 2025 11:48
 Sample : 5 PPM ALIPHATIC HC STD5
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	3.202	3.168	3.281	BB	60519	656566	80.35%	4.672%
2	4.462	4.428	4.548	BB	58217	648937	79.41%	4.618%
3	6.178	6.151	6.298	BB	45028	655292	80.19%	4.663%
4	6.642	6.594	6.721	BB	58653	655154	80.18%	4.662%
5	7.280	7.248	7.411	BB	37424	614016	75.14%	4.369%
6	8.477	8.421	8.581	BB	51390	659483	80.70%	4.693%
7	10.090	10.051	10.168	BB	51984	660971	80.89%	4.704%
8	11.536	11.501	11.611	BB	53831	672526	82.30%	4.786%
9	11.849	11.811	11.924	BB	70934	817153	100.00%	5.815%
10	12.849	12.811	12.914	BB	52788	663340	81.18%	4.720%
11	13.295	13.261	13.364	BB	46345	587641	71.91%	4.182%
12	13.462	13.428	13.524	BB	51537	654852	80.14%	4.660%
13	14.049	14.014	14.121	BB	49489	643626	78.76%	4.580%
14	15.155	15.094	15.224	BB	47817	631655	77.30%	4.495%
15	16.178	16.134	16.238	BB	45304	619264	75.78%	4.407%
16	17.129	17.068	17.201	BB	44838	632971	77.46%	4.504%
17	18.018	17.964	18.084	BB	46030	674483	82.54%	4.800%
18	18.852	18.801	18.931	BB	44529	688933	84.31%	4.903%
19	19.638	19.591	19.721	BB	38732	636572	77.90%	4.530%
20	20.380	20.321	20.484	BB	32119	597732	73.15%	4.254%
21	21.111	21.041	21.238	BB	21187	534678	65.43%	3.805%
22	22.007	21.908	22.144	BB	13080	446823	54.68%	3.180%
Sum of corrected areas:							14052667	

Aliphatic EPH 051425.M Wed May 14 13:22:38 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
 Data File : FE053813.D
 Signal(s) : FID1B.ch
 Acq On : 14 May 2025 12:18
 Operator : YP\AJ
 Sample : 20 PPM ALIPHATIC HC STD ICV
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
 Quant Time: May 14 12:57:53 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 12:15:41 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)	11.850	3413619	21.005 ug/ml
Spiked Amount 50.000		Recovery =	42.01%
12) S 1-chlorooctadecane (S...	13.295	2500324	21.091 ug/ml
Spiked Amount 50.000		Recovery =	42.18%
Target Compounds			
1) T n-Nonane (C9)	3.201	2840477	21.017 ug/ml
2) T n-Decane (C10)	4.462	2845724	21.059 ug/ml
3) T A~Naphthalene (C11.7)	6.174	3077733	21.416 ug/ml
4) T n-Dodecane (C12)	6.642	2883394	21.138 ug/ml
5) T A~2-methylnaphthalene...	7.276	2959846	21.339 ug/ml
6) T n-Tetradecane (C14)	8.477	2848811	21.110 ug/ml
7) T n-Hexadecane (C16)	10.090	2849304	21.116 ug/ml
8) T n-Octadecane (C18)	11.537	2838941	21.082 ug/ml
10) T n-Eicosane (C20)	12.849	2781635	21.165 ug/ml
11) T n-Heneicosane (C21)	13.462	2735043	21.097 ug/ml
13) T n-Docosane (C22)	14.051	2739221	21.471 ug/ml
14) T n-Tetracosane (C24)	15.155	2780446	22.223 ug/ml
15) T n-Hexacosane (C26)	16.178	2752523	22.478 ug/ml
16) T n-Octacosane (C28)	17.130	2740949	22.547 ug/ml
17) T n-Tricontane (C30)	18.019	2774148	22.271 ug/ml
18) T n-Dotriacontane (C32)	18.853	2741566	21.923 ug/ml
19) T n-Tetratriacontane (C34)	19.638	2579599	21.655 ug/ml
20) T n-Hexatriacontane (C36)	20.380	2437142	21.048 ug/ml
21) T n-Octatriacontane (C38)	21.111	2329830	21.409 ug/ml
22) T n-Tetracontane (C40)	22.009	2189291	22.063 ug/ml

(f)=RT Delta > 1/2 Window

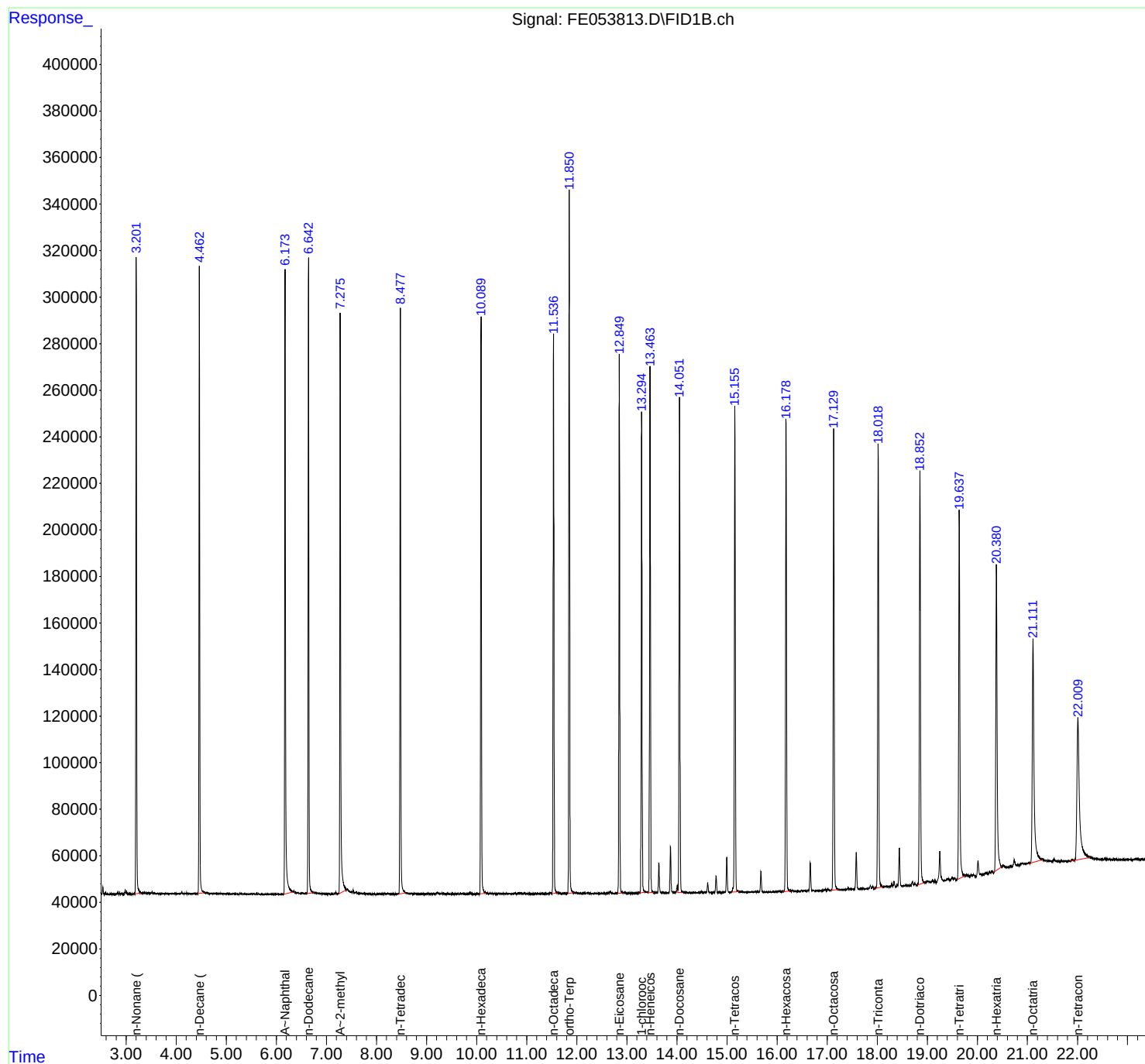
(m)=manual int.

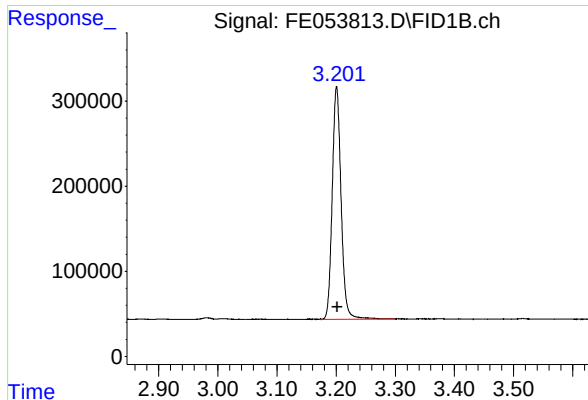
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053813.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 12:18
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: May 14 12:57:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 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)

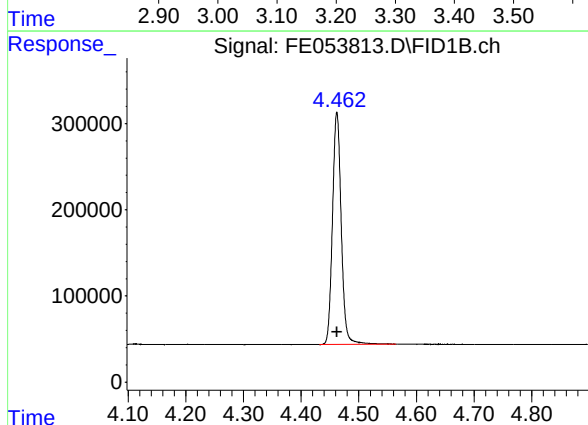
R.T.: 3.201 min
Delta R.T.: -0.001 min
Response: 2840477
Conc: 21.02 ug/ml

Instrument :

FID_E

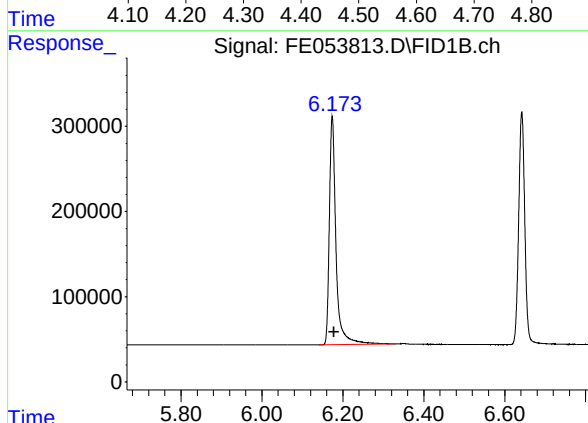
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



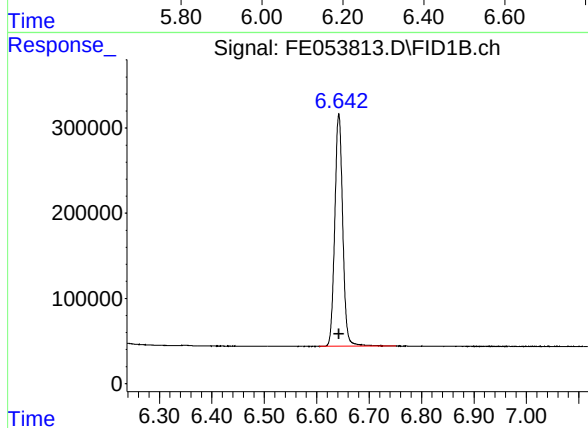
#2 n-Decane (C10)

R.T.: 4.462 min
Delta R.T.: 0.000 min
Response: 2845724
Conc: 21.06 ug/ml



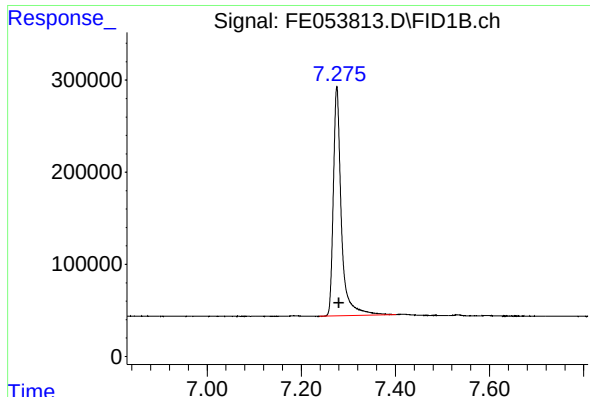
#3 A~Naphthalene (C11.7)

R.T.: 6.174 min
Delta R.T.: -0.004 min
Response: 3077733
Conc: 21.42 ug/ml



#4 n-Dodecane (C12)

R.T.: 6.642 min
Delta R.T.: 0.000 min
Response: 2883394
Conc: 21.14 ug/ml



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

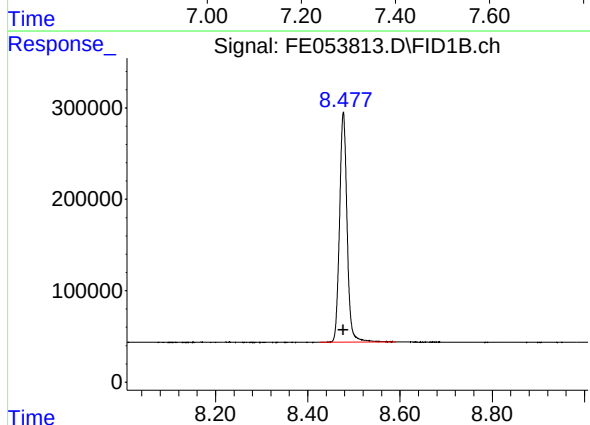
R.T.: 7.276 min
Delta R.T.: -0.005 min
Response: 2959846
Conc: 21.34 ug/ml

Instrument :

FID_E

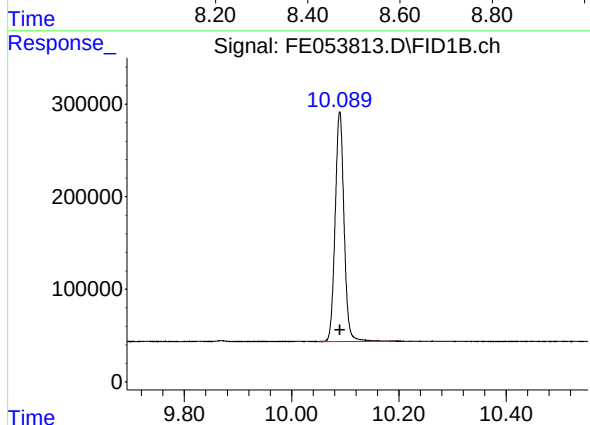
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



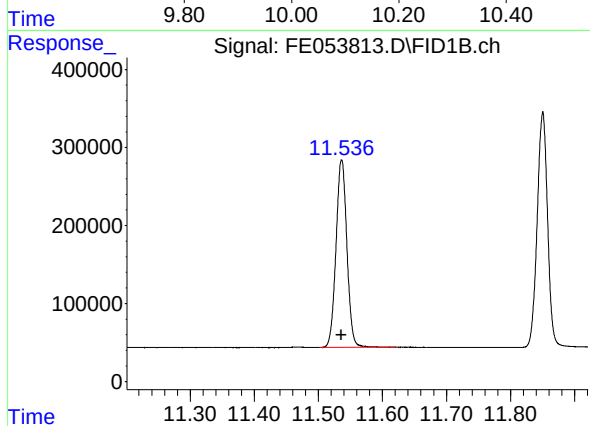
#6 n-Tetradecane (C14)

R.T.: 8.477 min
Delta R.T.: 0.000 min
Response: 2848811
Conc: 21.11 ug/ml



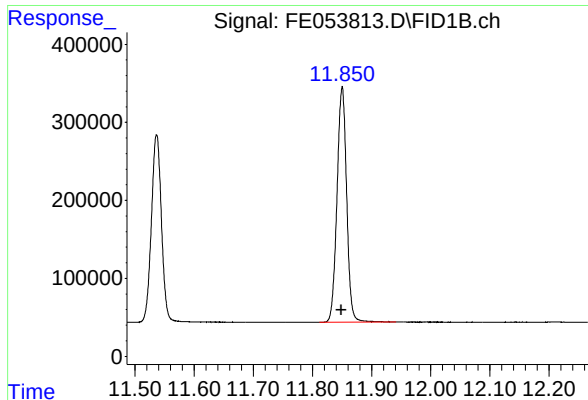
#7 n-Hexadecane (C16)

R.T.: 10.090 min
Delta R.T.: 0.000 min
Response: 2849304
Conc: 21.12 ug/ml



#8 n-Octadecane (C18)

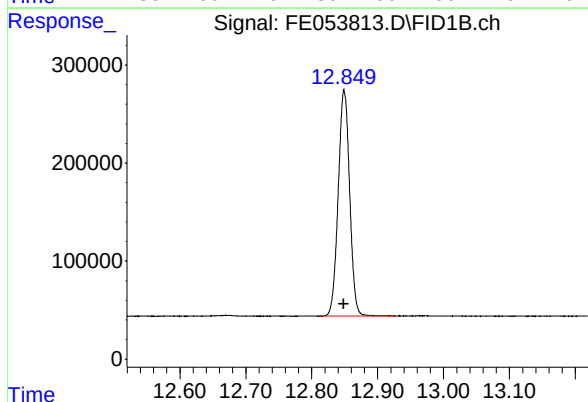
R.T.: 11.537 min
Delta R.T.: 0.000 min
Response: 2838941
Conc: 21.08 ug/ml



#9 ortho-Terphenyl (SURR)

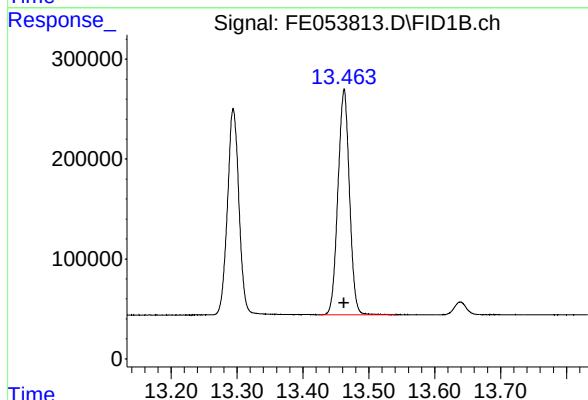
R.T.: 11.850 min
Delta R.T.: 0.002 min
Response: 3413619
Conc: 21.01 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



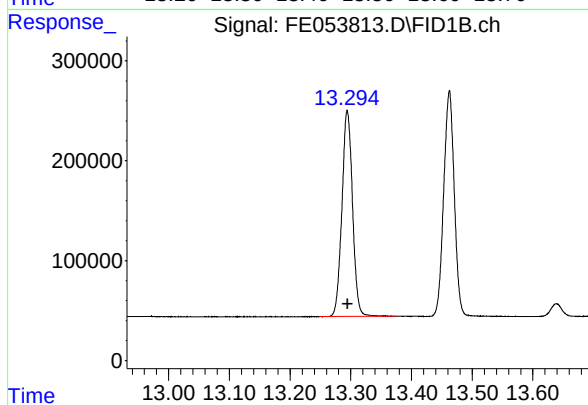
#10 n-Eicosane (C20)

R.T.: 12.849 min
Delta R.T.: 0.000 min
Response: 2781635
Conc: 21.16 ug/ml



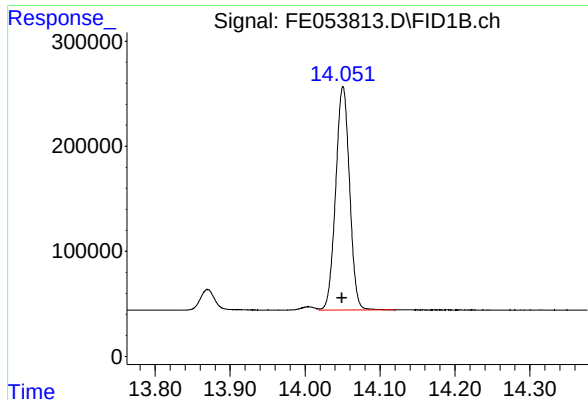
#11 n-Heneicosane (C21)

R.T.: 13.462 min
Delta R.T.: 0.000 min
Response: 2735043
Conc: 21.10 ug/ml



#12 1-chlorooctadecane (SURR)

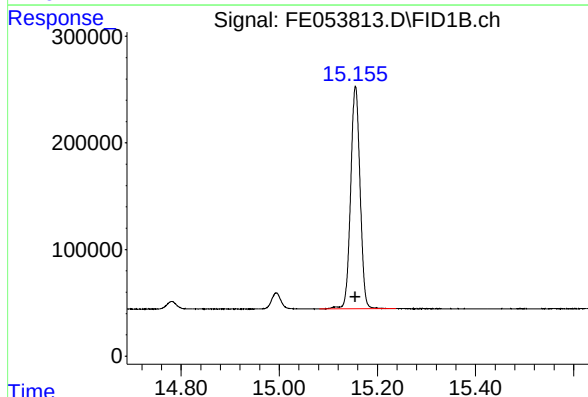
R.T.: 13.295 min
Delta R.T.: 0.000 min
Response: 2500324
Conc: 21.09 ug/ml



#13 n-Docosane (C22)

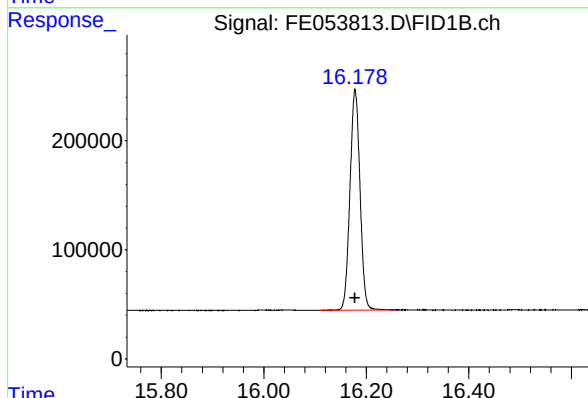
R.T.: 14.051 min
Delta R.T.: 0.001 min
Response: 2739221
Conc: 21.47 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



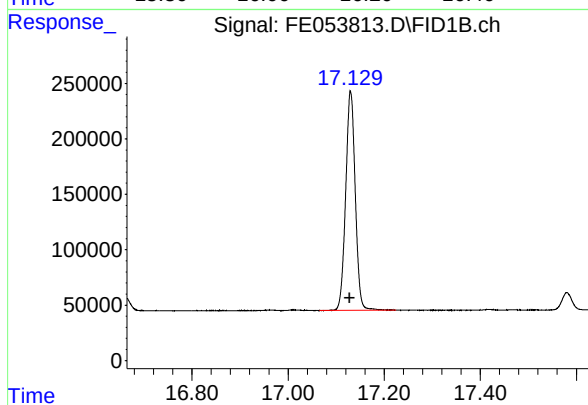
#14 n-Tetracosane (C24)

R.T.: 15.155 min
Delta R.T.: 0.000 min
Response: 2780446
Conc: 22.22 ug/ml



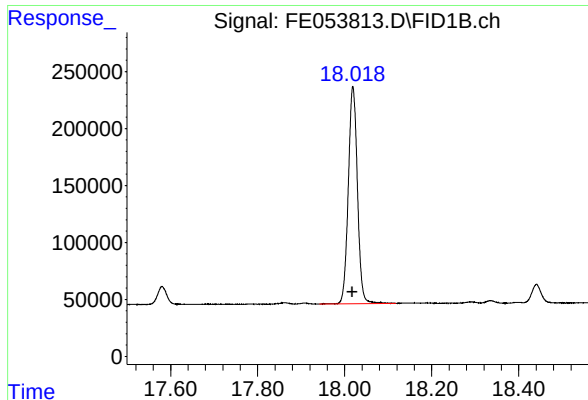
#15 n-Hexacosane (C26)

R.T.: 16.178 min
Delta R.T.: 0.000 min
Response: 2752523
Conc: 22.48 ug/ml



#16 n-Octacosane (C28)

R.T.: 17.130 min
Delta R.T.: 0.002 min
Response: 2740949
Conc: 22.55 ug/ml



#17 n-Tricontane (C30)

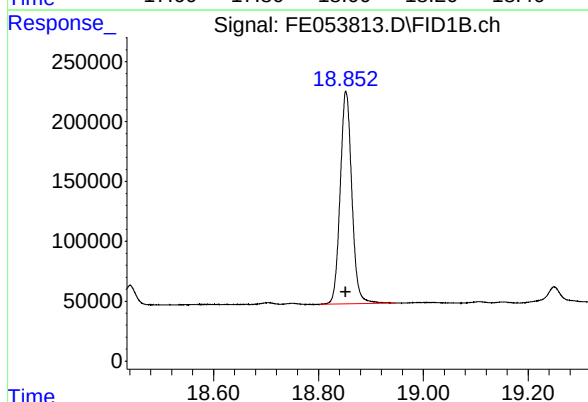
R.T.: 18.019 min
Delta R.T.: 0.001 min
Response: 2774148
Conc: 22.27 ug/ml

Instrument :

FID_E

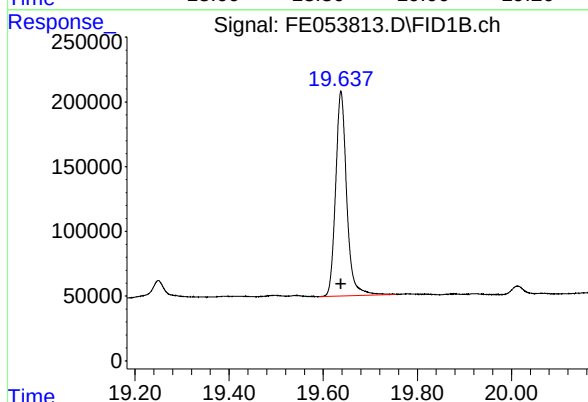
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



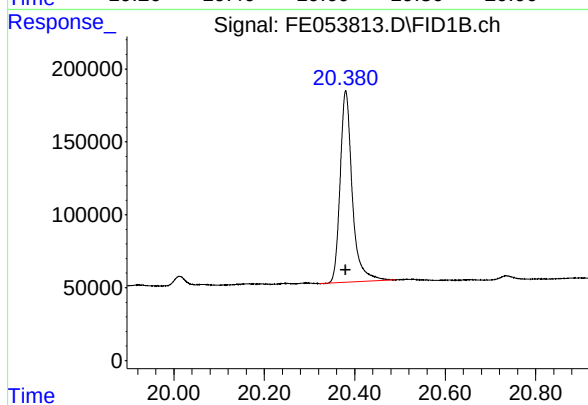
#18 n-Dotriacontane (C32)

R.T.: 18.853 min
Delta R.T.: 0.000 min
Response: 2741566
Conc: 21.92 ug/ml



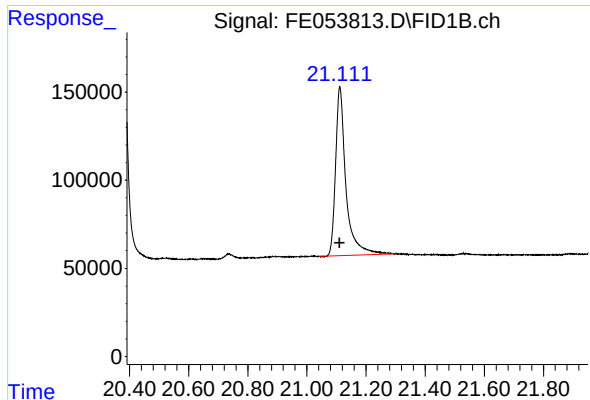
#19 n-Tetatriacontane (C34)

R.T.: 19.638 min
Delta R.T.: 0.000 min
Response: 2579599
Conc: 21.66 ug/ml



#20 n-Hexatriacontane (C36)

R.T.: 20.380 min
Delta R.T.: 0.000 min
Response: 2437142
Conc: 21.05 ug/ml



#21 n-Octatriacontane (C38)

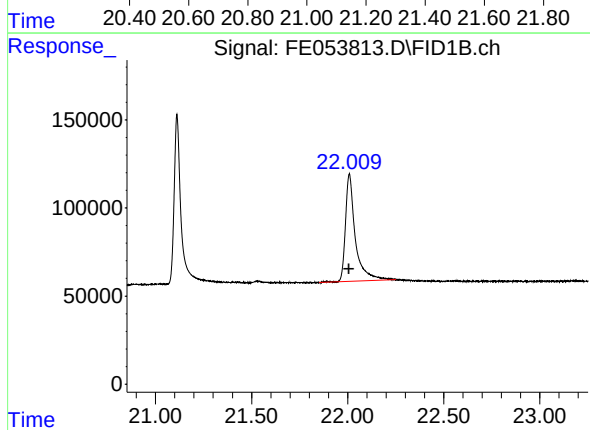
R.T.: 21.111 min
Delta R.T.: 0.000 min
Response: 2329830
Conc: 21.41 ug/ml

Instrument :

FID_E

ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



#22 n-Tetracontane (C40)

R.T.: 22.009 min
Delta R.T.: 0.002 min
Response: 2189291
Conc: 22.06 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053813.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 12:18
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	3.201	3.171	3.301	BB	272797	2840477	83.21%	4.684%
2	4.462	4.431	4.565	BB	269132	2845724	83.36%	4.693%
3	6.174	6.141	6.331	BV	267230	3077733	90.16%	5.075%
4	6.642	6.605	6.751	BB	272488	2883394	84.47%	4.755%
5	7.276	7.238	7.401	BV	248544	2959846	86.71%	4.881%
6	8.477	8.425	8.591	BB	251057	2848811	83.45%	4.698%
7	10.090	10.051	10.195	BB	248727	2849304	83.47%	4.699%
8	11.537	11.501	11.621	BB	241313	2838941	83.17%	4.682%
9	11.850	11.811	11.941	BB	302259	3413619	100.00%	5.629%
10	12.849	12.811	12.928	BB	230666	2781635	81.49%	4.587%
11	13.295	13.248	13.375	BB	205604	2500324	73.25%	4.123%
12	13.462	13.425	13.541	BB	223621	2735043	80.12%	4.510%
13	14.051	14.019	14.121	VB	212868	2739221	80.24%	4.517%
14	15.155	15.081	15.238	BB	208871	2780446	81.45%	4.585%
15	16.178	16.108	16.258	BB	202458	2752523	80.63%	4.539%
16	17.130	17.065	17.225	BB	197046	2740949	80.29%	4.520%
17	18.019	17.941	18.118	BB	190552	2774148	81.27%	4.575%
18	18.853	18.801	18.948	BB	178106	2741566	80.31%	4.521%
19	19.638	19.591	19.755	BB	158235	2579599	75.57%	4.254%
20	20.380	20.321	20.491	BV	131246	2437142	71.39%	4.019%
21	21.111	21.041	21.301	BB	96058	2329830	68.25%	3.842%
22	22.009	21.851	22.251	BB	61078	2189291	64.13%	3.610%
Sum of corrected areas:							60639566	

Aliphatic EPH 051425.M Wed May 14 13:22:02 2025

Continuing Calibration Report for SequenceID : FE060325AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FE054148.D

Aliphatic C9-C12	6816437.000	60.000	3.085	6.730	113607.283	135563.285	16.196
Aliphatic C12-C16	4926102.000	40.000	6.731	10.178	123152.550	134941.528	8.736
Aliphatic C16-C21	7542546.000	60.000	10.179	13.552	125709.100	131910.826	4.701
Aliphatic C21-C28	10036390.000	80.000	13.553	17.220	125454.875	124176.943	-1.029
Aliphatic C28-C40	13226699.000	120.000	17.221	22.091	110222.492	115430.822	4.512
Aliphatic EPH	42548174.000	360.000	3.085	22.091	118189.372	125644.338	5.933

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	03 Jun 2025 11:14
Client Sample ID:		Operator:	YP\AJ
Data file:	FE054148.D	Misc:	
Instrument:	FID_E	ALS Vial:	2
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.085	6.730	6816437.000	60.000	ug/ml
Aliphatic C12-C16	6.731	10.178	4926102.000	40.000	ug/ml
Aliphatic C16-C21	10.179	13.552	7542546.000	60.000	ug/ml
Aliphatic C21-C28	13.553	17.220	10036390.000	80.000	ug/ml
Aliphatic C28-C40	17.221	22.091	13226699.000	120.000	ug/ml
Aliphatic EPH	3.085	22.091	42548174.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054148.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 11:14
 Operator : YP\AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
 Quant Time: Jun 03 12:21:23 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 12:15:41 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)	11.837	3065342	18.862 ug/ml
Spiked Amount 50.000		Recovery =	37.72%
12) S 1-chlorooctadecane (S...	13.282	2292057	19.334 ug/ml
Spiked Amount 50.000		Recovery =	38.67%
Target Compounds			
1) T n-Nonane (C9)	3.184	2180681	16.135 ug/ml
2) T n-Decane (C10)	4.448	2256677	16.700 ug/ml
3) T A~Naphthalene (C11.7)	6.163	2524636	17.567 ug/ml
4) T n-Dodecane (C12)	6.630	2379079	17.441 ug/ml
5) T A~2-methylnaphthalene...	7.265	2496164	17.996 ug/ml
6) T n-Tetradecane (C14)	8.464	2423968	17.962 ug/ml
7) T n-Hexadecane (C16)	10.076	2502134	18.543 ug/ml
8) T n-Octadecane (C18)	11.523	2538981	18.855 ug/ml
10) T n-Eicosane (C20)	12.836	2516481	19.147 ug/ml
11) T n-Heneicosane (C21)	13.450	2487084	19.184 ug/ml
13) T n-Docosane (C22)	14.037	2500099	19.597 ug/ml
14) T n-Tetracosane (C24)	15.143	2546031	20.349 ug/ml
15) T n-Hexacosane (C26)	16.166	2506111	20.466 ug/ml
16) T n-Octacosane (C28)	17.117	2484149	20.435 ug/ml
17) T n-Tricontane (C30)	18.006	2524715	20.268 ug/ml
18) T n-Dotriacontane (C32)	18.841	2495668	19.957 ug/ml
19) T n-Tetratriacontane (C34)	19.625	2289337	19.219 ug/ml
20) T n-Hexatriacontane (C36)	20.366	2142075	18.500 ug/ml
21) T n-Octatriacontane (C38)	21.096	1952018	17.937 ug/ml
22) T n-Tetracontane (C40)	21.988	1822886	18.370 ug/ml

(f)=RT Delta > 1/2 Window

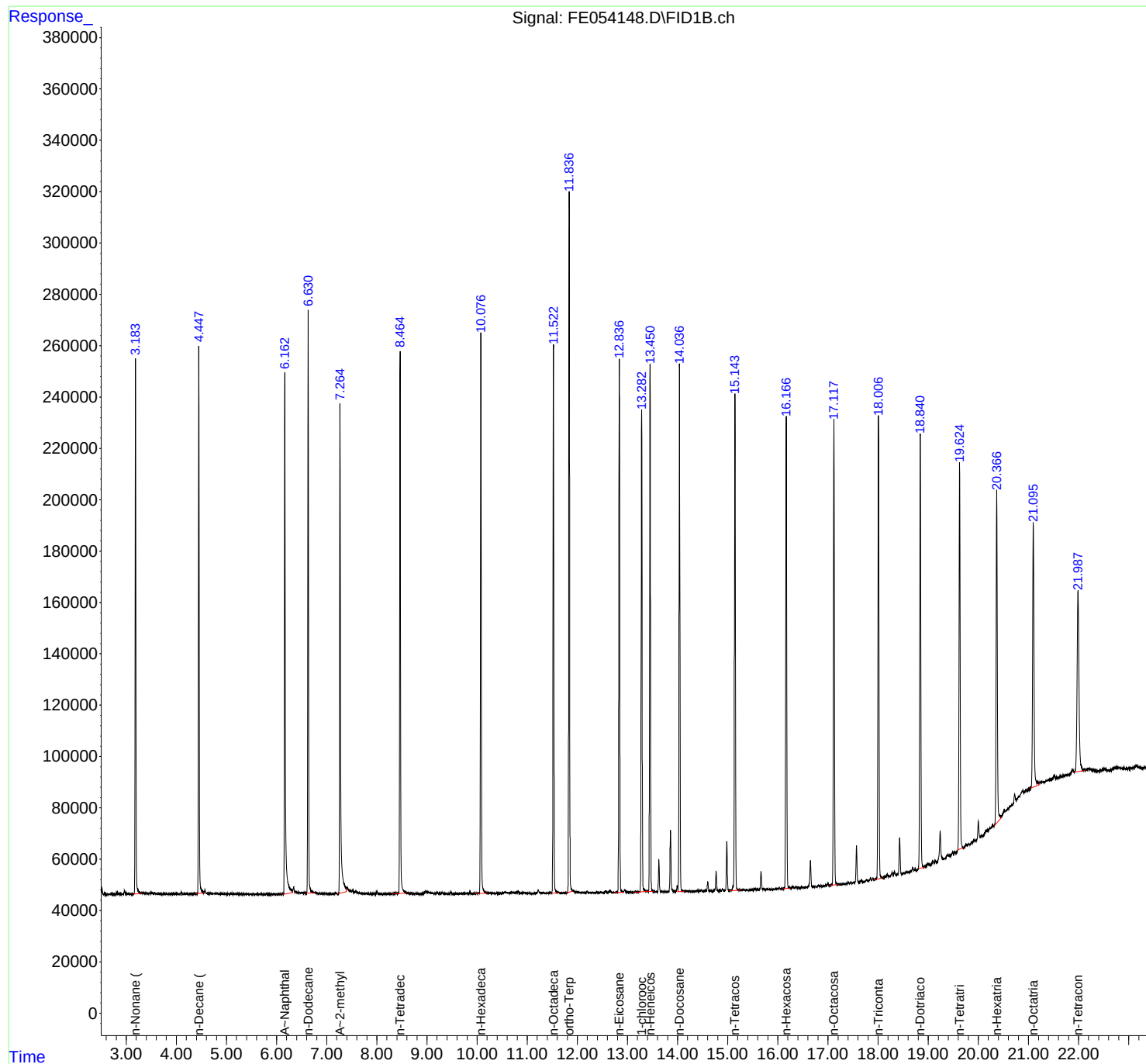
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054148.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 11:14
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Jun 03 12:21:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 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\FE060325AL\
 Data File : FE054148.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 11:14
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	3.184	3.127	3.310	BB	208401	2180681	71.14%	4.120%
2	4.448	4.392	4.552	BV	213104	2256677	73.62%	4.264%
3	6.163	6.112	6.317	BV	202160	2524636	82.36%	4.770%
4	6.630	6.575	6.767	BB	227449	2379079	77.61%	4.495%
5	7.265	7.210	7.394	BV	190103	2496164	81.43%	4.716%
6	8.464	8.322	8.599	BB	211079	2423968	79.08%	4.580%
7	10.076	9.954	10.207	BB	217254	2502134	81.63%	4.728%
8	11.523	11.490	11.630	BB	212464	2538981	82.83%	4.797%
9	11.837	11.780	11.909	BV	273377	3065342	100.00%	5.792%
10	12.836	12.740	12.914	BV	207758	2516481	82.09%	4.755%
11	13.282	13.124	13.380	BB	187624	2292057	74.77%	4.331%
12	13.450	13.390	13.530	BB	205790	2487084	81.14%	4.699%
13	14.037	14.005	14.135	VB	204963	2500099	81.56%	4.724%
14	15.143	15.040	15.250	BB	192960	2546031	83.06%	4.811%
15	16.166	16.100	16.244	BB	183897	2506111	81.76%	4.735%
16	17.117	17.039	17.184	BB	181343	2484149	81.04%	4.694%
17	18.006	17.920	18.089	PB	180967	2524715	82.36%	4.770%
18	18.841	18.800	18.929	BB	169128	2495668	81.42%	4.715%
19	19.625	19.590	19.705	BV	150198	2289337	74.68%	4.326%
20	20.366	20.320	20.454	BV	129990	2142075	69.88%	4.047%
21	21.096	21.040	21.212	BV	103113	1952018	63.68%	3.688%
22	21.988	21.919	22.127	VV	70397	1822886	59.47%	3.444%
Sum of corrected areas:							52926375	

Aliphatic EPH 051425.M Wed Jun 04 04:24:03 2025

Continuing Calibration Report for SequenceID : FE060325AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FE054167.D

Aliphatic C9-C12	6798073.000	60.000	3.085	6.730	113301.217	135563.285	16.422
Aliphatic C12-C16	4936042.000	40.000	6.731	10.178	123401.050	134941.528	8.552
Aliphatic C16-C21	7572280.000	60.000	10.179	13.552	126204.667	131910.826	4.326
Aliphatic C21-C28	10035757.000	80.000	13.553	17.220	125446.963	124176.943	-1.023
Aliphatic C28-C40	13358671.000	120.000	17.221	22.091	111322.258	115430.822	3.559
Aliphatic EPH	42700823.000	360.000	3.085	22.091	118613.397	125644.338	5.596

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	03 Jun 2025 23:27
Client Sample ID:		Operator:	YPAJ
Data file:	FE054167.D	Misc:	
Instrument:	FID_E	ALS Vial:	2
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.085	6.730	6798073.000	60.000	ug/ml
Aliphatic C12-C16	6.731	10.178	4936042.000	40.000	ug/ml
Aliphatic C16-C21	10.179	13.552	7572280.000	60.000	ug/ml
Aliphatic C21-C28	13.553	17.220	10035757.000	80.000	ug/ml
Aliphatic C28-C40	17.221	22.091	13358671.000	120.000	ug/ml
Aliphatic EPH	3.085	22.091	42700823.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054167.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 23:27
 Operator : YP\AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 06/04/2025
 Supervised By :mohammad ahmed 06/05/2025

Integration File: autoint1.e
 Quant Time: Jun 04 02:56:05 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 12:15:41 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)	11.837	3069951	18.891 ug/ml
Spiked Amount 50.000		Recovery =	37.78%
12) S 1-chlorooctadecane (S...	13.281	2315546	19.532 ug/ml
Spiked Amount 50.000		Recovery =	39.06%
Target Compounds			
1) T n-Nonane (C9)	3.183	2171005	16.063 ug/ml
2) T n-Decane (C10)	4.447	2251031	16.658 ug/ml
3) T A~Naphthalene (C11.7)	6.162	2534339	17.634 ug/ml
4) T n-Dodecane (C12)	6.629	2376037	17.419 ug/ml
5) T A~2-methylnaphthalene...	7.264	2500227	18.025 ug/ml
6) T n-Tetradecane (C14)	8.463	2423030	17.955 ug/ml
7) T n-Hexadecane (C16)	10.076	2513012	18.624 ug/ml
8) T n-Octadecane (C18)	11.523	2549604	18.934 ug/ml
10) T n-Eicosane (C20)	12.835	2525176	19.213 ug/ml
11) T n-Heneicosane (C21)	13.449	2497500	19.264 ug/ml
13) T n-Docosane (C22)	14.037	2506328	19.646 ug/ml
14) T n-Tetracosane (C24)	15.142	2523628	20.170 ug/mlm
15) T n-Hexacosane (C26)	16.165	2515878	20.546 ug/ml
16) T n-Octacosane (C28)	17.117	2489923	20.482 ug/ml
17) T n-Tricontane (C30)	18.007	2531642	20.324 ug/ml
18) T n-Dotriacontane (C32)	18.840	2510220	20.073 ug/ml
19) T n-Tetratriacontane (C34)	19.625	2319201	19.469 ug/ml
20) T n-Hexatriacontane (C36)	20.366	2135575	18.444 ug/ml
21) T n-Octatriacontane (C38)	21.095	1966169	18.067 ug/ml
22) T n-Tetracontane (C40)	21.987	1895864	19.106 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054167.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 23:27
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

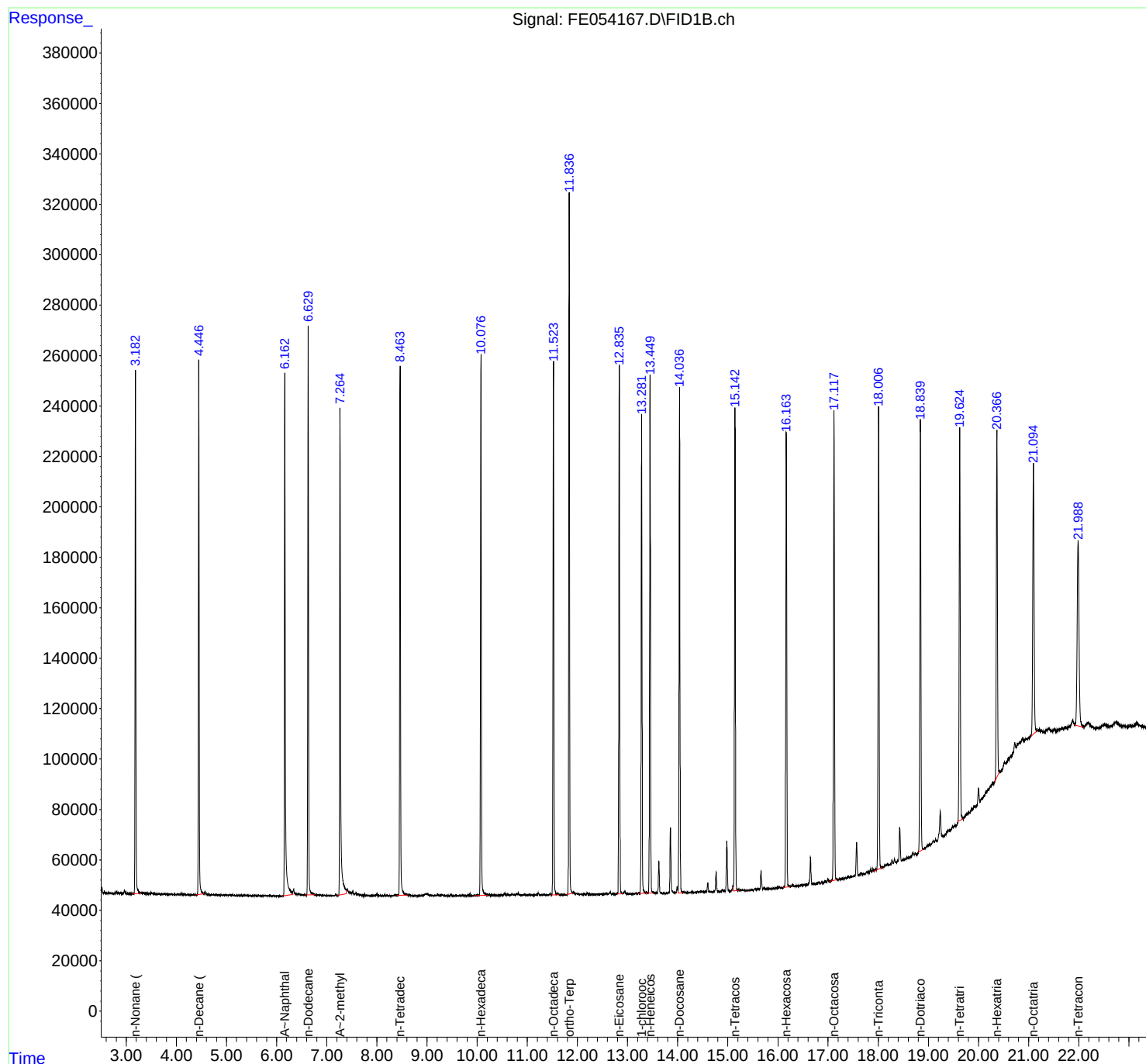
Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 06/04/2025
Supervised By :mohammad ahmed 06/05/2025

Integration File: autoint1.e
Quant Time: Jun 04 02:56:05 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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



rters

Instrument :
FID_E
LabSampleId :
20 PPM ALIPHATIC HC STD
Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025
Supervised By :mohammad ahmed 06/05/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE06032
Data File : FE054167.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 23:27
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	3.183	3.110	3.304	BB	207358	2171005	70.72%	4.085%
2	4.447	4.387	4.554	BV	211413	2251031	73.32%	4.236%
3	6.162	6.112	6.319	BV	206482	2534339	82.55%	4.769%
4	6.629	6.575	6.772	BB	225103	2376037	77.40%	4.471%
5	7.264	7.212	7.389	BV	192730	2500227	81.44%	4.704%
6	8.463	8.405	8.612	BB	209823	2423030	78.93%	4.559%
7	10.076	9.944	10.219	BB	213255	2513012	81.86%	4.729%
8	11.523	11.490	11.632	BB	211433	2549604	83.05%	4.797%
9	11.837	11.779	11.907	BV	277211	3069951	100.00%	5.776%
10	12.835	12.799	12.910	BV	210133	2525176	82.25%	4.751%
11	13.281	13.210	13.372	BB	189775	2315546	75.43%	4.357%
12	13.449	13.389	13.535	BB	205826	2497500	81.35%	4.699%
13	14.037	14.005	14.117	VB	199879	2506328	81.64%	4.716%
14	15.142	15.040	15.227	BB	191214	2548365	83.01%	4.795%
15	16.165	16.100	16.250	BB	180137	2515878	81.95%	4.734%
16	17.117	17.025	17.185	BB	186231	2489923	81.11%	4.685%
17	18.007	17.919	18.079	PB	183137	2531642	82.47%	4.764%
18	18.840	18.800	18.899	BB	170734	2510220	81.77%	4.723%
19	19.625	19.590	19.693	BV	156014	2319201	75.55%	4.364%
20	20.366	20.320	20.417	BB	137723	2135575	69.56%	4.018%
21	21.095	21.040	21.167	BV	106943	1966169	64.05%	3.700%
22	21.987	21.919	22.093	VV	73131	1895864	61.76%	3.567%
Sum of corrected areas:						53145622		

Aliphatic EPH 051425.M Wed Jun 04 04:30:24 2025



QC SAMPLE DATA

Report of Analysis

Client:	G Environmental		Date Collected:		
Project:	DeCamp		Date Received:		
Client Sample ID:	PB168239BL		SDG No.:	Q2179	
Lab Sample ID:	PB168239BL		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	100	
Sample Wt/Vol:	30.03	Units: g	Final Vol:	2000	uL
Soil Aliquot Vol:		uL	Test:	EPH_F2	
Prep Method :					

Prep Date :	Date Analyzed :	Prep Batch ID
06/03/25 10:00	06/03/25 13:54	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	0.91	U	1	0.91	3.99	mg/kg	FE054149.D
Total EPH	Total EPH	0.91	U		0.91	3.99	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 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:	G Environmental	Date Collected:	
Project:	DeCamp	Date Received:	
Client Sample ID:	PB168239BL	SDG No.:	Q2179
Lab Sample ID:	PB168239BL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE054149.D	1	06/03/25	06/03/25	PB168239

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	0.91	U	0.91	3.99	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	1.18	U	1.18	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	42.0		40 - 140	84%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	40.0		40 - 140	80%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB168239BL	Acq On:	03 Jun 2025 13:54
Client Sample ID:	PB168239BL	Operator:	YP\AJ
Data file:	FE054149.D	Misc:	
Instrument:	FID_E	ALS Vial:	6
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.085	6.730	0	0	300	ug/ml
Aliphatic C12-C16	6.731	10.178	0	0	200	ug/ml
Aliphatic C16-C21	10.179	13.552	0	0	300	ug/ml
Aliphatic C21-C28	13.553	17.220	0	0	400	ug/ml
Aliphatic C28-C40	17.221	22.091	0	0	600	ug/ml
Aliphatic EPH	3.085	22.091	0	0		ug/ml
ortho-Terphenyl (SURR)	11.841	11.841	6495533	39.97		ug/ml
1-chlorooctadecane (SURR)	13.287	13.287	4978121	41.99		ug/ml
Aliphatic C9-C28	3.085	17.220	0	0	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054149.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 13:54
 Operator : YP\AJ
 Sample : PB168239BL
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 PB168239BL

Integration File: autoint1.e
 Quant Time: Jun 04 02:50:56 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 12:15:41 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)	11.841	6495533	39.970 ug/ml
Spiked Amount	50.000	Recovery	= 79.94%
12) S 1-chlorooctadecane (S...	13.287	4978121	41.992 ug/ml
Spiked Amount	50.000	Recovery	= 83.98%

Target Compounds

(f)=RT Delta > 1/2 Window

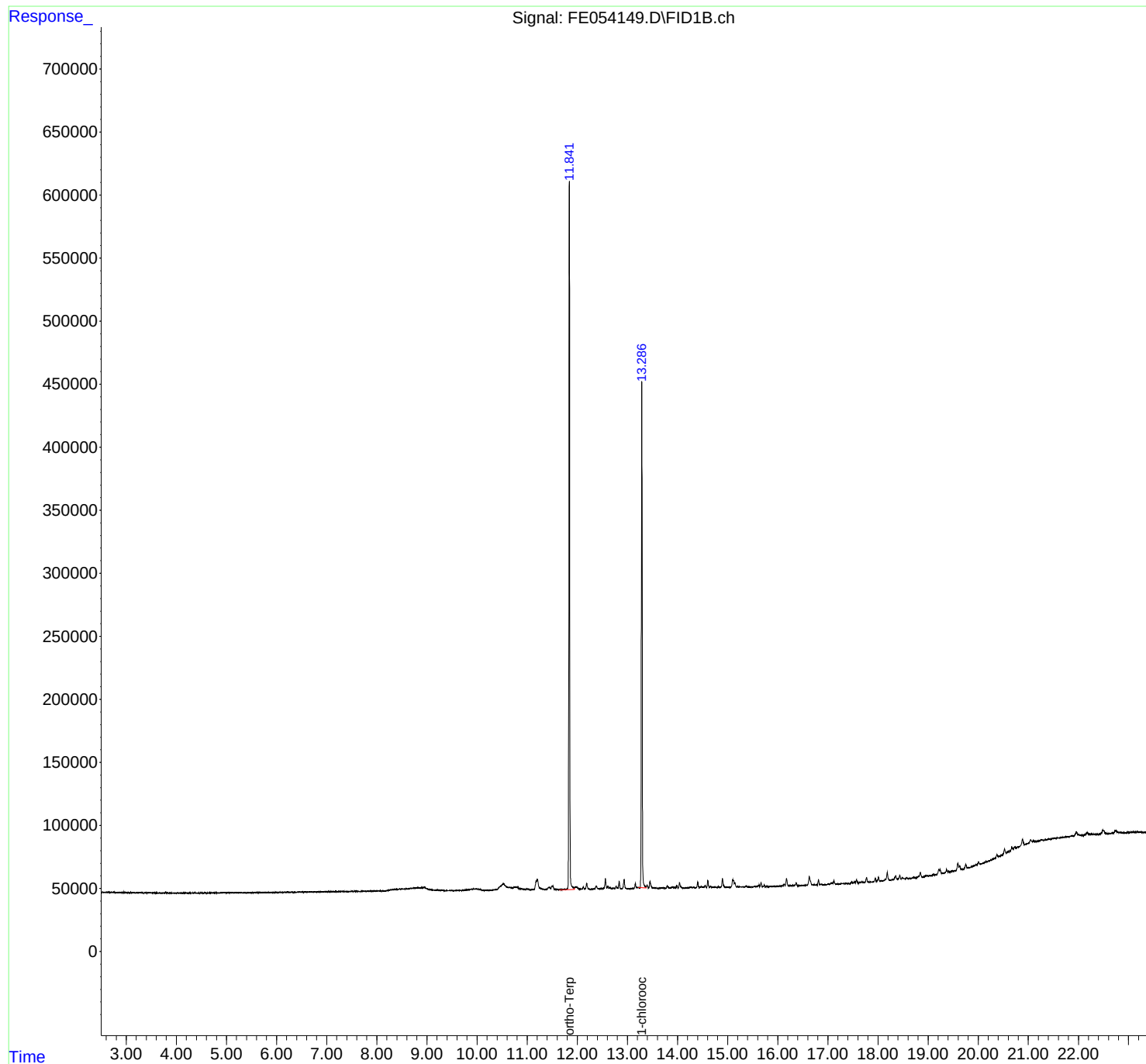
(m)=manual int.

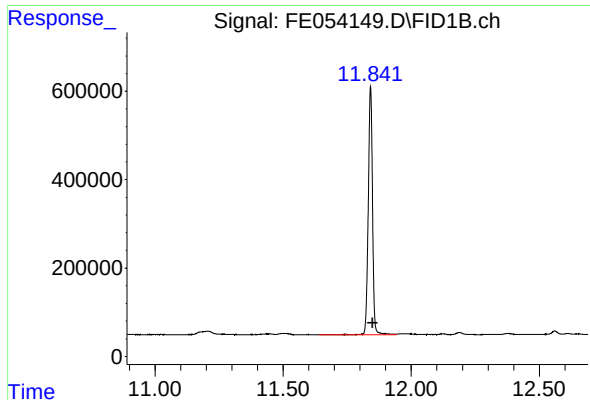
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054149.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 13:54
Operator : YP\AJ
Sample : PB168239BL
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB168239BL

Integration File: autoint1.e
Quant Time: Jun 04 02:50:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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

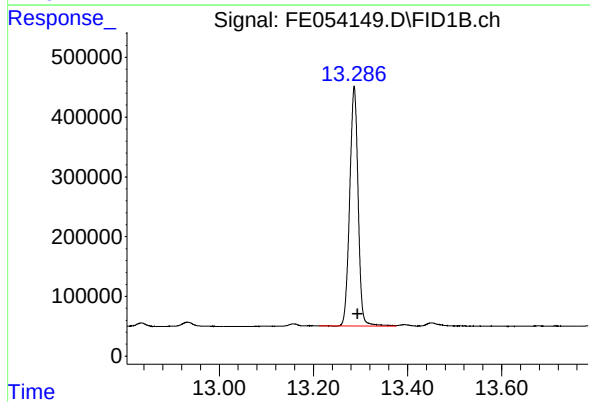




#9 ortho-Terphenyl (SURR)

R.T.: 11.841 min
Delta R.T.: -0.007 min
Response: 6495533
Conc: 39.97 ug/ml

Instrument :
FID_E
ClientSampleId :
PB168239BL



#12 1-chlorooctadecane (SURR)

R.T.: 13.287 min
Delta R.T.: -0.008 min
Response: 4978121
Conc: 41.99 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054149.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 13:54
Sample : PB168239BL
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	11.841	11.640	11.940	BV	561624	6495533	100.00%	56.613%
2	13.287	13.212	13.375	BV	402046	4978121	76.64%	43.387%
Sum of corrected areas:							11473655	

Aliphatic EPH 051425.M Wed Jun 04 04:24:51 2025

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	DeCamp	Date Received:	
Client Sample ID:	PB168239BS	SDG No.:	Q2179
Lab Sample ID:	PB168239BS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
06/03/25 10:00	06/03/25 14:24	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	72.4		1	0.91	3.99	mg/kg	FE054150.D
Total EPH	Total EPH	72.4			0.91	3.99	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 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:	G Environmental	Date Collected:	
Project:	DeCamp	Date Received:	
Client Sample ID:	PB168239BS	SDG No.:	Q2179
Lab Sample ID:	PB168239BS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE054150.D	1	06/03/25	06/03/25	PB168239

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	72.4		0.91	3.99	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	26.9		1.18	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	40.0		40 - 140	80%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	36.1		40 - 140	72%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB168239BS	Acq On:	03 Jun 2025 14:24
Client Sample ID:	PB168239BS	Operator:	YP\AJ
Data file:	FE054150.D	Misc:	
Instrument:	FID_E	ALS Vial:	7
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.085	6.730	26316192	194.125	300	ug/ml
Aliphatic C12-C16	6.731	10.178	32556263	241.262	200	ug/ml
Aliphatic C16-C21	10.179	13.552	36220074	274.58	300	ug/ml
Aliphatic C21-C28	13.553	17.220	46751012	376.487	400	ug/ml
Aliphatic C28-C40	17.221	22.091	46616921	403.852	600	ug/ml
Aliphatic EPH	3.085	22.091	188460462	1490		ug/ml
ortho-Terphenyl (SURR)	11.840	11.840	5862353	36.07		ug/ml
1-chlorooctadecane (SURR)	13.285	13.285	4736352	39.95		ug/ml
Aliphatic C9-C28	3.085	17.220	141843541	1090	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054150.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 14:24
 Operator : YP\AJ
 Sample : PB168239BS
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :

FID_E

ClientSampleId :

PB168239BS

Manual Integrations**APPROVED**

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Integration File: autoint1.e

Quant Time: Jun 04 02:51:14 2025

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M

Quant Title : GC Extractables

QLast Update : Wed May 14 12:15:41 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)	11.840	5862353	36.073 ug/ml
Spiked Amount 50.000		Recovery =	72.15%
12) S 1-chlorooctadecane (S...	13.285	4736352	39.953 ug/ml
Spiked Amount 50.000		Recovery =	79.91%
Target Compounds			
1) T n-Nonane (C9)	3.202	4723150	34.947 ug/ml
2) T n-Decane (C10)	4.457	4910014	36.335 ug/ml
3) T A~Naphthalene (C11.7)	6.165	5799757	40.356 ug/ml
4) T n-Dodecane (C12)	6.632	5151493	37.766 ug/ml
5) T A~2-methylnaphthalene...	7.266	5172988	37.294 ug/ml
6) T n-Tetradecane (C14)	8.466	5143332	38.113 ug/ml
7) T n-Hexadecane (C16)	10.078	5142003	38.107 ug/ml
8) T n-Octadecane (C18)	11.526	5042500	37.446 ug/ml
10) T n-Eicosane (C20)	12.839	5129908	39.032 ug/ml
11) T n-Heneicosane (C21)	13.452	4904873	37.833 ug/ml
13) T n-Docosane (C22)	14.039	4832245	37.877 ug/ml
14) T n-Tetracosane (C24)	15.140	10410594	83.207 ug/ml
15) T n-Hexacosane (C26)	16.169	4746505	38.762 ug/ml
16) T n-Octacosane (C28)	17.120	4991531	41.061 ug/ml
17) T n-Tricontane (C30)	18.011	4765569	38.258 ug/ml
18) T n-Dotriacontane (C32)	18.842	4847223	38.761 ug/ml
19) T n-Tetratriacontane (C34)	19.629	4797945	40.278 ug/ml
20) T n-Hexatriacontane (C36)	20.370	4762152	41.128 ug/ml
21) T n-Octatriacontane (C38)	21.100	4877867	44.823 ug/ml
22) T n-Tetracontane (C40)	21.994	4914105	49.522 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054150.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 14:24
Operator : YP\AJ
Sample : PB168239BS
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :

FID_E

ClientSampleId :

PB168239BS

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Integration File: autoint1.e

Quant Time: Jun 04 02:51:14 2025

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.

Quant Title : GC Extractables

QLast Update : Wed May 14 12:15:41 2025

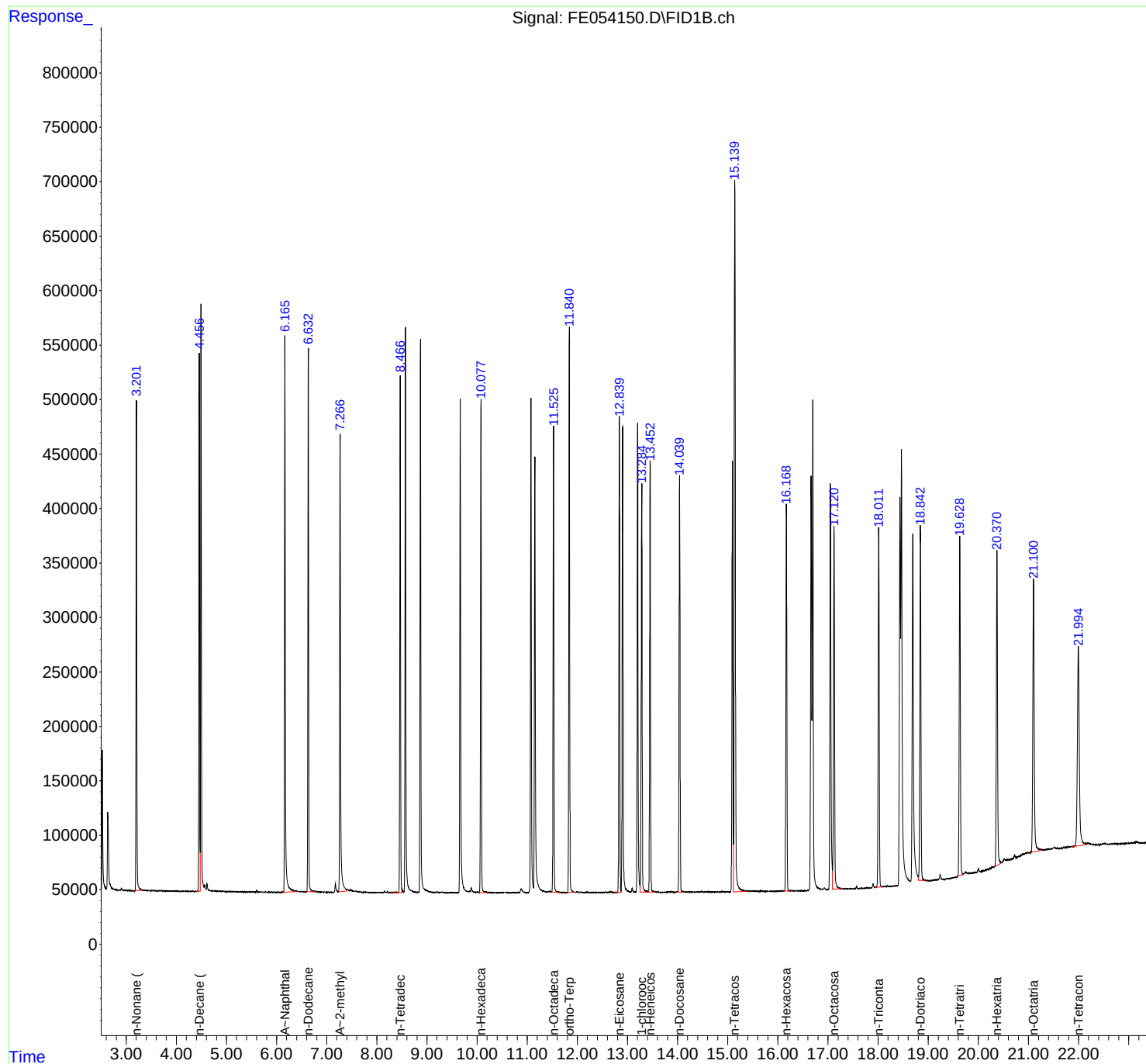
Response via : Initial Calibration

Integrator: ChemStation

Volume Inj. : 1 ul

Signal Phase : Rxi-1ms

Signal Info : 20M x 0.18mm x 0.18um



rteres

Instrument :

FID_E

ClientSampleId :

PB168239BS

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE06032
Data File : FE054150.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 14:24
Sample : PB168239BS
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	3.202	3.149	3.329	BV	449590	4723150	45.37%	2.373%
2	4.457	4.392	4.474	BV	493827	4910014	47.16%	2.467%
3	4.491	4.474	4.551	VV	538779	5731778	55.06%	2.879%
4	6.165	6.112	6.419	BB	510477	5799757	55.71%	2.914%
5	6.632	6.565	6.769	BB	499548	5151493	49.48%	2.588%
6	7.266	7.231	7.397	PV	420324	5172988	49.69%	2.599%
7	8.466	8.280	8.542	BV	475363	5143332	49.40%	2.584%
8	8.570	8.542	8.797	VB	517735	5720480	54.95%	2.874%
9	8.870	8.810	9.119	BB	508256	5752414	55.26%	2.890%
10	9.664	9.604	9.835	BV	452828	5625046	54.03%	2.826%
11	10.078	10.044	10.210	BB	452872	5142003	49.39%	2.583%
12	11.076	11.000	11.127	BV	453216	5277002	50.69%	2.651%
13	11.153	11.127	11.307	VV	399173	5327786	51.18%	2.676%
14	11.526	11.490	11.664	BB	427639	5042500	48.44%	2.533%
15	11.840	11.775	11.949	BV	519550	5862353	56.31%	2.945%
16	12.839	12.732	12.872	BV	437834	5129908	49.28%	2.577%
17	12.904	12.872	13.067	VV	428363	5327855	51.18%	2.677%
18	13.203	13.142	13.250	VV	431427	5210150	50.05%	2.617%
19	13.285	13.250	13.414	VV	375226	4736352	45.50%	2.379%
20	13.452	13.414	13.560	VB	395516	4904873	47.11%	2.464%
21	14.039	13.949	14.137	BB	382203	4832245	46.42%	2.428%
22	15.092	15.040	15.113	BV	395387	5023139	48.25%	2.523%
23	15.140	15.113	15.389	VB	650911	10410594	100.00%	5.230%
24	16.169	16.100	16.260	BB	355320	4746505	45.59%	2.384%
25	16.663	16.564	16.678	BV	381530	5348368	51.37%	2.687%
26	16.695	16.678	16.899	VB	449912	6003300	57.67%	3.016%
27	17.047	17.000	17.088	BV	372752	5395330	51.83%	2.710%
28	17.120	17.088	17.297	VB	333904	4991531	47.95%	2.508%
29	18.011	17.930	18.115	PB	328022	4765569	45.78%	2.394%
30	18.435	18.372	18.448	PV	355477	5155739	49.52%	2.590%
31	18.465	18.448	18.650	VV	400742	7107632	68.27%	3.571%
32	18.691	18.650	18.800	PBA	317884	5550960	53.32%	2.789%
33	18.843	18.800	18.980	BB	321585	4684952	45.00%	2.354%
34	19.629	19.590	19.699	BV	311057	4797945	46.09%	2.410%
35	20.370	20.320	20.462	BV	289028	4762152	45.74%	2.392%
36	21.100	21.040	21.284	BB	250808	4877867	46.85%	2.450%

37 21.994 21.850 22.150 BV 183612 4914105 47.20% 2.469%
rteres
Sum of corrected areas: 1996

Aliphatic EPH 051425.M Wed Jun 04 04:26:39 2025

Instrument :

FID_E

ClientSampleId :

PB168239BS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	DeCamp	Date Received:	
Client Sample ID:	PB168239BSD	SDG No.:	Q2179
Lab Sample ID:	PB168239BSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
06/03/25 10:00	06/03/25 14:55	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	70.6		1	0.91	3.99	mg/kg	FE054151.D
Total EPH	Total EPH	70.6			0.91	3.99	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 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:	G Environmental	Date Collected:	
Project:	DeCamp	Date Received:	
Client Sample ID:	PB168239BSD	SDG No.:	Q2179
Lab Sample ID:	PB168239BSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE054151.D	1	06/03/25	06/03/25	PB168239

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	70.6		0.91	3.99	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	24.6		1.18	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	39.4		40 - 140	79%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	35.6		40 - 140	71%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB168239BSD	Acq On:	03 Jun 2025 14:55
Client Sample ID:	PB168239BSD	Operator:	YP\AJ
Data file:	FE054151.D	Misc:	
Instrument:	FID_E	ALS Vial:	8
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.085	6.730	25495271	188.069	300	ug/ml
Aliphatic C12-C16	6.731	10.178	31708144	234.977	200	ug/ml
Aliphatic C16-C21	10.179	13.552	35374674	268.171	300	ug/ml
Aliphatic C21-C28	13.553	17.220	45603088	367.243	400	ug/ml
Aliphatic C28-C40	17.221	22.091	42608654	369.127	600	ug/ml
Aliphatic EPH	3.085	22.091	180789831	1430		ug/ml
ortho-Terphenyl (SURR)	11.839	11.839	5780344	35.57		ug/ml
1-chlorooctadecane (SURR)	13.284	13.284	4665030	39.35		ug/ml
Aliphatic C9-C28	3.085	17.220	138181177	1060	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054151.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 14:55
 Operator : YP\AJ
 Sample : PB168239BSD
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :

FID_E

ClientSampleId :

PB168239BSD

Manual Integrations**APPROVED**

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Integration File: autoint1.e

Quant Time: Jun 04 02:51:36 2025

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M

Quant Title : GC Extractables

QLast Update : Wed May 14 12:15:41 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)	11.839	5780344	35.569 ug/ml
Spiked Amount 50.000		Recovery =	71.14%
12) S 1-chlorooctadecane (S...	13.284	4665030	39.351 ug/ml
Spiked Amount 50.000		Recovery =	78.70%
Target Compounds			
1) T n-Nonane (C9)	3.202	4598745	34.026 ug/ml
2) T n-Decane (C10)	4.457	4734271	35.035 ug/ml
3) T A~Naphthalene (C11.7)	6.166	5616255	39.079 ug/ml
4) T n-Dodecane (C12)	6.632	4998642	36.645 ug/ml
5) T A~2-methylnaphthalene...	7.266	5027021	36.242 ug/ml
6) T n-Tetradecane (C14)	8.466	4973183	36.852 ug/ml
7) T n-Hexadecane (C16)	10.078	5013584	37.156 ug/ml
8) T n-Octadecane (C18)	11.525	4927954	36.596 ug/ml
10) T n-Eicosane (C20)	12.839	5019523	38.192 ug/ml
11) T n-Heneicosane (C21)	13.451	4789857	36.946 ug/ml
13) T n-Docosane (C22)	14.039	4726452	37.048 ug/ml
14) T n-Tetracosane (C24)	15.140	10145034	81.085 ug/ml
15) T n-Hexacosane (C26)	16.169	4630815	37.818 ug/ml
16) T n-Octacosane (C28)	17.119	4852824	39.920 ug/ml
17) T n-Tricontane (C30)	18.010	4616677	37.063 ug/ml
18) T n-Dotriacontane (C32)	18.843	4638741	37.094 ug/ml
19) T n-Tetratriacontane (C34)	19.628	4479444	37.604 ug/ml
20) T n-Hexatriacontane (C36)	20.370	4278413	36.951 ug/ml
21) T n-Octatriacontane (C38)	21.098	3901549	35.851 ug/ml
22) T n-Tetracontane (C40)	21.991	3565656	35.933 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054151.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 14:55
Operator : YP\AJ
Sample : PB168239BSD
Misc :
ALS Vial : 8 Sample Multiplier: 1

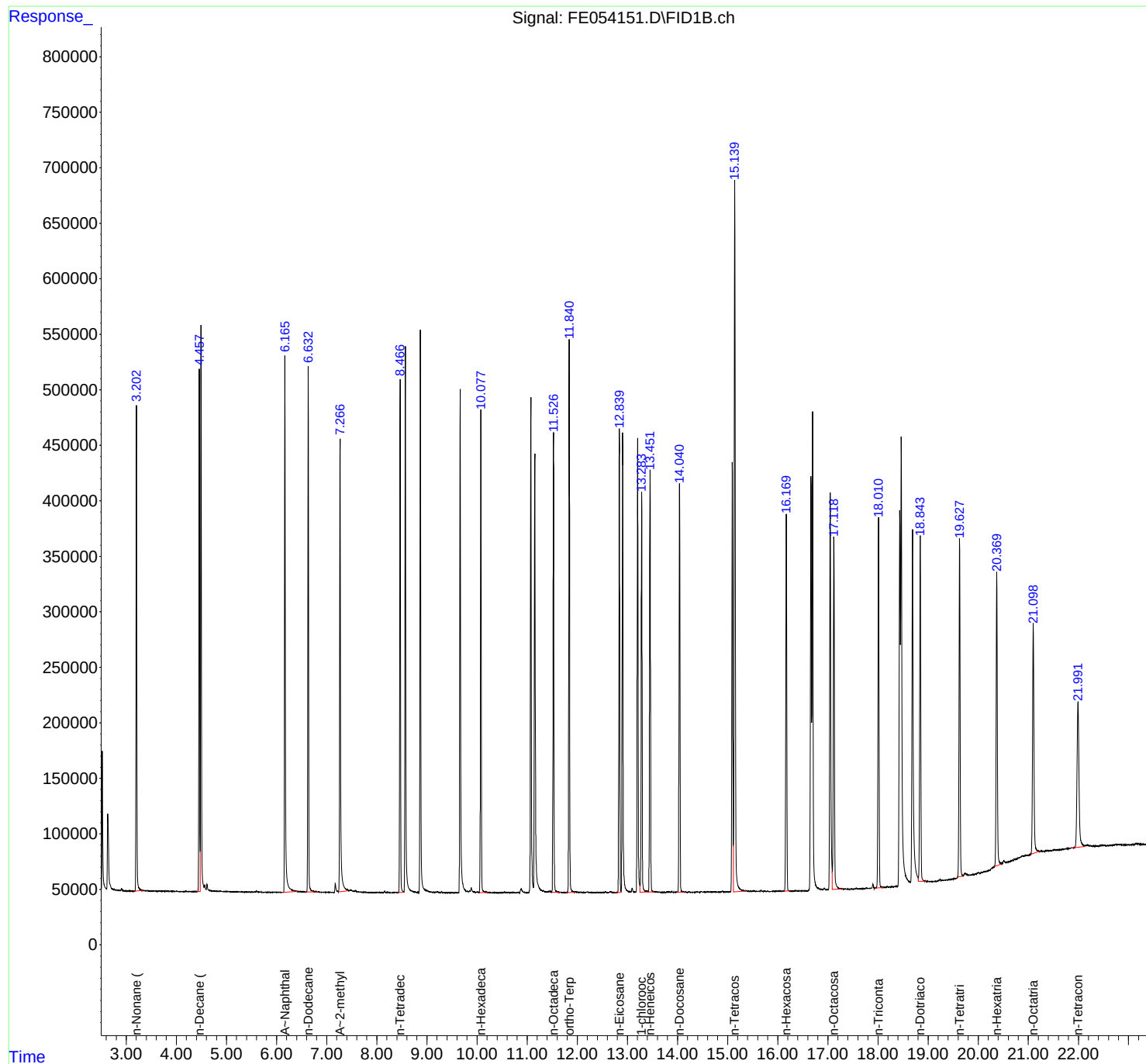
Instrument :
FID_E
ClientSampleId :
PB168239BSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 06/04/2025
Supervised By :mohammad ahmed 06/05/2025

Integration File: autoint1.e
Quant Time: Jun 04 02:51:36 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 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

Instrument :

FID_E

ClientSampleId :

PB168239BSD

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE06032
Data File : FE054151.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 14:55
Sample : PB168239BSD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	3.202	3.147	3.332	BV	437416	4598745	45.33%	2.405%
2	4.457	4.402	4.474	BV	470495	4734271	46.67%	2.476%
3	4.492	4.474	4.552	VV	509512	5547358	54.68%	2.901%
4	6.166	6.114	6.414	BB	482838	5616255	55.36%	2.937%
5	6.632	6.565	6.810	BB	472997	4998642	49.27%	2.614%
6	7.266	7.231	7.397	VV	408207	5027021	49.55%	2.629%
7	8.466	8.410	8.540	BV	461242	4973183	49.02%	2.601%
8	8.570	8.540	8.805	VB	491371	5581431	55.02%	2.919%
9	8.870	8.810	9.109	BB	506870	5618418	55.38%	2.938%
10	9.664	9.562	9.834	BV	450575	5494507	54.16%	2.873%
11	10.078	10.040	10.215	BB	435724	5013584	49.42%	2.622%
12	11.075	10.997	11.125	BV	446459	5153973	50.80%	2.695%
13	11.153	11.125	11.312	VV	396216	5210641	51.36%	2.725%
14	11.525	11.490	11.654	BB	412278	4927954	48.58%	2.577%
15	11.839	11.777	11.962	BV	495124	5780344	56.98%	3.023%
16	12.839	12.739	12.874	BV	417525	5019523	49.48%	2.625%
17	12.903	12.874	13.065	VV	414329	5194978	51.21%	2.717%
18	13.203	13.142	13.250	VV	408043	5077748	50.05%	2.655%
19	13.284	13.250	13.417	VV	360611	4665030	45.98%	2.439%
20	13.451	13.417	13.552	VB	380030	4789857	47.21%	2.505%
21	14.039	14.002	14.144	PB	368086	4726452	46.59%	2.472%
22	15.092	15.040	15.113	BV	387109	4907001	48.37%	2.566%
23	15.140	15.113	15.369	VB	640008	10145034	100.00%	5.305%
24	16.169	16.100	16.240	BB	338609	4630815	45.65%	2.422%
25	16.662	16.570	16.677	BV	373073	5195159	51.21%	2.717%
26	16.694	16.677	16.900	VV	430274	5875934	57.92%	3.073%
27	17.046	17.000	17.089	BV	357319	5269869	51.95%	2.756%
28	17.119	17.089	17.292	VB	317347	4852824	47.83%	2.538%
29	18.010	17.927	18.110	PB	333751	4616677	45.51%	2.414%
30	18.434	18.222	18.447	BV	336963	4908820	48.39%	2.567%
31	18.463	18.447	18.646	VV	403374	6921986	68.23%	3.620%
32	18.689	18.646	18.800	PBA	316754	5449712	53.72%	2.850%
33	18.843	18.800	18.982	BB	307955	4486397	44.22%	2.346%
34	19.628	19.590	19.695	BV	303375	4479444	44.15%	2.342%
35	20.370	20.320	20.474	BV	265151	4278413	42.17%	2.237%
36	21.098	21.040	21.227	BB	207529	3901549	38.46%	2.040%

37 21.991 21.850 22.134 BV 131452 3565656 35.15% 1.865%
rteres
Sum of corrected areas: 1912

Aliphatic EPH 051425.M Wed Jun 04 04:27:59 2025

Instrument :

FID_E

ClientSampleId :

PB168239BSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Report of Analysis

Client:	G Environmental		Date Collected:		
Project:	DeCamp		Date Received:		
Client Sample ID:	3MS		SDG No.:	Q2179	
Lab Sample ID:	Q2147-05MS		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	86.3	
Sample Wt/Vol:	30.08	Units: g	Final Vol:	2000	uL
Soil Aliquot Vol:		uL	Test:	EPH_F2	
Prep Method :					

Prep Date :	Date Analyzed :	Prep Batch ID
06/03/25 10:00	06/03/25 16:56	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	105	E	1	1.05	4.63	mg/kg	FE054155.D
Total EPH	Total EPH	105			1.05	4.63	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 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:	G Environmental	Date Collected:	
Project:	DeCamp	Date Received:	
Client Sample ID:	3MS	SDG No.:	Q2179
Lab Sample ID:	Q2147-05MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	86.3
Sample Wt/Vol:	30.08	Units:	g
Soil Aliquot Vol:		Final Vol:	2000 uL
Prep Method :		Test:	EPH_F2

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE054155.D	1	06/03/25	06/03/25	PB168239

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	105	E	1.05	4.63	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	59.4	E	1.36	2.31	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	38.6		40 - 140	77%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	33.0		40 - 140	66%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2147-05MS	Acq On:	03 Jun 2025 16:56
Client Sample ID:	3MS	Operator:	YP\AJ
Data file:	FE054155.D	Misc:	
Instrument:	FID_E	ALS Vial:	12
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.085	6.730	29212037	215.486	300	ug/ml
Aliphatic C12-C16	6.731	10.178	37891899	280.802	200	ug/ml
Aliphatic C16-C21	10.179	13.552	48061541	364.349	300	ug/ml
Aliphatic C21-C28	13.553	17.220	62432597	502.771	400	ug/ml
Aliphatic C28-C40	17.221	22.091	89008282	771.096	600	ug/ml
Aliphatic EPH	3.085	22.091	266606356	2130		ug/ml
ortho-Terphenyl (SURR)	11.839	11.839	5357181	32.96		ug/ml
1-chlorooctadecane (SURR)	13.283	13.283	4580758	38.64		ug/ml
Aliphatic C9-C28	3.085	17.220	177598074	1360	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054155.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 16:56
 Operator : YP\AJ
 Sample : Q2147-05MS
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :

FID_E

ClientSampleId :

3MS

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Integration File: autoint1.e

Quant Time: Jun 04 02:52:45 2025

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M

Quant Title : GC Extractables

QLast Update : Wed May 14 12:15:41 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)	11.839	5357181	32.965 ug/ml
Spiked Amount 50.000		Recovery =	65.93%
12) S 1-chlorooctadecane (S...	13.283	4580758	38.640 ug/ml
Spiked Amount 50.000		Recovery =	77.28%
Target Compounds			
1) T n-Nonane (C9)	3.201	5065042	37.476 ug/ml
2) T n-Decane (C10)	4.456	5228305	38.691 ug/ml
3) T A~Naphthalene (C11.7)	6.165	6148361	42.782 ug/ml
4) T n-Dodecane (C12)	6.632	5467838	40.085 ug/ml
5) T A~2-methylnaphthalene...	7.266	5672007	40.892 ug/ml
6) T n-Tetradecane (C14)	8.466	5507027	40.808 ug/ml
7) T n-Hexadecane (C16)	10.077	5613943	41.605 ug/ml
8) T n-Octadecane (C18)	11.525	5523361	41.017 ug/ml
10) T n-Eicosane (C20)	12.838	5762655	43.846 ug/ml
11) T n-Heneicosane (C21)	13.451	5522792	42.600 ug/mlm
13) T n-Docosane (C22)	14.039	5563436	43.609 ug/ml
14) T n-Tetracosane (C24)	15.140	12320403	98.471 ug/ml
15) T n-Hexacosane (C26)	16.170	5321029	43.454 ug/ml
16) T n-Octacosane (C28)	17.120	5358193	44.077 ug/ml
17) T n-Tricontane (C30)	18.011	5419821	43.510 ug/ml
18) T n-Dotriacontane (C32)	18.843	5373041	42.965 ug/ml
19) T n-Tetratriacontane (C34)	19.629	5359488	44.992 ug/ml
20) T n-Hexatriacontane (C36)	20.370	5538261	47.831 ug/ml
21) T n-Octatriacontane (C38)	21.100	5873041	53.967 ug/ml
22) T n-Tetracontane (C40)	21.992	5711428	57.557 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054155.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 16:56
Operator : YP\AJ
Sample : Q2147-05MS
Misc :
ALS Vial : 12 Sample Multiplier: 1

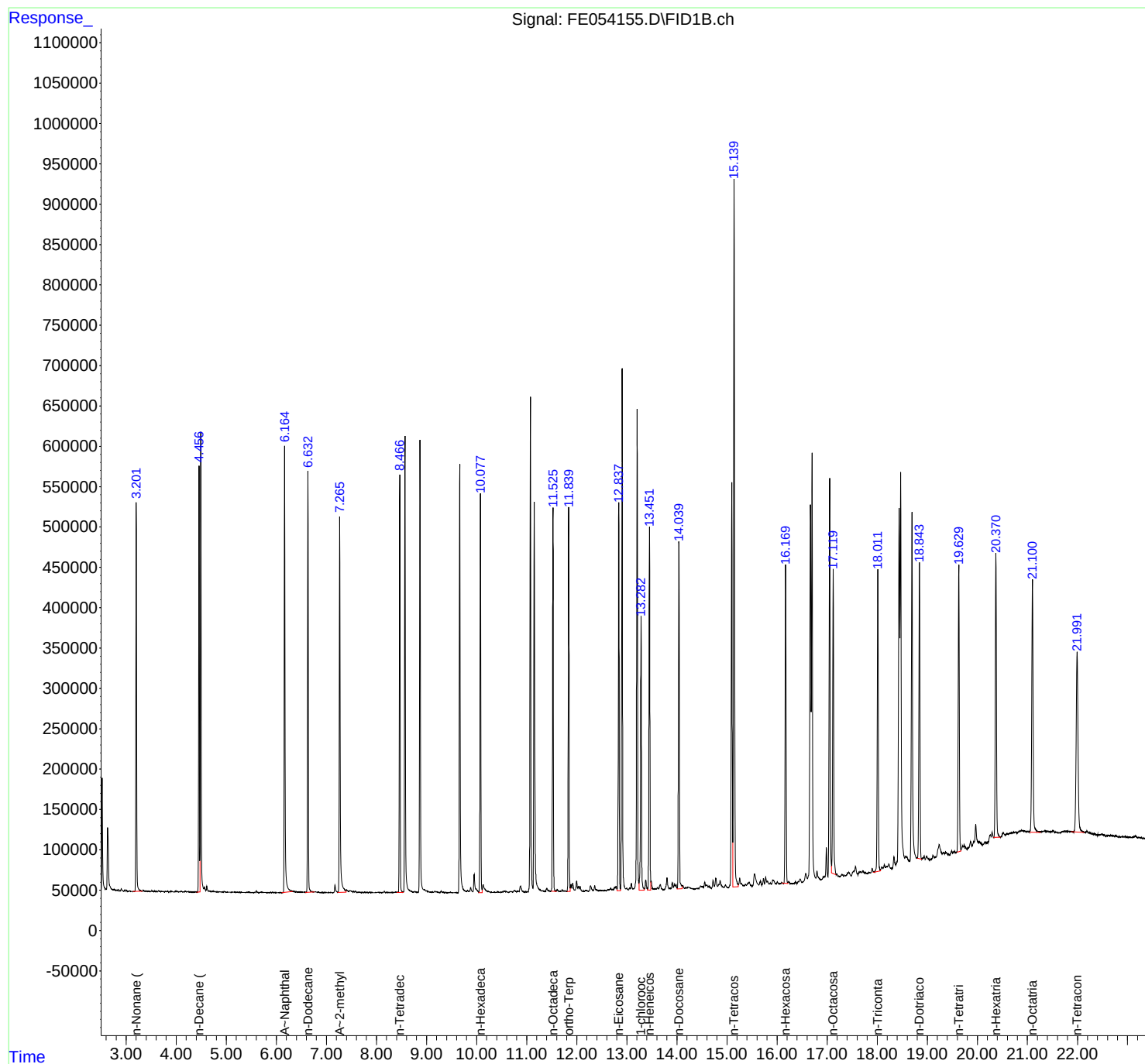
Instrument :
FID_E
ClientSampleId :
3MS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 06/04/2025
Supervised By :mohammad ahmed 06/05/2025

Integration File: autoint1.e
Quant Time: Jun 04 02:52:45 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 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

Instrument :

FID_E

ClientSampleId :

3MS

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE06032
Data File : FE054155.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 16:56
Sample : Q2147-05MS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	2.841	2.805	2.885	PH	1232	21196	0.17%	0.008%
2	2.903	2.885	2.952	PV	2499	28880	0.23%	0.010%
3	2.982	2.952	3.002	PV	1114	16572	0.13%	0.006%
4	3.010	3.002	3.051	VV	498	4576	0.04%	0.002%
5	3.068	3.051	3.128	PV	322	2988	0.02%	0.001%
6	3.134	3.128	3.142	VV	45	269	0.00%	0.000%
7	3.201	3.142	3.326	PV	482087	5105271	41.36%	1.837%
8	3.342	3.326	3.359	VV	1264	18456	0.15%	0.007%
9	3.371	3.359	3.398	VV	785	12552	0.10%	0.005%
10	3.411	3.398	3.431	VV	557	9086	0.07%	0.003%
11	3.444	3.431	3.463	VV	549	7256	0.06%	0.003%
12	3.479	3.463	3.494	VV	487	5824	0.05%	0.002%
13	3.512	3.494	3.553	VV	1214	20596	0.17%	0.007%
14	3.571	3.553	3.584	VV	738	7919	0.06%	0.003%
15	3.594	3.584	3.627	VV	522	10042	0.08%	0.004%
16	3.647	3.627	3.687	VV	1148	23894	0.19%	0.009%
17	3.727	3.687	3.762	VV	623	17927	0.15%	0.006%
18	3.789	3.762	3.818	VV	571	12208	0.10%	0.004%
19	3.831	3.818	3.865	VV	509	5769	0.05%	0.002%
20	3.891	3.865	3.944	PV	617	14352	0.12%	0.005%
21	3.994	3.944	4.010	PV	914	13603	0.11%	0.005%
22	4.027	4.010	4.046	VV	759	10639	0.09%	0.004%
23	4.065	4.046	4.082	VV	423	7457	0.06%	0.003%
24	4.104	4.082	4.146	VV	874	16431	0.13%	0.006%
25	4.188	4.146	4.208	VV	900	21177	0.17%	0.008%
26	4.224	4.208	4.308	VV	663	20810	0.17%	0.007%
27	4.344	4.308	4.375	PV	277	5856	0.05%	0.002%
28	4.391	4.375	4.421	VV	340	5288	0.04%	0.002%
29	4.456	4.421	4.473	VV	524953	5234542	42.41%	1.884%
30	4.491	4.473	4.550	VV	566384	6088031	49.32%	2.191%
31	4.565	4.550	4.590	VV	6563	104837	0.85%	0.038%
32	4.611	4.590	4.721	VV	7562	177874	1.44%	0.064%
33	4.738	4.721	4.779	VV	1275	32785	0.27%	0.012%
34	4.792	4.779	4.808	VV	766	12102	0.10%	0.004%
35	4.815	4.808	4.844	VV	762	13068	0.11%	0.005%
36	4.878	4.844	4.907	VV	597	20029	0.16%	0.007%

					retention			
37	4.919	4.907	4.937	VV	568	8947	0.07%	0.003%
38	4.962	4.937	5.105	VV	953	39311		
39	5.133	5.105	5.146	VV	479	7919		
40	5.167	5.146	5.190	VV	438	8254		
41	5.211	5.190	5.235	VV	397	7260		
42	5.251	5.235	5.261	VV	277	3521		
43	5.275	5.261	5.361	VV	382	9034	0.07%	0.003%
44	5.369	5.361	5.396	VV	122	2214	0.02%	0.001%
45	5.433	5.396	5.574	VV	435	20091	0.16%	0.007%
46	5.598	5.574	5.655	PV	2233	30583	0.25%	0.011%
47	5.713	5.655	5.760	VV	397	16794	0.14%	0.006%
48	5.775	5.760	5.830	VV	354	8318	0.07%	0.003%
49	5.846	5.830	5.875	VV	342	5537	0.04%	0.002%
50	5.905	5.875	5.953	VV	260	8135	0.07%	0.003%
51	5.972	5.953	6.024	VV	149	3531	0.03%	0.001%
52	6.077	6.024	6.095	PV	127	3034	0.02%	0.001%
53	6.165	6.095	6.324	PV	552365	6264811	50.76%	2.254%
54	6.337	6.324	6.466	VV	1939	103402	0.84%	0.037%
55	6.480	6.466	6.584	VV	928	51769	0.42%	0.019%
56	6.632	6.584	6.768	VV	522939	5553622	44.99%	1.998%
57	6.783	6.768	6.903	VV	1217	52107	0.42%	0.019%
58	6.913	6.903	6.941	VV	424	6965	0.06%	0.003%
59	6.956	6.941	6.978	VV	318	5699	0.05%	0.002%
60	6.986	6.978	7.013	VV	219	3631	0.03%	0.001%
61	7.035	7.013	7.078	VV	277	6734	0.05%	0.002%
62	7.084	7.078	7.123	VV	252	2998	0.02%	0.001%
63	7.172	7.123	7.230	PV	9768	154157	1.25%	0.055%
64	7.266	7.230	7.391	VV	463574	5728670	46.41%	2.061%
65	7.407	7.391	7.445	VV	3490	85524	0.69%	0.031%
66	7.473	7.445	7.529	VV	2746	98890	0.80%	0.036%
67	7.547	7.529	7.564	VV	1593	27389	0.22%	0.010%
68	7.581	7.564	7.649	VV	2171	54800	0.44%	0.020%
69	7.660	7.649	7.698	VV	721	14792	0.12%	0.005%
70	7.705	7.698	7.729	VV	310	4772	0.04%	0.002%
71	7.753	7.729	7.817	VV	687	18382	0.15%	0.007%
72	7.863	7.817	7.904	VV	570	18002	0.15%	0.006%
73	7.914	7.904	7.937	VV	254	3865	0.03%	0.001%
74	7.949	7.937	7.965	VV	186	2530	0.02%	0.001%
75	8.034	7.965	8.095	VV	849	29800	0.24%	0.011%
76	8.111	8.095	8.129	VV	272	5164	0.04%	0.002%
77	8.155	8.129	8.194	VV	1821	26642	0.22%	0.010%
78	8.212	8.194	8.236	VV	1098	14128	0.11%	0.005%
79	8.246	8.236	8.261	VV	246	3070	0.02%	0.001%
80	8.281	8.261	8.308	VV	430	8671	0.07%	0.003%
81	8.317	8.308	8.333	VV	375	4753	0.04%	0.002%
82	8.388	8.333	8.406	VV	1171	30155	0.24%	0.011%
83	8.420	8.406	8.435	VV	784	11704	0.09%	0.004%
84	8.466	8.435	8.532	VV	515799	5528356	44.79%	1.989%
85	8.570	8.532	8.743	VV	564399	6298181	51.03%	2.266%
86	8.765	8.743	8.838	VV	1473	53255	0.43%	0.019%
87	8.870	8.838	9.090	VV	559949	6481842	52.51%	2.332%
88	9.114	9.090	9.141	VV	1201	25585	0.21%	0.009%
89	9.163	9.141	9.195	VV	1950	44907	0.36%	0.016%

Instrument :

FID_E

ClientSampleId :

3MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

90	9.204	9.195	9.269	VV	1314	36588	0.30%	0.013%
91	9.293	9.269	9.321	VV	1997	32340		
92	9.331	9.321	9.418	VV	665	17072		
93	9.442	9.418	9.461	VV	493	7494		
94	9.479	9.461	9.512	VV	664	10115		
95	9.532	9.512	9.548	VV	229	3581		
96	9.581	9.548	9.611	VV	449	9373	0.08%	0.003%
97	9.622	9.611	9.630	PV	146	1138	0.01%	0.000%
98	9.663	9.630	9.797	VV	531768	6323812	51.23%	2.276%
99	9.817	9.797	9.837	VV	2674	48432	0.39%	0.017%
100	9.882	9.837	9.926	VV	6428	150196	1.22%	0.054%
101	9.951	9.926	10.045	VV	22372	446466	3.62%	0.161%
102	10.077	10.045	10.111	VV	492897	5615254	45.49%	2.021%
103	10.131	10.111	10.325	VV	9724	333918	2.71%	0.120%
104	10.350	10.325	10.380	VV	239	5129	0.04%	0.002%
105	10.418	10.380	10.446	PV	1197	15683	0.13%	0.006%
106	10.464	10.446	10.483	VV	374	5064	0.04%	0.002%
107	10.559	10.483	10.583	VV	1747	49471	0.40%	0.018%
108	10.598	10.583	10.648	VV	971	16681	0.14%	0.006%
109	10.670	10.648	10.684	VV	1017	13376	0.11%	0.005%
110	10.694	10.684	10.717	VV	914	12647	0.10%	0.005%
111	10.749	10.717	10.798	VV	2109	57268	0.46%	0.021%
112	10.817	10.798	10.828	VV	1420	18950	0.15%	0.007%
113	10.839	10.828	10.851	VV	1253	14578	0.12%	0.005%
114	10.878	10.851	10.961	VV	7606	177272	1.44%	0.064%
115	10.976	10.961	10.995	VV	738	8406	0.07%	0.003%
116	11.076	10.995	11.123	VV	607518	7026111	56.92%	2.528%
117	11.152	11.123	11.311	VV	482256	6321370	51.21%	2.275%
118	11.324	11.311	11.358	VV	1769	29294	0.24%	0.011%
119	11.400	11.358	11.439	VV	4394	101583	0.82%	0.037%
120	11.450	11.439	11.473	VV	1551	24149	0.20%	0.009%
121	11.525	11.473	11.588	VV	475020	5571077	45.14%	2.005%
122	11.612	11.588	11.661	VV	2626	53379	0.43%	0.019%
123	11.680	11.661	11.692	VV	951	12524	0.10%	0.005%
124	11.713	11.692	11.748	VV	2522	42238	0.34%	0.015%
125	11.766	11.748	11.800	VV	1023	17237	0.14%	0.006%
126	11.839	11.800	11.870	VV	472324	5361016	43.43%	1.929%
127	11.885	11.870	11.902	VV	8785	127997	1.04%	0.046%
128	11.920	11.902	11.961	VV	10291	179762	1.46%	0.065%
129	11.997	11.961	12.018	VV	13043	215167	1.74%	0.077%
130	12.031	12.018	12.049	VV	6188	91325	0.74%	0.033%
131	12.065	12.049	12.114	VV	6264	107309	0.87%	0.039%
132	12.134	12.114	12.153	PV	502	6555	0.05%	0.002%
133	12.191	12.153	12.215	VV	1383	29915	0.24%	0.011%
134	12.274	12.215	12.335	VV	6778	158364	1.28%	0.057%
135	12.357	12.335	12.393	VV	6854	116756	0.95%	0.042%
136	12.404	12.393	12.435	VV	1668	26466	0.21%	0.010%
137	12.455	12.435	12.483	VV	919	20194	0.16%	0.007%
138	12.501	12.483	12.524	VV	967	16788	0.14%	0.006%
139	12.564	12.524	12.591	VV	1040	24578	0.20%	0.009%
140	12.630	12.591	12.645	VV	1419	37174	0.30%	0.013%
141	12.679	12.645	12.709	VV	2966	77851	0.63%	0.028%

Instrument :

FID_E

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3MS

Manual IntegrationsAPPROVED

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rteres									
142	12.724	12.709	12.737	VV	2357	28846	0.23%	0.010%	
143	12.755	12.737	12.768	VV	4753	63922			
144	12.783	12.768	12.802	VV	5682	81931			
145	12.838	12.802	12.870	VV	481715	5771010	46.00%	2.043%	
146	12.905	12.870	12.984	VV	643175	7752537	62.00%	2.043%	
147	12.998	12.984	13.029	VV	2434	51717			
148	13.056	13.029	13.071	VV	3537	60415	0.49%	0.022%	
149	13.091	13.071	13.131	VV	8848	149847	1.21%	0.054%	
150	13.204	13.131	13.241	VV	597699	7353965	59.58%	2.646%	
151	13.283	13.241	13.351	VV	338010	4593227	37.21%	1.653%	
152	13.377	13.351	13.413	VV	12672	212397	1.72%	0.076%	
153	13.451	13.413	13.523	VV	449683	5677211	46.00%	2.043%	
154	13.537	13.523	13.558	VV	1565	28055	0.23%	0.010%	
155	13.573	13.558	13.590	VV	1822	28733	0.23%	0.010%	
156	13.610	13.590	13.634	VV	3253	57085	0.46%	0.021%	
157	13.666	13.634	13.731	VV	6661	161474	1.31%	0.058%	
158	13.800	13.731	13.845	VV	15028	308907	2.50%	0.111%	
159	13.863	13.845	13.885	VV	2274	41621	0.34%	0.015%	
160	13.907	13.885	13.928	VV	8812	134444	1.09%	0.048%	
161	13.947	13.928	13.964	VV	7098	107942	0.87%	0.039%	
162	13.979	13.964	14.003	VV	6614	104569	0.85%	0.038%	
163	14.039	14.003	14.106	VV	429688	5623739	45.56%	2.024%	
164	14.116	14.106	14.158	VV	4907	94612	0.77%	0.034%	
165	14.179	14.158	14.199	VV	2654	49462	0.40%	0.018%	
166	14.232	14.199	14.292	VV	2480	108732	0.88%	0.039%	
167	14.300	14.292	14.354	VV	1028	23734	0.19%	0.009%	
168	14.396	14.354	14.430	PV	1199	29792	0.24%	0.011%	
169	14.474	14.430	14.528	VV	3505	138241	1.12%	0.050%	
170	14.555	14.528	14.575	VV	8192	139515	1.13%	0.050%	
171	14.598	14.575	14.623	VV	4574	106970	0.87%	0.038%	
172	14.640	14.623	14.687	VV	2660	63250	0.51%	0.023%	
173	14.719	14.687	14.747	VV	10019	162424	1.32%	0.058%	
174	14.775	14.747	14.812	VV	12540	247060	2.00%	0.089%	
175	14.861	14.812	14.915	VV	9363	268525	2.18%	0.097%	
176	14.929	14.915	14.948	VV	1127	21258	0.17%	0.008%	
177	14.970	14.948	15.030	VV	3293	62068	0.50%	0.022%	
178	15.094	15.030	15.114	PV	502538	6526525	52.88%	2.349%	
179	15.140	15.114	15.225	VV	876059	12343100	100.00%	4.442%	
180	15.253	15.225	15.276	VV	10879	193397	1.57%	0.070%	
181	15.286	15.276	15.348	VV	4094	102500	0.83%	0.037%	
182	15.367	15.348	15.387	VV	2769	47071	0.38%	0.017%	
183	15.418	15.387	15.427	VV	4276	72584	0.59%	0.026%	
184	15.442	15.427	15.500	VV	5277	109234	0.88%	0.039%	
185	15.548	15.500	15.634	PV	15174	478884	3.88%	0.172%	
186	15.663	15.634	15.701	VV	4876	109631	0.89%	0.039%	
187	15.728	15.701	15.749	VV	8661	127678	1.03%	0.046%	
188	15.771	15.749	15.795	VV	10126	166719	1.35%	0.060%	
189	15.808	15.795	15.843	VV	5187	96234	0.78%	0.035%	
190	15.862	15.843	15.891	VV	2518	53597	0.43%	0.019%	
191	15.915	15.891	15.979	VV	5833	184396	1.49%	0.066%	
192	16.004	15.979	16.041	VV	3215	69509	0.56%	0.025%	
193	16.094	16.041	16.131	VV	2423	64489	0.52%	0.023%	
194	16.170	16.131	16.214	VV	399148	5379642	43.58%	1.936%	

Instrument :

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Manual IntegrationsAPPROVED

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Supervised By :mohammad ahmed 06/05/2025

195	16.233	16.214	16.289	VV	3112	60186	0.49%	0.022%
196	16.304	16.289	16.319	VV	182	2059		
197	16.368	16.319	16.395	PV	1892	32018		
198	16.421	16.395	16.434	PV	2204	32248		
199	16.459	16.434	16.499	VV	4919	99623		
200	16.572	16.499	16.605	VV	10911	289682		
201	16.666	16.605	16.681	VV	466948	7200580	58.34%	2.591%
202	16.698	16.681	16.771	VV	532585	6912950	56.01%	2.488%
203	16.796	16.771	16.875	VV	11814	272217	2.21%	0.098%
204	16.920	16.875	16.934	VV	4109	66733	0.54%	0.024%
205	16.984	16.934	17.013	VV	38998	610187	4.94%	0.220%
206	17.049	17.013	17.087	VV	490902	6852979	55.52%	2.466%
207	17.120	17.087	17.181	VV	376671	5674787	45.98%	2.042%
208	17.193	17.181	17.260	VV	4798	117001	0.95%	0.042%
209	17.295	17.260	17.333	VV	3134	93694	0.76%	0.034%
210	17.352	17.333	17.369	VV	1909	31143	0.25%	0.011%
211	17.432	17.369	17.481	VV	4578	175666	1.42%	0.063%
212	17.566	17.481	17.612	PV	10978	362006	2.93%	0.130%
213	17.639	17.612	17.654	VV	3618	58571	0.47%	0.021%
214	17.672	17.654	17.693	VV	3708	68151	0.55%	0.025%
215	17.711	17.693	17.800	VV	3727	107445	0.87%	0.039%
216	17.835	17.800	17.868	VV	1105	21371	0.17%	0.008%
217	17.899	17.868	17.925	PV	5404	79098	0.64%	0.028%
218	18.011	17.925	18.068	VV	374836	5464340	44.27%	1.966%
219	18.092	18.068	18.115	VV	4901	111907	0.91%	0.040%
220	18.141	18.115	18.165	VV	7545	154927	1.26%	0.056%
221	18.193	18.165	18.208	VV	5346	121520	0.98%	0.044%
222	18.233	18.208	18.301	VV	7594	213092	1.73%	0.077%
223	18.334	18.301	18.375	VV	15584	352128	2.85%	0.127%
224	18.437	18.375	18.452	VV	446471	7285502	59.02%	2.622%
225	18.467	18.452	18.547	VV	492421	7791862	63.13%	2.804%
226	18.565	18.547	18.583	VV	14213	280624	2.27%	0.101%
227	18.594	18.583	18.650	VV	13038	384841	3.12%	0.138%
228	18.694	18.650	18.795	VV	440945	7415141	60.08%	2.668%
229	18.843	18.795	18.891	VV	376821	5851991	47.41%	2.106%
230	18.936	18.891	18.959	VV	10348	338917	2.75%	0.122%
231	18.986	18.959	19.053	VV	9702	399923	3.24%	0.144%
232	19.113	19.053	19.140	VV	9874	344436	2.79%	0.124%
233	19.237	19.140	19.300	VV	21893	1227653	9.95%	0.442%
234	19.323	19.300	19.348	VV	11330	300468	2.43%	0.108%
235	19.365	19.348	19.421	VV	10726	418062	3.39%	0.150%
236	19.434	19.421	19.451	VV	7913	136954	1.11%	0.049%
237	19.487	19.451	19.508	VV	11051	320666	2.60%	0.115%
238	19.540	19.508	19.568	VV	10716	340952	2.76%	0.123%
239	19.629	19.568	19.672	VV	364394	5941265	48.13%	2.138%
240	19.700	19.672	19.718	VV	15885	381678	3.09%	0.137%
241	19.735	19.718	19.756	VV	15710	330721	2.68%	0.119%
242	19.767	19.756	19.789	VV	13292	246175	1.99%	0.089%
243	19.865	19.789	19.895	VV	18617	907690	7.35%	0.327%
244	19.967	19.895	20.022	VV	40024	1677153	13.59%	0.604%
245	20.038	20.022	20.101	VV	17945	757886	6.14%	0.273%
246	20.151	20.101	20.195	VV	16105	820059	6.64%	0.295%

Instrument :

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Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Chromatogram Data									
Peak No.	Retention Time (min)	Area	Height	Width	Volume	Concentration (%)	Response	Integration	Integration
247	20.257	20.195	20.275	VV	23854	923910	7.49%	0.332%	
248	20.295	20.275	20.326	VV	26817	719858			
249	20.370	20.326	20.468	VV	370866	7203510	58.76%	0.439%	
250	20.519	20.468	20.559	VV	24186	1203658	9.89%	0.695%	
251	20.583	20.559	20.592	VV	21929	415500	3.03%	0.179%	
252	20.680	20.592	20.708	VV	22877	1541442	12.45%	0.219%	
253	20.725	20.708	20.745	VV	22825	497493	4.03%	0.179%	
254	20.768	20.745	20.790	VV	22705	609758	4.94%	0.219%	
255	20.886	20.790	20.932	VV	23500	1932006	15.65%	0.695%	
256	20.944	20.932	20.976	VV	22091	571700	4.63%	0.206%	
257	20.996	20.976	21.037	VV	21154	750760	6.08%	0.270%	
258	21.100	21.037	21.261	VV	332398	8364134	67.76%	3.010%	
259	21.306	21.261	21.375	VV	18130	1220775	9.89%	0.439%	
260	21.407	21.375	21.461	VV	17448	873421	7.08%	0.314%	
261	21.509	21.461	21.568	VV	16876	1013052	8.21%	0.365%	
262	21.575	21.568	21.641	VV	14829	603954	4.89%	0.217%	
263	21.702	21.641	21.717	VV	14532	627847	5.09%	0.226%	
264	21.749	21.717	21.912	VV	14288	1536341	12.45%	0.553%	
265	21.992	21.912	22.135	VV	233998	7083485	57.39%	2.549%	
266	22.190	22.135	22.294	VV	9348	756305	6.13%	0.272%	
267	22.303	22.294	22.393	VV	5666	263923	2.14%	0.095%	
268	22.406	22.393	22.429	VV	3319	64790	0.52%	0.023%	
269	22.481	22.429	22.568	VV	3170	181368	1.47%	0.065%	
Sum of corrected areas:					277901191				

Instrument :
FID_E
ClientSampleId :
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Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025
Supervised By :mohammad ahmed 06/05/2025

Aliphatic EPH 051425.M Wed Jun 04 04:34:21 2025

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	DeCamp	Date Received:	
Client Sample ID:	3MSD	SDG No.:	Q2179
Lab Sample ID:	Q2147-05MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	86.3
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:			uL
Prep Method :		Test:	EPH_F2

Prep Date :	Date Analyzed :	Prep Batch ID
06/03/25 10:00	06/03/25 17:26	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	99.5	E	1	1.05	4.63	mg/kg	FE054156.D
Total EPH	Total EPH	99.5			1.05	4.63	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 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:	G Environmental	Date Collected:	
Project:	DeCamp	Date Received:	
Client Sample ID:	3MSD	SDG No.:	Q2179
Lab Sample ID:	Q2147-05MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	86.3
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:		Final Vol:	2000 uL
Prep Method :		Test:	EPH_F2

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE054156.D	1	06/03/25	06/03/25	PB168239

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	99.5	E	1.05	4.63	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	56.7	E	1.36	2.31	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	36.1		40 - 140	72%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	30.8		40 - 140	62%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2147-05MSD	Acq On:	03 Jun 2025 17:26
Client Sample ID:	3MSD	Operator:	YP\AJ
Data file:	FE054156.D	Misc:	
Instrument:	FID_E	ALS Vial:	13
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.085	6.730	26770159	197.474	300	ug/ml
Aliphatic C12-C16	6.731	10.178	34755542	257.56	200	ug/ml
Aliphatic C16-C21	10.179	13.552	49219153	373.124	300	ug/ml
Aliphatic C21-C28	13.553	17.220	57399957	462.243	400	ug/ml
Aliphatic C28-C40	17.221	22.091	84830276	734.901	600	ug/ml
Aliphatic EPH	3.085	22.091	252975087	2030		ug/ml
ortho-Terphenyl (SURR)	11.839	11.839	5003569	30.79		ug/ml
1-chlorooctadecane (SURR)	13.283	13.283	4282711	36.13		ug/ml
Aliphatic C9-C28	3.085	17.220	168144811	1290	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054156.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 17:26
 Operator : YP\AJ
 Sample : Q2147-05MSD
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :

FID_E

ClientSampleId :

3MSD

Manual Integrations**APPROVED**

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Integration File: autoint1.e

Quant Time: Jun 04 02:53:05 2025

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M

Quant Title : GC Extractables

QLast Update : Wed May 14 12:15:41 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)	11.839	5003569	30.789 ug/ml
Spiked Amount 50.000		Recovery =	61.58%
12) S 1-chlorooctadecane (S...	13.283	4282711	36.126 ug/ml
Spiked Amount 50.000		Recovery =	72.25%
Target Compounds			
1) T n-Nonane (C9)	3.201	4659742	34.478 ug/ml
2) T n-Decane (C10)	4.456	4788798	35.438 ug/ml
3) T A~Naphthalene (C11.7)	6.165	5708442	39.721 ug/ml
4) T n-Dodecane (C12)	6.631	5005678	36.697 ug/ml
5) T A~2-methylnaphthalene...	7.266	5136200	37.029 ug/ml
6) T n-Tetradecane (C14)	8.466	5044700	37.382 ug/ml
7) T n-Hexadecane (C16)	10.077	5158064	38.227 ug/ml
8) T n-Octadecane (C18)	11.525	5067333	37.631 ug/ml
10) T n-Eicosane (C20)	12.839	5289294	40.245 ug/ml
11) T n-Heneicosane (C21)	13.450	5080100	39.185 ug/mlm
13) T n-Docosane (C22)	14.039	5110367	40.057 ug/ml
14) T n-Tetracosane (C24)	15.140	11347982	90.699 ug/ml
15) T n-Hexacosane (C26)	16.169	4885255	39.895 ug/ml
16) T n-Octacosane (C28)	17.120	4942213	40.655 ug/ml
17) T n-Tricontane (C30)	18.011	4983682	40.009 ug/ml
18) T n-Dotriacontane (C32)	18.844	4969014	39.735 ug/ml
19) T n-Tetratriacontane (C34)	19.629	4937215	41.447 ug/ml
20) T n-Hexatriacontane (C36)	20.372	5164755	44.605 ug/ml
21) T n-Octatriacontane (C38)	21.100	5354378	49.201 ug/ml
22) T n-Tetracontane (C40)	21.994	5258170	52.989 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054156.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 17:26
Operator : YP\AJ
Sample : Q2147-05MSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

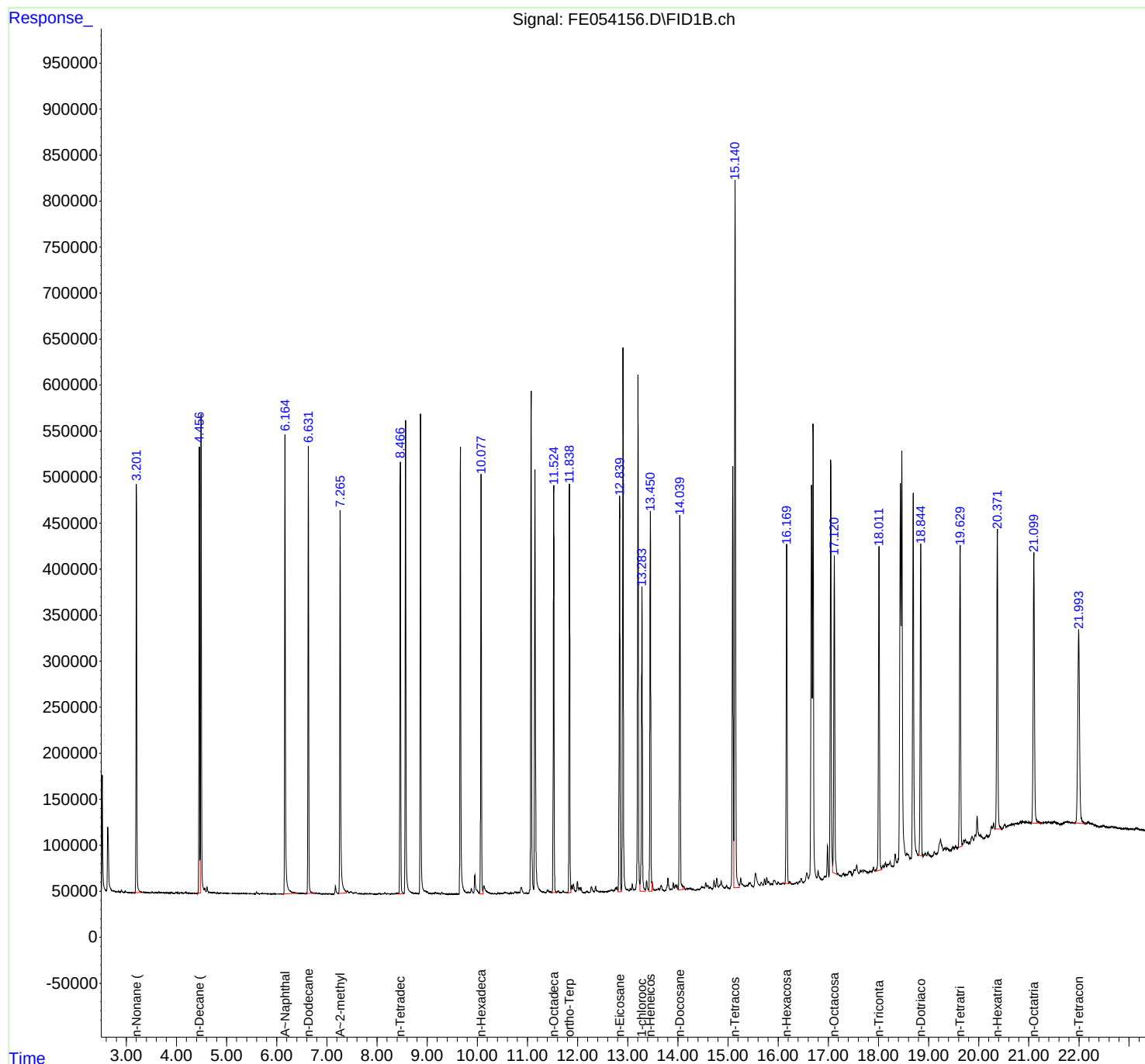
Instrument :
FID_E
ClientSampleId :
3MSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 06/04/2025
Supervised By :mohammad ahmed 06/05/2025

Integration File: autoint1.e
Quant Time: Jun 04 02:53:05 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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



riteres

Instrument :

FID_E

ClientSampleId :

3MSD

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE06032
Data File : FE054156.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 17:26
Sample : Q2147-05MSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.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	2.819	2.804	2.827	PV	130	963	0.01%	0.000%
2	2.841	2.827	2.883	PV	809	7120	0.06%	0.003%
3	2.903	2.883	2.951	PV	2306	27199	0.24%	0.011%
4	2.982	2.951	3.044	PV	1073	21214	0.19%	0.008%
5	3.068	3.044	3.110	VV	369	5063	0.04%	0.002%
6	3.124	3.110	3.145	PV	110	1588	0.01%	0.001%
7	3.159	3.145	3.167	VV	105	1121	0.01%	0.000%
8	3.201	3.167	3.327	VV	442603	4699110	41.34%	1.817%
9	3.341	3.327	3.360	VV	1122	16911	0.15%	0.007%
10	3.372	3.360	3.395	VV	748	11034	0.10%	0.004%
11	3.411	3.395	3.430	VV	558	9207	0.08%	0.004%
12	3.443	3.430	3.468	VV	557	7954	0.07%	0.003%
13	3.480	3.468	3.494	VV	474	5146	0.05%	0.002%
14	3.513	3.494	3.553	VV	1171	20255	0.18%	0.008%
15	3.571	3.553	3.611	VV	600	13326	0.12%	0.005%
16	3.619	3.611	3.626	VV	347	2687	0.02%	0.001%
17	3.647	3.626	3.686	VV	1109	22407	0.20%	0.009%
18	3.730	3.686	3.763	VV	539	17492	0.15%	0.007%
19	3.789	3.763	3.808	VV	657	10844	0.10%	0.004%
20	3.830	3.808	3.870	VV	475	9196	0.08%	0.004%
21	3.890	3.870	3.908	VV	555	9020	0.08%	0.003%
22	3.917	3.908	3.948	VV	484	5438	0.05%	0.002%
23	3.994	3.948	4.009	PV	853	12811	0.11%	0.005%
24	4.027	4.009	4.047	VV	784	11057	0.10%	0.004%
25	4.064	4.047	4.081	VV	478	7118	0.06%	0.003%
26	4.103	4.081	4.148	VV	802	16013	0.14%	0.006%
27	4.188	4.148	4.210	VV	831	19570	0.17%	0.008%
28	4.226	4.210	4.318	VV	545	18661	0.16%	0.007%
29	4.346	4.318	4.366	VV	307	5375	0.05%	0.002%
30	4.392	4.366	4.420	VV	300	5006	0.04%	0.002%
31	4.456	4.420	4.473	VV	484666	4802794	42.25%	1.857%
32	4.490	4.473	4.550	VV	519696	5581292	49.10%	2.159%
33	4.565	4.550	4.590	VV	5950	98069	0.86%	0.038%
34	4.611	4.590	4.721	VV	7032	162773	1.43%	0.063%
35	4.739	4.721	4.754	VV	1149	18487	0.16%	0.007%
36	4.760	4.754	4.780	VV	974	12097	0.11%	0.005%

					retention				
37	4.793	4.780	4.807	VV	704	10802	0.10%	0.004%	
38	4.817	4.807	4.842	VV	781	11829			
39	4.852	4.842	4.861	VV	498	5166			
40	4.875	4.861	4.905	VV	542	13480			
41	4.916	4.905	4.938	VV	561	9046			
42	4.961	4.938	5.009	VV	920	20554			
43	5.018	5.009	5.025	VV	323	2569	0.02%	0.001%	
44	5.034	5.025	5.095	VV	325	10403	0.09%	0.004%	
45	5.129	5.095	5.145	VV	400	8473	0.07%	0.003%	
46	5.164	5.145	5.189	VV	413	7602	0.07%	0.003%	
47	5.208	5.189	5.235	VV	361	6722	0.06%	0.003%	
48	5.243	5.235	5.352	VV	218	10179	0.09%	0.004%	
49	5.429	5.352	5.547	VV	417	21767	0.19%	0.008%	
50	5.558	5.547	5.570	VV	120	619	0.01%	0.000%	
51	5.598	5.570	5.661	VV	2069	28584	0.25%	0.011%	
52	5.713	5.661	5.744	VV	412	12753	0.11%	0.005%	
53	5.768	5.744	5.820	VV	288	9076	0.08%	0.004%	
54	5.847	5.820	5.875	VV	317	5444	0.05%	0.002%	
55	5.901	5.875	6.014	VV	237	8312	0.07%	0.003%	
56	6.020	6.014	6.044	VV	30	544	0.00%	0.000%	
57	6.048	6.044	6.056	VV	95	272	0.00%	0.000%	
58	6.072	6.056	6.103	VV	105	1245	0.01%	0.000%	
59	6.120	6.103	6.134	PV	72	713	0.01%	0.000%	
60	6.165	6.134	6.325	VV	498088	5720959	50.33%	2.213%	
61	6.338	6.325	6.472	VV	1837	100297	0.88%	0.039%	
62	6.481	6.472	6.596	VV	814	46737	0.41%	0.018%	
63	6.631	6.596	6.734	VV	486195	5062153	44.53%	1.958%	
64	6.745	6.734	6.767	VV	1230	21959	0.19%	0.008%	
65	6.783	6.767	6.902	VV	1172	49169	0.43%	0.019%	
66	6.913	6.902	6.937	VV	347	5286	0.05%	0.002%	
67	6.956	6.937	6.975	VV	297	5237	0.05%	0.002%	
68	6.998	6.975	7.019	VV	210	3649	0.03%	0.001%	
69	7.039	7.019	7.064	VV	271	4458	0.04%	0.002%	
70	7.072	7.064	7.094	VV	241	2323	0.02%	0.001%	
71	7.172	7.094	7.230	VV	8713	141131	1.24%	0.055%	
72	7.266	7.230	7.391	VV	416532	5226573	45.98%	2.021%	
73	7.407	7.391	7.448	VV	3289	83043	0.73%	0.032%	
74	7.473	7.448	7.531	VV	2536	92216	0.81%	0.036%	
75	7.548	7.531	7.564	VV	1451	24235	0.21%	0.009%	
76	7.582	7.564	7.628	VV	2050	42812	0.38%	0.017%	
77	7.635	7.628	7.730	VV	723	26720	0.24%	0.010%	
78	7.755	7.730	7.824	VV	611	17419	0.15%	0.007%	
79	7.859	7.824	7.919	VV	543	16174	0.14%	0.006%	
80	7.924	7.919	7.935	VV	229	1529	0.01%	0.001%	
81	7.957	7.935	7.978	VV	133	2910	0.03%	0.001%	
82	8.008	7.978	8.021	VV	427	7016	0.06%	0.003%	
83	8.034	8.021	8.098	VV	719	17425	0.15%	0.007%	
84	8.111	8.098	8.130	VV	242	3952	0.03%	0.002%	
85	8.155	8.130	8.187	VV	1617	21737	0.19%	0.008%	
86	8.212	8.187	8.238	VV	993	14144	0.12%	0.005%	
87	8.244	8.238	8.258	VV	212	1961	0.02%	0.001%	
88	8.285	8.258	8.311	VV	351	7528	0.07%	0.003%	
89	8.318	8.311	8.336	VV	337	3944	0.03%	0.002%	

Instrument :

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ClientSampleId :

3MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

90	8.388	8.336	8.406	VV	1070	26540	0.23%	0.010%
91	8.420	8.406	8.434	VV	698	10303		
92	8.466	8.434	8.531	VV	467250	5065142	44.92%	1.975%
93	8.571	8.531	8.748	VV	515355	5765095	50.84%	2.249%
94	8.769	8.748	8.836	VV	1415	47686	0.23%	0.010%
95	8.870	8.836	9.087	VV	520549	5938066	0.84%	0.037%
96	9.115	9.087	9.141	VV	1081	25243	0.22%	0.010%
97	9.164	9.141	9.194	VV	1814	41551	0.37%	0.016%
98	9.206	9.194	9.269	VV	1250	35202	0.31%	0.014%
99	9.294	9.269	9.319	VV	1949	30685	0.27%	0.012%
100	9.331	9.319	9.423	VV	680	17469	0.15%	0.007%
101	9.443	9.423	9.464	PV	475	6540	0.06%	0.003%
102	9.482	9.464	9.513	VV	518	8360	0.07%	0.003%
103	9.532	9.513	9.563	VV	223	4971	0.04%	0.002%
104	9.584	9.563	9.611	VV	433	7471	0.07%	0.003%
105	9.622	9.611	9.629	PV	174	1164	0.01%	0.000%
106	9.664	9.629	9.797	VV	488425	5798260	51.01%	2.242%
107	9.817	9.797	9.838	VV	2558	46556	0.41%	0.018%
108	9.854	9.838	9.863	VV	2140	27496	0.24%	0.011%
109	9.883	9.863	9.926	VV	6006	113524	1.00%	0.044%
110	9.952	9.926	10.041	VV	20643	415388	3.65%	0.161%
111	10.077	10.041	10.112	VV	456603	5158951	45.39%	1.995%
112	10.132	10.112	10.329	VV	8779	319329	2.81%	0.123%
113	10.346	10.329	10.388	VV	346	6246	0.05%	0.002%
114	10.418	10.388	10.443	PV	1117	16048	0.14%	0.006%
115	10.467	10.443	10.490	VV	491	7696	0.07%	0.003%
116	10.560	10.490	10.584	VV	1658	48684	0.43%	0.019%
117	10.598	10.584	10.648	VV	889	16918	0.15%	0.007%
118	10.672	10.648	10.685	VV	980	13667	0.12%	0.005%
119	10.694	10.685	10.721	VV	859	12674	0.11%	0.005%
120	10.750	10.721	10.798	VV	2004	54107	0.48%	0.021%
121	10.817	10.798	10.830	VV	1364	19811	0.17%	0.008%
122	10.840	10.830	10.850	VV	1256	12820	0.11%	0.005%
123	10.879	10.850	10.935	VV	6856	160549	1.41%	0.062%
124	10.943	10.935	10.964	VV	565	6940	0.06%	0.003%
125	10.977	10.964	10.998	VV	711	7576	0.07%	0.003%
126	11.011	10.998	11.020	VV	204	2475	0.02%	0.001%
127	11.075	11.020	11.123	VV	544649	6456562	56.80%	2.497%
128	11.152	11.123	11.311	VV	456742	5815706	51.16%	2.249%
129	11.325	11.311	11.353	VV	1608	26347	0.23%	0.010%
130	11.400	11.353	11.441	VV	3785	95497	0.84%	0.037%
131	11.451	11.441	11.481	VV	1454	25083	0.22%	0.010%
132	11.525	11.481	11.586	VV	441895	5105760	44.92%	1.975%
133	11.612	11.586	11.660	VV	2448	49434	0.43%	0.019%
134	11.680	11.660	11.693	VV	926	11663	0.10%	0.005%
135	11.713	11.693	11.746	VV	2356	37140	0.33%	0.014%
136	11.765	11.746	11.804	VV	861	15619	0.14%	0.006%
137	11.838	11.804	11.870	VV	444399	5007919	44.06%	1.937%
138	11.886	11.870	11.903	VV	8356	119642	1.05%	0.046%
139	11.920	11.903	11.963	VV	9654	167881	1.48%	0.065%
140	11.998	11.963	12.018	VV	12212	195551	1.72%	0.076%
141	12.032	12.018	12.050	VV	5626	85566	0.75%	0.033%

Instrument :

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ClientSampleId :

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Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

195	15.441	15.386	15.501	VV	4697	166231	1.46%	0.064%
196	15.548	15.501	15.635	PV	14489	444027		
197	15.662	15.635	15.698	VV	4547	98019		
198	15.728	15.698	15.749	VV	7725	119646		
199	15.772	15.749	15.795	VV	8881	150120		
200	15.810	15.795	15.842	VV	4767	88441		
201	15.861	15.842	15.888	VV	2396	46541	0.41%	0.018%
202	15.927	15.888	15.978	VV	5223	171458	1.51%	0.066%
203	16.005	15.978	16.040	VV	2977	62799	0.55%	0.024%
204	16.095	16.040	16.124	VV	2124	56820	0.50%	0.022%
205	16.169	16.124	16.213	VV	371215	4944590	43.50%	1.912%
206	16.232	16.213	16.303	VV	2833	55396	0.49%	0.021%
207	16.368	16.303	16.392	VV	1742	30469	0.27%	0.012%
208	16.420	16.392	16.433	PV	2074	28671	0.25%	0.011%
209	16.459	16.433	16.494	VV	4851	95160	0.84%	0.037%
210	16.572	16.494	16.605	VV	10103	274471	2.41%	0.106%
211	16.666	16.605	16.680	VV	431719	6580124	57.89%	2.545%
212	16.697	16.680	16.771	VV	501031	6378126	56.11%	2.467%
213	16.796	16.771	16.884	VV	10588	248504	2.19%	0.096%
214	16.922	16.884	16.933	VV	3480	51165	0.45%	0.020%
215	16.946	16.933	16.955	VV	3164	38867	0.34%	0.015%
216	16.984	16.955	17.013	VV	36388	518349	4.56%	0.200%
217	17.049	17.013	17.087	VV	452919	6287471	55.31%	2.432%
218	17.120	17.087	17.181	VV	349931	5211203	45.85%	2.015%
219	17.194	17.181	17.257	VV	4341	103246	0.91%	0.040%
220	17.294	17.257	17.331	VV	2967	85512	0.75%	0.033%
221	17.354	17.331	17.365	VV	1646	25942	0.23%	0.010%
222	17.411	17.365	17.420	VV	4077	78060	0.69%	0.030%
223	17.433	17.420	17.481	VV	4243	92814	0.82%	0.036%
224	17.566	17.481	17.611	VV	9880	341002	3.00%	0.132%
225	17.641	17.611	17.654	VV	3269	55611	0.49%	0.022%
226	17.674	17.654	17.693	VV	3778	67051	0.59%	0.026%
227	17.714	17.693	17.800	VV	3450	109614	0.96%	0.042%
228	17.838	17.800	17.871	PV	1266	25511	0.22%	0.010%
229	17.900	17.871	17.928	VV	4934	71615	0.63%	0.028%
230	18.011	17.928	18.064	VV	352283	5016395	44.13%	1.940%
231	18.091	18.064	18.114	VV	5073	107638	0.95%	0.042%
232	18.141	18.114	18.161	VV	7271	140413	1.24%	0.054%
233	18.193	18.161	18.208	VV	4848	123626	1.09%	0.048%
234	18.232	18.208	18.300	VV	7069	204278	1.80%	0.079%
235	18.334	18.300	18.368	VV	14754	314963	2.77%	0.122%
236	18.438	18.368	18.451	VV	416929	6713745	59.06%	2.596%
237	18.467	18.451	18.547	VV	453741	7206813	63.40%	2.787%
238	18.566	18.547	18.584	VV	13310	270262	2.38%	0.105%
239	18.596	18.584	18.654	VV	11768	367291	3.23%	0.142%
240	18.693	18.654	18.796	VV	405217	6855988	60.32%	2.651%
241	18.844	18.796	18.893	VV	346835	5402230	47.53%	2.089%
242	18.938	18.893	18.962	VV	9399	320314	2.82%	0.124%
243	18.989	18.962	19.061	VV	9349	397373	3.50%	0.154%
244	19.113	19.061	19.137	VV	9389	293017	2.58%	0.113%
245	19.238	19.137	19.292	VV	21148	1126301	9.91%	0.436%
246	19.326	19.292	19.348	VV	11137	337654	2.97%	0.131%

Instrument :

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Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

rters									
247	19.367	19.348	19.426	VV	10533	428745	3.77%	0.166%	
248	19.484	19.426	19.510	VV	10450	444979			
249	19.538	19.510	19.580	VV	10481	389767			
250	19.629	19.580	19.672	VV	335912	5441646	47.33%	0.166%	
251	19.701	19.672	19.719	VV	15990	394549			
252	19.736	19.719	19.793	VV	15699	594469			
253	19.866	19.793	19.896	VV	18039	868670	7.64%	0.336%	
254	19.932	19.896	19.941	VV	18690	446288	3.93%	0.173%	
255	19.969	19.941	20.020	VV	39135	1156289	10.17%	0.447%	
256	20.034	20.020	20.095	VV	17977	720719	6.34%	0.279%	
257	20.153	20.095	20.195	VV	16245	888398	7.82%	0.344%	
258	20.260	20.195	20.276	VV	24417	948916	8.35%	0.367%	
259	20.297	20.276	20.323	VV	27431	692432	6.09%	0.268%	
260	20.371	20.323	20.457	VV	347029	6843693	60.21%	2.647%	
261	20.519	20.457	20.549	VV	24456	1221670	10.75%	0.472%	
262	20.636	20.549	20.645	VV	22951	1294439	11.39%	0.501%	
263	20.664	20.645	20.674	VV	23395	403913	3.55%	0.156%	
264	20.686	20.674	20.704	VV	23057	410174	3.61%	0.159%	
265	20.840	20.704	20.858	VV	23966	2112977	18.59%	0.817%	
266	20.875	20.858	20.920	VV	23929	877326	7.72%	0.339%	
267	20.942	20.920	20.985	VV	22791	863388	7.60%	0.334%	
268	20.999	20.985	21.048	VV	21876	795652	7.00%	0.308%	
269	21.100	21.048	21.261	VV	313944	7812044	68.73%	3.021%	
270	21.330	21.261	21.357	VV	18432	1048578	9.22%	0.406%	
271	21.392	21.357	21.434	VV	18073	816888	7.19%	0.316%	
272	21.446	21.434	21.474	VV	17120	394241	3.47%	0.152%	
273	21.511	21.474	21.559	VV	16831	830955	7.31%	0.321%	
274	21.574	21.559	21.604	VV	15186	397772	3.50%	0.154%	
275	21.613	21.604	21.624	VV	13642	161919	1.42%	0.063%	
276	21.736	21.624	21.761	VV	14722	1144739	10.07%	0.443%	
277	21.769	21.761	21.778	VV	14479	142809	1.26%	0.055%	
278	21.790	21.778	21.822	VV	14088	365520	3.22%	0.141%	
279	21.831	21.822	21.842	VV	13107	152919	1.35%	0.059%	
280	21.850	21.842	21.905	VV	12953	468177	4.12%	0.181%	
281	21.994	21.905	22.139	VV	221293	6703583	58.97%	2.593%	
282	22.189	22.139	22.312	VV	9741	822926	7.24%	0.318%	
283	22.320	22.312	22.418	VV	5025	238467	2.10%	0.092%	
284	22.482	22.418	22.581	VV	2880	184218	1.62%	0.071%	
Sum of corrected areas:					258572574				

Instrument :

FID_E

ClientSampleId :

3MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Aliphatic EPH 051425.M Wed Jun 04 04:34:43 2025

Manual Integration Report

Sequence:

FE051425AL

Instrument

FID_e

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q2024-01	FE053824.D	ortho-Terphenyl (SURR)	yogesh	5/15/2025 8:27:48 AM	mohammad	5/16/2025 1:55:25	Peak Integrated by Software
Q2014-01	FE053826.D	1-chlorooctadecane (SURR)	yogesh	5/15/2025 8:27:49 AM	mohammad	5/16/2025 1:55:25	Peak Integrated by Software
Q2014-01	FE053826.D	ortho-Terphenyl (SURR)	yogesh	5/15/2025 8:27:49 AM	mohammad	5/16/2025 1:55:25	Peak Integrated by Software

Manual Integration Report

Sequence:

FE060325AL

Instrument

FID_e

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PB168239BS	FE054150.D	n-Dotriacontane (C32)	yogesh	6/4/2025 7:41:42 AM	mohammad	6/5/2025 1:34:56	Peak Integrated by Software
PB168239BSD	FE054151.D	n-Dotriacontane (C32)	yogesh	6/4/2025 7:41:44 AM	mohammad	6/5/2025 1:34:56	Peak Integrated by Software
Q2147-05MS	FE054155.D	n-Heneicosane (C21)	yogesh	6/4/2025 7:41:45 AM	mohammad	6/5/2025 1:34:56	Peak Integrated by Software
Q2147-05MSD	FE054156.D	n-Heneicosane (C21)	yogesh	6/4/2025 7:41:47 AM	mohammad	6/5/2025 1:34:56	Peak Integrated by Software
Q2174-03	FE054161.D	ortho-Terphenyl (SURR)	yogesh	6/4/2025 7:41:50 AM	mohammad	6/5/2025 1:34:56	Peak Integrated by Software
20 PPM ALIPHATIC HC	FE054167.D	n-Tetracosane (C24)	yogesh	6/4/2025 7:41:52 AM	mohammad	6/5/2025 1:34:56	Peak Integrated by Software

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE051425AL

Review By	yogesh	Review On	5/14/2025 11:46:43 AM
Supervise By	mohammad	Supervise On	5/16/2025 1:55:25 AM
SubDirectory	FE051425AL	HP Acquire Method	HP Processing Method FE051425AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24176 PP24174,PP24179		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FE053806.D	14 May 2025 08:48	YP\AJ	Ok
2	I.BLK	FE053807.D	14 May 2025 09:18	YP\AJ	Ok
3	100 PPM ALIPHATIC HC STD1	FE053808.D	14 May 2025 09:48	YP\AJ	Ok
4	50 PPM ALIPHATIC HC STD2	FE053809.D	14 May 2025 10:18	YP\AJ	Ok
5	20 PPM ALIPHATIC HC STD3	FE053810.D	14 May 2025 10:48	YP\AJ	Ok
6	10 PPM ALIPHATIC HC STD4	FE053811.D	14 May 2025 11:18	YP\AJ	Ok
7	5 PPM ALIPHATIC HC STD5	FE053812.D	14 May 2025 11:48	YP\AJ	Ok
8	20 PPM ALIPHATIC HC STD ICV	FE053813.D	14 May 2025 12:18	YP\AJ	Ok
9	I.BLK	FE053814.D	14 May 2025 12:48	YP\AJ	Ok
10	20 PPM ALIPHATIC HC STD	FE053815.D	14 May 2025 13:18	YP\AJ	Ok
11	Q2019-01	FE053816.D	14 May 2025 14:44	YP\AJ	Ok
12	Q2019-02	FE053817.D	14 May 2025 15:13	YP\AJ	Ok
13	Q2020-01	FE053818.D	14 May 2025 15:44	YP\AJ	Ok
14	Q2020-02	FE053819.D	14 May 2025 16:14	YP\AJ	Ok
15	Q2022-02	FE053820.D	14 May 2025 16:44	YP\AJ	Ok
16	Q2022-03	FE053821.D	14 May 2025 17:14	YP\AJ	Ok
17	Q2022-04	FE053822.D	14 May 2025 18:04	YP\AJ	Ok
18	Q2022-05	FE053823.D	14 May 2025 18:34	YP\AJ	Ok
19	Q2024-01	FE053824.D	14 May 2025 19:04	YP\AJ	Ok,M
20	Q2024-02	FE053825.D	14 May 2025 19:34	YP\AJ	Ok
21	Q2014-01	FE053826.D	14 May 2025 20:04	YP\AJ	Dilution

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE051425AL

Review By	yogesh	Review On	5/14/2025 11:46:43 AM
Supervise By	mohammad	Supervise On	5/16/2025 1:55:25 AM
SubDirectory	FE051425AL	HP Acquire Method	HP Processing Method FE051425AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24176 PP24174,PP24179		

22	Q2014-02	FE053827.D	14 May 2025 20:34	YP\AJ	Dilution
23	Q2014-03	FE053828.D	14 May 2025 21:05	YP\AJ	Dilution
24	Q2014-04	FE053829.D	14 May 2025 21:35	YP\AJ	Dilution
25	Q2014-05	FE053830.D	14 May 2025 22:05	YP\AJ	Dilution
26	Q2014-06	FE053831.D	14 May 2025 22:35	YP\AJ	Dilution
27	I.BLK	FE053832.D	14 May 2025 23:35	YP\AJ	Ok
28	20 PPM ALIPHATIC HC STD	FE053833.D	15 May 2025 00:05	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE060325AL

Review By	yogesh	Review On	6/3/2025 10:21:26 AM
Supervise By	mohammad	Supervise On	6/5/2025 1:34:56 AM
SubDirectory	FE060325AL	HP Acquire Method	HP Processing Method FE051425AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24176 PP24174,PP24179		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FE054140.D	03 Jun 2025 06:43	YP\AJ	Ok
2	I.BLK	FE054141.D	03 Jun 2025 07:13	YP\AJ	Ok
3	20 PPM ALIPHATIC HC STD	FE054142.D	03 Jun 2025 07:43	YP\AJ	Ok
4	Q2152-01DL	FE054143.D	03 Jun 2025 08:13	YP\AJ	Ok
5	Q2152-02DL	FE054144.D	03 Jun 2025 08:43	YP\AJ	Ok
6	Q2153-01DL	FE054145.D	03 Jun 2025 09:14	YP\AJ	Ok
7	Q2153-02DL	FE054146.D	03 Jun 2025 09:43	YP\AJ	Ok
8	I.BLK	FE054147.D	03 Jun 2025 10:44	YP\AJ	Ok
9	20 PPM ALIPHATIC HC STD	FE054148.D	03 Jun 2025 11:14	YP\AJ	Ok
10	PB168239BL	FE054149.D	03 Jun 2025 13:54	YP\AJ	Ok
11	PB168239BS	FE054150.D	03 Jun 2025 14:24	YP\AJ	Ok,M
12	PB168239BSD	FE054151.D	03 Jun 2025 14:55	YP\AJ	Ok,M
13	Q2147-03	FE054152.D	03 Jun 2025 15:25	YP\AJ	Ok
14	Q2147-04	FE054153.D	03 Jun 2025 15:55	YP\AJ	Ok
15	Q2147-05	FE054154.D	03 Jun 2025 16:25	YP\AJ	Ok
16	Q2147-05MS	FE054155.D	03 Jun 2025 16:56	YP\AJ	Ok,M
17	Q2147-05MSD	FE054156.D	03 Jun 2025 17:26	YP\AJ	Ok,M
18	Q2147-06	FE054157.D	03 Jun 2025 17:56	YP\AJ	Ok
19	Q2147-07	FE054158.D	03 Jun 2025 18:26	YP\AJ	Ok
20	Q2174-01	FE054159.D	03 Jun 2025 18:56	YP\AJ	Ok
21	Q2174-02	FE054160.D	03 Jun 2025 19:26	YP\AJ	Ok

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE060325AL

Review By	yogesh	Review On	6/3/2025 10:21:26 AM
Supervise By	mohammad	Supervise On	6/5/2025 1:34:56 AM
SubDirectory	FE060325AL	HP Acquire Method	HP Processing Method FE051425AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178		
CCC Internal Standard/PEM	PP24176		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24174,PP24179		

22	Q2174-03	FE054161.D	03 Jun 2025 19:57	YP\AJ	Ok,M
23	Q2179-01	FE054162.D	03 Jun 2025 20:27	YP\AJ	Ok
24	Q2179-02	FE054163.D	03 Jun 2025 20:57	YP\AJ	Ok
25	Q2179-03	FE054164.D	03 Jun 2025 21:27	YP\AJ	Ok
26	Q2179-04	FE054165.D	03 Jun 2025 21:57	YP\AJ	Ok
27	I.BLK	FE054166.D	03 Jun 2025 22:57	YP\AJ	Ok
28	20 PPM ALIPHATIC HC STD	FE054167.D	03 Jun 2025 23:27	YP\AJ	Ok,M

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE051425AL

Review By	yogesh	Review On	5/14/2025 11:46:43 AM
Supervise By	mohammad	Supervise On	5/16/2025 1:55:25 AM
SubDirectory	FE051425AL	HP Acquire Method	HP Processing Method FE051425AL

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178
CCC Internal Standard/PEM	PP24176
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24174,PP24179

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FE053806.D	14 May 2025 08:48		YP\AJ	Ok
2	I.BLK	I.BLK	FE053807.D	14 May 2025 09:18		YP\AJ	Ok
3	100 PPM ALIPHATIC H	100 PPM ALIPHATIC H	FE053808.D	14 May 2025 09:48		YP\AJ	Ok
4	50 PPM ALIPHATIC HC	50 PPM ALIPHATIC HC	FE053809.D	14 May 2025 10:18		YP\AJ	Ok
5	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE053810.D	14 May 2025 10:48		YP\AJ	Ok
6	10 PPM ALIPHATIC HC	10 PPM ALIPHATIC HC	FE053811.D	14 May 2025 11:18		YP\AJ	Ok
7	5 PPM ALIPHATIC HC	5 PPM ALIPHATIC HC	FE053812.D	14 May 2025 11:48		YP\AJ	Ok
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE053813.D	14 May 2025 12:18		YP\AJ	Ok
9	I.BLK	I.BLK	FE053814.D	14 May 2025 12:48		YP\AJ	Ok
10	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE053815.D	14 May 2025 13:18		YP\AJ	Ok
11	Q2019-01	MH-K	FE053816.D	14 May 2025 14:44		YP\AJ	Ok
12	Q2019-02	MH-K-EPH	FE053817.D	14 May 2025 15:13		YP\AJ	Ok
13	Q2020-01	TP-A	FE053818.D	14 May 2025 15:44		YP\AJ	Ok
14	Q2020-02	TP-A-EPH	FE053819.D	14 May 2025 16:14		YP\AJ	Ok
15	Q2022-02	COMP-1	FE053820.D	14 May 2025 16:44		YP\AJ	Ok
16	Q2022-03	COMP-1-EPH	FE053821.D	14 May 2025 17:14		YP\AJ	Ok
17	Q2022-04	COMP-2	FE053822.D	14 May 2025 18:04		YP\AJ	Ok
18	Q2022-05	COMP-2-EPH	FE053823.D	14 May 2025 18:34		YP\AJ	Ok

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE051425AL

Review By	yogesh	Review On	5/14/2025 11:46:43 AM
Supervise By	mohammad	Supervise On	5/16/2025 1:55:25 AM
SubDirectory	FE051425AL	HP Acquire Method	HP Processing Method FE051425AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178		
CCC	PP24176		
Internal Standard/PEM	PP24174,PP24179		
ICV/I.BLK			
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

19	Q2024-01	PL-02-051325	FE053824.D	14 May 2025 19:04		YP\AJ	Ok,M
20	Q2024-02	PL-02-051325-E2	FE053825.D	14 May 2025 19:34		YP\AJ	Ok
21	Q2014-01	MOO-25-0134	FE053826.D	14 May 2025 20:04	need 50x dilution	YP\AJ	Dilution
22	Q2014-02	MOO-25-0134-E2	FE053827.D	14 May 2025 20:34	need 5x & 200x dilution	YP\AJ	Dilution
23	Q2014-03	MOO-25-0145	FE053828.D	14 May 2025 21:05	need 100x dilution	YP\AJ	Dilution
24	Q2014-04	MOO-25-0145-E2	FE053829.D	14 May 2025 21:35	need 100x dilution	YP\AJ	Dilution
25	Q2014-05	MOO-25-0148	FE053830.D	14 May 2025 22:05	need 1000x dilution	YP\AJ	Dilution
26	Q2014-06	MOO-25-0148-E2	FE053831.D	14 May 2025 22:35	need 500x dilution	YP\AJ	Dilution
27	I.BLK	I.BLK	FE053832.D	14 May 2025 23:35		YP\AJ	Ok
28	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE053833.D	15 May 2025 00:05		YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE060325AL

Review By	yogesh	Review On	6/3/2025 10:21:26 AM
Supervise By	mohammad	Supervise On	6/5/2025 1:34:56 AM
SubDirectory	FE060325AL	HP Acquire Method	HP Processing Method FE051425AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178		
CCC	PP24176		
Internal Standard/PEM	PP24174,PP24179		
ICV/I.BLK			
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FE054140.D	03 Jun 2025 06:43		YPIAJ	Ok
2	I.BLK	I.BLK	FE054141.D	03 Jun 2025 07:13		YPIAJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE054142.D	03 Jun 2025 07:43		YPIAJ	Ok
4	Q2152-01DL	OK-02-05292025DL	FE054143.D	03 Jun 2025 08:13		YPIAJ	Ok
5	Q2152-02DL	OK-02-05292025-E2DL	FE054144.D	03 Jun 2025 08:43		YPIAJ	Ok
6	Q2153-01DL	TR-04-0592025DL	FE054145.D	03 Jun 2025 09:14		YPIAJ	Ok
7	Q2153-02DL	TR-04-0592025-E2DL	FE054146.D	03 Jun 2025 09:43		YPIAJ	Ok
8	I.BLK	I.BLK	FE054147.D	03 Jun 2025 10:44		YPIAJ	Ok
9	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE054148.D	03 Jun 2025 11:14		YPIAJ	Ok
10	PB168239BL	PB168239BL	FE054149.D	03 Jun 2025 13:54		YPIAJ	Ok
11	PB168239BS	PB168239BS	FE054150.D	03 Jun 2025 14:24		YPIAJ	Ok,M
12	PB168239BSD	PB168239BSD	FE054151.D	03 Jun 2025 14:55		YPIAJ	Ok,M
13	Q2147-03	1	FE054152.D	03 Jun 2025 15:25		YPIAJ	Ok
14	Q2147-04	2	FE054153.D	03 Jun 2025 15:55		YPIAJ	Ok
15	Q2147-05	3	FE054154.D	03 Jun 2025 16:25		YPIAJ	Ok
16	Q2147-05MS	3MS	FE054155.D	03 Jun 2025 16:56	FE054154.D	YPIAJ	Ok,M
17	Q2147-05MSD	3MSD	FE054156.D	03 Jun 2025 17:26	FE054154.D!FE054155.D	YPIAJ	Ok,M
18	Q2147-06	4	FE054157.D	03 Jun 2025 17:56		YPIAJ	Ok

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE060325AL

Review By	yogesh	Review On	6/3/2025 10:21:26 AM
Supervise By	mohammad	Supervise On	6/5/2025 1:34:56 AM
SubDirectory	FE060325AL	HP Acquire Method	HP Processing Method FE051425AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178		
CCC	PP24176		
Internal Standard/PEM	PP24174,PP24179		
ICV/I.BLK			
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

19	Q2147-07	5	FE054158.D	03 Jun 2025 18:26		YPIAJ	Ok
20	Q2174-01	DP1	FE054159.D	03 Jun 2025 18:56		YPIAJ	Ok
21	Q2174-02	D1	FE054160.D	03 Jun 2025 19:26		YPIAJ	Ok
22	Q2174-03	D2	FE054161.D	03 Jun 2025 19:57		YPIAJ	Ok,M
23	Q2179-01	D3	FE054162.D	03 Jun 2025 20:27		YPIAJ	Ok
24	Q2179-02	D4	FE054163.D	03 Jun 2025 20:57		YPIAJ	Ok
25	Q2179-03	D5	FE054164.D	03 Jun 2025 21:27		YPIAJ	Ok
26	Q2179-04	D6	FE054165.D	03 Jun 2025 21:57		YPIAJ	Ok
27	I.BLK	I.BLK	FE054166.D	03 Jun 2025 22:57		YPIAJ	Ok
28	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE054167.D	03 Jun 2025 23:27		YPIAJ	Ok,M

M : Manual Integration

PERCENT SOLID

Supervisor: Sohil
Analyst: jignesh
Date: 6/3/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:10
In Date: 06/02/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:15
Out Date: 06/03/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135973

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
Q2125-07	GSB3	25	1.14	10.44	11.58	10.36	88.3	
Q2167-01	52225	1	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2168-01	SAN-A1-A3	2	1.15	10.00	11.15	11.1	99.5	
Q2168-03	A3	3	1.19	10.12	11.31	11.27	99.6	
Q2168-05	SAN-B1-B3	4	1.19	10.16	11.35	11.31	99.6	
Q2168-07	B3	5	1.16	10.33	11.49	11.44	99.5	
Q2168-09	SAN-C1-C2	6	1.13	10.24	11.37	11.3	99.3	
Q2168-11	C2	7	1.17	10.38	11.55	11.31	97.7	
Q2171-01	5-28-25-A	8	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2171-02	5-28-25-B	9	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2171-03	51925	10	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2175-01	32525	11	1.00	1.00	2.00	2.00	100.0	debris
Q2175-02	52725	12	1.00	1.00	2.00	2.00	100.0	oil sample
Q2176-01	TP-46	13	1.19	10.63	11.82	10.09	83.7	
Q2176-02	TP-56	14	1.15	10.59	11.74	10.28	86.2	
Q2176-03	TP-25	15	1.16	10.29	11.45	9.98	85.7	
Q2176-04	TP-26	16	1.12	10.84	11.96	10.36	85.2	
Q2176-05	TP-28	17	1.18	10.51	11.69	10.69	90.5	
Q2176-06	TP-27	18	1.18	10.12	11.3	9.59	83.1	
Q2176-07	TP-31	19	1.18	10.64	11.82	10.42	86.8	
Q2176-08	TP-65	20	1.19	10.27	11.46	10.16	87.3	
Q2177-01	B-187-SB00	21	1.17	10.43	11.6	10.47	89.2	
Q2177-02	B-187-SB01	22	1.16	10.50	11.66	10.00	84.2	
Q2177-04	B-187-SB02	23	1.17	10.55	11.72	7.8	62.8	
Q2177-06	B-202-SB01	24	1.19	10.41	11.6	10.08	85.4	
Q2178-01	RT2929	26	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
Q2179-01	D3	27	1.15	9.96	11.11	10.47	93.6	
Q2179-02	D4	28	1.19	10.03	11.22	10.38	91.6	

PERCENT SOLID

Supervisor: Sohil
Analyst: jignesh
Date: 6/3/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:10
In Date: 06/02/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:15
Out Date: 06/03/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135973

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
Q2179-03	D5	29	1.18	10.26	11.44	10.8	93.8	
Q2179-04	D6	30	1.16	10.80	11.96	11.54	96.1	
Q2183-01	BC205321-3-1	31	1.00	1.00	2.00	2.00	100.0	oilc
Q2183-02	BC205321-3-2	32	1.00	1.00	2.00	2.00	100.0	oilc
Q2183-03	BC205321-4-1	33	1.00	1.00	2.00	2.00	100.0	oilc
Q2183-04	BC205321-4-2	34	1.00	1.00	2.00	2.00	100.0	oilc
Q2183-05	BC205321-5-1	35	1.00	1.00	2.00	2.00	100.0	oilc
Q2183-06	BC205321-5-2	36	1.00	1.00	2.00	2.00	100.0	oilc
Q2183-07	BC205321-6-1	37	1.00	1.00	2.00	2.00	100.0	oilc
Q2183-08	BC205321-6-2	38	1.00	1.00	2.00	2.00	100.0	oilc
Q2184-01	245F54-1-1	39	1.00	1.00	2.00	2.00	100.0	oilc
Q2184-02	245F54-1-2	40	1.00	1.00	2.00	2.00	100.0	oilc
Q2184-03	BC226595-1-1	41	1.00	1.00	2.00	2.00	100.0	oilc
Q2184-04	BC226595-1-2	42	1.00	1.00	2.00	2.00	100.0	oilc
Q2185-01	TP02-MHB-WC	43	1.15	10.68	11.83	10.28	85.5	
Q2185-02	TP02-MHB-VOC	44	1.13	10.62	11.75	10.58	89.0	
Q2185-03	TP02-MHB-EPH	45	1.15	10.26	11.41	10.00	86.3	
Q2185-05	TP01-MHB-WC	46	1.18	10.69	11.87	10.57	87.8	
Q2185-06	TP01-MHB-VOC	47	1.19	10.76	11.95	10.84	89.7	
Q2185-07	TP01-MHB-EPH	48	1.19	10.25	11.44	10.28	88.7	

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

WORKLIST(Hardcopy Internal Chain)

8735973

WorkList Name : %1-060225

WorkList ID : 189853

Department : Wet-Chemistry

Date : 06-02-2025 08:16:03

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2125-07	GSB3	Solid	Percent Solids	Cool 4 deg C	GENV01	L31	05/23/2025	Chemtech -SO
Q2167-01	52225	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2168-01	SAN-A1-A3	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2168-03	A3	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2168-05	SAN-B1-B3	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2168-07	B3	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2168-09	SAN-C1-C2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2168-11	C2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2171-01	5-28-25-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2171-02	5-28-25-B	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2171-03	51925	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2175-01	32525	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2175-02	52725	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2176-01	TP-46	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2176-02	TP-56	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/28/2025	Chemtech -SO
Q2176-03	TP-25	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/29/2025	Chemtech -SO
Q2176-04	TP-26	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/29/2025	Chemtech -SO
Q2176-05	TP-28	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/29/2025	Chemtech -SO
Q2176-06	TP-27	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/29/2025	Chemtech -SO
Q2176-07	TP-31	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/29/2025	Chemtech -SO
Q2176-08	TP-65	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/30/2025	Chemtech -SO

Date/Time 06/02/25 15:13
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Date/Time 06/02/25 17:25
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

WORKLIST(Hardcopy Internal Chain)

135913

WorkList Name : %1-060225

WorkList ID : 189853

Department : Wet-Chemistry

Date : 06-02-2025 08:16:03

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2177-01	B-187-SB00	Solid	Percent Solids	Cool 4 deg C	PORT06	L41	05/31/2025	Chemtech -SO
Q2177-02	B-187-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	L41	05/31/2025	Chemtech -SO
Q2177-04	B-187-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	L41	05/31/2025	Chemtech -SO
Q2177-06	B-202-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	L41	05/31/2025	Chemtech -SO
Q2178-01	RT2929	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	06/02/2025	Chemtech -SO
Q2179-01	D3	Solid	Percent Solids	Cool 4 deg C	GENV01	N11	06/02/2025	Chemtech -SO
Q2179-02	D4	Solid	Percent Solids	Cool 4 deg C	GENV01	N11	06/02/2025	Chemtech -SO
Q2179-03	D5	Solid	Percent Solids	Cool 4 deg C	GENV01	N11	06/02/2025	Chemtech -SO
Q2179-04	D6	Solid	Percent Solids	Cool 4 deg C	GENV01	N11	06/02/2025	Chemtech -SO
Q2183-01	BC205321-3-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	N12	06/02/2025	Chemtech -SO
Q2183-02	BC205321-3-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	N12	06/02/2025	Chemtech -SO
Q2183-03	BC205321-4-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	N12	06/02/2025	Chemtech -SO
Q2183-04	BC205321-4-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	N12	06/02/2025	Chemtech -SO
Q2183-05	BC205321-5-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	N12	06/02/2025	Chemtech -SO
Q2183-06	BC205321-5-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	N12	06/02/2025	Chemtech -SO
Q2183-07	BC205321-6-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	N12	06/02/2025	Chemtech -SO
Q2183-08	BC205321-6-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	N12	06/02/2025	Chemtech -SO
Q2184-01	245F54-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	N12	06/02/2025	Chemtech -SO
Q2184-02	245F54-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	N12	06/02/2025	Chemtech -SO
Q2184-03	BC226595-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	N12	06/02/2025	Chemtech -SO
Q2184-04	BC226595-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	N12	06/02/2025	Chemtech -SO

Date/Time 06/02/25 15:15
 Raw Sample Received by: SPW
 Raw Sample Relinquished by: SPW

Date/Time 06/02/25 17:25
 Raw Sample Received by: SPW
 Raw Sample Relinquished by: SPW

WORKLIST(Hardcopy Internal Chain)

135973

WorkList Name : %1-060225

WorkList ID : 189853

Department : Wet-Chemistry

Date : 06-02-2025 08:16:03

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2185-01	TP02-MHB-WC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	06/02/2025	Chemtech -SO
Q2185-02	TP02-MHB-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	06/02/2025	Chemtech -SO
Q2185-03	TP02-MHB-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	06/02/2025	Chemtech -SO
Q2185-05	TP01-MHB-WC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	06/02/2025	Chemtech -SO
Q2185-06	TP01-MHB-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	06/02/2025	Chemtech -SO
Q2185-07	TP01-MHB-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	06/02/2025	Chemtech -SO

Date/Time 06/02/25 15:15

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 06/02/25 17:15

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

SOP ID:	MNJDEP-EPH-7		
Clean Up SOP #:	N/A	Extraction Start Date :	06/03/2025
Matrix :	Solid	Extraction Start Time :	10:00
Weigh By:	EH	Extraction By:	RJ
Balance check:	EH	Extraction End Date :	06/03/2025
Balance ID:	EX-SC-2	Filter By:	RJ
pH Strip Lot#:	N/A	Extraction End Time :	13:25
		Concentration By:	EH
		Supervisor By :	RUPESH
Extraction Method:	☐ Separatory Funnel ☐ Continous Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☒ Soxhlet		

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	100 PPM	PP24573
Surrogate	1.0ML	100 PPM	PP24591
N/A	N/A	N/A	N/A
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	EP2612
Baked Na2SO4	N/A	EP2620
Sand	N/A	E2865
Methylene Chloride	N/A	E3939
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

N/A

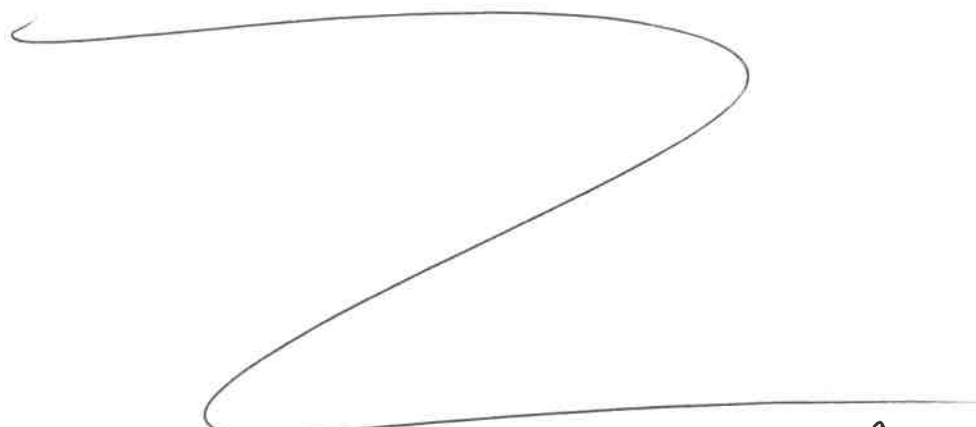
KD Bath ID:	N/A	Envap ID:	NEVAP-02
KD Bath Temperature:	N/A	Envap Temperature:	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
6/3/25	RS (Ext 666)	Y.P. PESTIPU
13:30	Preparation Group	Analysis Group

Analytical Method: MNJDEP-EPH-7

Concentration Date: 06/03/2025

Sample ID	Client Sample ID	Test	g/ mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB168239BL	PB168239BL	EPH_F2	30.03	N/A	ritesh	Evelyn	2			U6-1
PB168239BS	PB168239BS	EPH_F2	30.02	N/A	ritesh	Evelyn	2			2
PB168239BSD	PB168239BSD	EPH_F2	30.02	N/A	ritesh	Evelyn	2			3
Q2147-03	1	EPH_F2	30.06	N/A	ritesh	Evelyn	2			4
Q2147-04	2	EPH_F2	30.01	N/A	ritesh	Evelyn	2			5
Q2147-05	3	EPH_F2	30.05	N/A	ritesh	Evelyn	2			6
Q2147-05MS	3MS	EPH_F2	30.08	N/A	ritesh	Evelyn	2			U3-1
Q2147-05MSD	3MSD	EPH_F2	30.06	N/A	ritesh	Evelyn	2			2
Q2147-06	4	EPH_F2	30.02	N/A	ritesh	Evelyn	2			3
Q2147-07	5	EPH_F2	30.05	N/A	ritesh	Evelyn	2			4
Q2174-01	DP1	EPH_F2	30.08	N/A	ritesh	Evelyn	2			5
Q2174-02	D1	EPH_F2	30.06	N/A	ritesh	Evelyn	2			6
Q2174-03	D2	EPH_F2	30.02	N/A	ritesh	Evelyn	2			U2-1
Q2179-01	D3	EPH_F2	30.05	N/A	ritesh	Evelyn	2		Stone	2
Q2179-02	D4	EPH_F2	30.04	N/A	ritesh	Evelyn	2		Stone	3
Q2179-03	D5	EPH_F2	30.01	N/A	ritesh	Evelyn	2		Stone	4
Q2179-04	D6	EPH_F2	30.07	N/A	ritesh	Evelyn	2		Stone	5



RS
6/3

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q2147

WorkList ID : 189864

Department : Extraction

Date : 06-03-2025 09:18:02

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2174-01	DP1	Solid	EPH_F2	Cool 4 deg C	GENV01	L41	05/30/2025	NJEPH
Q2174-02	D1	Solid	EPH_F2	Cool 4 deg C	GENV01	L41	05/30/2025	NJEPH
Q2174-03	D2	Solid	EPH_F2	Cool 4 deg C	GENV01	L41	05/30/2025	NJEPH
Q2179-01	D3	Solid	EPH_F2	Cool 4 deg C	GENV01	N11	06/02/2025	NJEPH
Q2179-02	D4	Solid	EPH_F2	Cool 4 deg C	GENV01	N11	06/02/2025	NJEPH
Q2179-03	D5	Solid	EPH_F2	Cool 4 deg C	GENV01	N11	06/02/2025	NJEPH
Q2179-04	D6	Solid	EPH_F2	Cool 4 deg C	GENV01	N11	06/02/2025	NJEPH
Q2147-03	1	Solid	EPH_F2	Cool 4 deg C	SCIA01	L41	05/27/2025	NJEPH
Q2147-04	2	Solid	EPH_F2	Cool 4 deg C	SCIA01	L41	05/27/2025	NJEPH
Q2147-05	3	Solid	EPH_F2	Cool 4 deg C	SCIA01	L41	05/27/2025	NJEPH
Q2147-06	4	Solid	EPH_F2	Cool 4 deg C	SCIA01	L41	05/27/2025	NJEPH
Q2147-07	5	Solid	EPH_F2	Cool 4 deg C	SCIA01	L41	05/27/2025	NJEPH

Date/Time 06/03/25 9:55
 Raw Sample Received by: R3 L-FA-026
 Raw Sample Relinquished by: R3 L-FA-026

Date/Time 06/03/25 10:15
 Raw Sample Received by: R3 L-FA-026
 Raw Sample Relinquished by: R3 L-FA-026

Prep Standard - Chemical Standard Summary

Order ID : Q2179

Test : EPH_F2

Prepbatch ID : PB168239,

Sequence ID/Qc Batch ID: FE060325AL,

Standard ID :

EP2612,EP2620,PP24170,PP24174,PP24175,PP24176,PP24177,PP24178,PP24179,PP24573,PP24591,

Chemical ID :

E2865,E3551,E3930,E3932,E3939,P12363,P12981,P12983,P13279,P13601,P13603,P13650,P13671,P13676,P13677,
P13710,P13711,P13712,P13713,P13714,P13716,P13822,P13825,P13827,P13902,P13904,P13914,P13922,P13924,P1
3978,P13979,P13980,P13981,P13988,P13989,W3177,

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>
2017	1:1 ACETONE/METHYLENE CHLORIDE	EP2612	05/09/2025	11/05/2025	RUPESHKUMAR SHAH	None	None	Riteshkumar Patel
05/09/2025								

FROM 8000.00000ml of E3930 + 8000.00000ml of E3932 = 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>
3923	Baked Sodium Sulfate	EP2620	05/30/2025	07/01/2025	RUPESHKUMAR SHAH	Extraction_SC ALE_2	None	Riteshkumar Patel
(EX-SC-2)								

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
781	100 PPM Aliphatic HC Working STD (Restek)	PP24170	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani
								02/03/2025

FROM 0.25000ml of P12981 + 0.25000ml of P13671 + 1.25000ml of P12363 + 23.25000ml of W3177 = Final Quantity: 25.000 ml

<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)	PP24174	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani
								02/03/2025

FROM 0.25000ml of P12983 + 0.25000ml of P13650 + 2.50000ml of P13279 + 22.00000ml of W3177 = Final Quantity: 25.000 ml

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	PP24175	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani
								02/03/2025

FROM 0.50000ml of W3177 + 0.50000ml of PP24170 = Final Quantity: 1.000 ml

<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	PP24176	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani
								02/03/2025

FROM 0.80000ml of W3177 + 0.20000ml of PP24170 = Final Quantity: 1.000 ml

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	PP24177	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani
02/03/2025								

FROM 0.90000ml of W3177 + 0.10000ml of PP24170 = Final Quantity: 1.000 ml

<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	PP24178	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani
02/03/2025								

FROM 0.90000ml of W3177 + 0.10000ml of PP24175 = Final Quantity: 1.000 ml

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)	PP24179	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani
								02/03/2025

FROM 0.80000ml of W3177 + 0.20000ml of PP24174 = Final Quantity: 1.000 ml

<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	PP24573	05/14/2025	11/14/2025	Abdul Mirza	None	None	Yogesh Patel
								05/22/2025

FROM 5.00000ml of P13710 + 5.00000ml of P13711 + 5.00000ml of P13712 + 5.00000ml of P13713 + 5.00000ml of P13714 + 5.00000ml of P13716 + 5.00000ml of P13822 + 5.00000ml of P13825 + 5.00000ml of P13827 + 5.00000ml of P13902 + 5.00000ml of P13904 + 5.00000ml of P13914 + 5.00000ml of P13922 + 5.00000ml of P13924 + 5.00000ml of P13978 + 5.00000ml of P13979 + 5.00000ml of P13980 + 5.00000ml of P13981 + 5.00000ml of P13988 + 5.00000ml of P13989 = 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	PP24591	05/19/2025	11/05/2025	Abdul Mirza	None	None	Yogesh Patel 05/22/2025
<u>FROM</u>	1.00000ml of P13601 + 1.00000ml of P13603 + 1.00000ml of P13676 + 1.00000ml of P13677 + 196.00000ml of E3932 = Final Quantity: 200.000 ml							

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3382-05 / Sand, Purified (cs/4x2.5kg)	0000243821	06/30/2025	04/30/2020 / RAJESH	04/28/2020 / RAJESH	E2865

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	12/04/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A0262002	02/20/2026	05/02/2025 / RUPESH	03/09/2025 / RUPESH	E3930

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	11/05/2025	05/05/2025 / RUPESH	04/23/2025 / RUPESH	E3932

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)	25A2862010	11/22/2025	05/22/2025 / RUPESH	02/28/2025 / RUPESH	E3939

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30540 / Custom NJEPH Aliphatics Calibration Standard	A0190424	08/03/2025	02/03/2025 / yogesh	03/16/2023 / Yogesh	P12363

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0204989	08/03/2025	02/03/2025 / yogesh	12/20/2023 / Yogesh	P12981

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0204989	08/03/2025	02/03/2025 / yogesh	12/20/2023 / Yogesh	P12983

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95899 / NJ EPH Aliphatic n-Hydrocarbons-Revised, 1000 PPM	040524	08/03/2025	02/03/2025 / yogesh	04/11/2024 / yogesh	P13279

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0213283	11/19/2025	05/19/2025 / Abdul	10/16/2024 / yogesh	P13601

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0213283	11/19/2025	05/19/2025 / Abdul	10/16/2024 / yogesh	P13603

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	08/03/2025	02/03/2025 / yogesh	10/16/2024 / yogesh	P13650

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	08/03/2025	02/03/2025 / yogesh	10/16/2024 / yogesh	P13671

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	11/19/2025	05/19/2025 / Abdul	10/16/2024 / yogesh	P13676

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	11/19/2025	05/19/2025 / Abdul	10/16/2024 / yogesh	P13677

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0211254	11/14/2025	05/14/2025 / Abdul	10/24/2024 / yogesh	P13710

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0211254	11/14/2025	05/14/2025 / Abdul	10/24/2024 / yogesh	P13711

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0211254	11/14/2025	05/14/2025 / Abdul	10/24/2024 / yogesh	P13712

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0211254	11/14/2025	05/14/2025 / Abdul	10/24/2024 / yogesh	P13713

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0211254	11/14/2025	05/14/2025 / Abdul	10/24/2024 / yogesh	P13714

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0211254	11/14/2025	05/14/2025 / Abdul	10/24/2024 / yogesh	P13716

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	11/14/2025	05/14/2025 / Abdul	12/09/2024 / yogesh	P13822

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	11/14/2025	05/14/2025 / Abdul	12/09/2024 / yogesh	P13825

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	11/14/2025	05/14/2025 / Abdul	12/09/2024 / yogesh	P13827

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	A0217408	11/14/2025	05/14/2025 / Abdul	03/06/2025 / yogesh	P13902

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	11/14/2025	05/14/2025 / Abdul	03/06/2025 / yogesh	P13904

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0220449	11/14/2025	05/14/2025 / Abdul	03/06/2025 / yogesh	P13914

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A022580	11/14/2025	05/14/2025 / Abdul	03/06/2025 / yogesh	P13922

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A022580	11/14/2025	05/14/2025 / Abdul	03/06/2025 / yogesh	P13924

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0220449	11/14/2025	05/14/2025 / Abdul	04/24/2025 / Rahul	P13978

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	A0220449	11/14/2025	05/14/2025 / Abdul	04/24/2025 / Rahul	P13979

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0220449	11/14/2025	05/14/2025 / Abdul	04/24/2025 / Rahul	P13980

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0220449	11/14/2025	05/14/2025 / Abdul	04/24/2025 / Rahul	P13981

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0220580	11/14/2025	05/14/2025 / Abdul	04/25/2025 / Rahul	P13988

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0220580	11/14/2025	05/14/2025 / Abdul	04/25/2025 / Rahul	P13989

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	24G1962003	08/22/2025	02/03/2025 / jignesh	01/31/2025 / jignesh	W3177

Sand
Purified
Washed and Ignited



Material No.: 3382-05
Batch No.: 0000243821
Manufactured Date: 2018/04/09
Retest Date: 2025/04/07
Revision No: 1

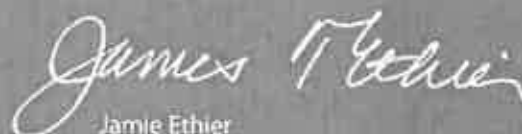
Certificate of Analysis

Test	Specification	Result
Substances Soluble in HCl	$\leq 0.16\%$	0.01

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US
Packaging Site: Paris Mfg Ctr & DC

E 2865


Jamie Ethier
Vice President Global Quality

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

Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700



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MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
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TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na ₂ SO ₄
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO ₄)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreign matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

Recd. by R3 on 7/24/23 E 3551

RC-02-01, Ed. 3

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)



Material No.: 9266-A4
Batch No.: 25A0262002
Manufactured Date: 2024-11-21
Expiration Date: 2026-02-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	4
Assay (CH ₂ Cl ₂) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8\%$	99.9%
Color (APHA)	≤ 10	10
Residue after Evaporation	≤ 1.0 ppm	0.8 ppm
Titration Acid (μ eq/g)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02\%$	$< 0.01\%$

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

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

E3930

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.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (µeq/g)	<= 0.3	0.2
Titration Base (µeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

RS

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3932

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.: 25A2862010
Manufactured Date: 2024-12-18
Expiration Date: 2026-03-19
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	2
Assay (CH ₂ Cl ₂) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	99.9 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titration Acid (μ eq/g)	≤ 0.3	<0.1
Chloride (Cl)	≤ 10 ppm	<5 ppm
Water (by KF, coulometric)	$\leq 0.02 \%$	<0.01 %

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

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

E3939

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



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30540 **Lot No.:** A0190424

Description : NJEPH Aliphatics Calibration Standard

Aliphatics Calibration Standard 2000µg/mL, Hexane/Carbon Disulfide (80:20), 1mL/ampul

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

Expiration Date : November 30, 2029 **Storage:** 25°C nominal

Handling: Sonicate prior to use. **Ship:** Ambient

P12361
↓
P12370 } Y.P.
031/6/23

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Nonane (C9) CAS # 111-84-2 Purity 99% (Lot SHBN5361)	2,014.0 µg/mL	+/- 11.8193 +/- 50.0027 +/- 59.9491	µg/mL Gravimetric Unstressed Stressed
2	n-Decane (C10) CAS # 124-18-5 Purity 99% (Lot SHBN8619)	2,014.7 µg/mL	+/- 11.8232 +/- 50.0193 +/- 59.9689	µg/mL Gravimetric Unstressed Stressed
3	Naphthalene CAS # 91-20-3 Purity 99% (Lot MKCH0219)	2,015.3 µg/mL	+/- 11.8271 +/- 50.0358 +/- 59.9888	µg/mL Gravimetric Unstressed Stressed
4	n-Dodecane (C12) CAS # 112-40-3 Purity 99% (Lot SHBN7174)	2,008.0 µg/mL	+/- 11.7841 +/- 49.8538 +/- 59.7705	µg/mL Gravimetric Unstressed Stressed
5	2-Methylnaphthalene CAS # 91-57-6 Purity 96% (Lot STBK0259)	2,007.0 µg/mL	+/- 11.7784 +/- 49.8299 +/- 59.7419	µg/mL Gravimetric Unstressed Stressed
6	n-Tetradecane (C14) CAS # 629-59-4 Purity 99% (Lot STBK2282)	2,016.7 µg/mL	+/- 11.8349 +/- 50.0689 +/- 60.0284	µg/mL Gravimetric Unstressed Stressed
7	n-Hexadecane (C16) CAS # 544-76-3 Purity 98% (Lot SHBM4146)	2,014.9 µg/mL	+/- 11.8244 +/- 50.0246 +/- 59.9753	µg/mL Gravimetric Unstressed Stressed

8	n-Octadecane (C18) CAS # 593-45-3 Purity 97%	(Lot VZKOJ)	2,004.7 µg/mL	+/-	11.7645	µg/mL	Gravimetric
				+/-	49.7710	µg/mL	Unstressed
				+/-	59.6712	µg/mL	Stressed
9	n-Eicosane (C20) CAS # 112-95-8 Purity 99%	(Lot MKCF7888)	2,018.0 µg/mL	+/-	11.8428	µg/mL	Gravimetric
				+/-	50.1020	µg/mL	Unstressed
				+/-	60.0681	µg/mL	Stressed
10	n-Heneicosane (C21) CAS # 629-94-7 Purity 99%	(Lot MKCL3226)	2,000.7 µg/mL	+/-	11.7410	µg/mL	Gravimetric
				+/-	49.6717	µg/mL	Unstressed
				+/-	59.5522	µg/mL	Stressed
11	n-Docosane (C22) CAS # 629-97-0 Purity 99%	(Lot MKCL8918)	2,005.3 µg/mL	+/-	11.7684	µg/mL	Gravimetric
				+/-	49.7876	µg/mL	Unstressed
				+/-	59.6911	µg/mL	Stressed
12	n-Tetracosane (C24) CAS # 646-31-1 Purity 99%	(Lot MKCN2863)	2,018.0 µg/mL	+/-	11.8428	µg/mL	Gravimetric
				+/-	50.1020	µg/mL	Unstressed
				+/-	60.0681	µg/mL	Stressed
13	n-Hexacosane (C26) CAS # 630-01-3 Purity 99%	(Lot MKCD4540)	2,014.0 µg/mL	+/-	11.8193	µg/mL	Gravimetric
				+/-	50.0027	µg/mL	Unstressed
				+/-	59.9491	µg/mL	Stressed
14	n-Octacosane (C28) CAS # 630-02-4 Purity 99%	(Lot BCCG0084)	2,002.0 µg/mL	+/-	11.7489	µg/mL	Gravimetric
				+/-	49.7048	µg/mL	Unstressed
				+/-	59.5919	µg/mL	Stressed
15	n-Triacontane (C30) CAS # 638-68-6 Purity 97%	(Lot MKCQ9436)	2,011.1 µg/mL	+/-	11.8025	µg/mL	Gravimetric
				+/-	49.9316	µg/mL	Unstressed
				+/-	59.8637	µg/mL	Stressed
16	n-Dotriacontane (C32) CAS # 544-85-4 Purity 99%	(Lot BCBW0661)	2,012.0 µg/mL	+/-	11.8075	µg/mL	Gravimetric
				+/-	49.9531	µg/mL	Unstressed
				+/-	59.8895	µg/mL	Stressed
17	n-Tetratriacontane (C34) CAS # 14167-59-0 Purity 99%	(Lot OML4N)	2,006.7 µg/mL	+/-	11.7762	µg/mL	Gravimetric
				+/-	49.8207	µg/mL	Unstressed
				+/-	59.7308	µg/mL	Stressed
18	n-Hexatriacontane (C36) CAS # 630-06-8 Purity 99%	(Lot Z27H018)	2,017.3 µg/mL	+/-	11.8388	µg/mL	Gravimetric
				+/-	50.0855	µg/mL	Unstressed
				+/-	60.0483	µg/mL	Stressed
19	n-Octatriacontane (C38) CAS # 7194-85-6 Purity 96%	(Lot 0000145137)	2,017.3 µg/mL	+/-	11.8385	µg/mL	Gravimetric
				+/-	50.0842	µg/mL	Unstressed
				+/-	60.0467	µg/mL	Stressed
20	n-Tetracontane (C40) CAS # 4181-95-7 Purity 99%	(Lot BSBME)	2,008.7 µg/mL	+/-	11.7880	µg/mL	Gravimetric
				+/-	49.8703	µg/mL	Unstressed
				+/-	59.7903	µg/mL	Stressed
Solvent: Hexane/Carbon disulfide (80:20)							
	CAS # 110-54-3/75-15-0						
	Purity 99%						

Column:
30m x 0.25mm x 0.25µm
Pxx-5 (cat.#10223)

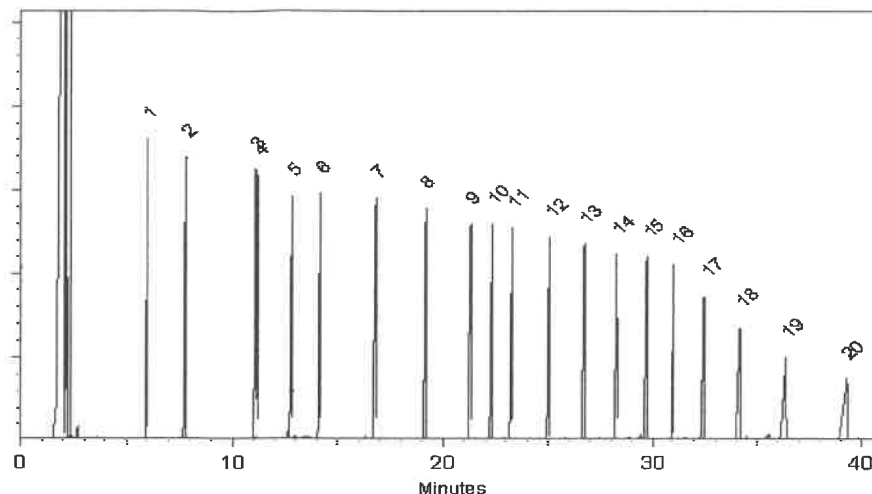
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Morgan Craighead - Mix Technician

Date Mixed: 10-Oct-2022 Balance: 1128360905


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 20-Oct-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.



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Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 31098 **Lot No.:** A0204989
Description: 1-Chlorooctadecane Standard
1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul
Container Size: 2 mL **Pkg Amt:** > 1 mL
Expiration Date: January 31, 2031 **Storage:** 10°C or colder
Ship: Ambient

P12960
↓
P12991 } Y.P.
12/21/2023

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Chlorooctadecane	3386-33-2	14738400	99%	10,097.3 µg/mL	+/- 567.2675

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

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

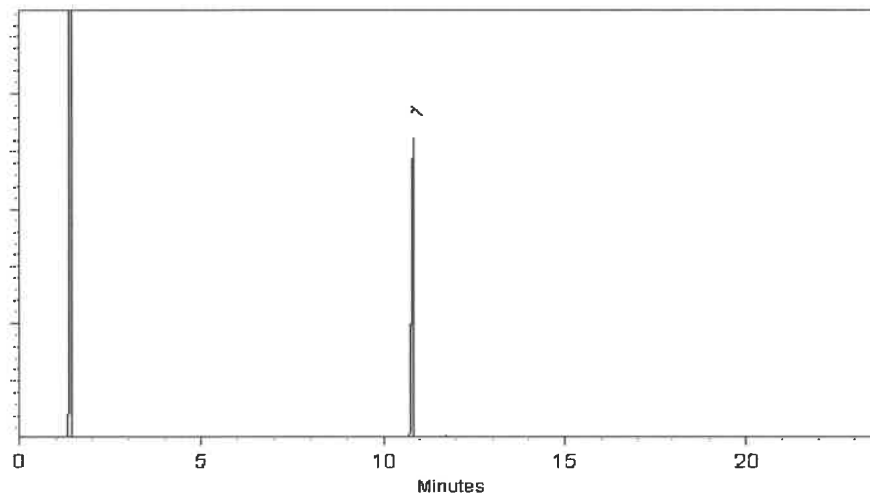
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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.

Peter Robbins - Operations Technician I

Date Mixed: 02-Dec-2023

Balance Serial # B345965662

Christie Mills - Operations Lead Tech - ARM QC

Date Passed: 08-Dec-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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chromatographic plus



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Catalog No.: 31098 **Lot No.:** A0204989

Description: 1-Chlorooctadecane Standard

1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul

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

Expiration Date: January 31, 2031 **Storage:** 10°C or colder

Ship: Ambient

P12960
↓
P12991 } Y.P.
12/21/2023

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Chlorooctadecane	3386-33-2	14738400	99%	10,097.3 µg/mL	+/- 567.2675

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

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

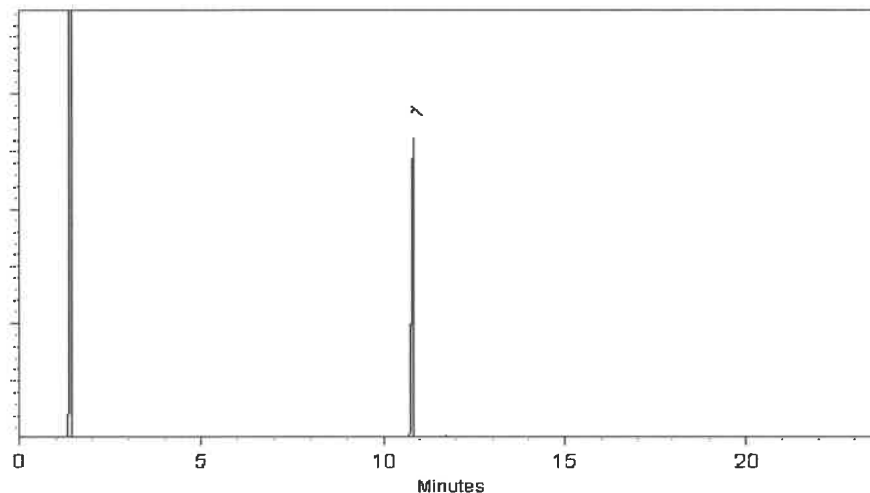
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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.

Peter Robbins - Operations Technician I

Date Mixed: 02-Dec-2023

Balance Serial # B345965662

Christie Mills - Operations Lead Tech - ARM QC

Date Passed: 08-Dec-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

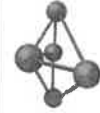
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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	0.013	NA	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	0.013	NA	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	0.013	NA	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	0.013	NA	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	0.013	NA	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	0.013	NA	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	0.013	NA	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	0.013	NA	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	0.013	NA	NA	NA	1001.2	4.2	629-97-0	N/A
12.	n-Triacosane	95708	120222	1.00	25.00	1000.8	1000.8	1000	NA	0.013	NA	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	0.013	NA	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	0.013	NA	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	0.013	NA	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	0.013	NA	NA	NA	999.8	4.3	544-85-4	ivn-mus 100mg/kg
17.	n-Tetraacontane	95708	120222	1.00	25.00	1000.4	1000.4	1000	NA	0.013	NA	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	0.013	NA	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	0.013	NA	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	0.013	NA	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).



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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:

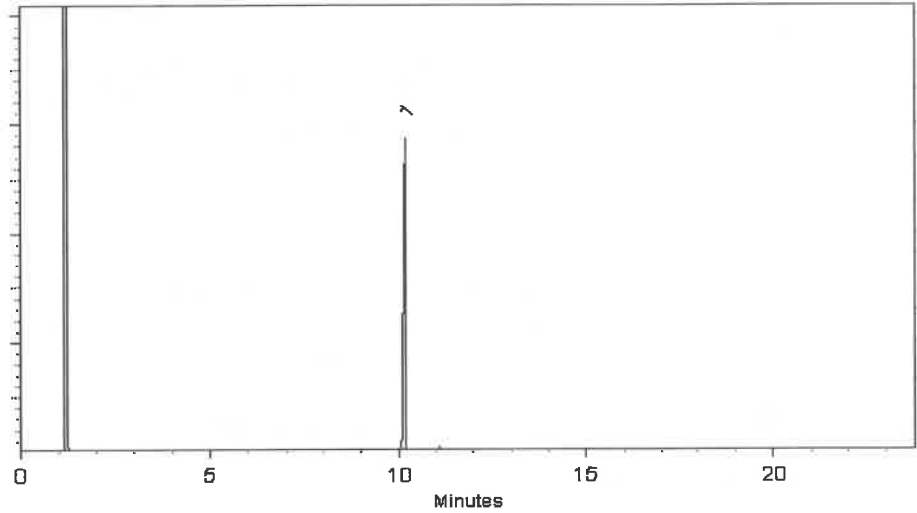
FID

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:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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Catalog No. : 31098 **Lot No.:** A0213283

Description : 1-Chlorooctadecane Standard

1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul

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

Expiration Date : July 31, 2031 **Storage:** 10°C or colder

Ship: Ambient

P13595
↓
P13624 } Y.P.
10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Chlorooctadecane	3386-33-2	15018900	99%	10,058.0 µg/mL	+/- 565.0578

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

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-S (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

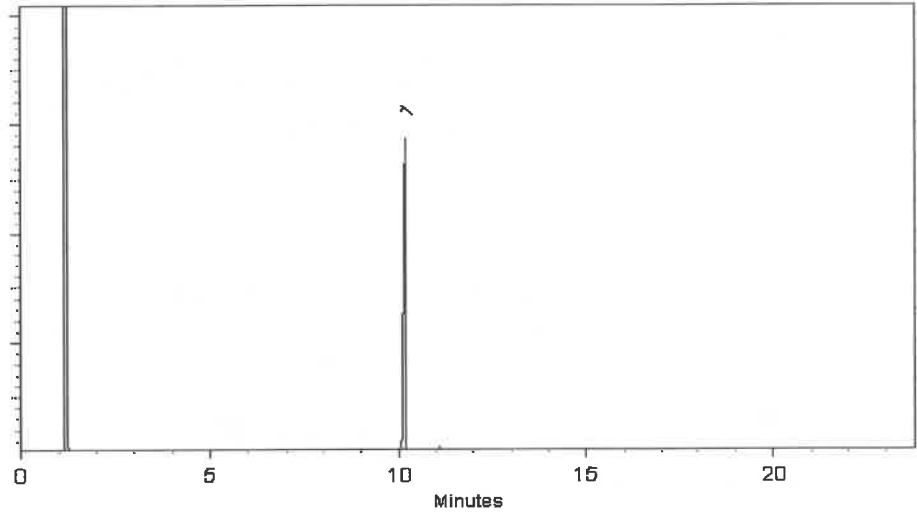
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Stacey Wanner - Operations Technician I

Date Mixed: 28-Jun-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- 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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Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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:

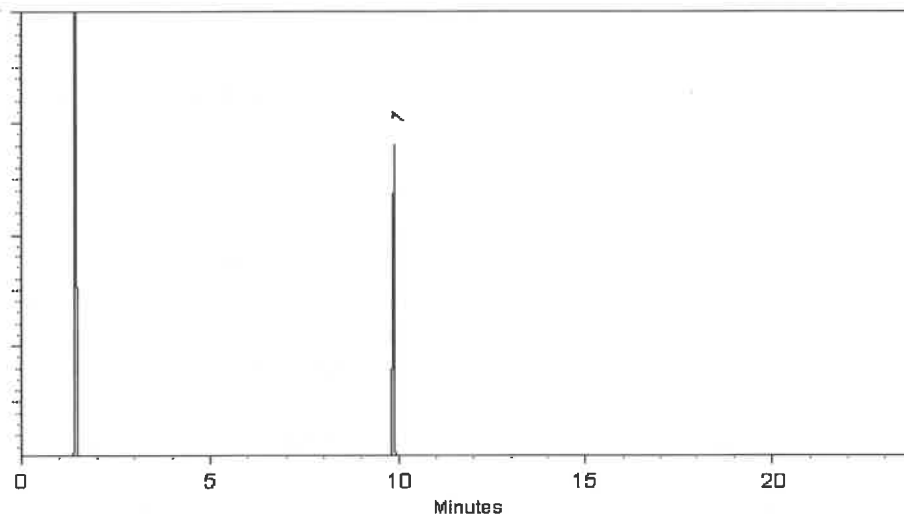
FID

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:

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Purity Notes:

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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Handling Notes:

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Catalog No. : 31097 **Lot No.:** A0216631
Description : o-Terphenyl Standard
o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul
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:

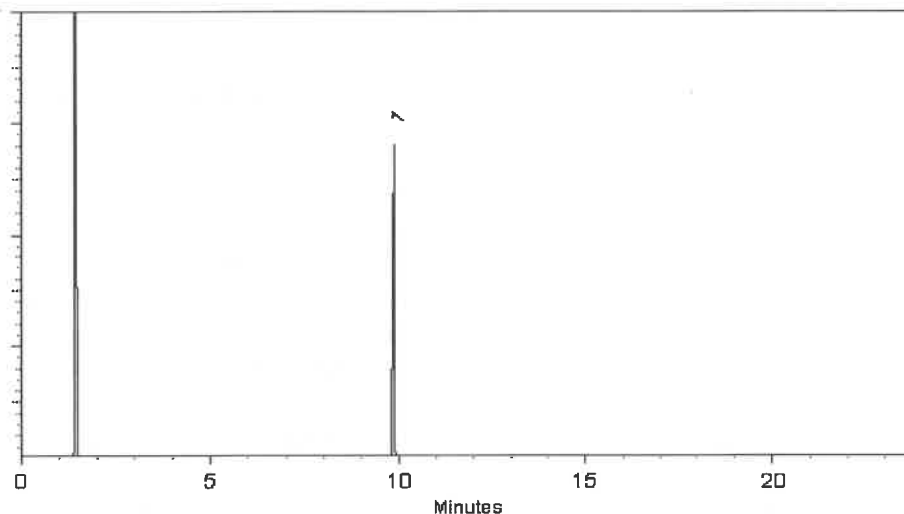
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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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:

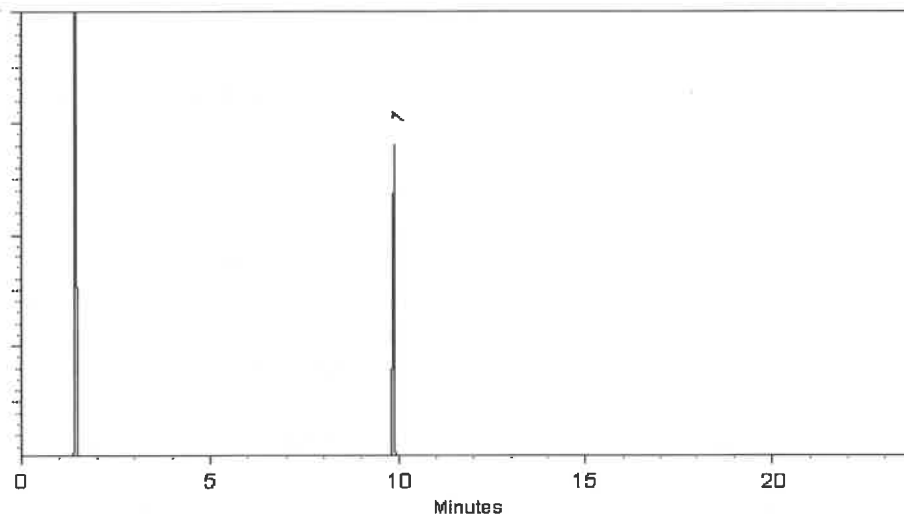
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
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General Certified Reference Material Notes

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o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul
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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)
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* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

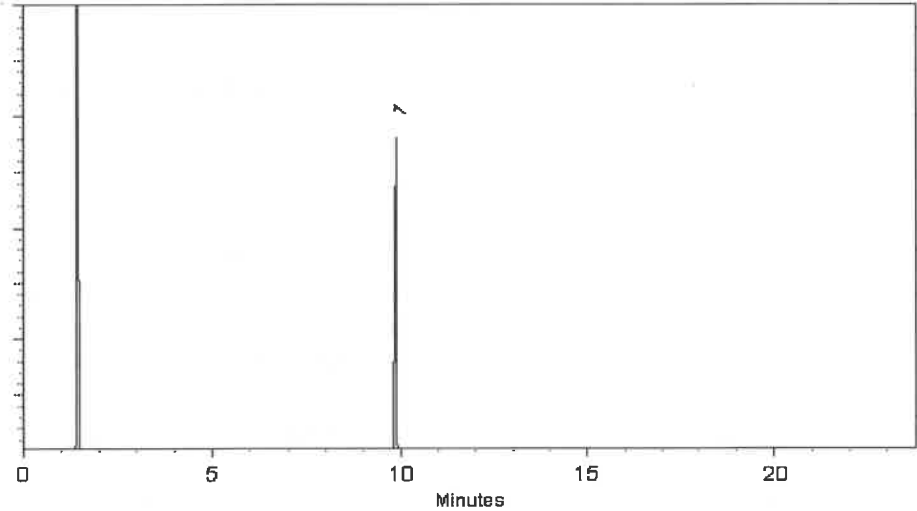
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

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

Catalog No. : 30543 **Lot No.:** A0211254

Description : NJEPH Aromatics Matrix Spike Mix

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

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

Expiration Date : April 30, 2030 **Storage:** 10°C or colder

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

P13408
↓
P13716 } Y.P.
10/26/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	200.0 µg/mL	+/- 9.0114
2	Naphthalene	91-20-3	STBL1057	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0316
4	Acenaphthylene	208-96-8	214935L31M	98%	200.3 µg/mL	+/- 9.0255
5	Acenaphthene	83-32-9	MKCR7169	99%	202.0 µg/mL	+/- 9.1015
6	Fluorene	86-73-7	10241100	99%	201.2 µg/mL	+/- 9.0655
7	Phenanthrene	85-01-8	MKCS5188	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCR0570	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCK2592	99%	201.2 µg/mL	+/- 9.0655
11	Benz(a)anthracene	56-55-3	I30012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP231206RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	012013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.0 µg/mL	+/- 9.0114
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.8 µg/mL	+/- 9.0033

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240105ECS	99%	200.8	µg/mL	+/- 9.0474

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rbx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

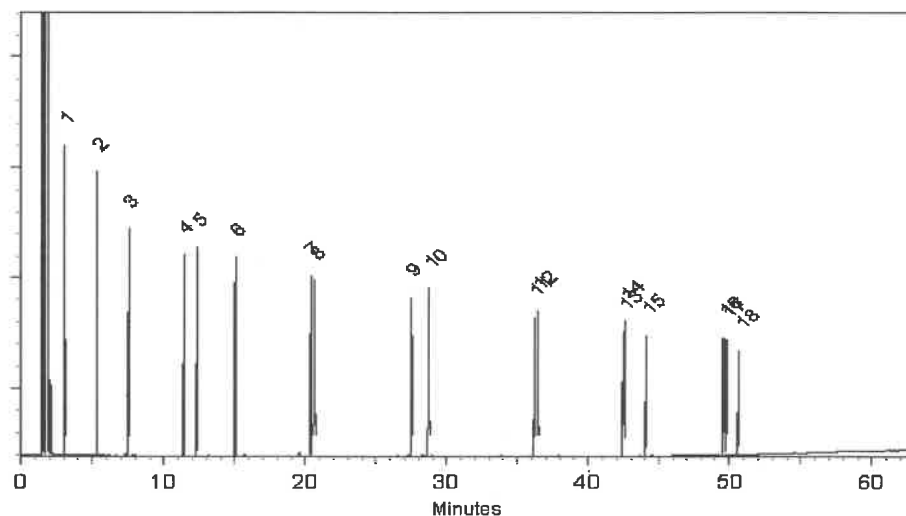
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Michael Maye
Michael Maye - Operations Tech I

Date Mixed: 09-May-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-May-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

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Catalog No. : 30543

Lot No.: A0211254

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : April 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13408
↓
P13716 } Y.P.
10/26/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	200.0 µg/mL	+/- 9.0114
2	Naphthalene	91-20-3	STBL1057	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0316
4	Acenaphthylene	208-96-8	214935L31M	98%	200.3 µg/mL	+/- 9.0255
5	Acenaphthene	83-32-9	MKCR7169	99%	202.0 µg/mL	+/- 9.1015
6	Fluorene	86-73-7	10241100	99%	201.2 µg/mL	+/- 9.0655
7	Phenanthrene	85-01-8	MKCS5188	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCR0570	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCK2592	99%	201.2 µg/mL	+/- 9.0655
11	Benz(a)anthracene	56-55-3	I30012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP231206RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	012013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.0 µg/mL	+/- 9.0114
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.8 µg/mL	+/- 9.0033

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240105ECS	99%	200.8	µg/mL	+/- 9.0474

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rbx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

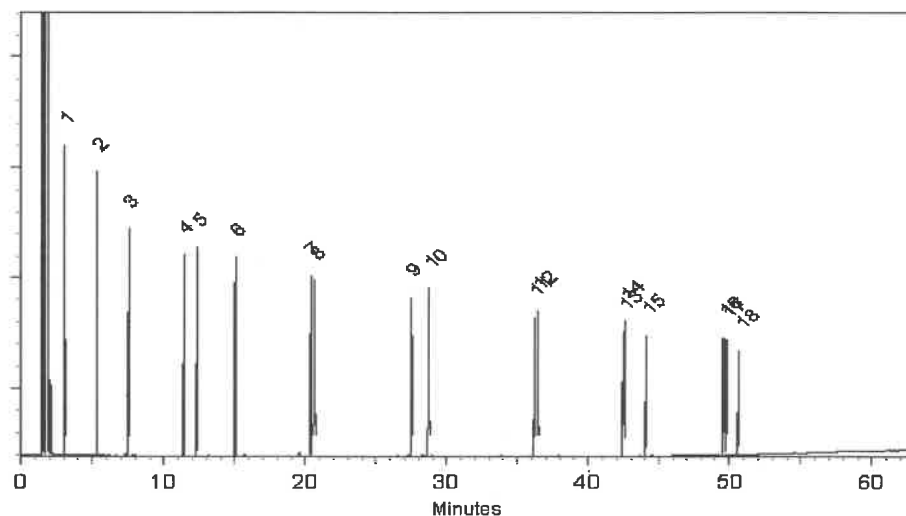
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Maye
Michael Maye - Operations Tech I

Date Mixed: 09-May-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-May-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543

Lot No.: A0211254

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : April 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13408
↓
P13716 } Y.P.
10/26/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	200.0 µg/mL	+/- 9.0114
2	Naphthalene	91-20-3	STBL1057	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0316
4	Acenaphthylene	208-96-8	214935L31M	98%	200.3 µg/mL	+/- 9.0255
5	Acenaphthene	83-32-9	MKCR7169	99%	202.0 µg/mL	+/- 9.1015
6	Fluorene	86-73-7	10241100	99%	201.2 µg/mL	+/- 9.0655
7	Phenanthrene	85-01-8	MKCS5188	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCR0570	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.8 µg/mL	+/- 9.0474
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11	Benz(a)anthracene	56-55-3	I30012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP231206RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	012013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.0 µg/mL	+/- 9.0114
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.8 µg/mL	+/- 9.0033

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240105ECS	99%	200.8	µg/mL	+/- 9.0474

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rbx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

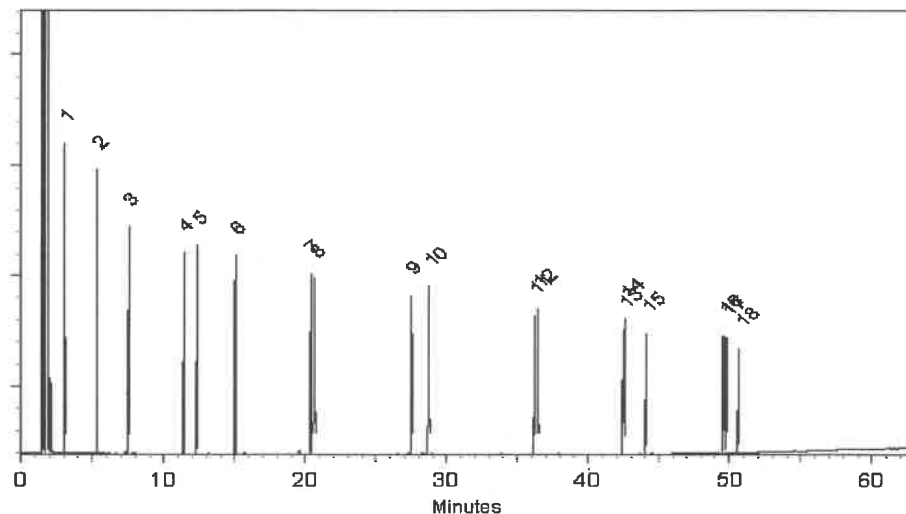
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Maye
Michael Maye - Operations Tech I

Date Mixed: 09-May-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-May-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543

Lot No.: A0211254

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : April 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13408
↓
P13716 } Y.P.
10/26/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	200.0 µg/mL	+/- 9.0114
2	Naphthalene	91-20-3	STBL1057	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0316
4	Acenaphthylene	208-96-8	214935L31M	98%	200.3 µg/mL	+/- 9.0255
5	Acenaphthene	83-32-9	MKCR7169	99%	202.0 µg/mL	+/- 9.1015
6	Fluorene	86-73-7	10241100	99%	201.2 µg/mL	+/- 9.0655
7	Phenanthrene	85-01-8	MKCS5188	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCR0570	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCK2592	99%	201.2 µg/mL	+/- 9.0655
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12	Chrysene	218-01-9	RP231206RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	012013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.0 µg/mL	+/- 9.0114
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.7 µg/mL	+/- 9.0431
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17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240105ECS	99%	200.8	µg/mL	+/- 9.0474

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

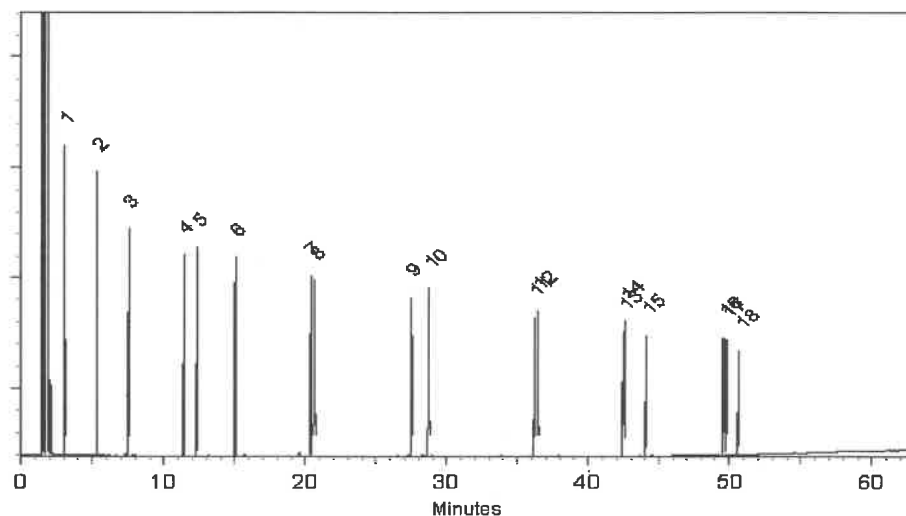
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Maye
Michael Maye - Operations Tech I

Date Mixed: 09-May-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-May-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

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Certified Uncertainty Value Notes:

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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

Catalog No. : 30543

Lot No.: A0211254

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : April 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13408
↓
P13716 } Y.P.
10/26/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	200.0 µg/mL	+/- 9.0114
2	Naphthalene	91-20-3	STBL1057	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0316
4	Acenaphthylene	208-96-8	214935L31M	98%	200.3 µg/mL	+/- 9.0255
5	Acenaphthene	83-32-9	MKCR7169	99%	202.0 µg/mL	+/- 9.1015
6	Fluorene	86-73-7	10241100	99%	201.2 µg/mL	+/- 9.0655
7	Phenanthrene	85-01-8	MKCS5188	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCR0570	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCK2592	99%	201.2 µg/mL	+/- 9.0655
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12	Chrysene	218-01-9	RP231206RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	012013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.0 µg/mL	+/- 9.0114
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.7 µg/mL	+/- 9.0431
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18	Benzo(g,h,i)perylene	191-24-2	RP240105ECS	99%	200.8	µg/mL	+/- 9.0474

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rbx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

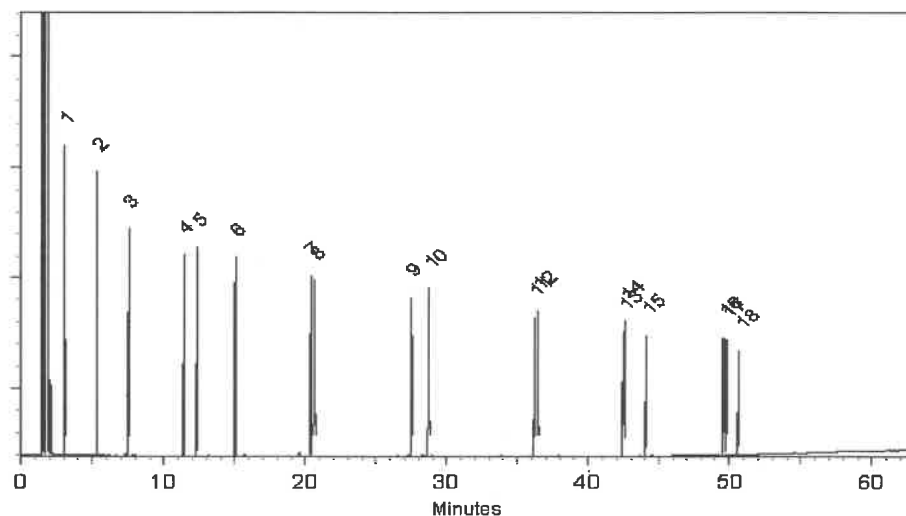
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Michael Maye
Michael Maye - Operations Tech I

Date Mixed: 09-May-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-May-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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Manufacturing Notes:

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Tel: 1-814-353-1300
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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Catalog No. : 30543

Lot No.: A0211254

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : April 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13408
↓
P13716 } Y.P.
10/26/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	200.0 µg/mL	+/- 9.0114
2	Naphthalene	91-20-3	STBL1057	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0316
4	Acenaphthylene	208-96-8	214935L31M	98%	200.3 µg/mL	+/- 9.0255
5	Acenaphthene	83-32-9	MKCR7169	99%	202.0 µg/mL	+/- 9.1015
6	Fluorene	86-73-7	10241100	99%	201.2 µg/mL	+/- 9.0655
7	Phenanthrene	85-01-8	MKCS5188	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCR0570	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCK2592	99%	201.2 µg/mL	+/- 9.0655
11	Benz(a)anthracene	56-55-3	I30012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP231206RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	012013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.0 µg/mL	+/- 9.0114
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.8 µg/mL	+/- 9.0033

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240105ECS	99%	200.8	µg/mL	+/- 9.0474

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rbx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

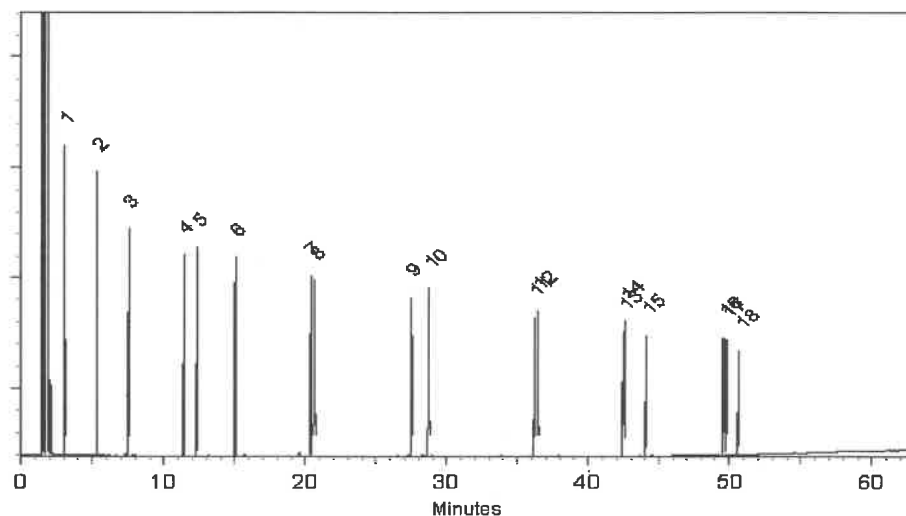
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Maye
Michael Maye - Operations Tech I

Date Mixed: 09-May-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-May-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0217408

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

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

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

Handling: Sonicate prior to use. **Ship:** Ambient

P13800
↓
P13829 } YIP
12/09/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.7 µg/mL	+/- 5.1839
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.0 µg/mL	+/- 5.1917
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.5 µg/mL	+/- 5.1805
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.5 µg/mL	+/- 5.1805
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.7 µg/mL	+/- 5.1857
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1857
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.9 µg/mL	+/- 5.1888
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.5 µg/mL	+/- 5.1805
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.5 µg/mL	+/- 5.1788
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.6 µg/mL	+/- 5.1822
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.6 µg/mL	+/- 5.1822
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.1 µg/mL	+/- 5.1942
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.9 µg/mL	+/- 5.1891
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.8 µg/mL	+/- 5.1865
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	199.3 µg/mL	+/- 5.1477

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
 30m x 0.25mm x 0.25µm
 Rtx-5 (cat.#10223)
Carrier Gas:
 hydrogen-constant pressure 10 psi.

Temp. Program:
 40°C (hold 2 min.) to 330°C
 @ 10°C/min. (hold 10 min.)

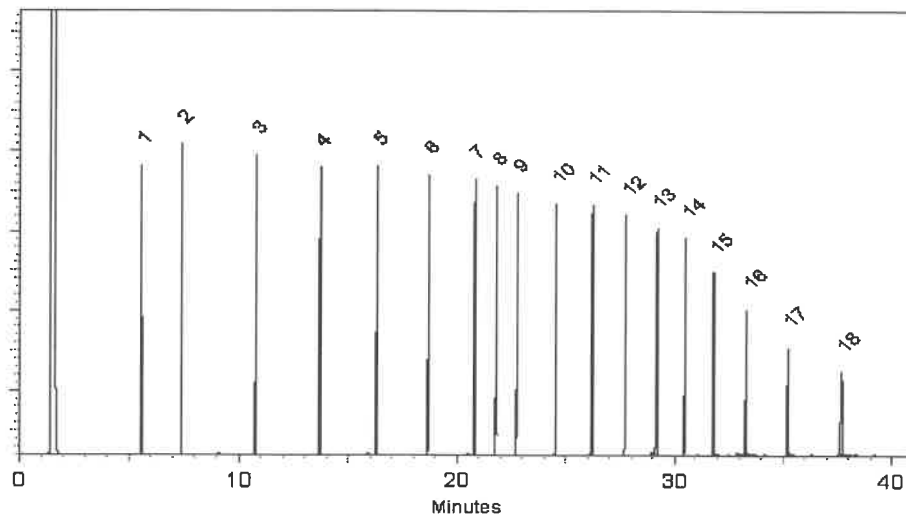
Inj. Temp:
 250°C

Det. Temp:
 330°C

Det. Type:
 FID

Split Vent:
 2 ml/min.

Inj. Vol
 1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope S. Riglin
 Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino
 Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0217408

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

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

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

Handling: Sonicate prior to use. **Ship:** Ambient

P13800
↓
P13829 } YIP
12/09/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.7 µg/mL	+/- 5.1839
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.0 µg/mL	+/- 5.1917
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.5 µg/mL	+/- 5.1805
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.5 µg/mL	+/- 5.1805
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.7 µg/mL	+/- 5.1857
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1857
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.9 µg/mL	+/- 5.1888
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.5 µg/mL	+/- 5.1805
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.5 µg/mL	+/- 5.1788
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.6 µg/mL	+/- 5.1822
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.6 µg/mL	+/- 5.1822
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.1 µg/mL	+/- 5.1942
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.9 µg/mL	+/- 5.1891
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.8 µg/mL	+/- 5.1865
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	199.3 µg/mL	+/- 5.1477

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
 30m x 0.25mm x 0.25µm
 Rtx-5 (cat.#10223)
Carrier Gas:
 hydrogen-constant pressure 10 psi.

Temp. Program:
 40°C (hold 2 min.) to 330°C
 @ 10°C/min. (hold 10 min.)

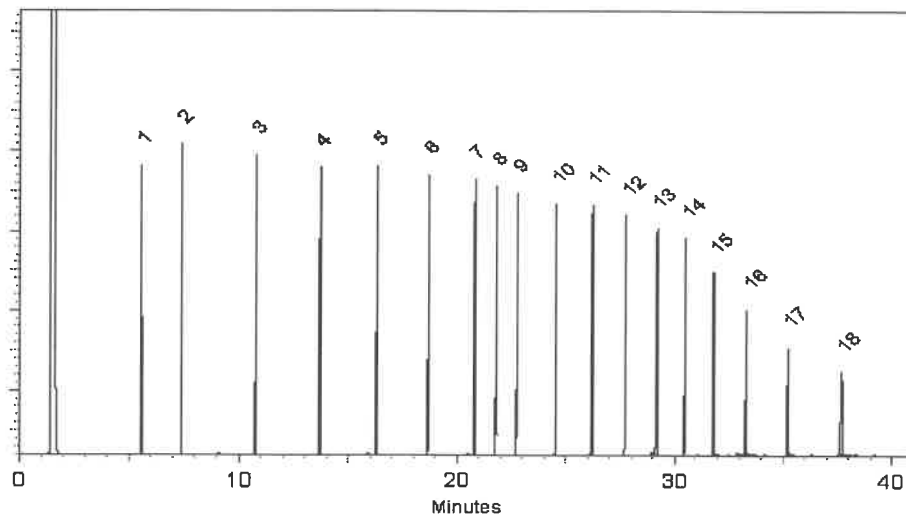
Inj. Temp:
 250°C

Det. Temp:
 330°C

Det. Type:
 FID

Split Vent:
 2 ml/min.

Inj. Vol
 1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope S. Riglin
 Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino
 Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0217408

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

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

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

Handling: Sonicate prior to use. **Ship:** Ambient

P13800
↓
P13829 } YIP
12/09/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.7 µg/mL	+/- 5.1839
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.0 µg/mL	+/- 5.1917
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.5 µg/mL	+/- 5.1805
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.5 µg/mL	+/- 5.1805
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.7 µg/mL	+/- 5.1857
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1857
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.9 µg/mL	+/- 5.1888
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.5 µg/mL	+/- 5.1805
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.5 µg/mL	+/- 5.1788
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.6 µg/mL	+/- 5.1822
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.6 µg/mL	+/- 5.1822
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.1 µg/mL	+/- 5.1942
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.9 µg/mL	+/- 5.1891
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.8 µg/mL	+/- 5.1865
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	199.3 µg/mL	+/- 5.1477

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
 30m x 0.25mm x 0.25µm
 Rtx-5 (cat.#10223)
Carrier Gas:
 hydrogen-constant pressure 10 psi.

Temp. Program:
 40°C (hold 2 min.) to 330°C
 @ 10°C/min. (hold 10 min.)

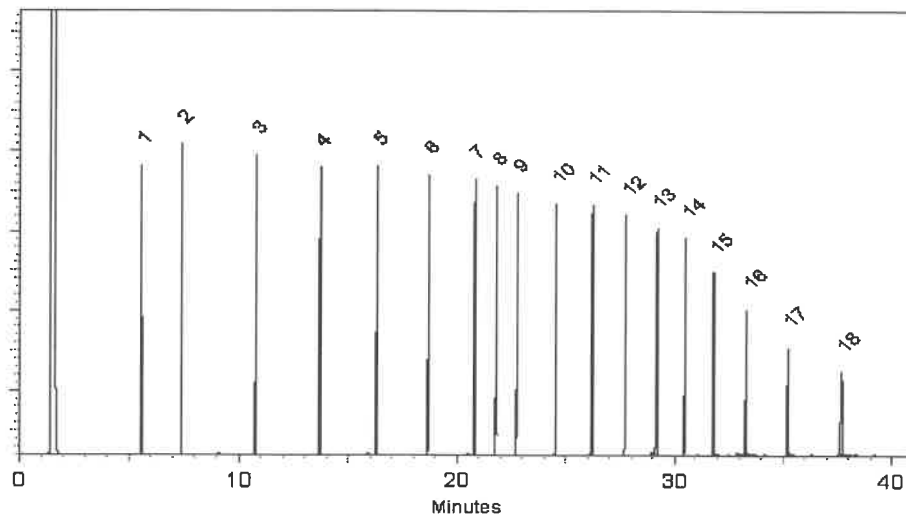
Inj. Temp:
 250°C

Det. Temp:
 330°C

Det. Type:
 FID

Split Vent:
 2 ml/min.

Inj. Vol
 1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope S. Riglin
 Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino
 Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0217408

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

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

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

Handling: Sonicate prior to use. **Ship:** Ambient

P13896
↓
P13906 } Y.P.
03/06/25

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%	200.7 µg/mL	+/- 5.1839
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.0 µg/mL	+/- 5.1917
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.5 µg/mL	+/- 5.1805
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.5 µg/mL	+/- 5.1805
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.7 µg/mL	+/- 5.1857
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1857
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.9 µg/mL	+/- 5.1888
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.5 µg/mL	+/- 5.1805
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.5 µg/mL	+/- 5.1788
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.6 µg/mL	+/- 5.1822
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.6 µg/mL	+/- 5.1822
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.1 µg/mL	+/- 5.1942
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.9 µg/mL	+/- 5.1891
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.8 µg/mL	+/- 5.1865
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	199.3 µg/mL	+/- 5.1477

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

Solvent: n-Pentane**CAS #** 109-66-0**Purity** 99%

Quality Confirmation Test

Column:30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)**Carrier Gas:**

hydrogen-constant pressure 10 psi.

Temp. Program:40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)**Inj. Temp:**

250°C

Det. Temp:

330°C

Det. Type:

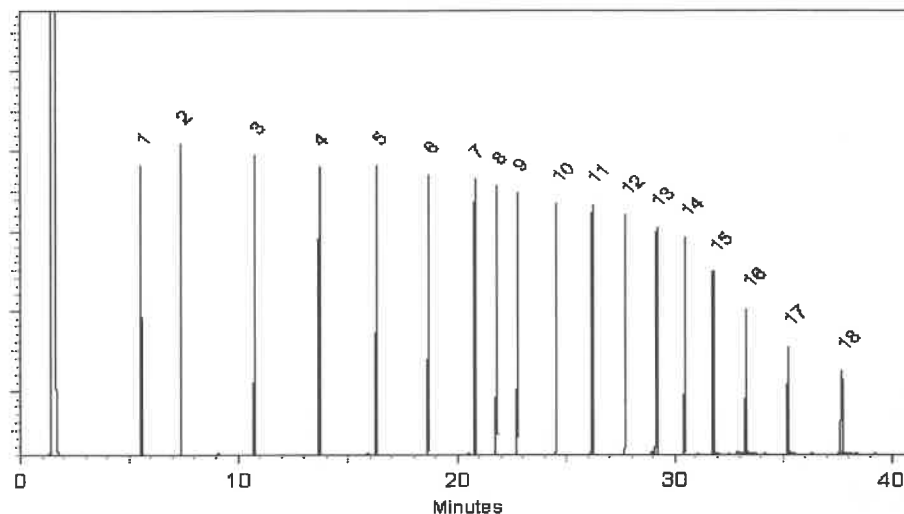
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope B. Riglin
Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024**Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0217408

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

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

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

Handling: Sonicate prior to use. **Ship:** Ambient

P13896
↓
P13906 } Y.P.
03/06/25

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%	200.7 µg/mL	+/- 5.1839
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.0 µg/mL	+/- 5.1917
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.5 µg/mL	+/- 5.1805
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.5 µg/mL	+/- 5.1805
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.7 µg/mL	+/- 5.1857
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1857
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.9 µg/mL	+/- 5.1888
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.5 µg/mL	+/- 5.1805
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.5 µg/mL	+/- 5.1788
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.6 µg/mL	+/- 5.1822
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.6 µg/mL	+/- 5.1822
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.1 µg/mL	+/- 5.1942
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.9 µg/mL	+/- 5.1891
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.8 µg/mL	+/- 5.1865
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	199.3 µg/mL	+/- 5.1477

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

Solvent: n-Pentane**CAS #** 109-66-0**Purity** 99%

Quality Confirmation Test

Column:30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)**Carrier Gas:**

hydrogen-constant pressure 10 psi.

Temp. Program:40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)**Inj. Temp:**

250°C

Det. Temp:

330°C

Det. Type:

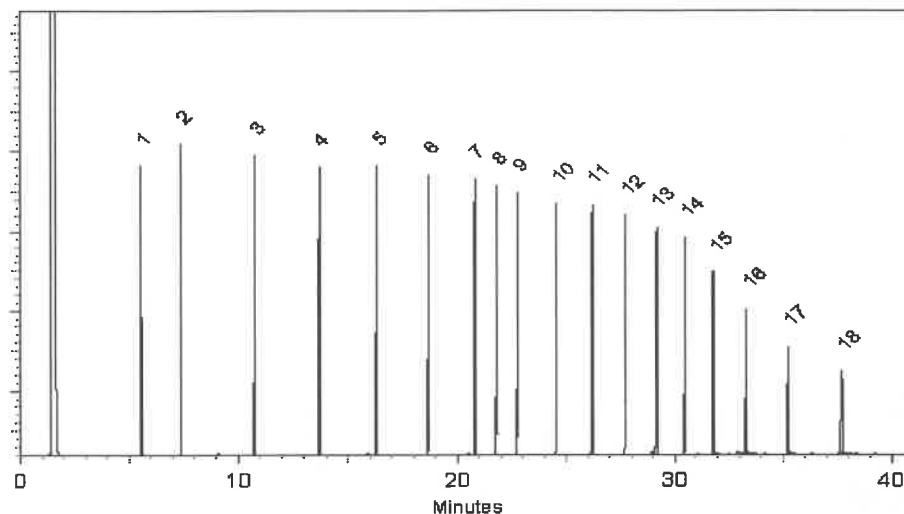
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope B. Riglin
Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024**Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0220449

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 : January 31, 2032 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13909
↓
P1395 } Y.P.
03106/25

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%	201.3 µg/mL	+/- 5.2012
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.7 µg/mL	+/- 5.2098
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	201.3 µg/mL	+/- 5.2012
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.3 µg/mL	+/- 5.1753
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1839
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.1 µg/mL	+/- 5.1704
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.7 µg/mL	+/- 5.1839
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.3 µg/mL	+/- 5.1753
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	201.3 µg/mL	+/- 5.2012
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	201.0 µg/mL	+/- 5.1926
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.3 µg/mL	+/- 5.1753
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.2 µg/mL	+/- 5.1984
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	201.7 µg/mL	+/- 5.2098
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	201.3 µg/mL	+/- 5.2012
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	201.7 µg/mL	+/- 5.2098
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	201.6 µg/mL	+/- 5.2081

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

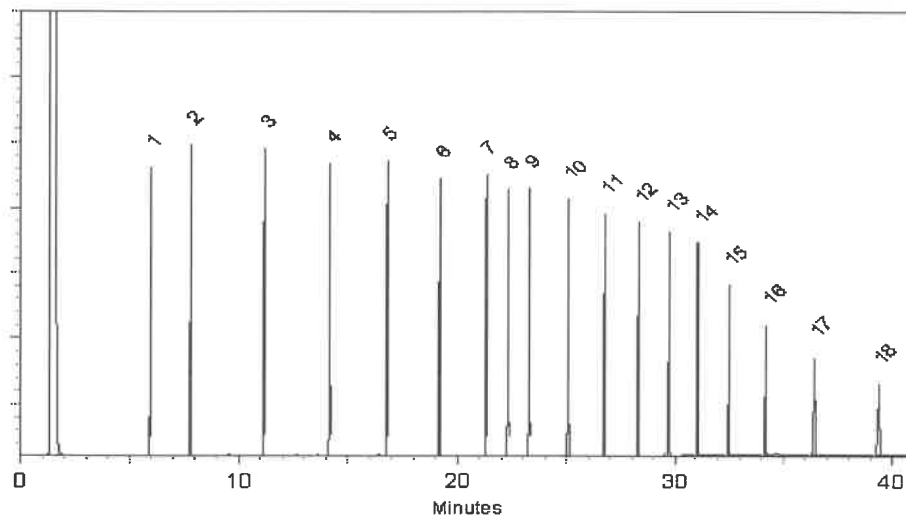
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish
Brandon Reish - Operations Technician III

Date Mixed: 23-Dec-2024 **Balance Serial #** C322230531

Dillon Murphy
Dillon Murphy - Operations Technician I

Date Passed: 27-Dec-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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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.: A0220580

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 : November 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13916 } Y.P.
↓
P13935 } 08/06/25

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%	201.9 µg/mL	+/- 9.0961
2	Naphthalene	91-20-3	STBL1057	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	RP241029RSR	98%	201.9 µg/mL	+/- 9.0961
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.9 µg/mL	+/- 9.0961
7	Phenanthrene	85-01-8	MKCT3391	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	MKCW9141	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCL8032	99%	201.6 µg/mL	+/- 9.0835
11	Benz(a)anthracene	56-55-3	I220012022BAA	99%	202.0 µg/mL	+/- 9.1015
12	Chrysene	218-01-9	RP240719RSR	99%	202.0 µg/mL	+/- 9.1015
13	Benzo(b)fluoranthene	205-99-2	SBS-BBF-FINAL-2	99%	202.0 µg/mL	+/- 9.1015
14	Benzo(k)fluoranthene	207-08-9	012022K	98%	201.5 µg/mL	+/- 9.0784
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	201.2 µg/mL	+/- 9.0655
18	Benzo(g,h,i)perylene	191-24-2	RP241014RSR	98%	200.3 µg/mL	+/- 9.0255

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

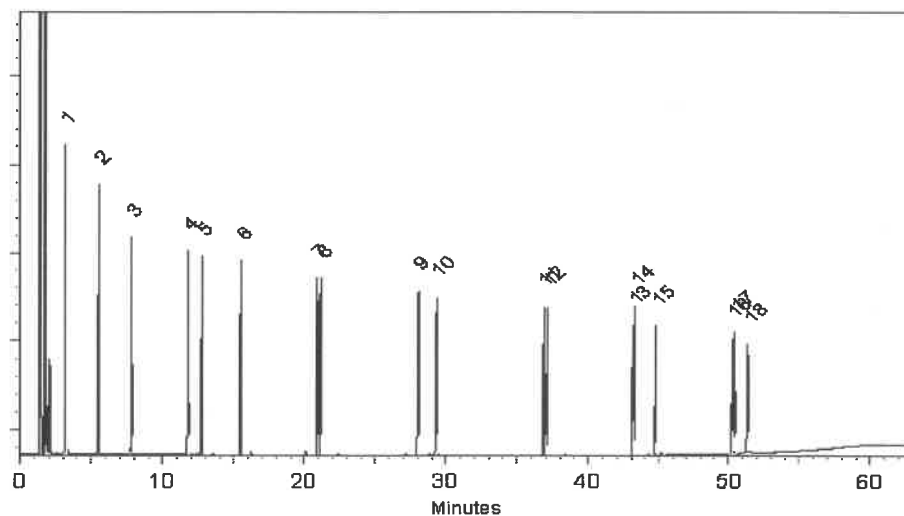
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

VenKelley
Ven Kelley - Operations Tech I

Date Mixed: 30-Dec-2024 **Balance Serial #** 1128360905

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 03-Jan-2025

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543

Lot No.: A0220580

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 : November 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13916 } Y.P.
↓
P13935 } 08/06/25

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%	201.9 µg/mL	+/- 9.0961
2	Naphthalene	91-20-3	STBL1057	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	RP241029RSR	98%	201.9 µg/mL	+/- 9.0961
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.9 µg/mL	+/- 9.0961
7	Phenanthrene	85-01-8	MKCT3391	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	MKCW9141	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCL8032	99%	201.6 µg/mL	+/- 9.0835
11	Benz(a)anthracene	56-55-3	I220012022BAA	99%	202.0 µg/mL	+/- 9.1015
12	Chrysene	218-01-9	RP240719RSR	99%	202.0 µg/mL	+/- 9.1015
13	Benzo(b)fluoranthene	205-99-2	SBS-BBF-FINAL-2	99%	202.0 µg/mL	+/- 9.1015
14	Benzo(k)fluoranthene	207-08-9	012022K	98%	201.5 µg/mL	+/- 9.0784
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	201.2 µg/mL	+/- 9.0655
18	Benzo(g,h,i)perylene	191-24-2	RP241014RSR	98%	200.3 µg/mL	+/- 9.0255

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

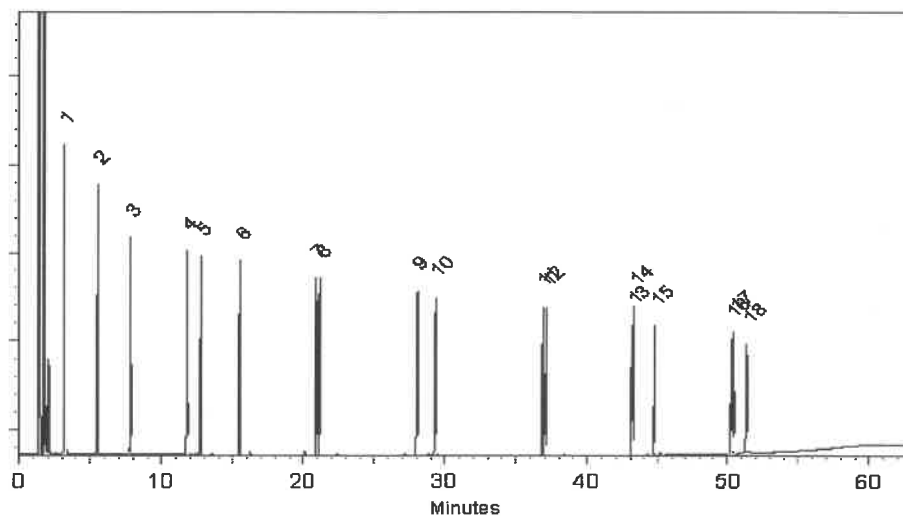
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

VenKelley
Ven Kelley - Operations Tech I

Date Mixed: 30-Dec-2024 **Balance Serial #** 1128360905

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 03-Jan-2025

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0220449

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 : January 31, 2032 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13978 } RC/
↓
P13987 } 04/24/25

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%	201.3 µg/mL	+/- 5.2012
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.7 µg/mL	+/- 5.2098
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	201.3 µg/mL	+/- 5.2012
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.3 µg/mL	+/- 5.1753
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1839
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.1 µg/mL	+/- 5.1704
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.7 µg/mL	+/- 5.1839
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.3 µg/mL	+/- 5.1753
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	201.3 µg/mL	+/- 5.2012
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	201.0 µg/mL	+/- 5.1926
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.3 µg/mL	+/- 5.1753
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.2 µg/mL	+/- 5.1984
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	201.7 µg/mL	+/- 5.2098
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	201.3 µg/mL	+/- 5.2012
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	201.7 µg/mL	+/- 5.2098
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	201.6 µg/mL	+/- 5.2081

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

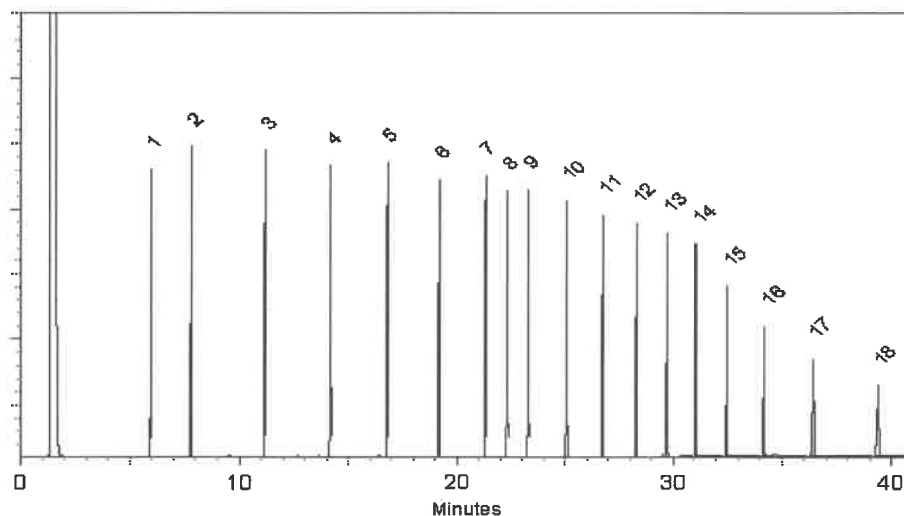
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

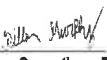
Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Brandon Reish - Operations Technician III

Date Mixed: 23-Dec-2024 **Balance Serial #** C322230531


Dillan Murphy - Operations Technician I

Date Passed: 27-Dec-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0220449

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 : January 31, 2032 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13978 } RC/
↓
P13987 } 04/24/25

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%	201.3 µg/mL	+/- 5.2012
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.7 µg/mL	+/- 5.2098
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	201.3 µg/mL	+/- 5.2012
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.3 µg/mL	+/- 5.1753
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1839
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.1 µg/mL	+/- 5.1704
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.7 µg/mL	+/- 5.1839
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.3 µg/mL	+/- 5.1753
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	201.3 µg/mL	+/- 5.2012
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	201.0 µg/mL	+/- 5.1926
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.3 µg/mL	+/- 5.1753
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.2 µg/mL	+/- 5.1984
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	201.7 µg/mL	+/- 5.2098
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	201.3 µg/mL	+/- 5.2012
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	201.7 µg/mL	+/- 5.2098
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	201.6 µg/mL	+/- 5.2081

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

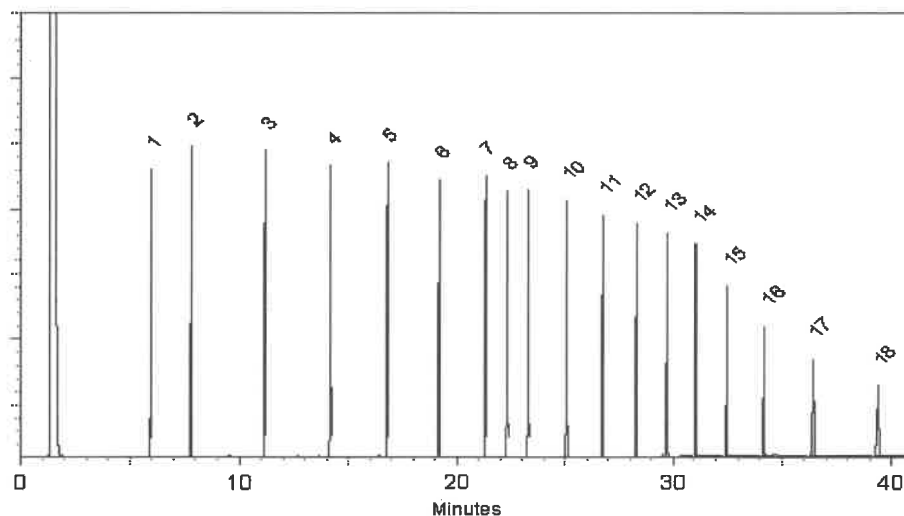
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Brandon Reish - Operations Technician III

Date Mixed: 23-Dec-2024 **Balance Serial #** C322230531


Dillan Murphy - Operations Technician I

Date Passed: 27-Dec-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0220449

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 : January 31, 2032 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13978 } RC/
↓
P13987 } 04/24/25

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%	201.3 µg/mL	+/- 5.2012
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.7 µg/mL	+/- 5.2098
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	201.3 µg/mL	+/- 5.2012
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.3 µg/mL	+/- 5.1753
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1839
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.1 µg/mL	+/- 5.1704
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.7 µg/mL	+/- 5.1839
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.3 µg/mL	+/- 5.1753
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	201.3 µg/mL	+/- 5.2012
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	201.0 µg/mL	+/- 5.1926
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.3 µg/mL	+/- 5.1753
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.2 µg/mL	+/- 5.1984
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	201.7 µg/mL	+/- 5.2098
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	201.3 µg/mL	+/- 5.2012
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	201.7 µg/mL	+/- 5.2098
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	201.6 µg/mL	+/- 5.2081

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

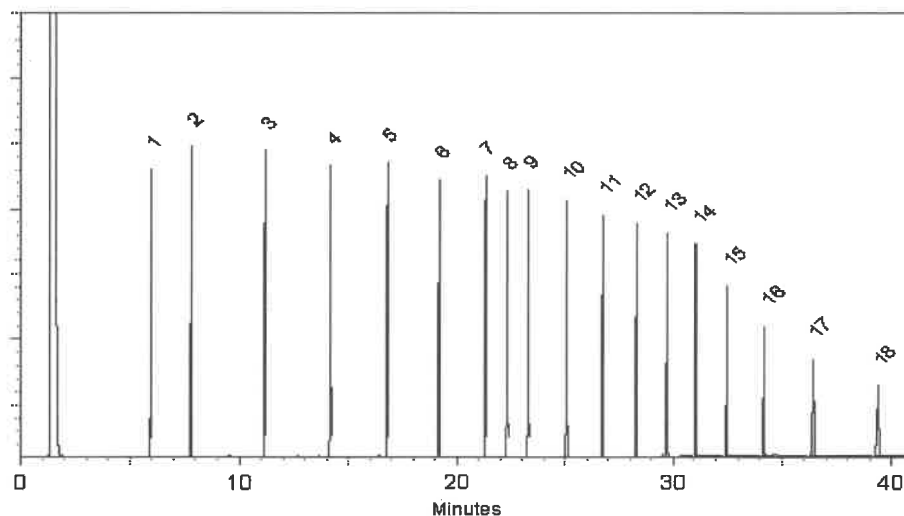
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

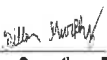
Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Brandon Reish - Operations Technician III

Date Mixed: 23-Dec-2024 **Balance Serial #** C322230531


Dillan Murphy - Operations Technician I

Date Passed: 27-Dec-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



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

Catalog No. : 30542 **Lot No.:** A0220449

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 : January 31, 2032 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13978 } RC/
↓
P13987 } 04/24/25

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%	201.3 µg/mL	+/- 5.2012
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.7 µg/mL	+/- 5.2098
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	201.3 µg/mL	+/- 5.2012
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.3 µg/mL	+/- 5.1753
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1839
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.1 µg/mL	+/- 5.1704
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.7 µg/mL	+/- 5.1839
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.3 µg/mL	+/- 5.1753
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	201.3 µg/mL	+/- 5.2012
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	201.0 µg/mL	+/- 5.1926
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.3 µg/mL	+/- 5.1753
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.2 µg/mL	+/- 5.1984
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	201.7 µg/mL	+/- 5.2098
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	201.3 µg/mL	+/- 5.2012
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	201.7 µg/mL	+/- 5.2098
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	201.6 µg/mL	+/- 5.2081

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

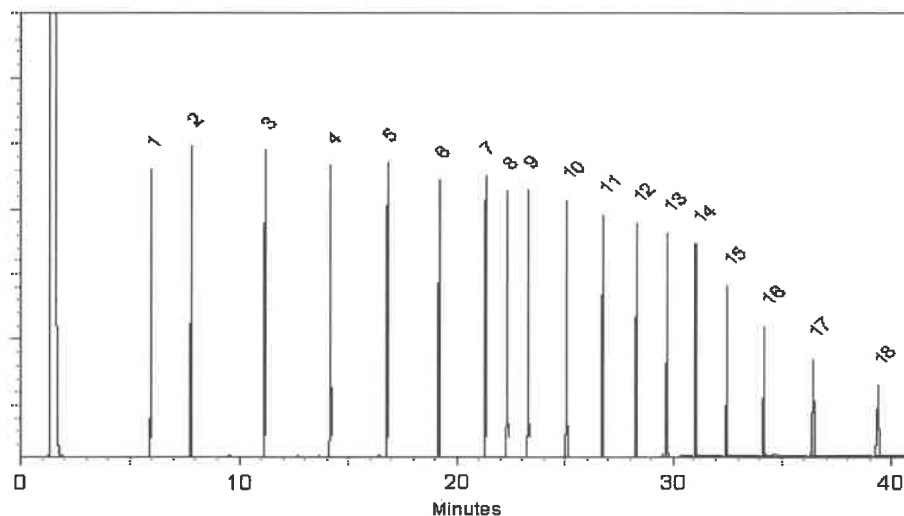
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Brandon Reish - Operations Technician III

Date Mixed: 23-Dec-2024 **Balance Serial #** C322230531


Dillan Murphy - Operations Technician I

Date Passed: 27-Dec-2024

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.

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Catalog No. : 30543 **Lot No.:** A0220580

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 : November 30, 2030 **Storage:** 10°C or colder

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

P13988 } RC/
↓
P13993 } 4/25/25

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%	201.9 µg/mL	+/- 9.0961
2	Naphthalene	91-20-3	STBL1057	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	RP241029RSR	98%	201.9 µg/mL	+/- 9.0961
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.9 µg/mL	+/- 9.0961
7	Phenanthrene	85-01-8	MKCT3391	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	MKCW9141	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCL8032	99%	201.6 µg/mL	+/- 9.0835
11	Benz(a)anthracene	56-55-3	I220012022BAA	99%	202.0 µg/mL	+/- 9.1015
12	Chrysene	218-01-9	RP240719RSR	99%	202.0 µg/mL	+/- 9.1015
13	Benzo(b)fluoranthene	205-99-2	SBS-BBF-FINAL-2	99%	202.0 µg/mL	+/- 9.1015
14	Benzo(k)fluoranthene	207-08-9	012022K	98%	201.5 µg/mL	+/- 9.0784
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

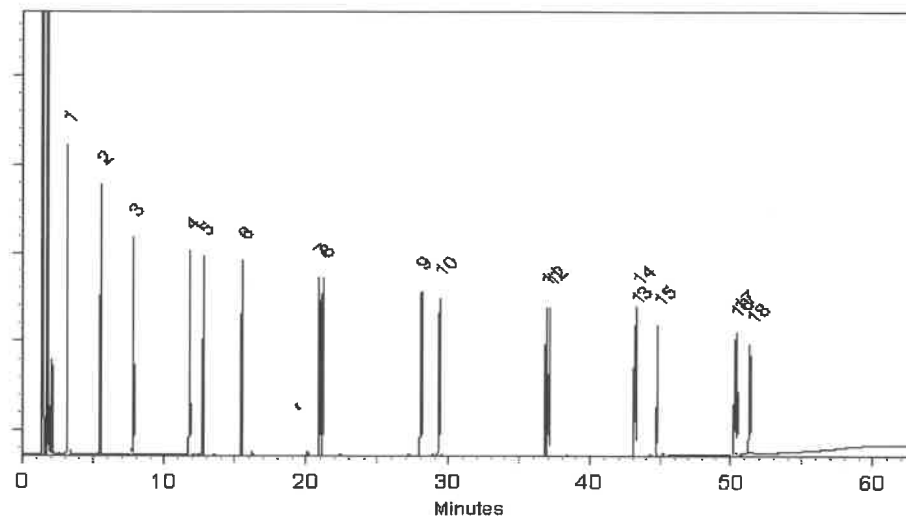
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	201.2 µg/mL	+/- 9.0655
18	Benzo(g,h,i)perylene	191-24-2	RP241014RSR	98%	200.3 µg/mL	+/- 9.0255

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.
Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)
Inj. Temp:
250°C
Det. Temp:
330°C
Det. Type:
FID
Split Vent:
20 ml/min.
Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

VenKelley
Ven Kelley - Operations Tech I

Date Mixed: 30-Dec-2024 **Balance Serial #** 1128360905

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 03-Jan-2025

**Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397**



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0220580

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 : November 30, 2030 **Storage:** 10°C or colder

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

P13988 } RC/
↓
P13993 } 4/25/25

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%	201.9 µg/mL	+/- 9.0961
2	Naphthalene	91-20-3	STBL1057	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	RP241029RSR	98%	201.9 µg/mL	+/- 9.0961
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.9 µg/mL	+/- 9.0961
7	Phenanthrene	85-01-8	MKCT3391	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	MKCW9141	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCL8032	99%	201.6 µg/mL	+/- 9.0835
11	Benz(a)anthracene	56-55-3	I220012022BAA	99%	202.0 µg/mL	+/- 9.1015
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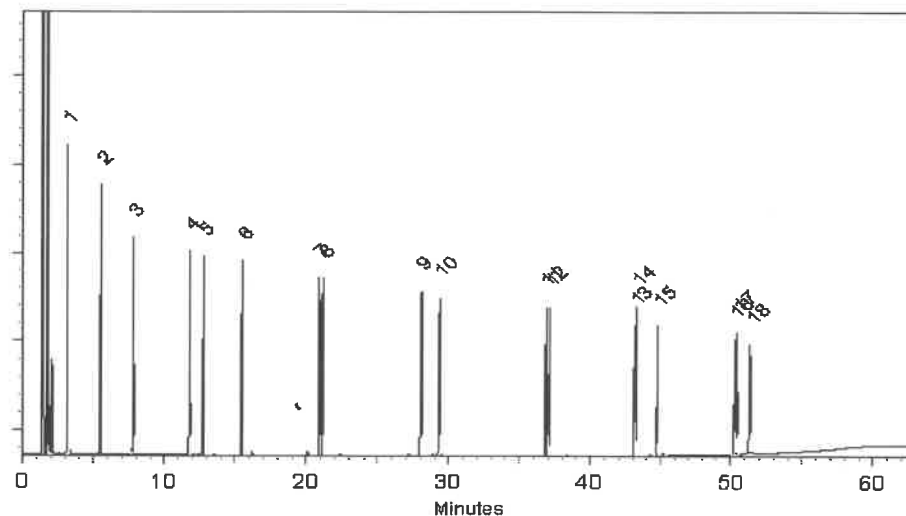
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Purity 99%

Quality Confirmation Test

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Det. Temp:
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Det. Type:
FID
Split Vent:
20 ml/min.
Inj. Vol
1µl



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VenKelley
Ven Kelley - Operations Tech I

Date Mixed: 30-Dec-2024 **Balance Serial #** 1128360905

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 03-Jan-2025

**Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397**

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



Material No.: 9262-03
Batch No.: 24G1962003
Manufactured Date: 2024-05-23
Expiration Date: 2025-08-22
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	3
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	1
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	$\geq 99.5 \%$	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	98 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	$\leq 0.05 \%$	< 0.01 %

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

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production



SHIPPING DOCUMENTS

CLIENT INFORMATION

COMPANY: GECP Inc
ADDRESS: 8 CARRAGE
CITY: Succasunna STATE: NJ ZIP:
ATTENTION: GL
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: De Camp
PROJECT NO.: LOCATION: NJ
PROJECT MANAGER: GL
e-mail:
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: GECP Inc PO#:
ADDRESS: 8 CARRAGE
CITY: Succasunna STATE: NJ ZIP:
ATTENTION: PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) 5 days DAYS*
HARDCOPY DATA PACKAGE: Standard DAYS*
EDD: Standard 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
☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B
+ Raw Data ☐ Other SEP excel
☒ EDD FORMAT hasite add NJ dep

EPH (at 1)
(containing 2 methanols)
Naphthalene

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER	
1.	D3	Soil		X	6/2/25	0945	1	X										
2.	D4					0956	1	X										
3.	D5					1100	1	X										
4.	D6	Soil		X	6/2/25	1125	1	X										
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

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

RELINQUISHED BY SAMPLER:	DATE/TIME: <u>1220</u>	RECEIVED BY:	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP <u>21.0</u> °C
1. <u>AK</u>	<u>6/2/25</u>	1. <u>[Signature]</u>	Comments: <u>5-day EPH Car 1 (then depending on results 2 methanols/Naphthalene)</u>
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
2.		2.	
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
3.		3.	

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488