

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:	Q2174	OrderDate:	5/30/2025 2:11:38 PM
Client:	G Environmental	Project:	DeCamp
Contact:	Gary Landis	Location:	L41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2174-01	DP1	Solid	EPH_F2	NJEPH	05/30/25	06/03/25	06/03/25	05/30/25
Q2174-02	D1	Solid	EPH_F2	NJEPH	05/30/25	06/03/25	06/03/25	05/30/25
Q2174-03	D2	Solid	EPH_F2	NJEPH	05/30/25	06/03/25	06/03/25	05/30/25



QC SUMMARY

SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: GENV01
Lab Code: CHEM CASE No.: Q2174 SAS No.: Q2174 SDG No.: Q2174
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
DP1	61	56		0
D1	60	56		0
D2	43	42		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

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>Q2174</u>	SAS No :	<u>Q2174</u>
				SDG No:	<u>Q2174</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>Q2174</u>	SAS No : <u>Q2174</u> SDG No: <u>Q2174</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:** Q2174 **SAS No :** Q2174 **SDG No:** Q2174
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>Q2174</u>	SAS No :	<u>Q2174</u>
		SDG No:	<u>Q2174</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.: Q2174

SAS No.: Q2174 SDG NO.: Q2174

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
DP1	Q2174-01
D1	Q2174-02
D2	Q2174-03

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	G Environmental	Date Collected:	05/30/25
Project:	DeCamp	Date Received:	05/30/25
Client Sample ID:	DP1	SDG No.:	Q2174
Lab Sample ID:	Q2174-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	96.4
Sample Wt/Vol:	30.08	Units:	g
Soil Aliquot Vol:			uL
Prep Method :		Final Vol:	2000
		Test:	EPH_F2

Prep Date :	Date Analyzed :	Prep Batch ID
06/03/25 10:00	06/03/25 18:56	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	3.63	J	1	0.94	4.13	mg/kg	FE054159.D
Total EPH	Total EPH	3.63	J		0.94	4.13	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:	05/30/25
Project:	DeCamp	Date Received:	05/30/25
Client Sample ID:	DP1	SDG No.:	Q2174
Lab Sample ID:	Q2174-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	96.4
Sample Wt/Vol:	30.08 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
FE054159.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	3.63	J	0.94	4.13	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	11.1		1.22	2.07	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	30.4		40 - 140	61%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	28.2		40 - 140	56%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2174-01	Acq On:	03 Jun 2025 18:56
Client Sample ID:	DP1	Operator:	YP\AJ
Data file:	FE054159.D	Misc:	
Instrument:	FID_E	ALS Vial:	16
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.085	6.730	204265	1.507	300	ug/ml
Aliphatic C12-C16	6.731	10.178	450912	3.342	200	ug/ml
Aliphatic C16-C21	10.179	13.552	5422173	41.105	300	ug/ml
Aliphatic C21-C28	13.553	17.220	1006690	8.107	400	ug/ml
Aliphatic C28-C40	17.221	22.091	18597966	161.118	600	ug/ml
Aliphatic EPH	3.085	22.091	25682006	215.178		ug/ml
ortho-Terphenyl (SURR)	11.837	11.837	4579984	28.18		ug/ml
1-chlorooctadecane (SURR)	13.282	13.282	3606997	30.43		ug/ml
Aliphatic C9-C28	3.085	17.220	7084040	54.061	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054159.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 18:56
Operator : YP\AJ
Sample : Q2174-01
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
DP1

Integration File: autoint1.e
Quant Time: Jun 04 02:54:02 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	4579984	28.182 ug/ml
Spiked Amount	50.000	Recovery	= 56.36%
12) S 1-chlorooctadecane (S...	13.282	3606997	30.426 ug/ml
Spiked Amount	50.000	Recovery	= 60.85%

Target Compounds

(f)=RT Delta > 1/2 Window

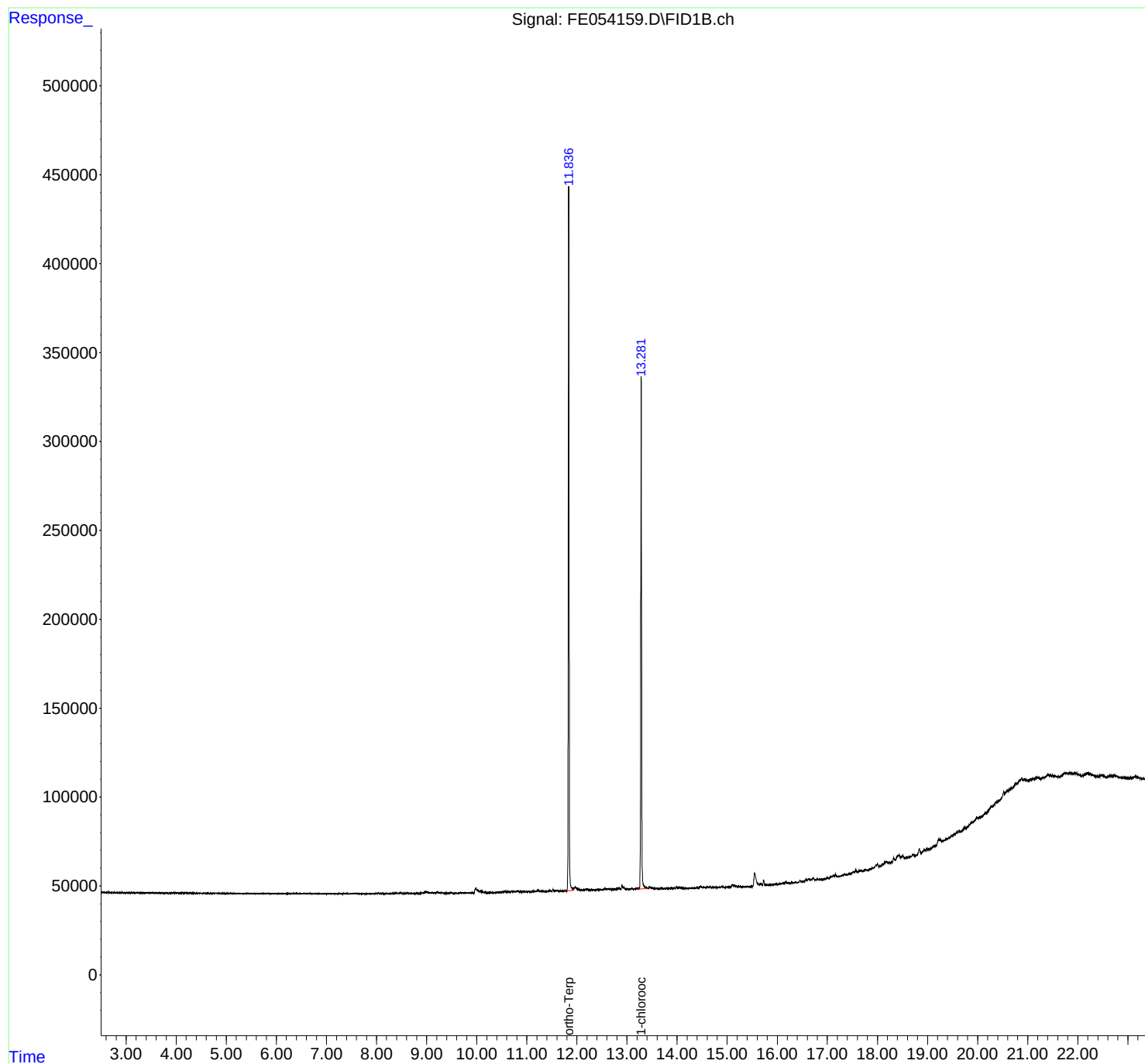
(m)=manual int.

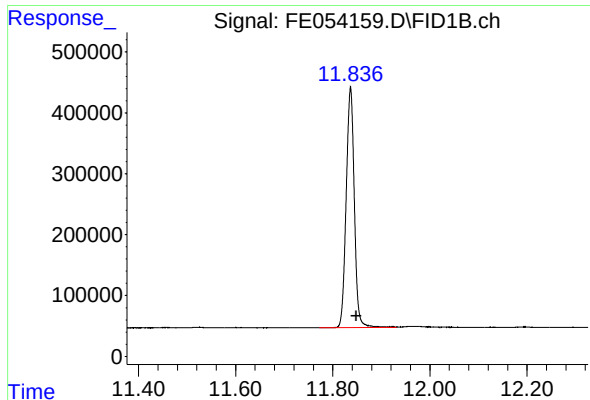
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054159.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 18:56
Operator : YP\AJ
Sample : Q2174-01
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
DP1

Integration File: autoint1.e
Quant Time: Jun 04 02:54:02 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

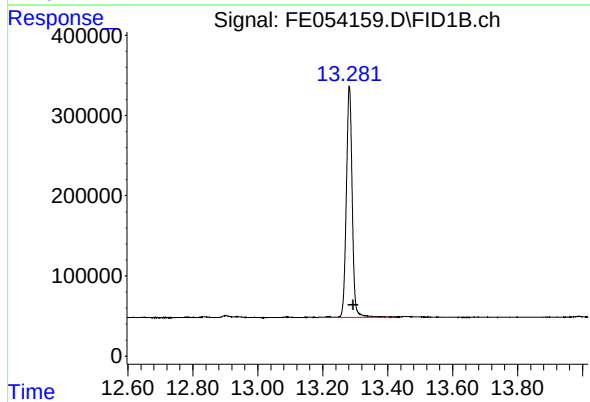




#9 ortho-Terphenyl (SURR)

R.T.: 11.837 min
Delta R.T.: -0.012 min
Response: 4579984
Conc: 28.18 ug/ml

Instrument :
FID_E
ClientSampleId :
DP1



#12 1-chlorooctadecane (SURR)

R.T.: 13.282 min
Delta R.T.: -0.013 min
Response: 3606997
Conc: 30.43 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054159.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 18:56
 Sample : Q2174-01
 Misc :
 ALS Vial : 16 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	2.855	2.804	2.948	BV	84	2761	0.06%	0.009%
2	2.959	2.948	2.966	PV	64	371	0.01%	0.001%
3	3.004	2.966	3.028	VV	146	2157	0.05%	0.007%
4	3.058	3.028	3.105	VV	139	3117	0.07%	0.010%
5	3.118	3.105	3.154	PV	102	1759	0.04%	0.006%
6	3.159	3.154	3.166	VV	140	617	0.01%	0.002%
7	3.173	3.166	3.226	VV	143	2735	0.06%	0.009%
8	3.267	3.226	3.358	VV	160	5342	0.11%	0.018%
9	3.369	3.358	3.381	VV	104	1096	0.02%	0.004%
10	3.387	3.381	3.433	VV	122	2643	0.06%	0.009%
11	3.453	3.433	3.494	VV	106	2981	0.06%	0.010%
12	3.507	3.494	3.530	VV	139	1844	0.04%	0.006%
13	3.539	3.530	3.556	VV	135	1401	0.03%	0.005%
14	3.565	3.556	3.626	VV	109	3624	0.08%	0.012%
15	3.631	3.626	3.641	VV	108	602	0.01%	0.002%
16	3.659	3.641	3.710	VV	134	3160	0.07%	0.010%
17	3.720	3.710	3.746	VV	157	1531	0.03%	0.005%
18	3.763	3.746	3.798	VV	114	2291	0.05%	0.008%
19	3.803	3.798	3.828	VV	98	1057	0.02%	0.003%
20	3.833	3.828	3.895	VV	122	2470	0.05%	0.008%
21	3.911	3.895	3.924	PV	123	1370	0.03%	0.004%
22	3.932	3.924	4.054	VV	142	4842	0.10%	0.016%
23	4.086	4.054	4.095	VV	157	1683	0.04%	0.006%
24	4.119	4.095	4.131	VV	138	2241	0.05%	0.007%
25	4.135	4.131	4.198	VV	225	4225	0.09%	0.014%
26	4.204	4.198	4.221	VV	107	1409	0.03%	0.005%
27	4.229	4.221	4.254	VV	108	1902	0.04%	0.006%
28	4.264	4.254	4.277	VV	160	1441	0.03%	0.005%
29	4.293	4.277	4.331	VV	144	3400	0.07%	0.011%
30	4.336	4.331	4.368	VV	141	2423	0.05%	0.008%
31	4.377	4.368	4.393	VV	118	1441	0.03%	0.005%
32	4.452	4.393	4.469	VV	170	5362	0.12%	0.018%
33	4.489	4.469	4.543	VV	170	4205	0.09%	0.014%
34	4.570	4.543	4.585	VV	116	2325	0.05%	0.008%
35	4.597	4.585	4.613	VV	100	1434	0.03%	0.005%
36	4.631	4.613	4.642	VV	240	2493	0.05%	0.008%

					rteres			
37	4.648	4.642	4.712	VV	85	2511	0.05%	0.008%
38	4.725	4.712	4.762	VV	104	1920	0.04%	0.006%
39	4.794	4.762	4.817	VV	189	2566	0.06%	0.008%
40	4.841	4.817	4.897	VV	158	4722	0.10%	0.015%
41	4.905	4.897	4.930	VV	143	2037	0.04%	0.007%
42	4.942	4.930	4.958	VV	119	1693	0.04%	0.006%
43	4.972	4.958	4.996	VV	143	2048	0.04%	0.007%
44	5.003	4.996	5.028	VV	116	1482	0.03%	0.005%
45	5.052	5.028	5.107	VV	156	3141	0.07%	0.010%
46	5.123	5.107	5.180	VV	111	3066	0.07%	0.010%
47	5.214	5.180	5.308	VV	92	4207	0.09%	0.014%
48	5.313	5.308	5.334	VV	50	583	0.01%	0.002%
49	5.341	5.334	5.420	VV	52	3855	0.08%	0.013%
50	5.434	5.420	5.458	VV	133	2134	0.05%	0.007%
51	5.472	5.458	5.534	VV	121	3275	0.07%	0.011%
52	5.540	5.534	5.574	VV	103	1596	0.03%	0.005%
53	5.587	5.574	5.659	VV	157	4660	0.10%	0.015%
54	5.741	5.659	5.764	PV	173	5955	0.13%	0.020%
55	5.782	5.764	5.791	VV	157	2070	0.04%	0.007%
56	5.798	5.791	5.868	VV	154	5188	0.11%	0.017%
57	5.877	5.868	5.898	VV	159	1833	0.04%	0.006%
58	5.916	5.898	5.938	VV	155	2335	0.05%	0.008%
59	5.945	5.938	5.968	VV	168	2008	0.04%	0.007%
60	5.977	5.968	6.001	VV	123	1800	0.04%	0.006%
61	6.049	6.001	6.074	VV	133	4043	0.09%	0.013%
62	6.079	6.074	6.089	VV	83	671	0.01%	0.002%
63	6.095	6.089	6.114	VV	79	914	0.02%	0.003%
64	6.118	6.114	6.126	VV	103	454	0.01%	0.001%
65	6.167	6.126	6.214	VV	192	4453	0.10%	0.015%
66	6.236	6.214	6.282	VV	150	4167	0.09%	0.014%
67	6.289	6.282	6.316	VV	138	2422	0.05%	0.008%
68	6.341	6.316	6.375	VV	289	5972	0.13%	0.020%
69	6.408	6.375	6.428	VV	225	4994	0.11%	0.016%
70	6.433	6.428	6.473	VV	175	3909	0.08%	0.013%
71	6.496	6.473	6.514	VV	234	4615	0.10%	0.015%
72	6.521	6.514	6.541	VV	228	3148	0.07%	0.010%
73	6.545	6.541	6.552	VV	244	1300	0.03%	0.004%
74	6.562	6.552	6.584	VV	225	3748	0.08%	0.012%
75	6.598	6.584	6.681	VV	241	10820	0.23%	0.035%
76	6.694	6.681	6.735	VV	211	4601	0.10%	0.015%
77	6.746	6.735	6.792	VV	146	3516	0.08%	0.012%
78	6.800	6.792	6.838	VV	155	1560	0.03%	0.005%
79	6.874	6.838	6.907	VV	114	2626	0.06%	0.009%
80	6.926	6.907	6.944	PV	75	1346	0.03%	0.004%
81	6.947	6.944	6.955	VV	130	369	0.01%	0.001%
82	6.965	6.955	6.986	VV	82	1007	0.02%	0.003%
83	6.993	6.986	7.058	VV	108	1990	0.04%	0.007%
84	7.117	7.058	7.138	VV	97	2251	0.05%	0.007%
85	7.197	7.138	7.215	VV	108	3249	0.07%	0.011%
86	7.240	7.215	7.325	VV	176	6473	0.14%	0.021%
87	7.346	7.325	7.380	VV	208	4779	0.10%	0.016%
88	7.523	7.380	7.594	VV	273	20930	0.45%	0.069%
89	7.605	7.594	7.831	VV	238	14097	0.30%	0.046%

					rteres			
90	7.862	7.831	7.924	PV	336	7326	0.16%	0.024%
91	8.035	7.924	8.164	VV	420	26831	0.58%	0.088%
92	8.189	8.164	8.252	VV	215	7274	0.16%	0.024%
93	8.388	8.252	8.414	VV	341	19600	0.42%	0.064%
94	8.476	8.414	8.554	VV	561	24236	0.52%	0.079%
95	8.612	8.554	8.756	VV	373	17776	0.38%	0.058%
96	8.793	8.756	8.814	PV	141	2888	0.06%	0.009%
97	8.980	8.814	9.123	VV	1047	74844	1.61%	0.245%
98	9.147	9.123	9.171	VV	257	7154	0.15%	0.023%
99	9.203	9.171	9.278	VV	689	23367	0.50%	0.077%
100	9.299	9.278	9.440	VV	468	14047	0.30%	0.046%
101	9.475	9.440	9.564	PV	232	5562	0.12%	0.018%
102	9.594	9.564	9.638	VV	100	1890	0.04%	0.006%
103	9.685	9.638	9.724	PV	194	4796	0.10%	0.016%
104	9.755	9.724	9.781	VV	145	3614	0.08%	0.012%
105	9.798	9.781	9.812	VV	69	963	0.02%	0.003%
106	9.854	9.812	9.881	PV	82	1986	0.04%	0.007%
107	9.907	9.881	9.930	VV	222	3004	0.06%	0.010%
108	9.977	9.930	10.054	VV	2545	100103	2.15%	0.328%
109	10.077	10.054	10.165	VV	1213	39458	0.85%	0.129%
110	10.183	10.165	10.295	VV	232	10819	0.23%	0.035%
111	10.344	10.295	10.380	PV	168	3706	0.08%	0.012%
112	10.422	10.380	10.440	VV	226	4613	0.10%	0.015%
113	10.464	10.440	10.501	VV	282	7068	0.15%	0.023%
114	10.554	10.501	10.653	VV	734	33669	0.72%	0.110%
115	10.695	10.653	10.724	VV	705	17127	0.37%	0.056%
116	10.740	10.724	10.771	VV	425	9490	0.20%	0.031%
117	10.819	10.771	10.861	VV	761	23461	0.50%	0.077%
118	10.886	10.861	10.901	VV	313	5808	0.12%	0.019%
119	10.944	10.901	11.014	VV	462	14995	0.32%	0.049%
120	11.039	11.014	11.078	VV	444	7222	0.16%	0.024%
121	11.137	11.078	11.171	VV	411	11546	0.25%	0.038%
122	11.221	11.171	11.281	VV	1061	33710	0.72%	0.111%
123	11.297	11.281	11.334	VV	484	8556	0.18%	0.028%
124	11.347	11.334	11.371	VV	120	2316	0.05%	0.008%
125	11.456	11.371	11.484	VV	695	17137	0.37%	0.056%
126	11.522	11.484	11.558	VV	944	18680	0.40%	0.061%
127	11.608	11.558	11.651	VV	433	13915	0.30%	0.046%
128	11.675	11.651	11.694	PV	199	2708	0.06%	0.009%
129	11.718	11.694	11.744	VV	128	3653	0.08%	0.012%
130	11.836	11.744	11.934	VV	397027	4605302	99.03%	15.102%
131	11.968	11.934	12.103	VV	2121	110702	2.38%	0.363%
132	12.130	12.103	12.154	VV	667	13804	0.30%	0.045%
133	12.194	12.154	12.226	VV	1128	27210	0.59%	0.089%
134	12.244	12.226	12.271	VV	450	9630	0.21%	0.032%
135	12.294	12.271	12.361	VV	471	17589	0.38%	0.058%
136	12.392	12.361	12.428	VV	470	13967	0.30%	0.046%
137	12.472	12.428	12.528	VV	565	27988	0.60%	0.092%
138	12.563	12.528	12.591	VV	986	26792	0.58%	0.088%
139	12.608	12.591	12.634	VV	730	15716	0.34%	0.052%
140	12.649	12.634	12.734	VV	666	25897	0.56%	0.085%
141	12.785	12.734	12.818	VV	681	26622	0.57%	0.087%

					rteres			
142	12.836	12.818	12.869	VV	1306	24254	0.52%	0.080%
143	12.902	12.869	13.016	VV	2722	85542	1.84%	0.281%
144	13.092	13.016	13.138	VV	888	27069	0.58%	0.089%
145	13.161	13.138	13.181	VV	610	11229	0.24%	0.037%
146	13.217	13.181	13.241	VV	776	21796	0.47%	0.071%
147	13.282	13.241	13.425	VV	289523	3645420	78.39%	11.954%
148	13.454	13.425	13.651	VV	1364	80865	1.74%	0.265%
149	13.675	13.651	13.693	VV	321	8076	0.17%	0.026%
150	13.711	13.693	13.734	VV	393	7823	0.17%	0.026%
151	13.752	13.734	13.774	VV	332	6395	0.14%	0.021%
152	13.799	13.774	13.851	VV	381	11807	0.25%	0.039%
153	13.890	13.851	13.914	VV	352	10049	0.22%	0.033%
154	13.989	13.914	14.014	VV	1133	28095	0.60%	0.092%
155	14.035	14.014	14.168	VV	974	33878	0.73%	0.111%
156	14.185	14.168	14.217	VV	168	2474	0.05%	0.008%
157	14.249	14.217	14.298	VV	333	6609	0.14%	0.022%
158	14.326	14.298	14.353	VV	130	2811	0.06%	0.009%
159	14.400	14.353	14.423	PV	468	8585	0.18%	0.028%
160	14.473	14.423	14.528	VV	1099	32995	0.71%	0.108%
161	14.547	14.528	14.578	VV	509	9830	0.21%	0.032%
162	14.603	14.578	14.628	VV	814	13255	0.29%	0.043%
163	14.657	14.628	14.788	VV	597	27790	0.60%	0.091%
164	14.892	14.788	14.964	VV	836	24888	0.54%	0.082%
165	15.106	14.964	15.214	VV	1253	76844	1.65%	0.252%
166	15.237	15.214	15.291	VV	341	11071	0.24%	0.036%
167	15.309	15.291	15.351	VV	165	3303	0.07%	0.011%
168	15.375	15.351	15.404	PV	199	3308	0.07%	0.011%
169	15.549	15.404	15.640	PV	7241	239617	5.15%	0.786%
170	15.666	15.640	15.697	VV	1049	26206	0.56%	0.086%
171	15.727	15.697	15.763	VV	3062	48864	1.05%	0.160%
172	15.789	15.763	15.818	VV	395	8225	0.18%	0.027%
173	15.882	15.818	15.904	VV	190	5811	0.12%	0.019%
174	15.990	15.904	16.010	PV	142	7655	0.16%	0.025%
175	16.073	16.010	16.094	PV	374	9391	0.20%	0.031%
176	16.126	16.094	16.141	VV	446	8653	0.19%	0.028%
177	16.170	16.141	16.208	VV	870	19343	0.42%	0.063%
178	16.230	16.208	16.258	VV	339	5560	0.12%	0.018%
179	16.294	16.258	16.317	VV	224	4730	0.10%	0.016%
180	16.364	16.317	16.398	PV	361	8204	0.18%	0.027%
181	16.454	16.398	16.521	PV	1195	24558	0.53%	0.081%
182	16.575	16.521	16.601	VV	1064	31006	0.67%	0.102%
183	16.623	16.601	16.694	VV	1215	52197	1.12%	0.171%
184	16.718	16.694	16.764	VV	1795	37997	0.82%	0.125%
185	16.806	16.764	16.831	VV	891	19655	0.42%	0.064%
186	16.860	16.831	16.894	VV	295	7976	0.17%	0.026%
187	16.997	16.894	17.029	PV	895	22094	0.48%	0.072%
188	17.118	17.029	17.141	VV	1303	51060	1.10%	0.167%
189	17.160	17.141	17.214	VV	2016	38002	0.82%	0.125%
190	17.236	17.214	17.253	VV	305	5508	0.12%	0.018%
191	17.357	17.253	17.385	PV	598	28897	0.62%	0.095%
192	17.566	17.385	17.610	VV	1670	80592	1.73%	0.264%
193	17.673	17.610	17.704	VV	727	29337	0.63%	0.096%
194	17.766	17.704	17.805	VV	746	22503	0.48%	0.074%

					rteres			
195	18.002	17.805	18.053	PV	2058	82859	1.78%	0.272%
196	18.178	18.053	18.213	VV	1745	87957	1.89%	0.288%
197	18.233	18.213	18.258	VV	1033	18625	0.40%	0.061%
198	18.324	18.258	18.357	VV	2378	64216	1.38%	0.211%
199	18.426	18.357	18.464	VV	3104	150884	3.24%	0.495%
200	18.508	18.464	18.560	VV	2204	75492	1.62%	0.248%
201	18.706	18.560	18.751	VV	884	47015	1.01%	0.154%
202	18.834	18.751	18.878	PV	3092	66728	1.43%	0.219%
203	18.934	18.878	18.956	VV	1528	35534	0.76%	0.117%
204	18.987	18.956	19.021	VV	1278	32427	0.70%	0.106%
205	19.119	19.021	19.134	VV	1099	42993	0.92%	0.141%
206	19.241	19.134	19.293	VV	3643	211651	4.55%	0.694%
207	19.628	19.293	19.661	VV	3779	586751	12.62%	1.924%
208	19.742	19.661	19.768	VV	4479	240551	5.17%	0.789%
209	20.001	19.768	20.021	VV	7110	850820	18.30%	2.790%
210	20.522	20.021	20.543	VV	15449	3082003	66.27%	10.106%
211	20.877	20.543	21.008	VV	18828	4650438	100.00%	15.250%
212	21.100	21.008	21.128	VV	16185	1159543	24.93%	3.802%
213	21.190	21.128	21.258	VV	15951	1204705	25.91%	3.950%
214	21.413	21.258	21.481	VV	14785	1919642	41.28%	6.295%
215	21.505	21.481	21.608	VV	13221	948447	20.39%	3.110%
216	21.748	21.608	21.764	VV	11817	1075412	23.12%	3.526%
217	21.782	21.764	21.831	VV	11425	447289	9.62%	1.467%
218	21.854	21.831	21.911	VV	10678	498104	10.71%	1.633%
219	21.930	21.911	22.081	VV	9722	851043	18.30%	2.791%
220	22.199	22.081	22.388	VV	6730	970930	20.88%	3.184%
221	22.471	22.388	22.564	VV	2472	188832	4.06%	0.619%
Sum of corrected areas:						30495600		

Aliphatic EPH 051425.M Wed Jun 04 04:35:55 2025

Report of Analysis

Client:	G Environmental	Date Collected:	05/30/25
Project:	DeCamp	Date Received:	05/30/25
Client Sample ID:	D1	SDG No.:	Q2174
Lab Sample ID:	Q2174-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.6
Sample Wt/Vol:	30.06	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 19:26	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	2.70	J	1	0.96	4.21	mg/kg	FE054160.D
Total EPH	Total EPH	2.70	J		0.96	4.21	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:	05/30/25
Project:	DeCamp	Date Received:	05/30/25
Client Sample ID:	D1	SDG No.:	Q2174
Lab Sample ID:	Q2174-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.6
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
FE054160.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	2.70	J	0.96	4.21	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	13.5		1.24	2.11	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	29.8		40 - 140	60%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	27.9		40 - 140	56%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2174-02	Acq On:	03 Jun 2025 19:26
Client Sample ID:	D1	Operator:	YP\AJ
Data file:	FE054160.D	Misc:	
Instrument:	FID_E	ALS Vial:	17
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.085	6.730	245601	1.812	300	ug/ml
Aliphatic C12-C16	6.731	10.178	860779	6.379	200	ug/ml
Aliphatic C16-C21	10.179	13.552	2157116	16.353	300	ug/ml
Aliphatic C21-C28	13.553	17.220	1933913	15.574	400	ug/ml
Aliphatic C28-C40	17.221	22.091	22168864	192.053	600	ug/ml
Aliphatic EPH	3.085	22.091	27366273	232.171		ug/ml
ortho-Terphenyl (SURR)	11.837	11.837	4540006	27.94		ug/ml
1-chlorooctadecane (SURR)	13.282	13.282	3534176	29.81		ug/ml
Aliphatic C9-C28	3.085	17.220	5197409	40.118	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054160.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 19:26
 Operator : YP\AJ
 Sample : Q2174-02
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 D1

Integration File: autoint1.e
 Quant Time: Jun 04 02:54:15 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	4540006	27.936 ug/ml
Spiked Amount	50.000	Recovery	= 55.87%
12) S 1-chlorooctadecane (S...	13.282	3534176	29.812 ug/ml
Spiked Amount	50.000	Recovery	= 59.62%

Target Compounds

(f)=RT Delta > 1/2 Window

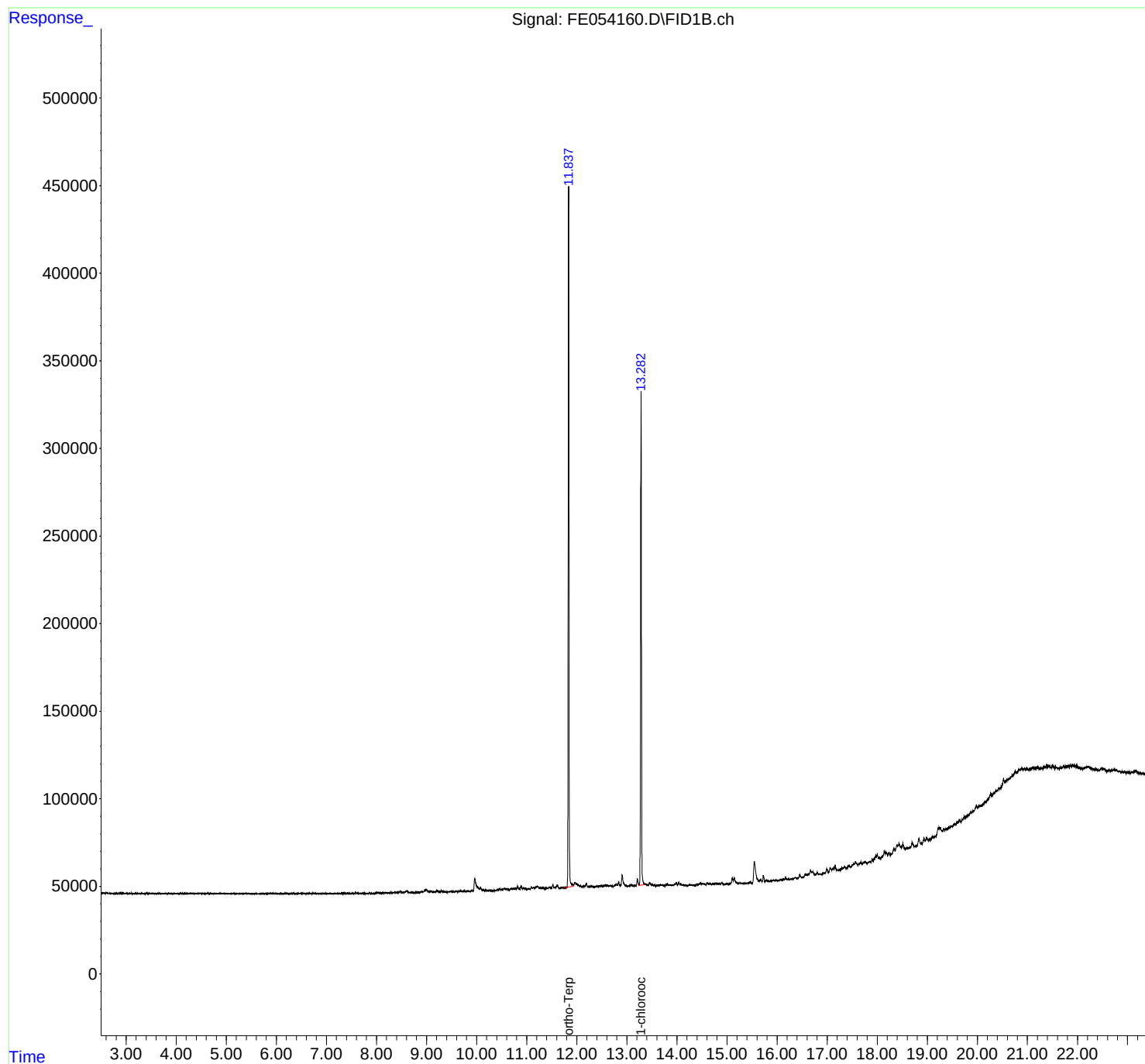
(m)=manual int.

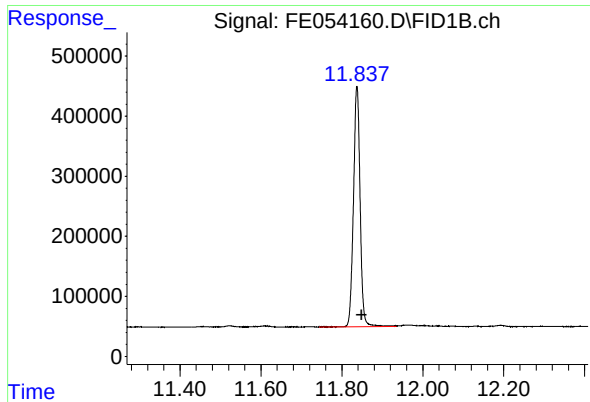
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054160.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 19:26
Operator : YP\AJ
Sample : Q2174-02
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
D1

Integration File: autoint1.e
Quant Time: Jun 04 02:54:15 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

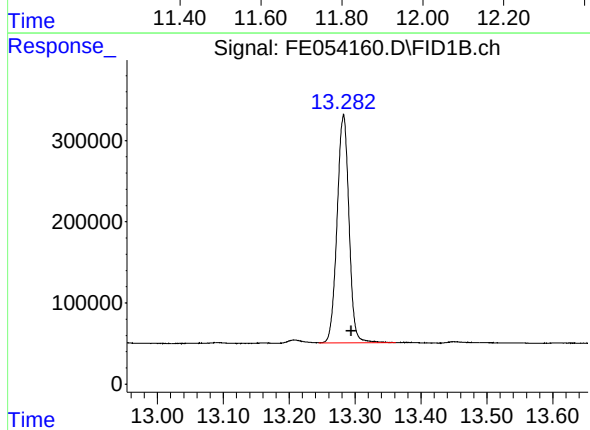




#9 ortho-Terphenyl (SURR)

R.T.: 11.837 min
Delta R.T.: -0.011 min
Response: 4540006
Conc: 27.94 ug/ml

Instrument :
FID_E
ClientSampleId :
D1



#12 1-chlorooctadecane (SURR)

R.T.: 13.282 min
Delta R.T.: -0.012 min
Response: 3534176
Conc: 29.81 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054160.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 19:26
 Sample : Q2174-02
 Misc :
 ALS Vial : 17 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	2.879	2.804	2.912	BV	172	3730	0.08%	0.010%
2	2.931	2.912	2.944	PV	124	1426	0.03%	0.004%
3	2.948	2.944	2.968	VV	104	814	0.02%	0.002%
4	2.981	2.968	2.995	VV	78	861	0.02%	0.002%
5	3.004	2.995	3.085	VV	94	2846	0.06%	0.008%
6	3.111	3.085	3.124	PV	164	1835	0.04%	0.005%
7	3.189	3.124	3.222	VV	191	5393	0.12%	0.015%
8	3.230	3.222	3.274	VV	102	2335	0.05%	0.006%
9	3.294	3.274	3.314	VV	110	1695	0.04%	0.005%
10	3.352	3.314	3.371	VV	119	2609	0.06%	0.007%
11	3.394	3.371	3.408	VV	130	1929	0.04%	0.005%
12	3.412	3.408	3.440	VV	114	1846	0.04%	0.005%
13	3.453	3.440	3.532	VV	136	4239	0.09%	0.011%
14	3.548	3.532	3.575	VV	142	1858	0.04%	0.005%
15	3.648	3.575	3.760	VV	123	6348	0.14%	0.017%
16	3.775	3.760	3.781	VV	130	955	0.02%	0.003%
17	3.788	3.781	3.838	VV	145	2689	0.06%	0.007%
18	3.883	3.838	4.065	VV	145	8852	0.19%	0.024%
19	4.082	4.065	4.140	VV	168	5744	0.12%	0.016%
20	4.178	4.140	4.220	VV	250	7731	0.17%	0.021%
21	4.266	4.220	4.341	VV	185	9778	0.21%	0.026%
22	4.346	4.341	4.378	VV	166	2193	0.05%	0.006%
23	4.449	4.378	4.513	VV	290	11218	0.24%	0.030%
24	4.531	4.513	4.550	VV	108	1993	0.04%	0.005%
25	4.571	4.550	4.595	VV	146	2679	0.06%	0.007%
26	4.629	4.595	4.745	VV	338	9777	0.21%	0.026%
27	4.875	4.745	4.938	VV	226	15181	0.33%	0.041%
28	4.950	4.938	5.009	VV	222	6262	0.13%	0.017%
29	5.036	5.009	5.084	VV	170	4697	0.10%	0.013%
30	5.115	5.084	5.238	VV	163	9662	0.21%	0.026%
31	5.249	5.238	5.311	VV	125	2900	0.06%	0.008%
32	5.324	5.311	5.399	VV	107	3581	0.08%	0.010%
33	5.435	5.399	5.477	VV	195	5203	0.11%	0.014%
34	5.501	5.477	5.568	VV	109	3683	0.08%	0.010%
35	5.596	5.568	5.673	PV	235	5738	0.12%	0.016%
36	5.710	5.673	5.752	VV	144	5405	0.12%	0.015%

					rteres			
37	5.777	5.752	5.813	VV	118	4711	0.10%	0.013%
38	5.849	5.813	5.864	VV	167	3856	0.08%	0.010%
39	5.901	5.864	6.053	VV	194	15181	0.33%	0.041%
40	6.079	6.053	6.121	VV	107	2791	0.06%	0.008%
41	6.192	6.121	6.254	VV	237	11142	0.24%	0.030%
42	6.343	6.254	6.378	VV	310	11078	0.24%	0.030%
43	6.446	6.378	6.477	VV	200	9415	0.20%	0.025%
44	6.511	6.477	6.588	VV	275	13049	0.28%	0.035%
45	6.629	6.588	6.693	VV	338	13567	0.29%	0.037%
46	6.715	6.693	6.764	VV	183	4803	0.10%	0.013%
47	6.785	6.764	6.854	VV	200	5723	0.12%	0.015%
48	6.860	6.854	6.884	VV	87	1164	0.02%	0.003%
49	6.893	6.884	6.935	VV	118	2069	0.04%	0.006%
50	6.956	6.935	6.978	VV	94	1431	0.03%	0.004%
51	6.988	6.978	7.019	VV	67	765	0.02%	0.002%
52	7.089	7.019	7.105	PV	117	1931	0.04%	0.005%
53	7.151	7.105	7.180	VV	96	3388	0.07%	0.009%
54	7.204	7.180	7.232	VV	162	3020	0.06%	0.008%
55	7.268	7.232	7.294	VV	171	4489	0.10%	0.012%
56	7.354	7.294	7.386	VV	371	12181	0.26%	0.033%
57	7.419	7.386	7.511	VV	183	12919	0.28%	0.035%
58	7.583	7.511	7.728	VV	418	24887	0.53%	0.067%
59	7.756	7.728	7.828	VV	232	5029	0.11%	0.014%
60	7.862	7.828	7.891	PV	432	6707	0.14%	0.018%
61	7.916	7.891	7.936	VV	163	2618	0.06%	0.007%
62	7.957	7.936	7.981	VV	144	2398	0.05%	0.006%
63	8.036	7.981	8.091	VV	554	18449	0.40%	0.050%
64	8.113	8.091	8.129	VV	182	3451	0.07%	0.009%
65	8.190	8.129	8.243	VV	539	16066	0.35%	0.044%
66	8.283	8.243	8.314	VV	468	10697	0.23%	0.029%
67	8.334	8.314	8.350	VV	408	7376	0.16%	0.020%
68	8.387	8.350	8.421	VV	469	16991	0.36%	0.046%
69	8.470	8.421	8.550	VV	974	37371	0.80%	0.101%
70	8.610	8.550	8.770	VV	939	50233	1.08%	0.136%
71	8.792	8.770	8.811	PV	284	3194	0.07%	0.009%
72	8.981	8.811	9.071	VV	1848	105777	2.27%	0.286%
73	9.082	9.071	9.124	VV	590	14825	0.32%	0.040%
74	9.149	9.124	9.171	VV	473	10796	0.23%	0.029%
75	9.205	9.171	9.271	VV	897	32529	0.70%	0.088%
76	9.297	9.271	9.402	VV	1129	33214	0.71%	0.090%
77	9.489	9.402	9.514	PV	450	15662	0.34%	0.042%
78	9.538	9.514	9.553	VV	198	4475	0.10%	0.012%
79	9.591	9.553	9.633	VV	418	11056	0.24%	0.030%
80	9.679	9.633	9.728	VV	708	21788	0.47%	0.059%
81	9.754	9.728	9.778	VV	669	12121	0.26%	0.033%
82	9.825	9.778	9.871	VV	341	15228	0.33%	0.041%
83	9.906	9.871	9.928	VV	673	11967	0.26%	0.032%
84	9.964	9.928	10.053	VV	7290	243065	5.22%	0.658%
85	10.076	10.053	10.164	VV	2473	73729	1.58%	0.200%
86	10.180	10.164	10.214	VV	578	13231	0.28%	0.036%
87	10.241	10.214	10.319	VV	424	17511	0.38%	0.047%
88	10.346	10.319	10.378	VV	328	8408	0.18%	0.023%
89	10.421	10.378	10.438	VV	845	17521	0.38%	0.047%

					rteres			
90	10.465	10.438	10.501	VV	1330	30785	0.66%	0.083%
91	10.552	10.501	10.591	VV	1251	47685	1.02%	0.129%
92	10.608	10.591	10.641	VV	1048	22433	0.48%	0.061%
93	10.697	10.641	10.718	VV	1172	37780	0.81%	0.102%
94	10.741	10.718	10.763	VV	1048	24780	0.53%	0.067%
95	10.818	10.763	10.861	VV	2241	67806	1.46%	0.184%
96	10.888	10.861	10.920	VV	2548	50740	1.09%	0.137%
97	10.942	10.920	10.994	VV	1089	35823	0.77%	0.097%
98	11.039	10.994	11.071	VV	917	29264	0.63%	0.079%
99	11.096	11.071	11.124	VV	1502	37283	0.80%	0.101%
100	11.137	11.124	11.156	VV	1387	23525	0.51%	0.064%
101	11.217	11.156	11.258	VV	2113	91499	1.97%	0.248%
102	11.296	11.258	11.357	VV	1112	51149	1.10%	0.138%
103	11.455	11.357	11.482	VV	1419	64719	1.39%	0.175%
104	11.523	11.482	11.558	VV	2820	63285	1.36%	0.171%
105	11.610	11.558	11.651	VV	2405	73226	1.57%	0.198%
106	11.678	11.651	11.696	VV	850	19277	0.41%	0.052%
107	11.719	11.696	11.768	VV	1020	32147	0.69%	0.087%
108	11.837	11.768	11.934	VV	403279	4655649	100.00%	12.606%
109	11.964	11.934	12.107	VV	3492	222828	4.79%	0.603%
110	12.131	12.107	12.148	VV	1573	29719	0.64%	0.080%
111	12.192	12.148	12.266	VV	3076	101136	2.17%	0.274%
112	12.293	12.266	12.360	VV	1222	53156	1.14%	0.144%
113	12.391	12.360	12.427	VV	1190	37616	0.81%	0.102%
114	12.463	12.427	12.523	VV	1271	65751	1.41%	0.178%
115	12.561	12.523	12.590	VV	1667	54688	1.17%	0.148%
116	12.608	12.590	12.631	VV	1710	33142	0.71%	0.090%
117	12.671	12.631	12.725	VV	1251	61709	1.33%	0.167%
118	12.789	12.725	12.809	VV	1945	68665	1.47%	0.186%
119	12.834	12.809	12.878	VV	3254	76231	1.64%	0.206%
120	12.906	12.878	13.024	VV	6985	202301	4.35%	0.548%
121	13.092	13.024	13.134	VV	1615	62576	1.34%	0.169%
122	13.162	13.134	13.179	VV	1174	24310	0.52%	0.066%
123	13.209	13.179	13.242	VV	4823	95313	2.05%	0.258%
124	13.282	13.242	13.428	VV	279910	3669430	78.82%	9.936%
125	13.452	13.428	13.573	VV	2403	108098	2.32%	0.293%
126	13.610	13.573	13.641	VV	809	26408	0.57%	0.072%
127	13.677	13.641	13.765	VV	964	49165	1.06%	0.133%
128	13.811	13.765	13.851	VV	1085	39742	0.85%	0.108%
129	13.873	13.851	13.901	VV	732	17201	0.37%	0.047%
130	13.987	13.901	14.011	VV	1909	64855	1.39%	0.176%
131	14.036	14.011	14.060	VV	2039	36965	0.79%	0.100%
132	14.077	14.060	14.108	VV	1197	25211	0.54%	0.068%
133	14.120	14.108	14.221	VV	683	22026	0.47%	0.060%
134	14.249	14.221	14.331	PV	545	16993	0.36%	0.046%
135	14.346	14.331	14.364	VV	77	1006	0.02%	0.003%
136	14.400	14.364	14.423	PV	635	10458	0.22%	0.028%
137	14.470	14.423	14.494	VV	1268	34413	0.74%	0.093%
138	14.512	14.494	14.578	VV	862	30770	0.66%	0.083%
139	14.602	14.578	14.628	VV	1286	22970	0.49%	0.062%
140	14.653	14.628	14.693	VV	814	22126	0.48%	0.060%
141	14.739	14.693	14.764	VV	742	20343	0.44%	0.055%

					rteres			
142	14.785	14.764	14.821	VV	767	17111	0.37%	0.046%
143	14.848	14.821	14.868	VV	564	10704	0.23%	0.029%
144	14.893	14.868	14.931	VV	1032	18068	0.39%	0.049%
145	14.984	14.931	15.038	VV	280	9840	0.21%	0.027%
146	15.105	15.038	15.124	PV	3267	65647	1.41%	0.178%
147	15.143	15.124	15.217	VV	3515	86185	1.85%	0.233%
148	15.258	15.217	15.291	VV	527	15158	0.33%	0.041%
149	15.311	15.291	15.354	VV	215	5219	0.11%	0.014%
150	15.459	15.354	15.504	PV	428	16251	0.35%	0.044%
151	15.546	15.504	15.640	PV	12205	377374	8.11%	1.022%
152	15.666	15.640	15.698	VV	1474	37829	0.81%	0.102%
153	15.726	15.698	15.757	VV	3705	58282	1.25%	0.158%
154	15.783	15.757	15.858	VV	1216	32390	0.70%	0.088%
155	15.879	15.858	15.898	VV	410	6918	0.15%	0.019%
156	15.925	15.898	16.031	VV	620	28849	0.62%	0.078%
157	16.072	16.031	16.092	VV	476	12864	0.28%	0.035%
158	16.125	16.092	16.141	VV	498	12165	0.26%	0.033%
159	16.169	16.141	16.254	VV	1329	37454	0.80%	0.101%
160	16.297	16.254	16.317	VV	372	9575	0.21%	0.026%
161	16.365	16.317	16.398	PV	798	20963	0.45%	0.057%
162	16.455	16.398	16.510	VV	2036	45780	0.98%	0.124%
163	16.573	16.510	16.595	VV	1653	49142	1.06%	0.133%
164	16.669	16.595	16.691	VV	3829	119755	2.57%	0.324%
165	16.714	16.691	16.757	VV	2609	68737	1.48%	0.186%
166	16.805	16.757	16.891	VV	1759	62604	1.34%	0.170%
167	16.992	16.891	17.031	PV	2683	75301	1.62%	0.204%
168	17.059	17.031	17.098	VV	3002	71550	1.54%	0.194%
169	17.160	17.098	17.261	VV	3768	121546	2.61%	0.329%
170	17.352	17.261	17.380	PV	1386	52301	1.12%	0.142%
171	17.439	17.380	17.468	VV	1143	38141	0.82%	0.103%
172	17.568	17.468	17.613	VV	2538	115806	2.49%	0.314%
173	17.673	17.613	17.700	VV	1474	51201	1.10%	0.139%
174	17.764	17.700	17.799	VV	1230	40904	0.88%	0.111%
175	17.845	17.799	17.868	PV	578	12850	0.28%	0.035%
176	17.900	17.868	17.924	PV	1204	22140	0.48%	0.060%
177	18.001	17.924	18.061	VV	2762	120367	2.59%	0.326%
178	18.142	18.061	18.158	VV	3443	82240	1.77%	0.223%
179	18.178	18.158	18.212	VV	2442	63584	1.37%	0.172%
180	18.233	18.212	18.254	VV	1373	26185	0.56%	0.071%
181	18.330	18.254	18.361	VV	2976	91100	1.96%	0.247%
182	18.395	18.361	18.411	VV	4492	104286	2.24%	0.282%
183	18.434	18.411	18.485	VV	4657	155980	3.35%	0.422%
184	18.510	18.485	18.564	VV	4357	103303	2.22%	0.280%
185	18.595	18.564	18.614	VV	1015	24098	0.52%	0.065%
186	18.697	18.614	18.744	VV	2587	75343	1.62%	0.204%
187	18.832	18.744	18.898	PV	3709	86630	1.86%	0.235%
188	18.935	18.898	18.956	VV	2845	47459	1.02%	0.129%
189	18.986	18.956	19.031	VV	2326	62626	1.35%	0.170%
190	19.259	19.031	19.300	VV	5074	383258	8.23%	1.038%
191	19.332	19.300	19.350	VV	3697	91511	1.97%	0.248%
192	19.647	19.350	19.668	VV	4959	674343	14.48%	1.826%
193	19.741	19.668	19.760	VV	6165	278826	5.99%	0.755%
194	19.979	19.760	20.021	VV	9783	1107468	23.79%	2.999%

					rteres			
195	20.263	20.021	20.300	VV	12854	1682463	36.14%	4.556%
196	20.432	20.300	20.454	VV	14578	1244867	26.74%	3.371%
197	20.523	20.454	20.544	VV	19192	870476	18.70%	2.357%
198	20.758	20.544	20.781	VV	20649	2601403	55.88%	7.044%
199	20.880	20.781	20.914	VV	20922	1623635	34.87%	4.396%
200	20.937	20.914	21.024	VV	20044	1276349	27.42%	3.456%
201	21.048	21.024	21.074	VV	18651	557544	11.98%	1.510%
202	21.102	21.074	21.138	VV	18727	699662	15.03%	1.895%
203	21.189	21.138	21.251	VV	17913	1191898	25.60%	3.227%
204	21.265	21.251	21.290	VV	16719	385628	8.28%	1.044%
205	21.383	21.290	21.405	VV	16450	1122557	24.11%	3.040%
206	21.436	21.405	21.473	VV	15839	641280	13.77%	1.736%
207	21.504	21.473	21.548	VV	15270	657089	14.11%	1.779%
208	21.563	21.548	21.658	VV	13873	856769	18.40%	2.320%
209	21.725	21.658	21.744	VV	12635	640917	13.77%	1.735%
210	21.809	21.744	21.833	VV	11823	627949	13.49%	1.700%
211	21.859	21.833	21.877	VV	11556	301379	6.47%	0.816%
212	21.926	21.877	21.964	VV	11107	561553	12.06%	1.521%
213	21.984	21.964	22.064	VV	9996	531771	11.42%	1.440%
214	22.083	22.064	22.106	VV	7518	181725	3.90%	0.492%
215	22.218	22.106	22.421	VV	6884	1020535	21.92%	2.763%
216	22.508	22.421	22.587	VV	2663	209306	4.50%	0.567%
					Sum of corrected areas:		36930871	

Aliphatic EPH 051425.M Wed Jun 04 04:36:50 2025

Report of Analysis

Client:	G Environmental	Date Collected:	05/30/25
Project:	DeCamp	Date Received:	05/30/25
Client Sample ID:	D2	SDG No.:	Q2174
Lab Sample ID:	Q2174-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	88.6
Sample Wt/Vol:	30.02	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 19:57	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	46.9		1	1.03	4.51	mg/kg	FE054161.D
Total EPH	Total EPH	46.9			1.03	4.51	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:	05/30/25
Project:	DeCamp	Date Received:	05/30/25
Client Sample ID:	D2	SDG No.:	Q2174
Lab Sample ID:	Q2174-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	88.6
Sample Wt/Vol:	30.02	Units:	g
Soil Aliquot Vol:		Final Vol:	2000 uL
Prep Method :		Test:	EPH_F2

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE054161.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	46.9		1.03	4.51	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	51.8	E	1.33	2.26	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	21.4		40 - 140	43%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	20.8		40 - 140	42%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2174-03	Acq On:	03 Jun 2025 19:57
Client Sample ID:	D2	Operator:	YP\AJ
Data file:	FE054161.D	Misc:	
Instrument:	FID_E	ALS Vial:	18
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.085	6.730	10111560	74.589	300	ug/ml
Aliphatic C12-C16	6.731	10.178	34335093	254.444	200	ug/ml
Aliphatic C16-C21	10.179	13.552	28549715	216.432	300	ug/ml
Aliphatic C21-C28	13.553	17.220	9767404	78.657	400	ug/ml
Aliphatic C28-C40	17.221	22.091	79592468	689.525	600	ug/ml
Aliphatic EPH	3.085	22.091	162356240	1310		ug/ml
ortho-Terphenyl (SURR)	11.837	11.837	3374433	20.76		ug/ml
1-chlorooctadecane (SURR)	13.282	13.282	2534826	21.38		ug/ml
Aliphatic C9-C28	3.085	17.220	82763772	624.122	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054161.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 19:57
 Operator : YP\AJ
 Sample : Q2174-03
 Misc :
 ALS Vial : 18 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 D2

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 02:54:30 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	3374433	20.764 ug/mlm
Spiked Amount 50.000		Recovery =	41.53%
12) S 1-chlorooctadecane (S...	13.282	2534826	21.382 ug/ml
Spiked Amount 50.000		Recovery =	42.76%

Target Compounds

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054161.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 19:57
Operator : YP\AJ
Sample : Q2174-03
Misc :
ALS Vial : 18 Sample Multiplier: 1

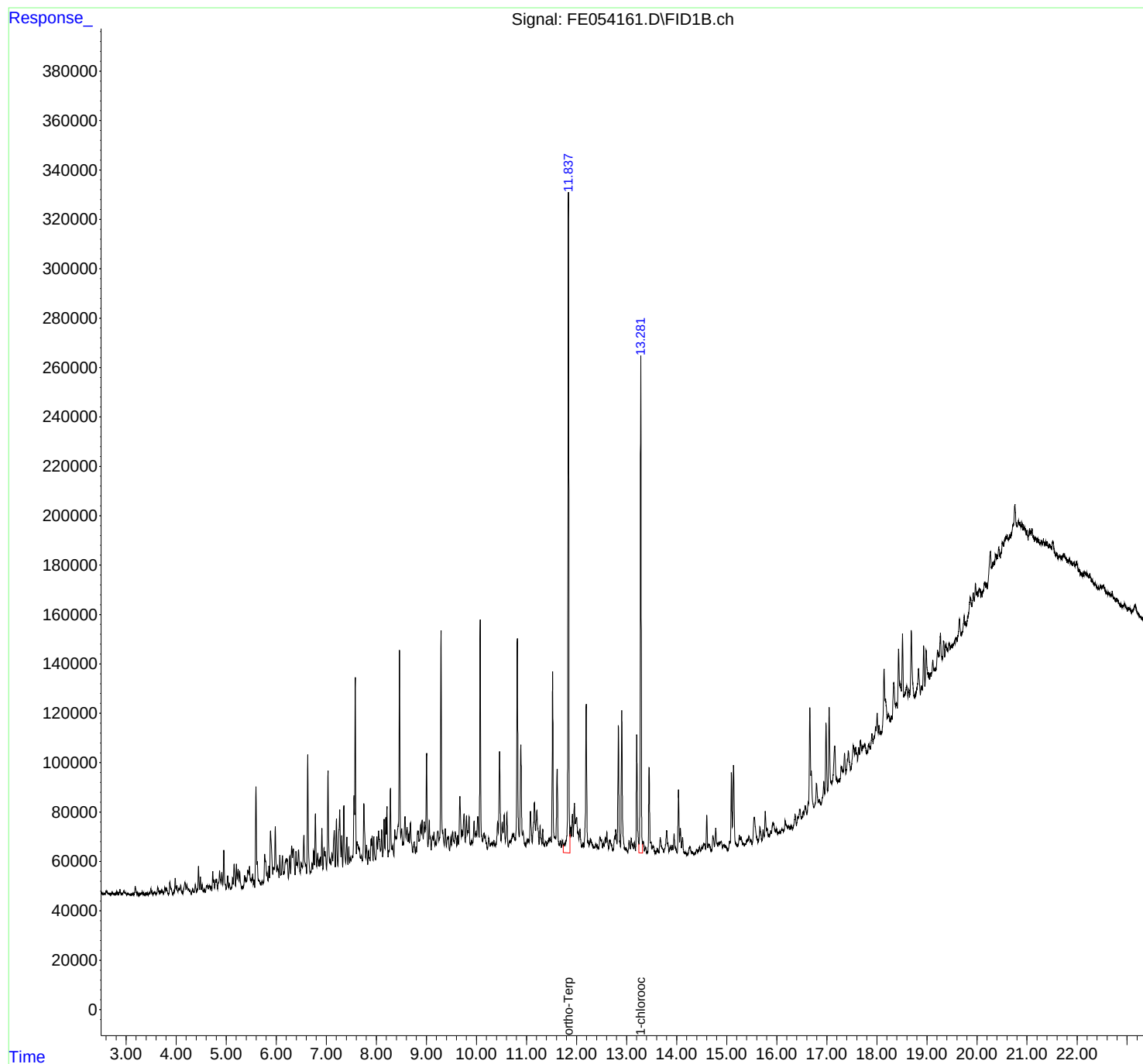
Instrument :
FID_E
ClientSampleId :
D2

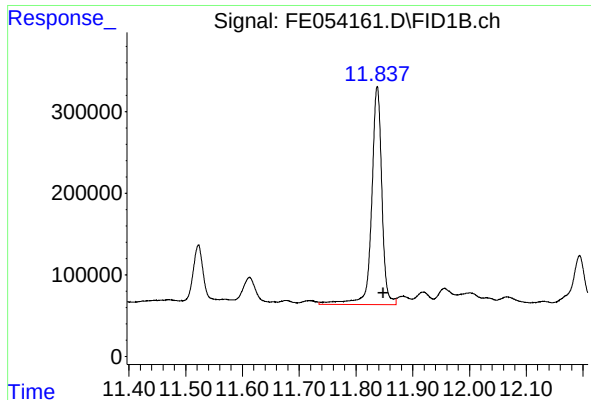
Manual Integrations
APPROVED

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

Integration File: autoint1.e
Quant Time: Jun 04 02:54:30 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





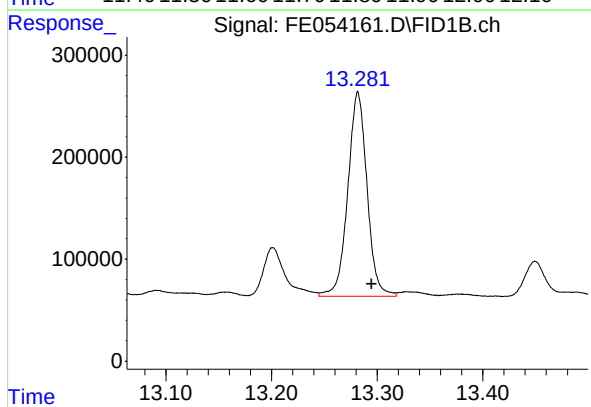
#9 ortho-Terphenyl (SURR)

R.T.: 11.837 min
Delta R.T.: -0.011 min
Response: 3374433
Conc: 20.76 ug/ml

Instrument :
FID_E
ClientSampleId :
D2

Manual Integrations
APPROVED

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



#12 1-chlorooctadecane (SURR)

R.T.: 13.282 min
Delta R.T.: -0.013 min
Response: 2534826
Conc: 21.38 ug/ml

rteres

Instrument :

FID_E

ClientSampleId :

D2

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 : FE054161.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 19:57
Sample : Q2174-03
Misc :
ALS Vial : 18 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	2.849	2.804	2.856	BV	18	-578	-0.01%	-0.000%
2	2.877	2.856	2.921	PV	1716	19590	0.46%	0.012%
3	2.958	2.921	2.975	PV	1357	21236	0.50%	0.013%
4	2.986	2.975	3.017	VV	616	8313	0.19%	0.005%
5	3.045	3.017	3.089	VV	337	6141	0.14%	0.004%
6	3.109	3.089	3.124	PV	125	1455	0.03%	0.001%
7	3.135	3.124	3.149	VV	282	2504	0.06%	0.002%
8	3.183	3.149	3.221	VV	3380	57152	1.34%	0.034%
9	3.233	3.221	3.278	VV	434	6463	0.15%	0.004%
10	3.322	3.278	3.341	PV	981	18178	0.42%	0.011%
11	3.353	3.341	3.375	VV	571	6495	0.15%	0.004%
12	3.393	3.375	3.409	VV	371	5215	0.12%	0.003%
13	3.426	3.409	3.444	VV	568	7124	0.17%	0.004%
14	3.463	3.444	3.478	VV	579	6457	0.15%	0.004%
15	3.495	3.478	3.537	VV	2350	36943	0.86%	0.022%
16	3.554	3.537	3.564	VV	807	8237	0.19%	0.005%
17	3.576	3.564	3.592	VV	838	10297	0.24%	0.006%
18	3.632	3.592	3.665	VV	2954	52637	1.23%	0.032%
19	3.714	3.665	3.748	VV	1626	51921	1.21%	0.031%
20	3.775	3.748	3.788	VV	2714	37730	0.88%	0.023%
21	3.801	3.788	3.846	VV	2189	44946	1.05%	0.027%
22	3.875	3.846	3.932	VV	4911	92953	2.17%	0.056%
23	3.982	3.932	4.001	PV	6459	90970	2.13%	0.055%
24	4.015	4.001	4.034	VV	3341	45420	1.06%	0.027%
25	4.057	4.034	4.073	VV	2121	38360	0.90%	0.023%
26	4.092	4.073	4.134	VV	3555	55192	1.29%	0.033%
27	4.178	4.134	4.197	VV	4476	100316	2.35%	0.060%
28	4.213	4.197	4.242	VV	3698	66201	1.55%	0.040%
29	4.252	4.242	4.269	VV	1851	24561	0.57%	0.015%
30	4.279	4.269	4.299	VV	1272	12610	0.29%	0.008%
31	4.333	4.299	4.361	PV	1790	31573	0.74%	0.019%
32	4.383	4.361	4.408	VV	3628	51526	1.20%	0.031%
33	4.446	4.408	4.467	VV	10738	142633	3.33%	0.086%
34	4.485	4.467	4.504	VV	6361	76547	1.79%	0.046%
35	4.521	4.504	4.542	VV	3354	43135	1.01%	0.026%
36	4.557	4.542	4.584	VV	1108	18769	0.44%	0.011%

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37	4.621	4.584	4.640	VV	2784	64454	1.51%	0.039%
38	4.656	4.640	4.666	VV	2536	32125		
39	4.673	4.666	4.687	VV	2302	24633		
40	4.699	4.687	4.713	VV	2241	25948		
41	4.732	4.713	4.768	VV	8206	137852		
42	4.788	4.768	4.798	VV	4750	62784		
43	4.809	4.798	4.827	VV	5048	59454	1.39%	0.036%
44	4.868	4.827	4.895	VV	8418	180734	4.23%	0.109%
45	4.912	4.895	4.932	VV	7558	110767	2.59%	0.067%
46	4.953	4.932	4.998	VV	16543	247475	5.79%	0.149%
47	5.030	4.998	5.048	VV	6007	90153	2.11%	0.054%
48	5.063	5.048	5.088	VV	2938	42545	0.99%	0.026%
49	5.128	5.088	5.140	VV	5119	68629	1.60%	0.041%
50	5.158	5.140	5.186	VV	10613	169293	3.96%	0.102%
51	5.205	5.186	5.221	VV	10506	130362	3.05%	0.078%
52	5.239	5.221	5.256	VV	8377	128350	3.00%	0.077%
53	5.270	5.256	5.308	VV	7569	114232	2.67%	0.069%
54	5.319	5.308	5.328	VV	978	9933	0.23%	0.006%
55	5.334	5.328	5.343	VV	976	8221	0.19%	0.005%
56	5.368	5.343	5.381	VV	5570	75320	1.76%	0.045%
57	5.391	5.381	5.408	VV	4706	62332	1.46%	0.037%
58	5.432	5.408	5.452	VV	7723	157619	3.69%	0.095%
59	5.466	5.452	5.502	VV	9111	162254	3.79%	0.098%
60	5.529	5.502	5.544	VV	5937	100558	2.35%	0.060%
61	5.555	5.544	5.569	VV	3510	34578	0.81%	0.021%
62	5.595	5.569	5.695	VV	41304	746843	17.46%	0.449%
63	5.718	5.695	5.732	VV	2942	47045	1.10%	0.028%
64	5.770	5.732	5.809	VV	13304	335656	7.85%	0.202%
65	5.817	5.809	5.836	VV	5946	71956	1.68%	0.043%
66	5.854	5.836	5.866	VV	8665	105407	2.46%	0.063%
67	5.886	5.866	5.931	VV	22884	536842	12.55%	0.323%
68	5.943	5.931	5.960	VV	7774	125406	2.93%	0.075%
69	5.981	5.960	6.011	VV	24347	406719	9.51%	0.244%
70	6.025	6.011	6.055	VV	8587	179388	4.19%	0.108%
71	6.072	6.055	6.091	VV	12757	171270	4.00%	0.103%
72	6.124	6.091	6.145	VV	12535	253224	5.92%	0.152%
73	6.155	6.145	6.161	VV	5932	52241	1.22%	0.031%
74	6.205	6.161	6.243	VV	11198	432471	10.11%	0.260%
75	6.270	6.243	6.287	VV	12283	204819	4.79%	0.123%
76	6.309	6.287	6.324	VV	16061	264396	6.18%	0.159%
77	6.339	6.324	6.377	VV	14726	352247	8.24%	0.212%
78	6.395	6.377	6.427	VV	13705	274768	6.42%	0.165%
79	6.446	6.427	6.481	VV	14360	307893	7.20%	0.185%
80	6.499	6.481	6.524	VV	9123	197249	4.61%	0.119%
81	6.551	6.524	6.606	VV	20036	520930	12.18%	0.313%
82	6.630	6.606	6.678	VV	52183	788305	18.43%	0.474%
83	6.716	6.678	6.729	VV	8463	191360	4.47%	0.115%
84	6.748	6.729	6.762	VV	13466	200068	4.68%	0.120%
85	6.782	6.762	6.806	VV	28437	437047	10.22%	0.263%
86	6.829	6.806	6.845	VV	12308	227462	5.32%	0.137%
87	6.855	6.845	6.867	VV	9486	111935	2.62%	0.067%
88	6.883	6.867	6.895	VV	10710	153179	3.58%	0.092%
89	6.913	6.895	6.935	VV	22250	313395	7.33%	0.188%

Instrument :

FID_E

ClientSampleId :

D2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

90	6.954	6.935	6.966	VV	14260	200218	4.68%	0.120%
91	6.977	6.966	7.005	VV	12718	237670		
92	7.034	7.005	7.067	VV	45389	724813	16.05%	0.413%
93	7.078	7.067	7.093	VV	9457	133301	5.90%	0.152%
94	7.113	7.093	7.129	VV	11844	214712	13.25%	0.341%
95	7.158	7.129	7.181	VV	20917	438262	10.18%	0.262%
96	7.203	7.181	7.231	VV	25737	435424	16.05%	0.413%
97	7.268	7.231	7.295	VV	29051	686314	5.90%	0.152%
98	7.310	7.295	7.328	VV	18820	252249	13.25%	0.341%
99	7.351	7.328	7.387	VV	30788	566586	7.75%	0.199%
100	7.411	7.387	7.433	VV	18062	331575		
101	7.450	7.433	7.468	VV	13982	215988	5.05%	0.130%
102	7.481	7.468	7.495	VV	9644	143145	3.35%	0.086%
103	7.518	7.495	7.527	VV	9923	177799	4.16%	0.107%
104	7.555	7.527	7.563	VV	34721	454240	10.62%	0.273%
105	7.579	7.563	7.602	VV	82522	1030036	24.08%	0.619%
106	7.615	7.602	7.688	VV	15805	660077	15.43%	0.397%
107	7.702	7.688	7.718	VV	9895	160020	3.74%	0.096%
108	7.752	7.718	7.787	VV	31039	698314	16.33%	0.420%
109	7.805	7.787	7.828	VV	14048	262101	6.13%	0.158%
110	7.846	7.828	7.875	VV	11796	255752	5.98%	0.154%
111	7.895	7.875	7.905	VV	16488	226235	5.29%	0.136%
112	7.917	7.905	7.934	VV	17713	244286	5.71%	0.147%
113	7.950	7.934	7.987	VV	17356	359862	8.41%	0.216%
114	8.012	7.987	8.027	VV	17140	307428	7.19%	0.185%
115	8.045	8.027	8.083	VV	19495	513843	12.01%	0.309%
116	8.108	8.083	8.128	VV	19928	378217	8.84%	0.227%
117	8.155	8.128	8.172	VV	23897	419507	9.81%	0.252%
118	8.189	8.172	8.200	VV	24707	322681	7.54%	0.194%
119	8.212	8.200	8.236	VV	28811	410029	9.59%	0.246%
120	8.282	8.236	8.314	VV	36404	791552	18.51%	0.476%
121	8.328	8.314	8.350	VV	13093	246998	5.77%	0.148%
122	8.370	8.350	8.382	VV	19334	293615	6.86%	0.176%
123	8.389	8.382	8.404	VV	16698	215492	5.04%	0.130%
124	8.463	8.404	8.490	VV	91525	1714551	40.09%	1.031%
125	8.507	8.490	8.528	VV	19627	384409	8.99%	0.231%
126	8.573	8.528	8.595	VV	24486	716801	16.76%	0.431%
127	8.614	8.595	8.636	VV	19995	431322	10.08%	0.259%
128	8.648	8.636	8.662	VV	17363	248251	5.80%	0.149%
129	8.683	8.662	8.726	VV	21667	596931	13.96%	0.359%
130	8.755	8.726	8.779	VV	13820	374503	8.76%	0.225%
131	8.794	8.779	8.804	VV	11826	156503	3.66%	0.094%
132	8.836	8.804	8.853	VV	18358	459539	10.74%	0.276%
133	8.886	8.853	8.901	VV	20644	495738	11.59%	0.298%
134	8.917	8.901	8.937	VV	22531	415472	9.71%	0.250%
135	8.958	8.937	8.972	VV	21747	387098	9.05%	0.233%
136	9.004	8.972	9.032	VV	49473	943463	22.06%	0.567%
137	9.057	9.032	9.097	VV	21949	596842	13.95%	0.359%
138	9.123	9.097	9.137	VV	15530	339254	7.93%	0.204%
139	9.152	9.137	9.171	VV	17063	291026	6.80%	0.175%
140	9.185	9.171	9.198	VV	13391	209295	4.89%	0.126%
141	9.229	9.198	9.252	VV	17622	493868	11.55%	0.297%

Instrument :

FID_E

ClientSampleId :

D2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Instrument : FID_E ClientSampleId : D2									
rteres									
142	9.293	9.252	9.357	VV	98464	1863904	43.58%	1.120%	
143	9.378	9.357	9.401	VV	18290	389641			
144	9.436	9.401	9.463	VV	15065	481902	11.77%	0.134%	
145	9.491	9.463	9.505	VV	14989	313800	7.48%	0.141%	
146	9.524	9.505	9.558	VV	16602	450186	10.61%	0.152%	
147	9.577	9.558	9.609	VV	16741	429372	10.61%	0.152%	
148	9.625	9.609	9.641	VV	15189	253693	5.93%	0.152%	
149	9.670	9.641	9.701	VV	30726	738679	17.27%	0.444%	
150	9.713	9.701	9.725	VV	17108	234203	5.48%	0.141%	
151	9.753	9.725	9.777	VV	23490	573583	13.41%	0.345%	
152	9.801	9.777	9.821	VV	22787	462381	10.81%	0.278%	
153	9.853	9.821	9.887	VV	22378	628669	14.70%	0.378%	
154	9.903	9.887	9.918	VV	12722	222273	5.20%	0.134%	
155	9.953	9.918	9.973	VV	20460	503867	11.78%	0.303%	
156	9.989	9.973	10.004	VV	15982	277992	6.50%	0.167%	
157	10.028	10.004	10.052	VV	22147	526814	12.32%	0.317%	
158	10.076	10.052	10.122	VV	101008	1536031	35.91%	0.923%	
159	10.151	10.122	10.220	VV	15202	741810	17.34%	0.446%	
160	10.248	10.220	10.275	VV	13093	361025	8.44%	0.217%	
161	10.308	10.275	10.332	VV	11044	360257	8.42%	0.217%	
162	10.349	10.332	10.374	VV	11986	277994	6.50%	0.167%	
163	10.422	10.374	10.436	VV	19139	495452	11.58%	0.298%	
164	10.464	10.436	10.492	VV	47887	934937	21.86%	0.562%	
165	10.516	10.492	10.534	VV	18875	391947	9.16%	0.236%	
166	10.554	10.534	10.578	VV	21951	440422	10.30%	0.265%	
167	10.609	10.578	10.636	VV	22926	530036	12.39%	0.319%	
168	10.668	10.636	10.677	VV	11138	254430	5.95%	0.153%	
169	10.747	10.677	10.774	VV	14257	731107	17.09%	0.439%	
170	10.817	10.774	10.854	VV	92490	1565110	36.59%	0.941%	
171	10.888	10.854	10.918	VV	49784	1015790	23.75%	0.611%	
172	10.934	10.918	10.969	VV	14714	375886	8.79%	0.226%	
173	11.029	11.069	11.051	VV	11266	505689	11.82%	0.304%	
174	11.081	11.051	11.115	VV	22633	578899	13.53%	0.348%	
175	11.158	11.115	11.180	VV	26145	703471	16.45%	0.423%	
176	11.208	11.180	11.252	VV	22755	714846	16.71%	0.430%	
177	11.272	11.252	11.307	VV	16582	407174	9.52%	0.245%	
178	11.325	11.307	11.361	VV	15045	343843	8.04%	0.207%	
179	11.382	11.361	11.406	VV	10084	252584	5.91%	0.152%	
180	11.470	11.406	11.490	VV	11284	508979	11.90%	0.306%	
181	11.522	11.490	11.559	VV	77860	1225024	28.64%	0.736%	
182	11.569	11.559	11.583	VV	11652	158817	3.71%	0.095%	
183	11.612	11.583	11.660	VV	38395	834688	19.51%	0.502%	
184	11.677	11.660	11.697	VV	9964	190000	4.44%	0.114%	
185	11.718	11.697	11.740	VV	9782	220979	5.17%	0.133%	
186	11.838	11.740	11.867	VV	272517	3720233	86.98%	2.236%	
187	11.883	11.867	11.898	VV	14880	248404	5.81%	0.149%	
188	11.918	11.898	11.937	VV	19958	358061	8.37%	0.215%	
189	11.956	11.937	11.978	VV	24485	471517	11.02%	0.283%	
190	12.000	11.978	12.048	VV	18879	622512	14.55%	0.374%	
191	12.066	12.048	12.108	VV	13840	368456	8.61%	0.221%	
192	12.131	12.108	12.146	VV	8318	167723	3.92%	0.101%	
193	12.194	12.146	12.251	VV	64469	1262347	29.51%	0.759%	
194	12.280	12.251	12.336	VV	9365	401465	9.39%	0.241%	

Manual IntegrationsAPPROVED

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

195	12.389	12.336	12.409	VV	7262	280931	6.57%	0.169%
196	12.423	12.409	12.441	VV	6175	115352		
197	12.468	12.441	12.521	VV	9986	385077		
198	12.536	12.521	12.550	VV	7458	118518		
199	12.575	12.550	12.590	VV	9723	193131		
200	12.607	12.590	12.640	VV	11756	251377		
201	12.660	12.640	12.731	VV	8611	353843	8.27%	0.213%
202	12.785	12.731	12.808	VV	12458	399836	9.35%	0.240%
203	12.835	12.808	12.876	VV	54450	887085	20.74%	0.533%
204	12.902	12.876	12.965	VV	60779	1043422	24.39%	0.627%
205	12.981	12.965	13.020	VV	4811	135509	3.17%	0.081%
206	13.049	13.020	13.072	VV	7750	168362	3.94%	0.101%
207	13.092	13.072	13.139	VV	8672	252395	5.90%	0.152%
208	13.157	13.139	13.176	VV	6910	122063	2.85%	0.073%
209	13.201	13.176	13.245	VV	50441	796467	18.62%	0.479%
210	13.282	13.245	13.318	VV	202462	2642871	61.79%	1.589%
211	13.329	13.318	13.359	VV	6875	135445	3.17%	0.081%
212	13.378	13.359	13.419	VV	4421	122701	2.87%	0.074%
213	13.449	13.419	13.512	VV	36522	654299	15.30%	0.393%
214	13.533	13.512	13.577	VV	4767	133798	3.13%	0.080%
215	13.614	13.577	13.641	VV	3544	99879	2.34%	0.060%
216	13.671	13.641	13.744	VV	8018	265162	6.20%	0.159%
217	13.798	13.744	13.848	VV	10628	329030	7.69%	0.198%
218	13.871	13.848	13.891	VV	4115	83489	1.95%	0.050%
219	13.909	13.891	13.925	VV	4284	71578	1.67%	0.043%
220	13.947	13.925	14.011	VV	8956	214657	5.02%	0.129%
221	14.035	14.011	14.057	VV	26547	365955	8.56%	0.220%
222	14.072	14.057	14.098	VV	11047	177605	4.15%	0.107%
223	14.116	14.098	14.164	VV	7287	135555	3.17%	0.081%
224	14.177	14.164	14.204	VV	1052	17328	0.41%	0.010%
225	14.263	14.204	14.294	VV	3360	88604	2.07%	0.053%
226	14.303	14.294	14.319	VV	1307	14903	0.35%	0.009%
227	14.329	14.319	14.347	VV	775	8317	0.19%	0.005%
228	14.400	14.347	14.421	PV	1977	44254	1.03%	0.027%
229	14.453	14.421	14.480	VV	2534	61586	1.44%	0.037%
230	14.508	14.480	14.519	VV	2570	50500	1.18%	0.030%
231	14.539	14.519	14.548	VV	4130	56956	1.33%	0.034%
232	14.555	14.548	14.578	VV	3903	53125	1.24%	0.032%
233	14.600	14.578	14.623	VV	15060	210571	4.92%	0.127%
234	14.637	14.623	14.698	VV	3371	99429	2.32%	0.060%
235	14.724	14.698	14.753	VV	6575	136458	3.19%	0.082%
236	14.779	14.753	14.822	VV	9505	202211	4.73%	0.122%
237	14.844	14.822	14.858	VV	3675	63935	1.49%	0.038%
238	14.890	14.858	14.914	VV	3882	106697	2.49%	0.064%
239	14.940	14.914	14.959	VV	2501	52449	1.23%	0.032%
240	14.974	14.959	15.031	VV	1904	42595	1.00%	0.026%
241	15.058	15.031	15.068	PV	3423	48566	1.14%	0.029%
242	15.093	15.068	15.113	VV	30875	428870	10.03%	0.258%
243	15.135	15.113	15.220	VV	33884	634672	14.84%	0.382%
244	15.252	15.220	15.271	VV	4771	88127	2.06%	0.053%
245	15.284	15.271	15.320	VV	4061	77057	1.80%	0.046%
246	15.335	15.320	15.354	VV	1215	16571	0.39%	0.010%

Instrument :

FID_E

ClientSampleId :

D2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

					rters			
247	15.368	15.354	15.378	VV	960	9783	0.23%	0.006%
248	15.416	15.378	15.423	VV	2033	43569		
249	15.444	15.423	15.469	VV	3574	69499		
250	15.480	15.469	15.508	VV	1848	24279		
251	15.551	15.508	15.627	PV	10728	325451		
252	15.663	15.627	15.701	PV	5680	113451		
253	15.725	15.701	15.745	VV	4264	55790	1.30%	0.034%
254	15.769	15.745	15.794	VV	11269	181721	4.25%	0.109%
255	15.805	15.794	15.840	VV	4273	70094	1.64%	0.042%
256	15.877	15.840	15.894	VV	2660	51243	1.20%	0.031%
257	15.928	15.894	15.978	VV	5337	181546	4.24%	0.109%
258	15.997	15.978	16.022	VV	2449	41970	0.98%	0.025%
259	16.056	16.022	16.071	VV	1003	18720	0.44%	0.011%
260	16.098	16.071	16.144	VV	1709	41070	0.96%	0.025%
261	16.168	16.144	16.215	VV	4537	104073	2.43%	0.063%
262	16.234	16.215	16.259	VV	1669	34786	0.81%	0.021%
263	16.296	16.259	16.317	VV	1271	24535	0.57%	0.015%
264	16.366	16.317	16.391	PV	4976	96461	2.26%	0.058%
265	16.420	16.391	16.430	VV	3187	48397	1.13%	0.029%
266	16.460	16.430	16.491	VV	5681	137676	3.22%	0.083%
267	16.530	16.491	16.542	VV	3258	69877	1.63%	0.042%
268	16.569	16.542	16.600	VV	5176	120620	2.82%	0.073%
269	16.660	16.600	16.746	VV	43417	1065192	24.90%	0.640%
270	16.793	16.746	16.827	VV	10603	257902	6.03%	0.155%
271	16.848	16.827	16.887	VV	3519	82826	1.94%	0.050%
272	16.938	16.887	16.957	VV	9165	182439	4.27%	0.110%
273	16.984	16.957	17.017	VV	31739	529122	12.37%	0.318%
274	17.046	17.017	17.103	VV	37539	737199	17.24%	0.443%
275	17.157	17.103	17.214	VV	20217	701422	16.40%	0.422%
276	17.225	17.214	17.232	VV	5106	51500	1.20%	0.031%
277	17.248	17.232	17.259	VV	5460	80918	1.89%	0.049%
278	17.293	17.259	17.323	VV	9824	292804	6.85%	0.176%
279	17.353	17.323	17.381	VV	14086	330517	7.73%	0.199%
280	17.430	17.381	17.474	VV	13776	521203	12.19%	0.313%
281	17.529	17.474	17.557	VV	14515	520345	12.17%	0.313%
282	17.575	17.557	17.615	VV	12928	368745	8.62%	0.222%
283	17.635	17.615	17.651	VV	11705	214855	5.02%	0.129%
284	17.672	17.651	17.701	VV	14062	348828	8.16%	0.210%
285	17.755	17.701	17.791	VV	11562	555442	12.99%	0.334%
286	17.839	17.791	17.874	VV	9817	424886	9.93%	0.255%
287	17.899	17.874	17.924	VV	13326	327580	7.66%	0.197%
288	18.004	17.924	18.027	VV	19422	844614	19.75%	0.508%
289	18.043	18.027	18.061	VV	14096	266442	6.23%	0.160%
290	18.075	18.061	18.092	VV	11289	205030	4.79%	0.123%
291	18.143	18.092	18.211	VV	35645	1465228	34.26%	0.881%
292	18.233	18.211	18.271	VV	15959	524971	12.27%	0.316%
293	18.289	18.271	18.303	VV	14187	262288	6.13%	0.158%
294	18.337	18.303	18.374	VV	26897	885471	20.70%	0.532%
295	18.394	18.374	18.407	VV	17922	336748	7.87%	0.202%
296	18.433	18.407	18.487	VV	39165	1267161	29.63%	0.762%
297	18.512	18.487	18.544	VV	43840	971127	22.70%	0.584%
298	18.594	18.544	18.620	VV	21888	887391	20.75%	0.533%
299	18.638	18.620	18.654	VV	19619	383982	8.98%	0.231%

Instrument :

FID_E

ClientSampleId :

D2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Instrument :

FID_E

ClientSampleId :

D2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

					rt	Area	Height	Area%	Height%
300	18.688	18.654	18.746	VV	42703	1349903	31.56%	0.811%	
301	18.832	18.746	18.869	VV	24946	1331429	31.56%	0.811%	
302	18.888	18.869	18.904	VV	16934	337297	31.56%	0.811%	
303	18.936	18.904	18.959	VV	32493	739702	17.56%	0.409%	
304	18.985	18.959	19.053	VV	29859	1206596	28.56%	0.633%	
305	19.074	19.053	19.086	VV	19333	375254	8.56%	0.188%	
306	19.118	19.086	19.158	VV	23912	882545	20.63%	0.531%	
307	19.212	19.158	19.240	VV	26440	1089146	25.46%	0.655%	
308	19.270	19.240	19.311	VV	32443	1102187	25.77%	0.663%	
309	19.334	19.311	19.357	VV	27591	681194	15.93%	0.409%	
310	19.383	19.357	19.418	VV	26259	881445	20.61%	0.530%	
311	19.442	19.418	19.464	VV	25459	680451	15.91%	0.409%	
312	19.487	19.464	19.510	VV	24149	644574	15.07%	0.387%	
313	19.549	19.510	19.559	VV	24846	708341	16.56%	0.426%	
314	19.587	19.559	19.604	VV	25474	672114	15.71%	0.404%	
315	19.649	19.604	19.686	VV	31825	1346186	31.47%	0.809%	
316	19.745	19.686	19.795	VV	32049	1826747	42.71%	1.098%	
317	19.869	19.795	19.900	VV	37405	2085251	48.75%	1.253%	
318	19.926	19.900	19.948	VV	38239	1035515	24.21%	0.622%	
319	19.969	19.948	20.020	VV	41667	1627808	38.06%	0.978%	
320	20.046	20.020	20.103	VV	38209	1816399	42.47%	1.092%	
321	20.149	20.103	20.178	VV	38746	1657701	38.76%	0.996%	
322	20.194	20.178	20.208	VV	38151	666085	15.57%	0.400%	
323	20.266	20.208	20.301	VV	49661	2427527	56.75%	1.459%	
324	20.315	20.301	20.324	VV	44568	594771	13.91%	0.358%	
325	20.369	20.324	20.391	VV	46930	1804088	42.18%	1.084%	
326	20.398	20.391	20.406	VV	46055	419303	9.80%	0.252%	
327	20.435	20.406	20.465	VV	48782	1633450	38.19%	0.982%	
328	20.510	20.465	20.524	VV	49305	1673686	39.13%	1.006%	
329	20.605	20.524	20.634	VV	51044	3274516	76.56%	1.968%	
330	20.657	20.634	20.672	VV	50231	1102160	25.77%	0.663%	
331	20.757	20.672	20.805	VV	60923	4277283	100.00%	2.571%	
332	20.828	20.805	20.848	VV	53354	1357688	31.74%	0.816%	
333	20.861	20.848	20.890	VV	52032	1275182	29.81%	0.767%	
334	20.901	20.890	20.921	VV	51282	935732	21.88%	0.562%	
335	20.931	20.921	20.983	VV	49779	1786673	41.77%	1.074%	
336	20.997	20.983	21.021	VV	46832	1017887	23.80%	0.612%	
337	21.053	21.021	21.080	VV	46199	1584673	37.05%	0.953%	
338	21.103	21.080	21.146	VV	45509	1702024	39.79%	1.023%	
339	21.176	21.146	21.264	VV	40790	2789537	65.22%	1.677%	
340	21.285	21.264	21.310	VV	38055	1005300	23.50%	0.604%	
341	21.327	21.310	21.357	VV	37988	1035891	24.22%	0.623%	
342	21.372	21.357	21.384	VV	36333	584090	13.66%	0.351%	
343	21.400	21.384	21.436	VV	35747	1056047	24.69%	0.635%	
344	21.446	21.436	21.493	VV	33878	1128150	26.38%	0.678%	
345	21.516	21.493	21.580	VV	34097	1597900	37.36%	0.961%	
346	21.594	21.580	21.614	VV	27830	557447	13.03%	0.335%	
347	21.625	21.614	21.634	VV	26087	310388	7.26%	0.187%	
348	21.657	21.634	21.685	VV	26107	769954	18.00%	0.463%	
349	21.694	21.685	21.702	VV	25125	253368	5.92%	0.152%	
350	21.728	21.702	21.738	VV	25565	523076	12.23%	0.314%	
351	21.748	21.738	21.796	VV	25259	810928	18.96%	0.487%	

rteres							
352	21.813	21.796	21.825	VV	21837	372617	8.71% 0.224%
353	21.852	21.825	21.910	VV	21755	1034142	24.11%
354	21.940	21.910	21.955	VV	18497	498227	11.81%
355	21.982	21.955	22.038	VV	18320	810673	18.71%
356	22.046	22.038	22.105	VV	13932	506144	11.81%
357	22.120	22.105	22.141	VV	11336	233654	5.62%
358	22.152	22.141	22.164	VV	11460	154788	3.62% 0.093%
359	22.168	22.164	22.185	VV	11256	128453	3.00% 0.077%
360	22.198	22.185	22.237	VV	10463	283780	6.63% 0.171%
361	22.256	22.237	22.287	VV	9136	233939	5.47% 0.141%
362	22.296	22.287	22.411	VV	6049	261057	6.10% 0.157%
363	22.425	22.411	22.434	VV	988	10219	0.24% 0.006%
Sum of corrected areas:					166359699		

Instrument :
FID_E
ClientSampleId :
D2

Manual IntegrationsAPPROVED

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

Aliphatic EPH 051425.M Wed Jun 04 04:37:54 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

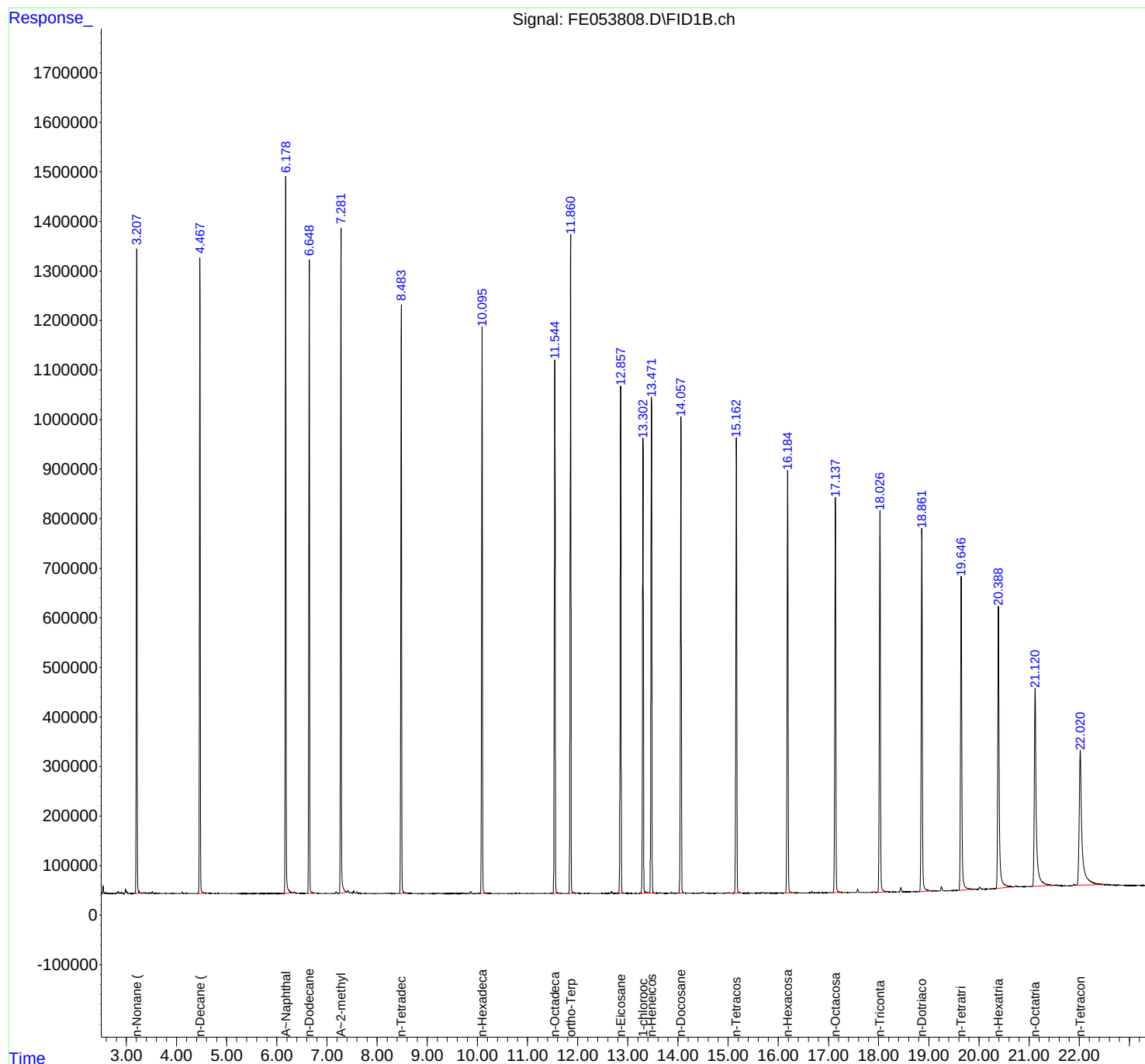
(m)=manual int.

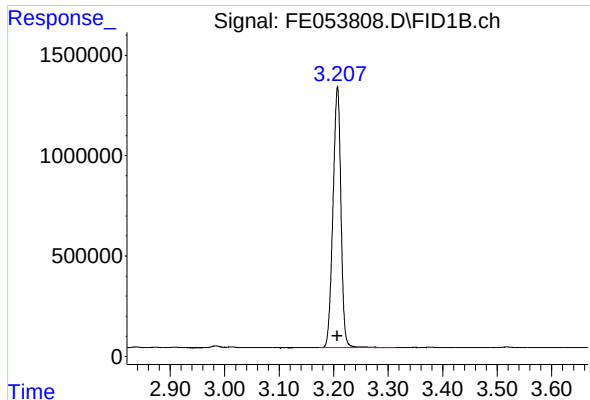
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053808.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 09:48
Operator : YP\AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 6 Sample Multiplier: 1

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)

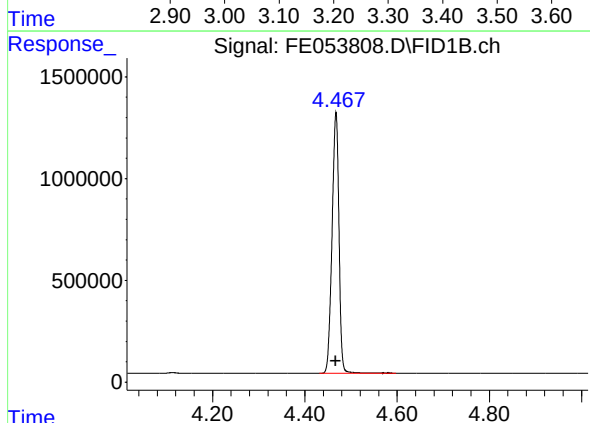
R.T.: 3.207 min
Delta R.T.: 0.000 min
Response: 13229979
Conc: 97.67 ug/ml

Instrument :

FID_E

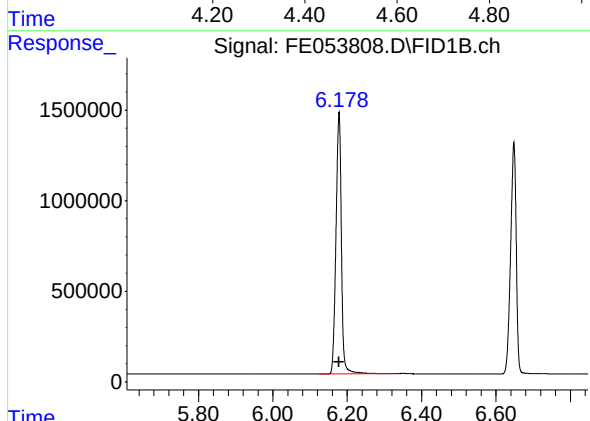
ClientSampleId :

100 PPM ALIPHATIC HC STD1



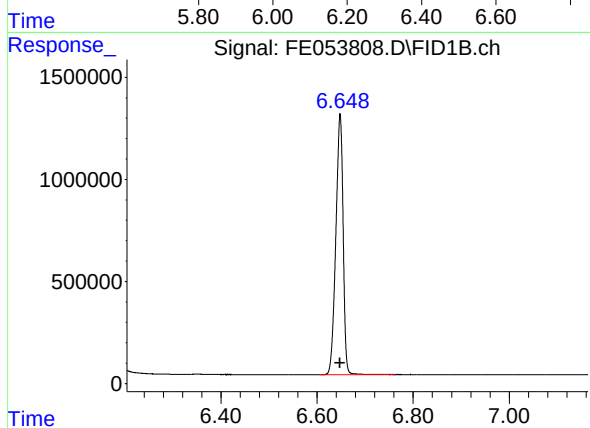
#2 n-Decane (C10)

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



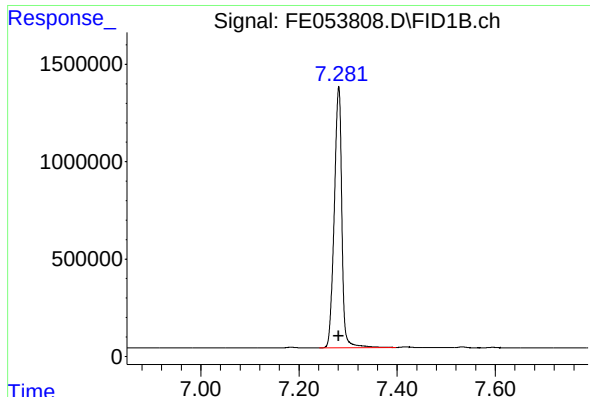
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

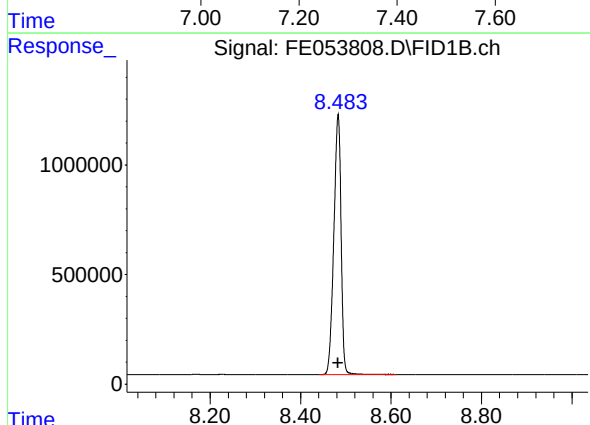
R.T.: 6.648 min
Delta R.T.: 0.000 min
Response: 13419127
Conc: 97.71 ug/ml



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

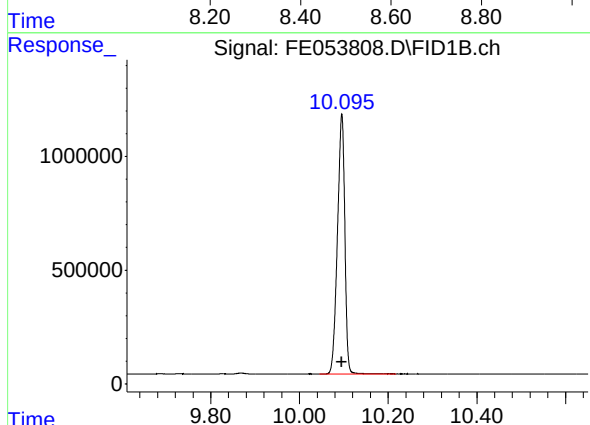
R.T.: 7.281 min
Delta R.T.: 0.000 min
Response: 14358544
Conc: 99.85 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



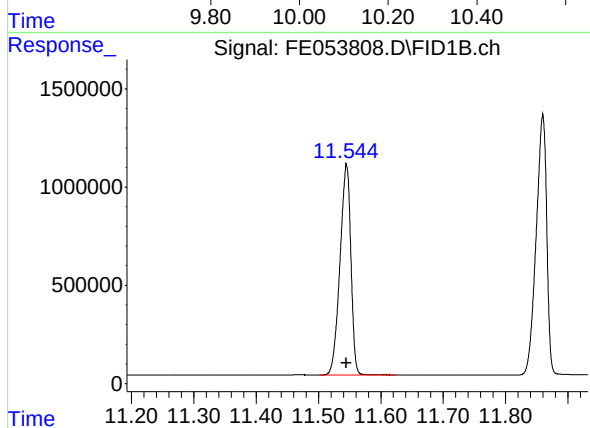
#6 n-Tetradecane (C14)

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



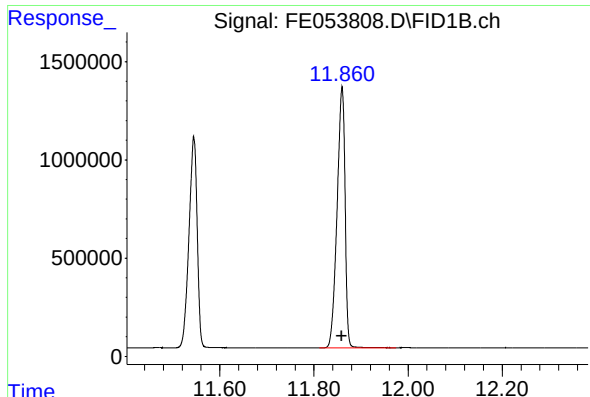
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

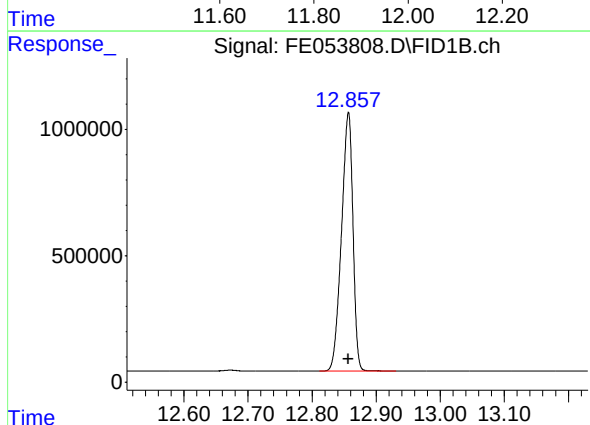
R.T.: 11.545 min
Delta R.T.: 0.000 min
Response: 12994768
Conc: 97.11 ug/ml



#9 ortho-Terphenyl (SURR)

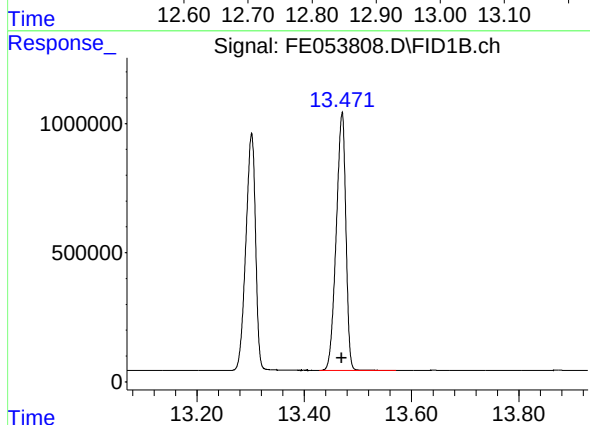
R.T.: 11.859 min
Delta R.T.: 0.000 min
Response: 15622587
Conc: 97.09 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



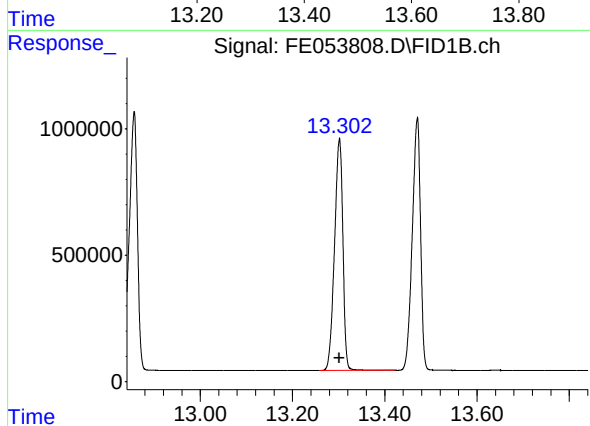
#10 n-Eicosane (C20)

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



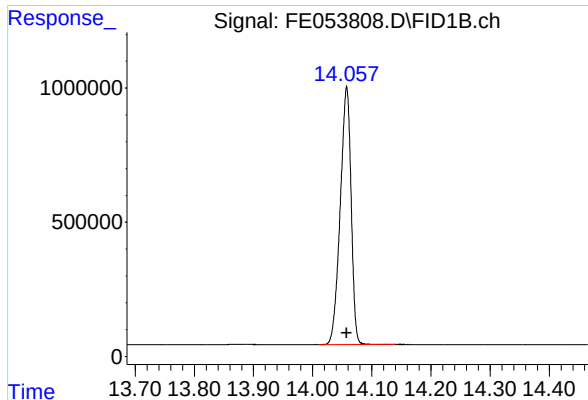
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

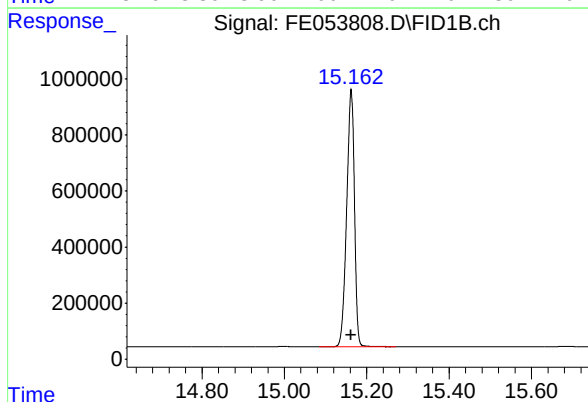
R.T.: 13.301 min
Delta R.T.: 0.000 min
Response: 11527656
Conc: 97.61 ug/ml



#13 n-Docosane (C22)

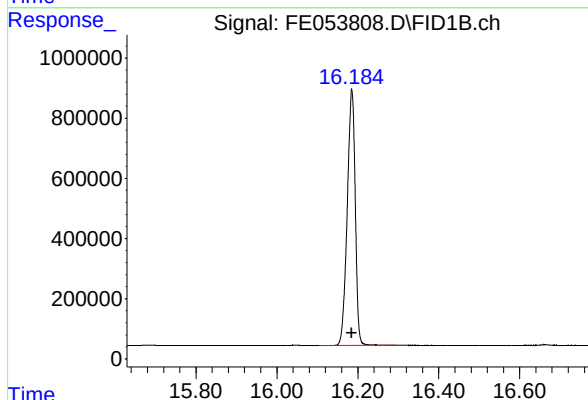
R.T.: 14.057 min
Delta R.T.: 0.000 min
Response: 12254031
Conc: 97.02 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



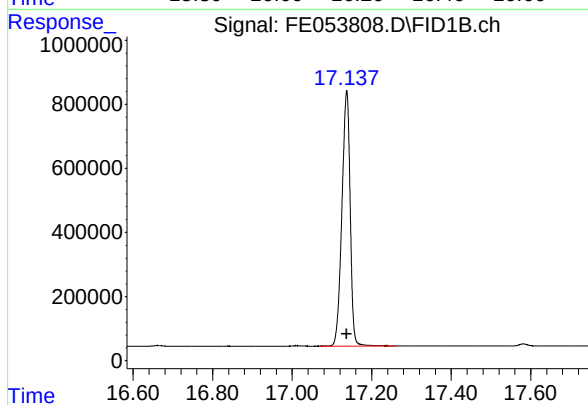
#14 n-Tetracosane (C24)

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



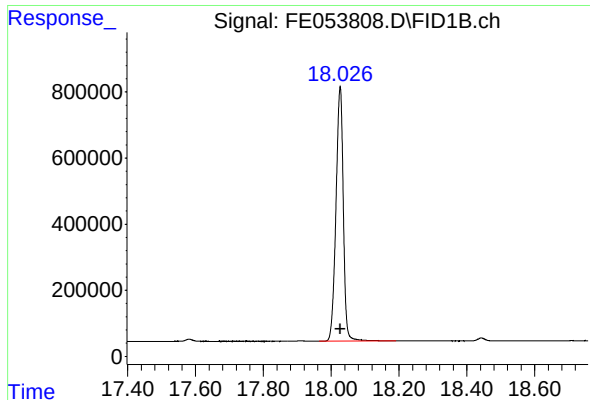
#15 n-Hexacosane (C26)

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)

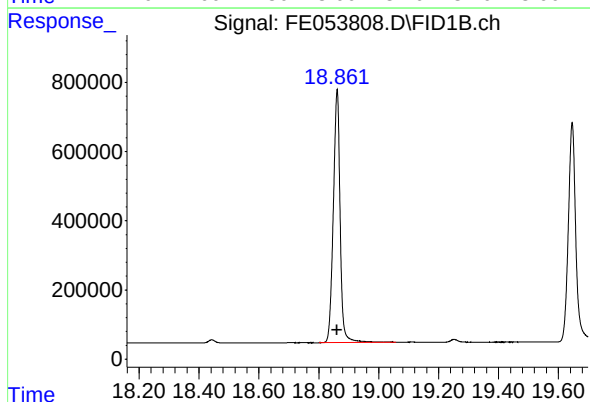
R.T.: 18.026 min
Delta R.T.: 0.000 min
Response: 11534739
Conc: 95.96 ug/ml

Instrument :

FID_E

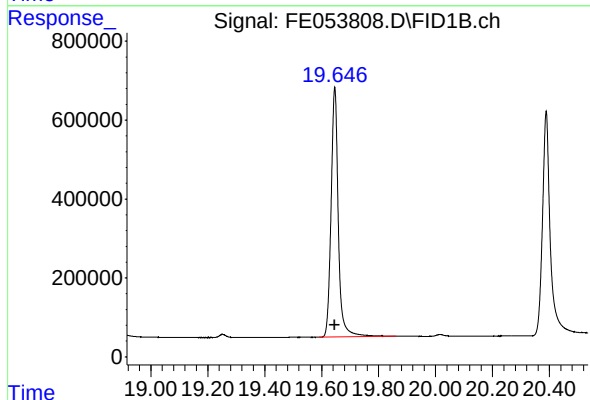
ClientSampleId :

100 PPM ALIPHATIC HC STD1



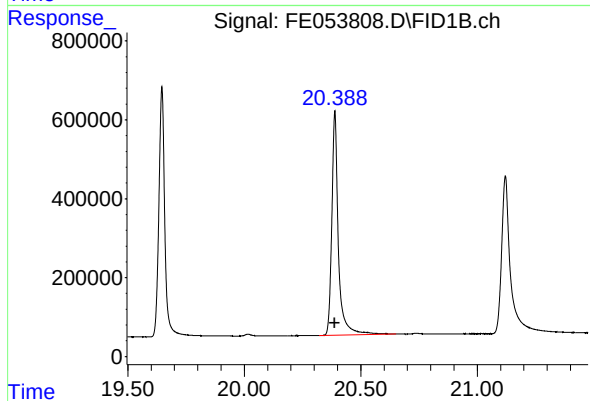
#18 n-Dotriacontane (C32)

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



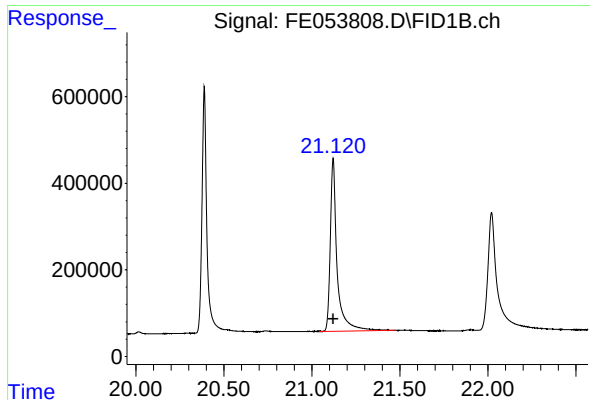
#19 n-Tetratriacontane (C34)

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)

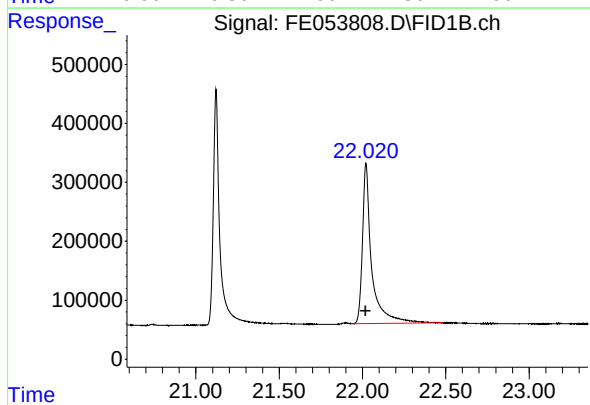
R.T.: 21.121 min
Delta R.T.: 0.000 min
Response: 10825017
Conc: 99.12 ug/ml

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

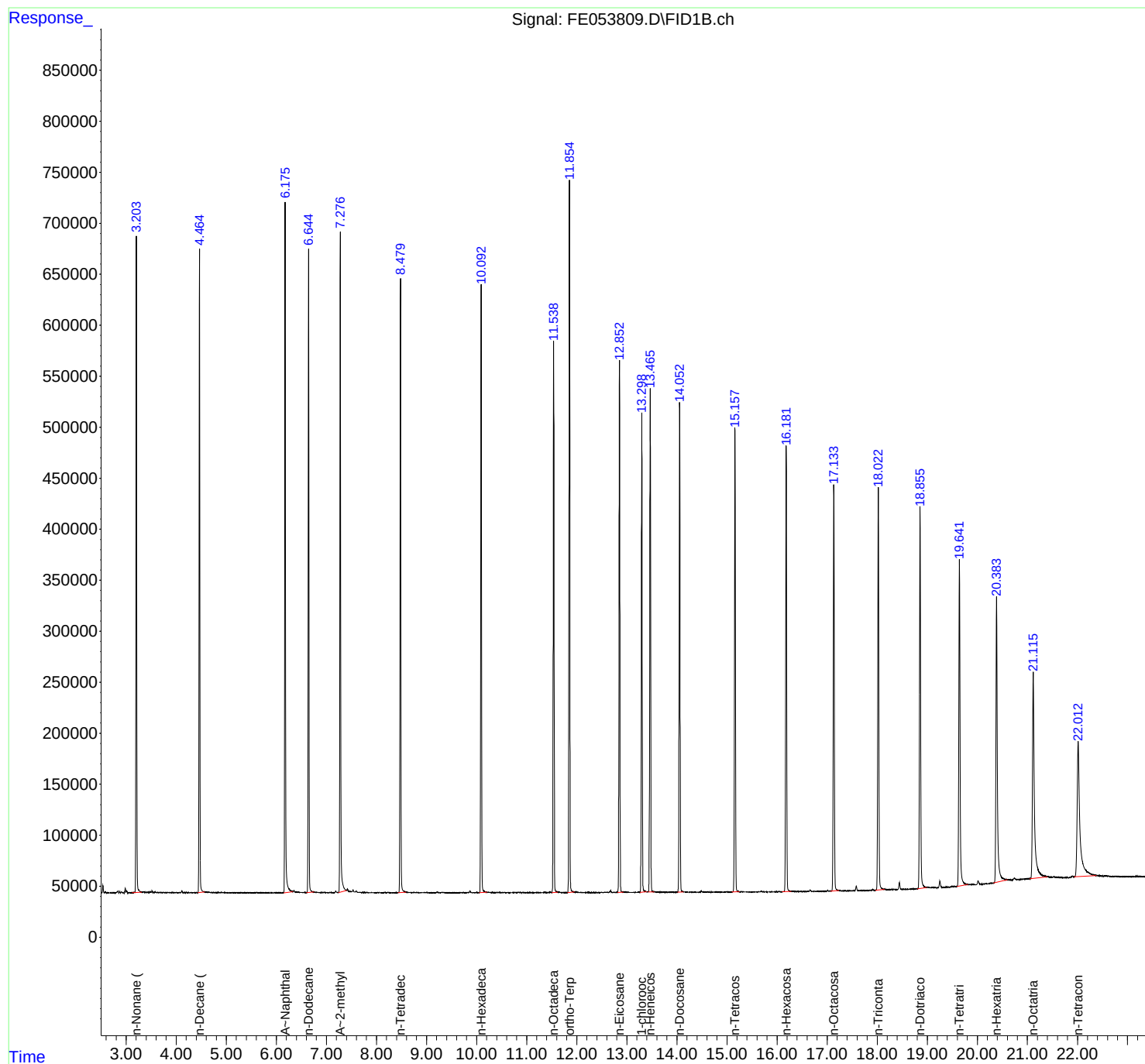
(m)=manual int.

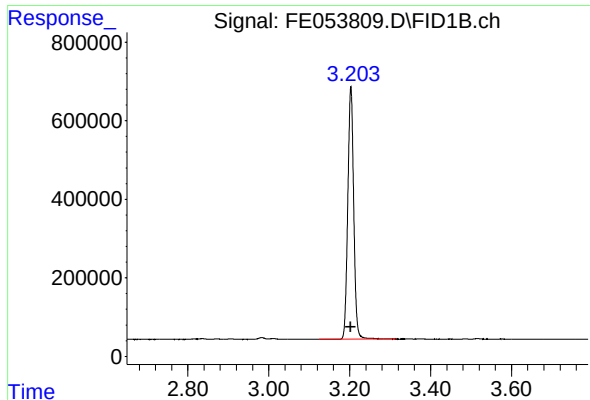
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053809.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 10:18
Operator : YP\AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 7 Sample Multiplier: 1

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

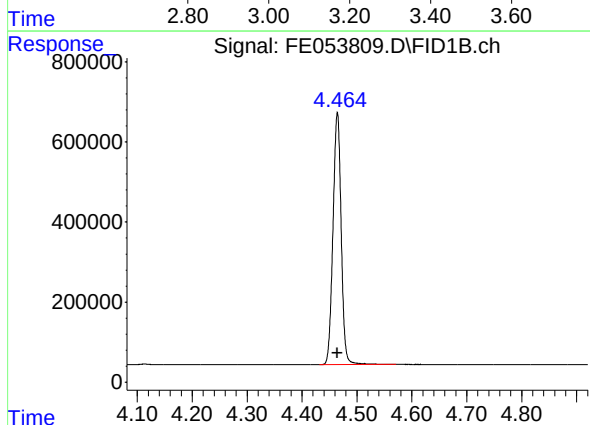




#1 n-Nonane (C9)

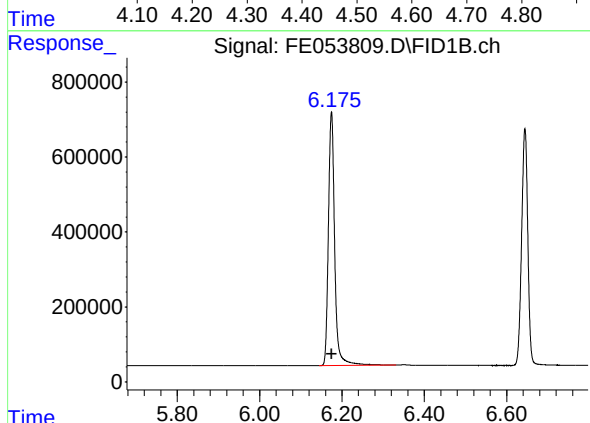
R.T.: 3.203 min
Delta R.T.: 0.000 min
Response: 6521797
Conc: 48.75 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



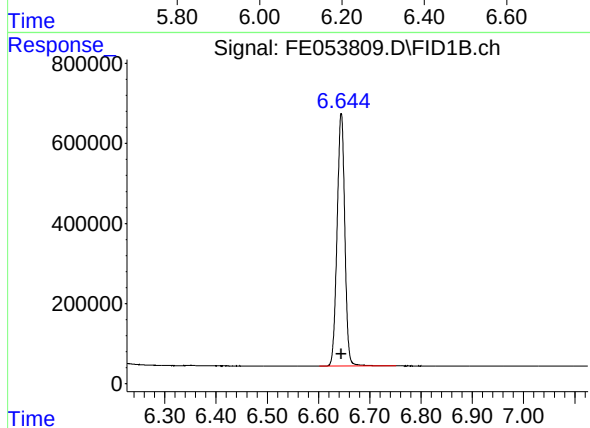
#2 n-Decane (C10)

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



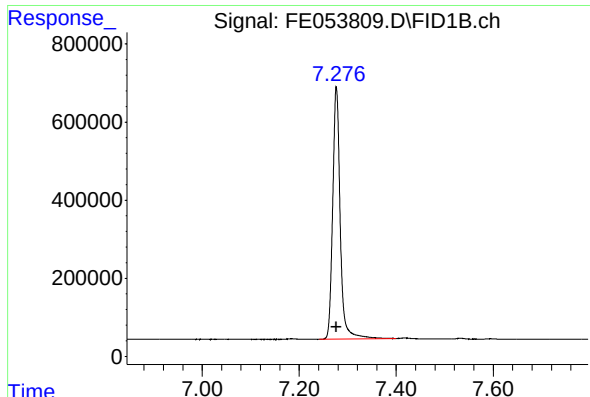
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

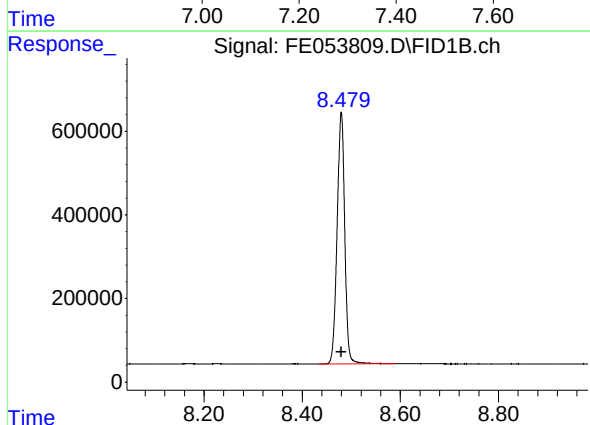
R.T.: 6.644 min
Delta R.T.: 0.000 min
Response: 6609385
Conc: 48.74 ug/ml



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

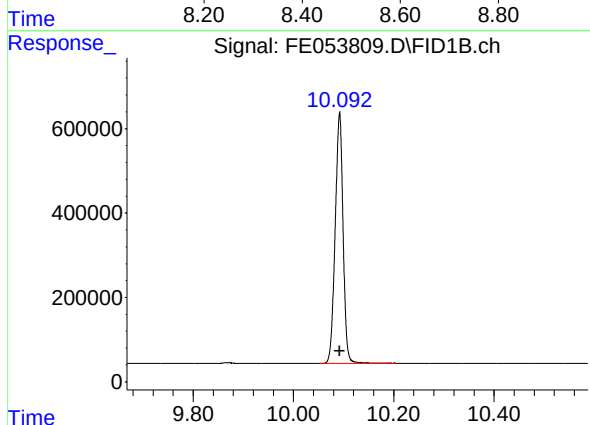
R.T.: 7.277 min
Delta R.T.: 0.000 min
Response: 6992834
Conc: 49.08 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



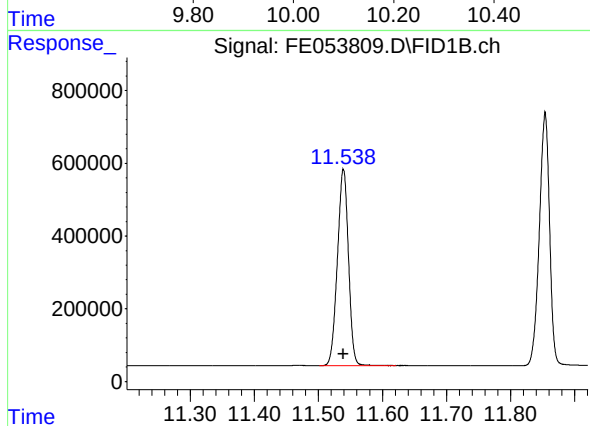
#6 n-Tetradecane (C14)

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



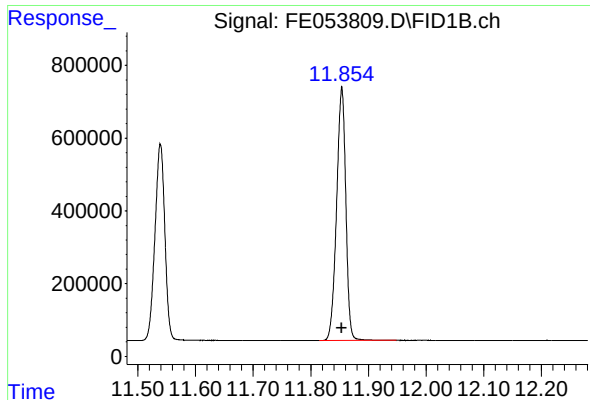
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

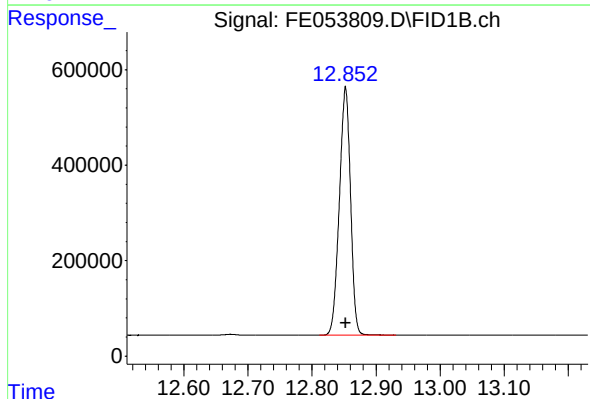
R.T.: 11.539 min
Delta R.T.: 0.000 min
Response: 6432292
Conc: 48.69 ug/ml



#9 ortho-Terphenyl (SURR)

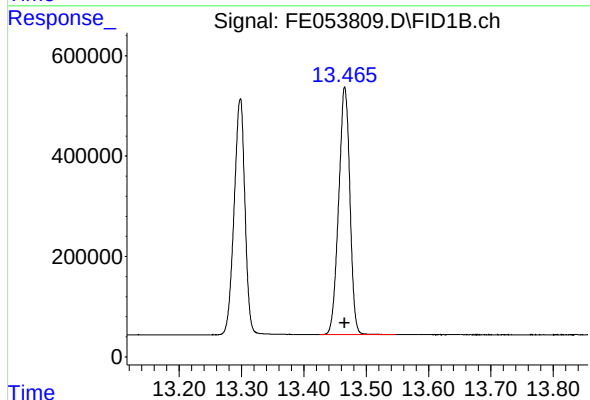
R.T.: 11.854 min
Delta R.T.: 0.000 min
Response: 7743091
Conc: 48.73 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



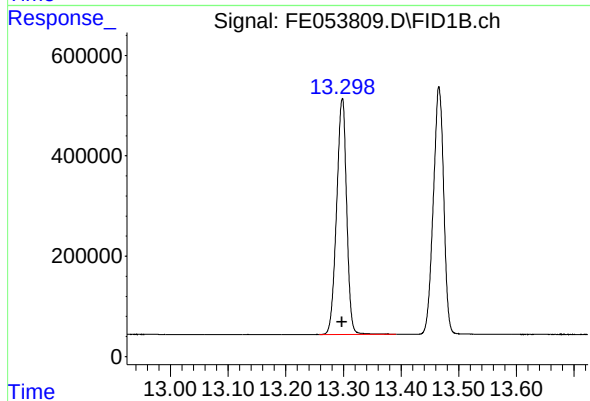
#10 n-Eicosane (C20)

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



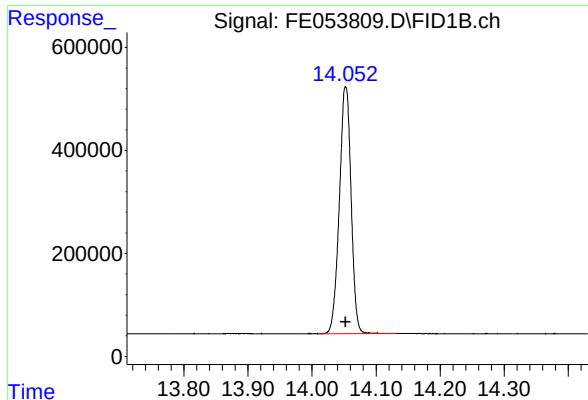
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

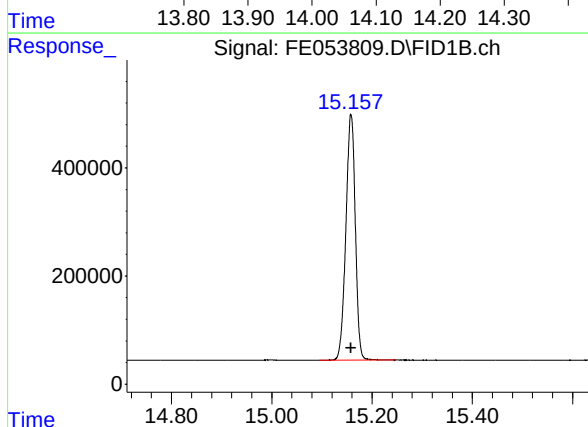
R.T.: 13.298 min
Delta R.T.: 0.000 min
Response: 5688678
Conc: 48.77 ug/ml



#13 n-Docosane (C22)

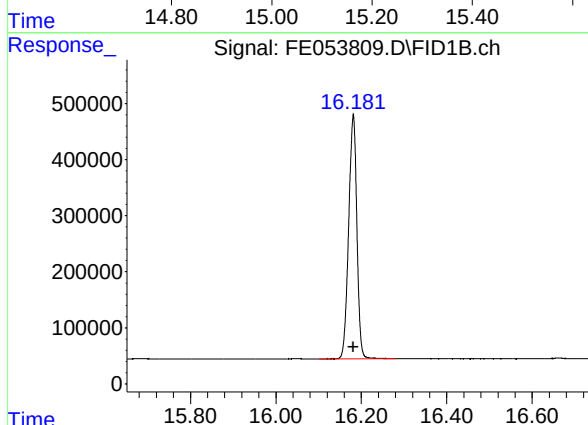
R.T.: 14.053 min
Delta R.T.: 0.000 min
Response: 6073373
Conc: 48.71 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



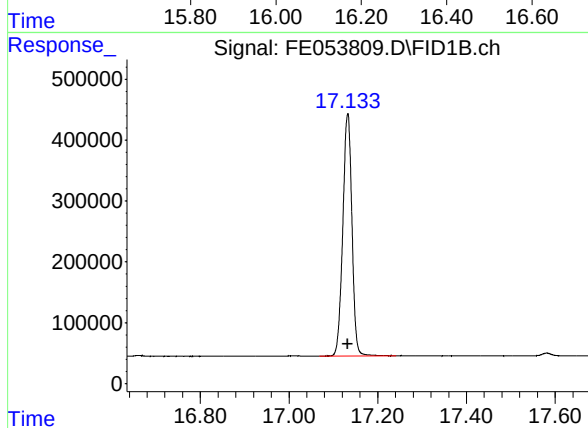
#14 n-Tetracosane (C24)

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



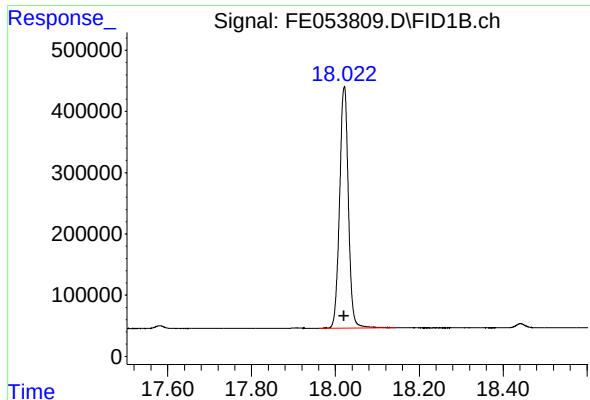
#15 n-Hexacosane (C26)

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



#16 n-Octacosane (C28)

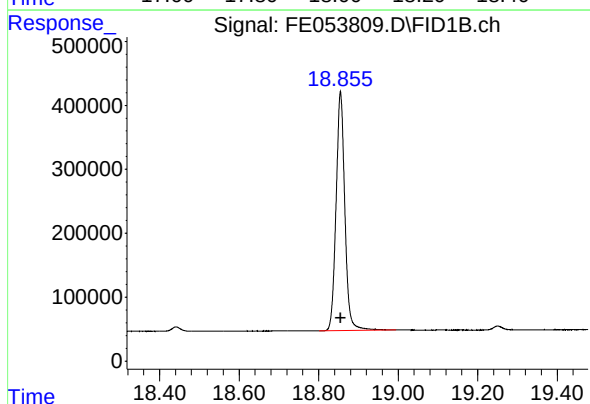
R.T.: 17.132 min
Delta R.T.: 0.000 min
Response: 5702740
Conc: 48.61 ug/ml



#17 n-Tricontane (C30)

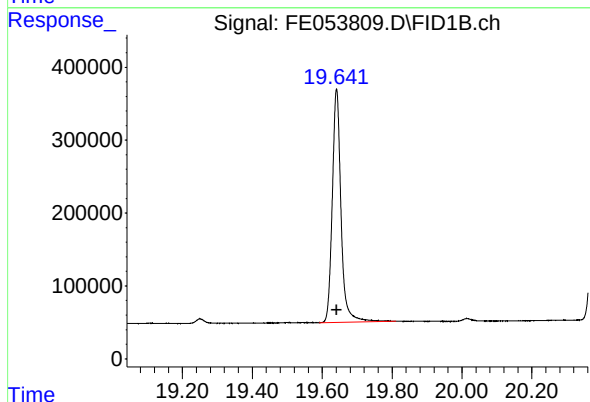
R.T.: 18.021 min
Delta R.T.: 0.000 min
Response: 5742679
Conc: 48.50 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



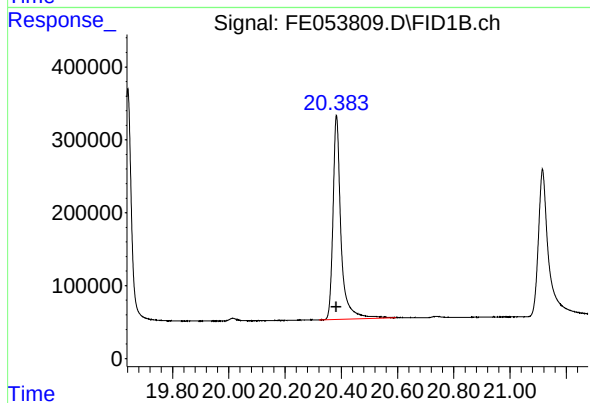
#18 n-Dotriacontane (C32)

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



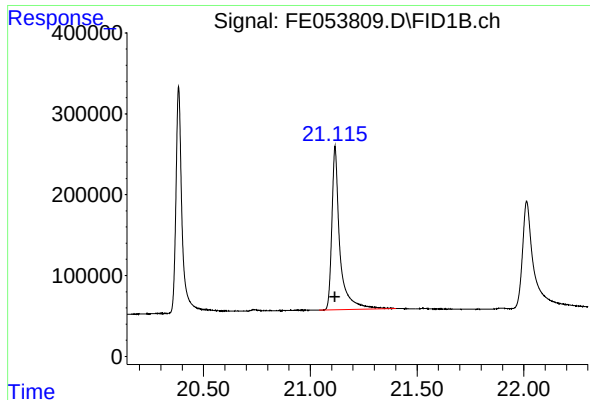
#19 n-Tetratriacontane (C34)

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



#20 n-Hexatriacontane (C36)

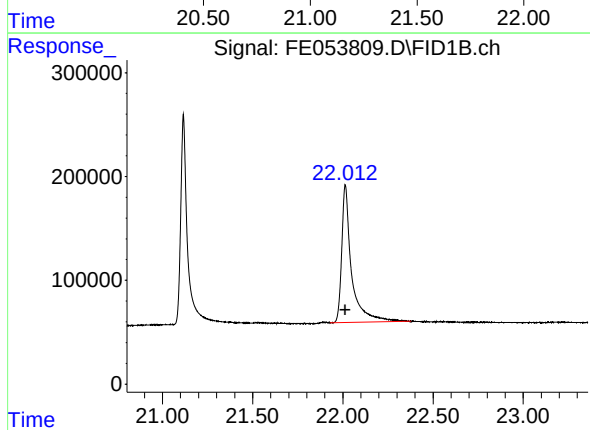
R.T.: 20.383 min
Delta R.T.: 0.000 min
Response: 5509173
Conc: 48.87 ug/ml



#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

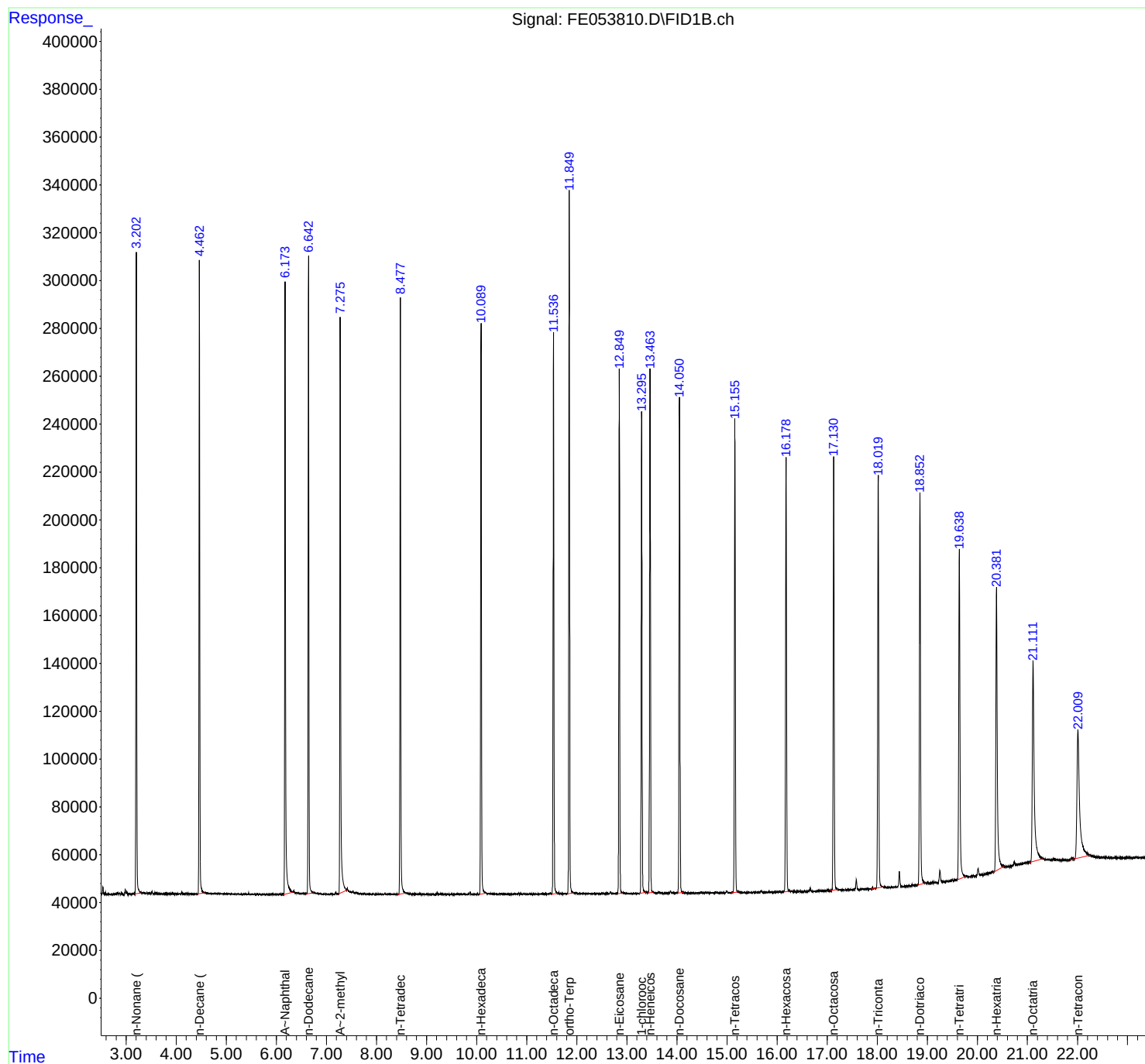
(m)=manual int.

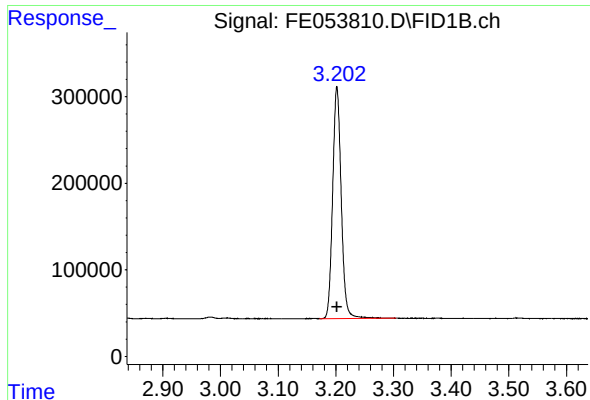
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053810.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 10:48
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 8 Sample Multiplier: 1

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

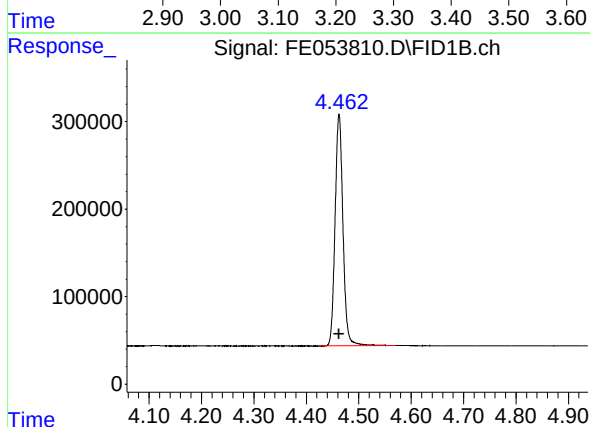




#1 n-Nonane (C9)

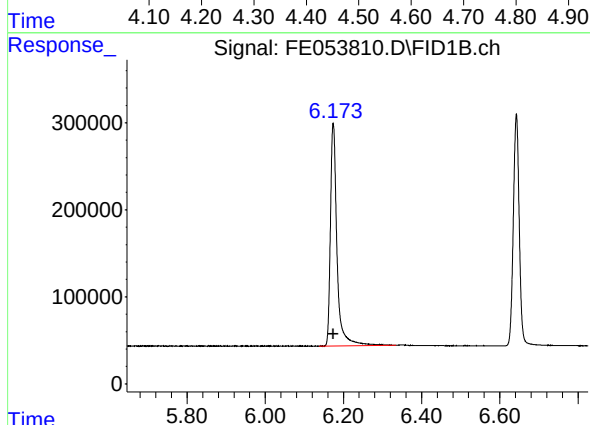
R.T.: 3.202 min
Delta R.T.: 0.000 min
Response: 2772120
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



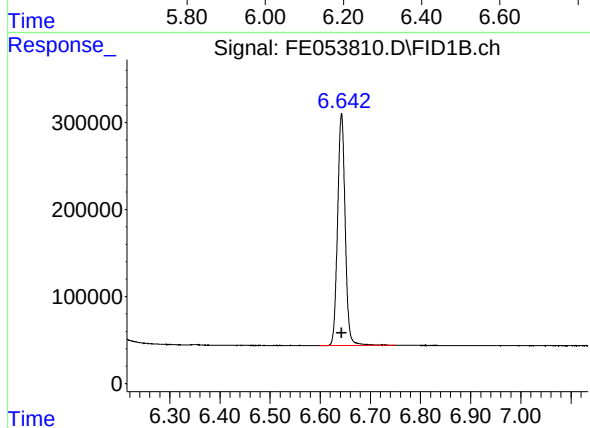
#2 n-Decane (C10)

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



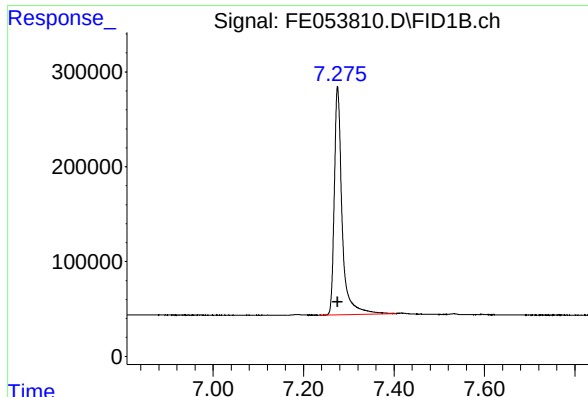
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

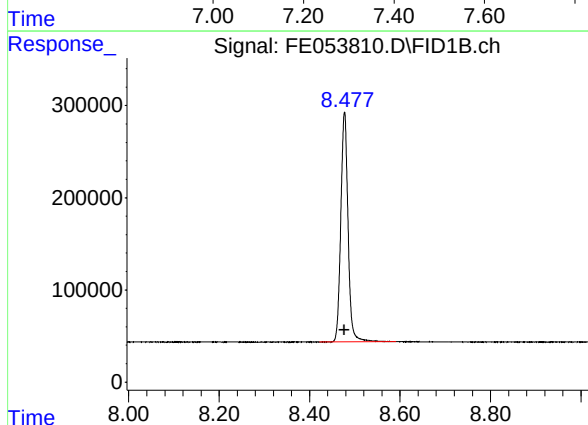
R.T.: 6.642 min
Delta R.T.: 0.000 min
Response: 2809474
Conc: 20.00 ug/ml



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

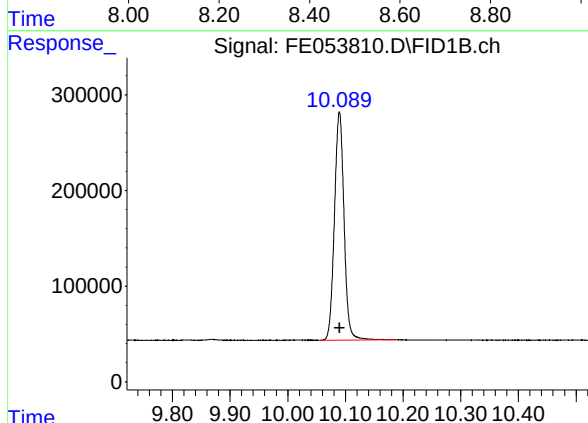
R.T.: 7.276 min
Delta R.T.: 0.000 min
Response: 2880461
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



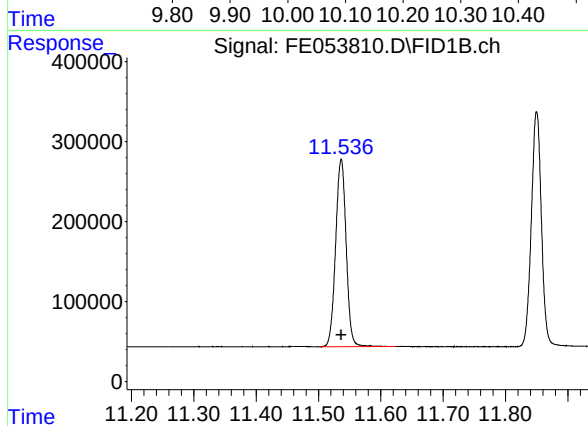
#6 n-Tetradecane (C14)

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



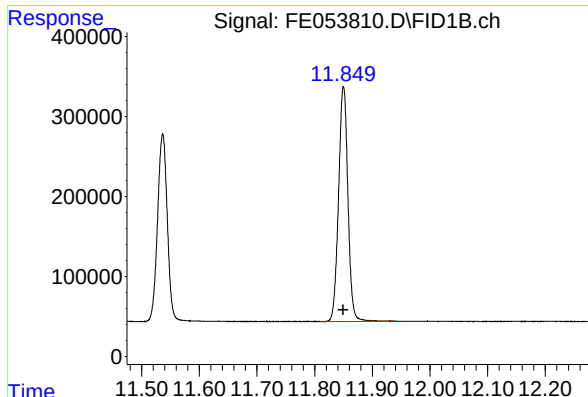
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

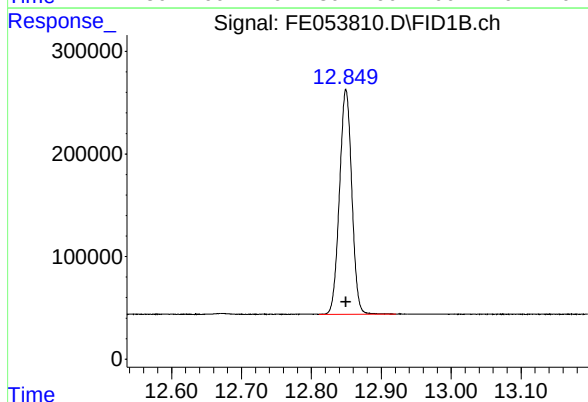
R.T.: 11.536 min
Delta R.T.: 0.000 min
Response: 2753858
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURR)

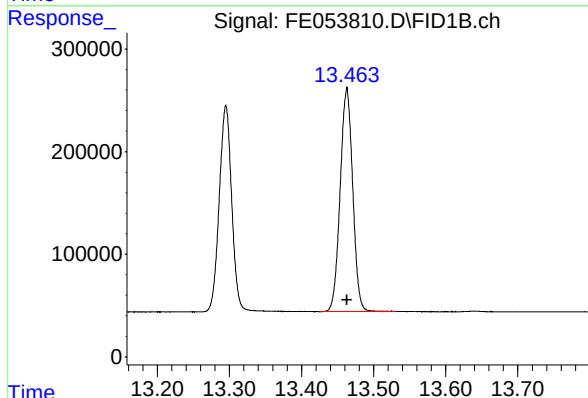
R.T.: 11.850 min
Delta R.T.: 0.000 min
Response: 3311788
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



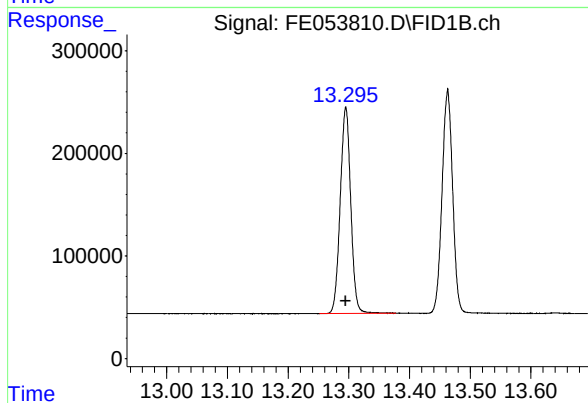
#10 n-Eicosane (C20)

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



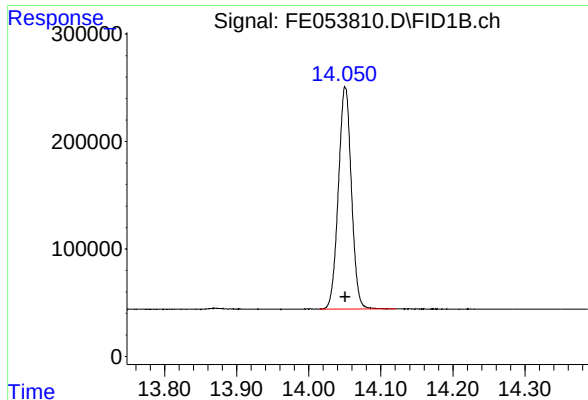
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

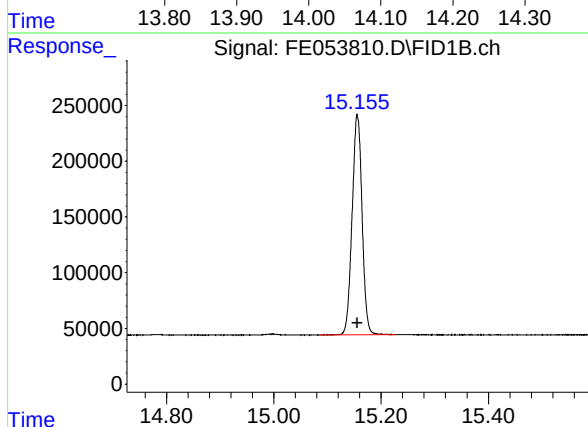
R.T.: 13.295 min
Delta R.T.: 0.000 min
Response: 2418280
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

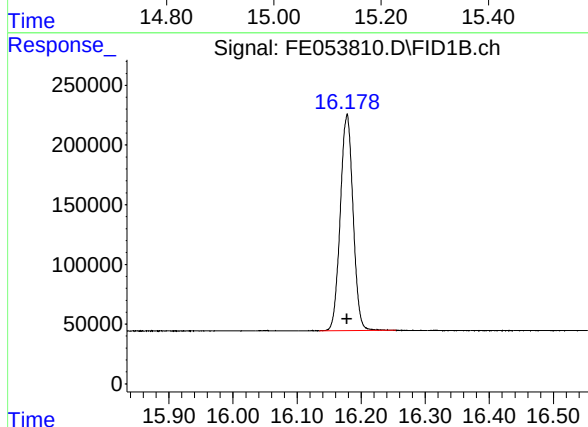
R.T.: 14.051 min
Delta R.T.: 0.000 min
Response: 2601518
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



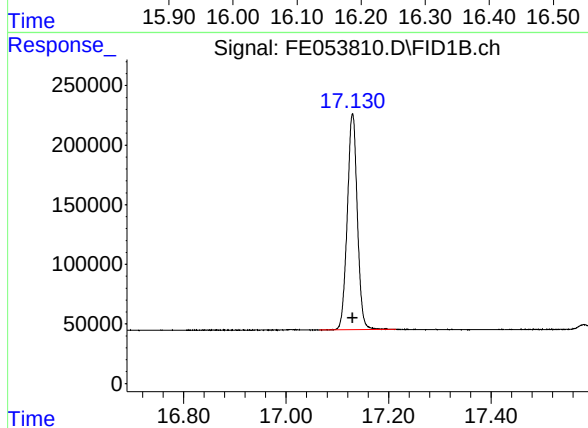
#14 n-Tetracosane (C24)

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



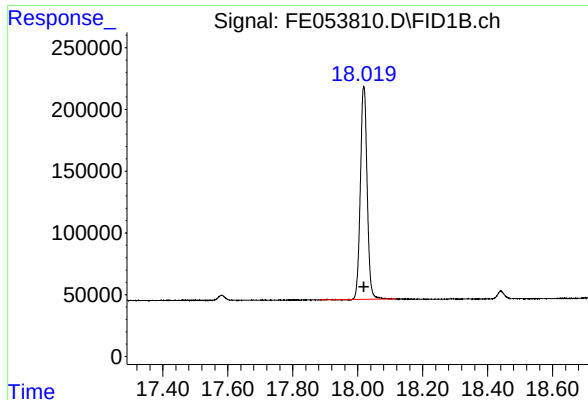
#15 n-Hexacosane (C26)

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



#16 n-Octacosane (C28)

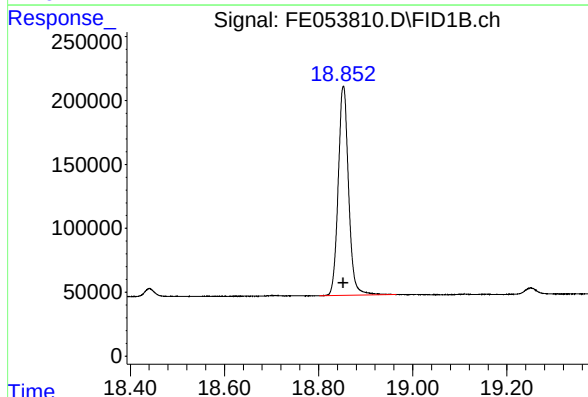
R.T.: 17.130 min
Delta R.T.: 0.000 min
Response: 2466499
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

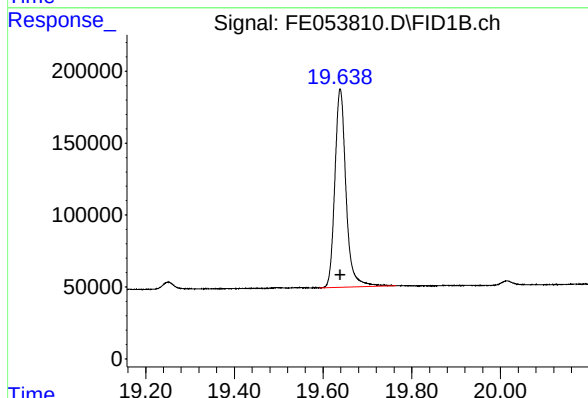
R.T.: 18.019 min
Delta R.T.: 0.000 min
Response: 2500963
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



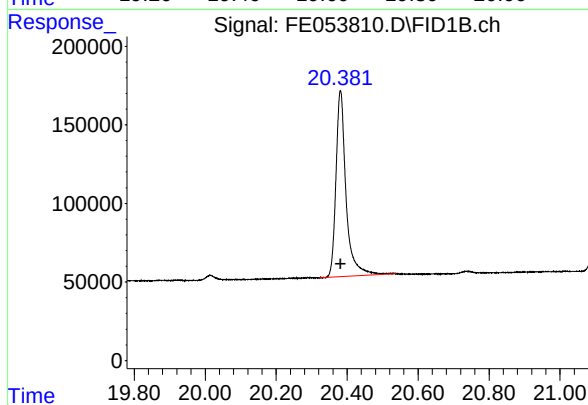
#18 n-Dotriacontane (C32)

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



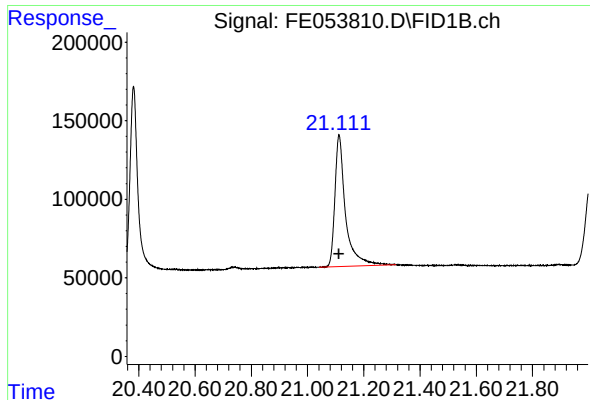
#19 n-Tetatriacontane (C34)

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



#20 n-Hexatriacontane (C36)

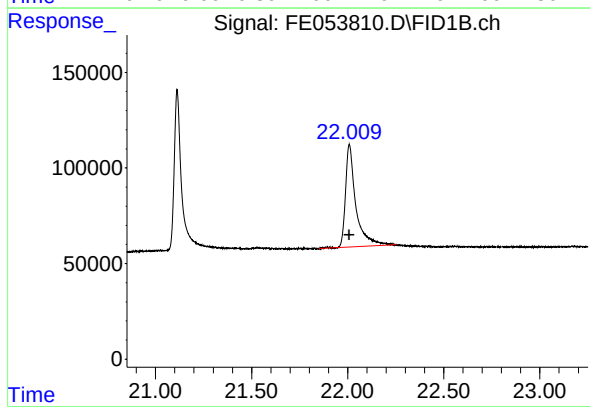
R.T.: 20.381 min
Delta R.T.: 0.000 min
Response: 2335320
Conc: 20.00 ug/ml



#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

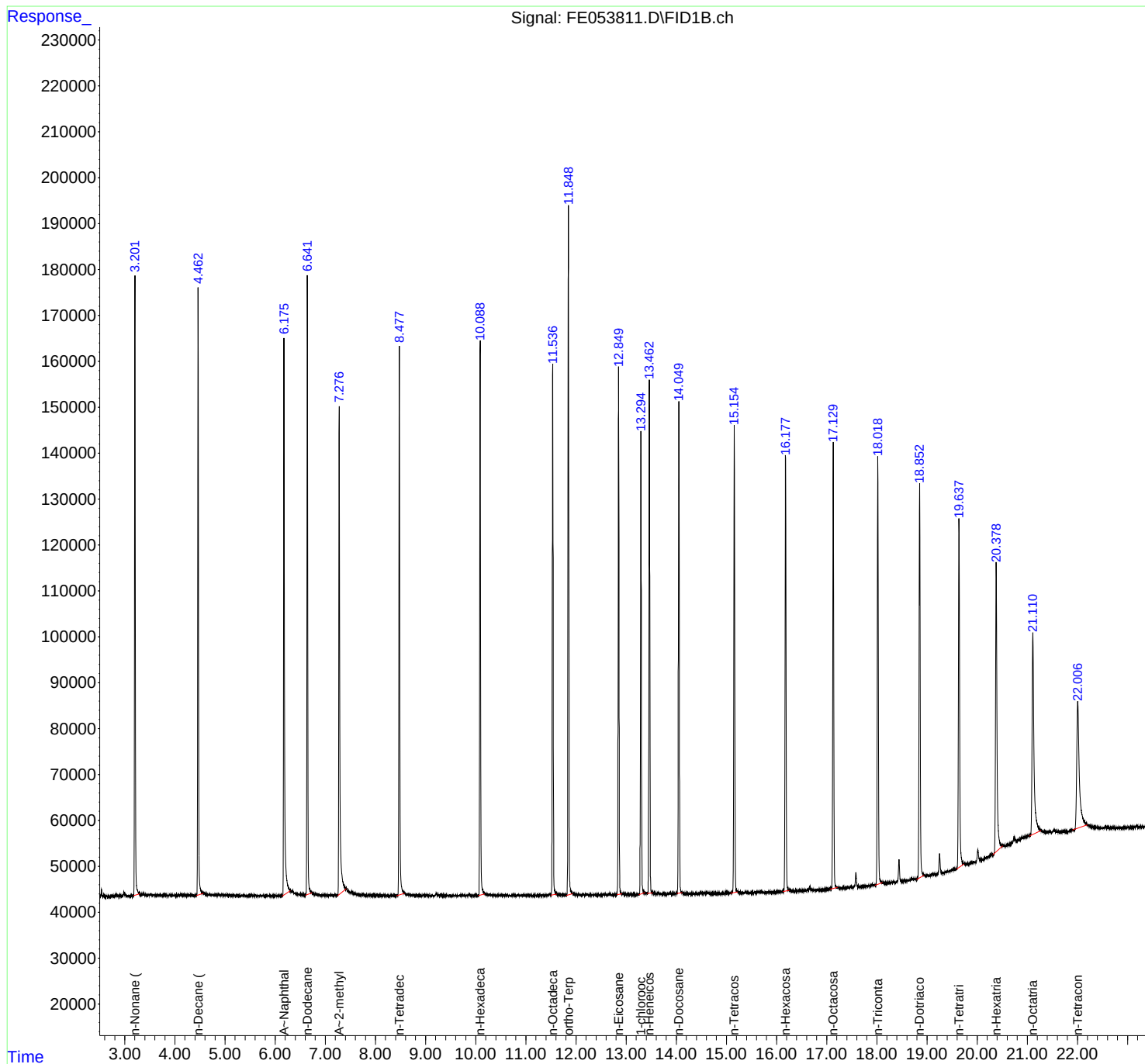
(m)=manual int.

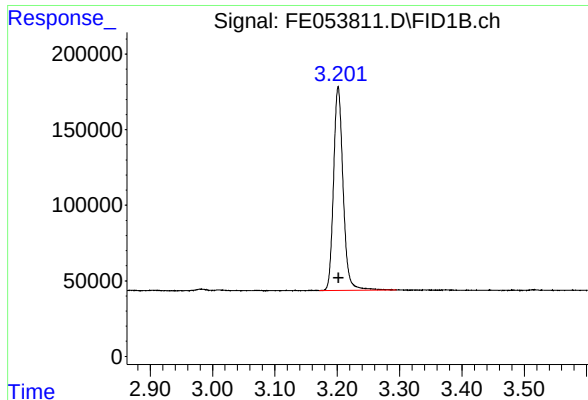
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053811.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 11:18
Operator : YP\AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 9 Sample Multiplier: 1

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

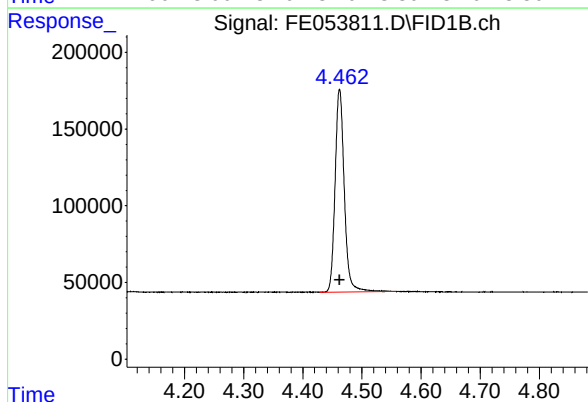




#1 n-Nonane (C9)

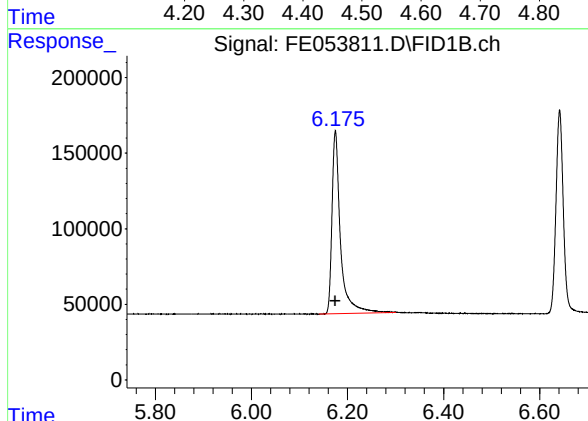
R.T.: 3.202 min
Delta R.T.: 0.000 min
Response: 1431091
Conc: 10.51 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



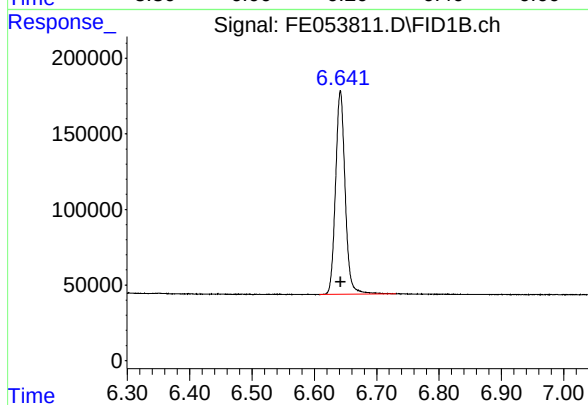
#2 n-Decane (C10)

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



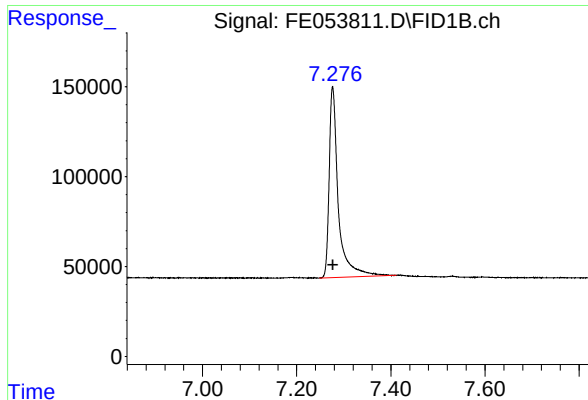
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

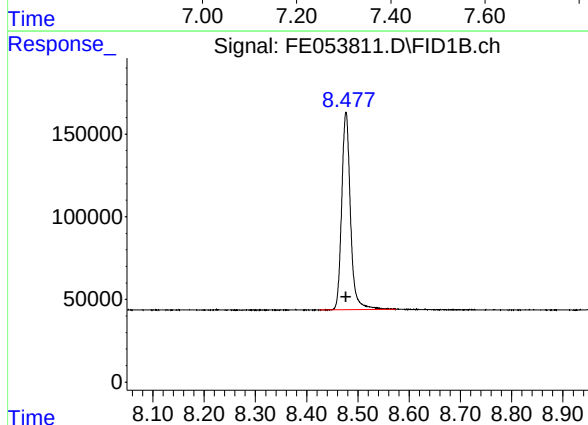
R.T.: 6.642 min
Delta R.T.: 0.000 min
Response: 1441460
Conc: 10.46 ug/ml



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

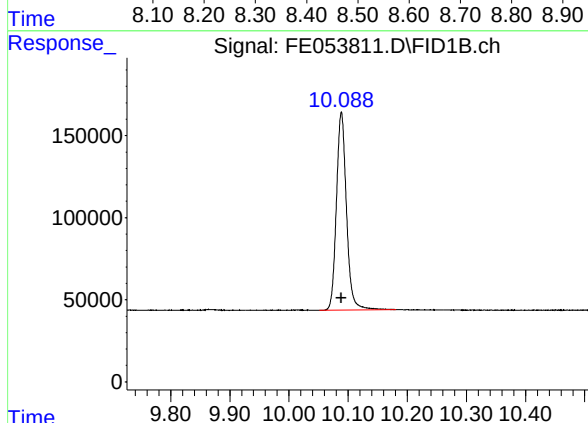
R.T.: 7.277 min
Delta R.T.: 0.000 min
Response: 1432714
Conc: 10.04 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



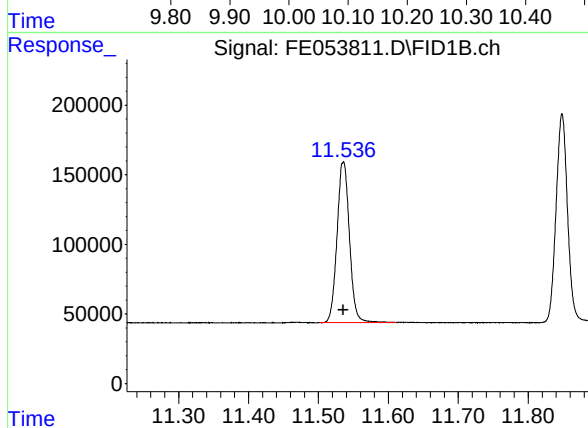
#6 n-Tetradecane (C14)

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



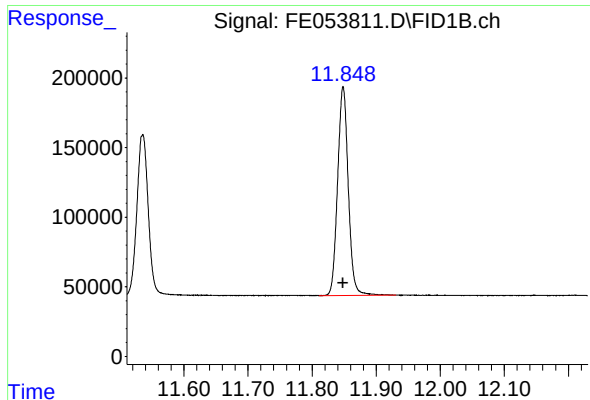
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

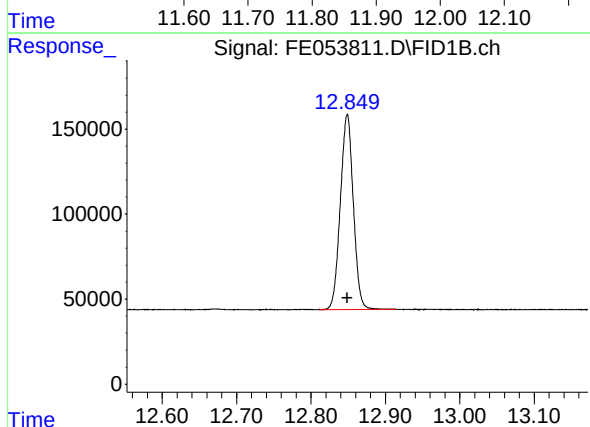
R.T.: 11.536 min
Delta R.T.: 0.000 min
Response: 1425081
Conc: 10.58 ug/ml



#9 ortho-Terphenyl (SURR)

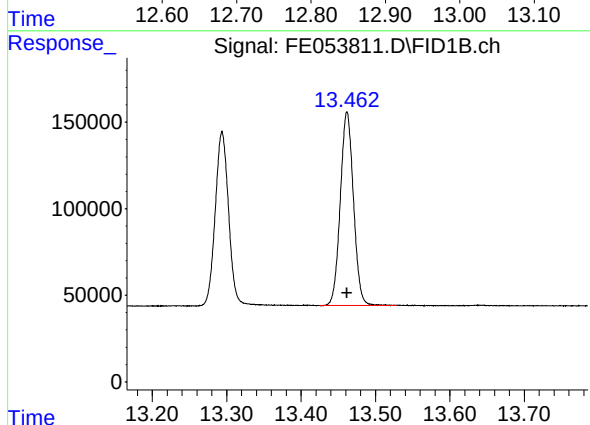
R.T.: 11.848 min
Delta R.T.: 0.000 min
Response: 1724522
Conc: 10.63 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



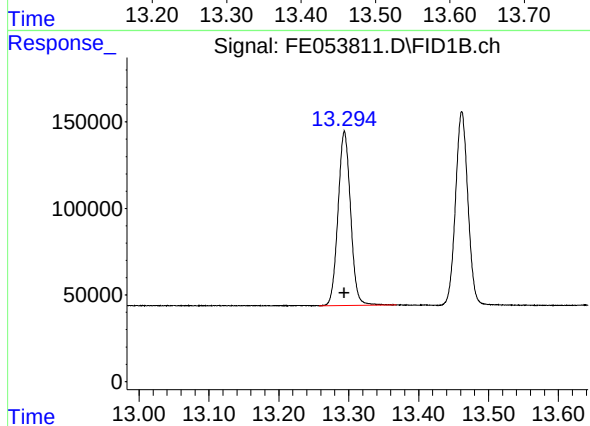
#10 n-Eicosane (C20)

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



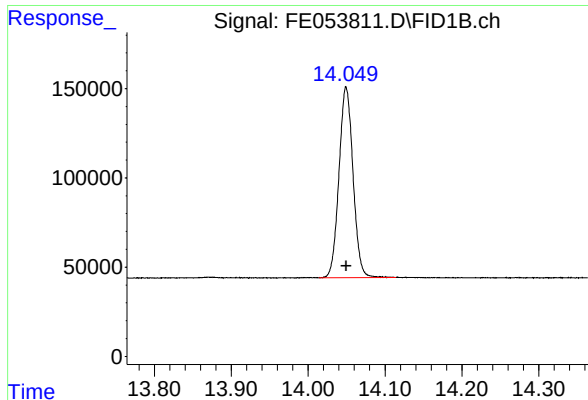
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

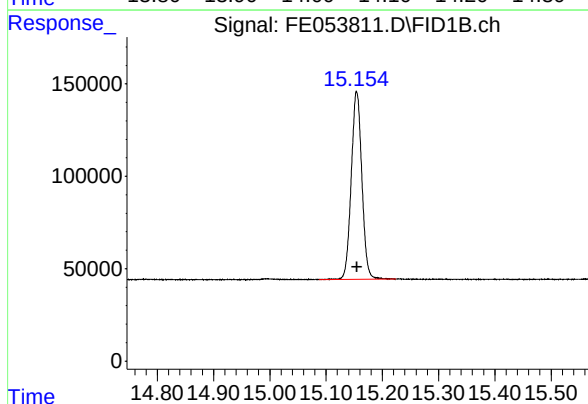
R.T.: 13.294 min
Delta R.T.: 0.000 min
Response: 1252547
Conc: 10.54 ug/ml



#13 n-Docosane (C22)

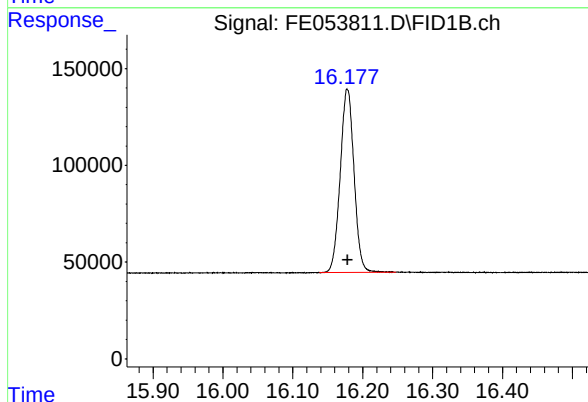
R.T.: 14.050 min
Delta R.T.: 0.000 min
Response: 1350709
Conc: 10.61 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



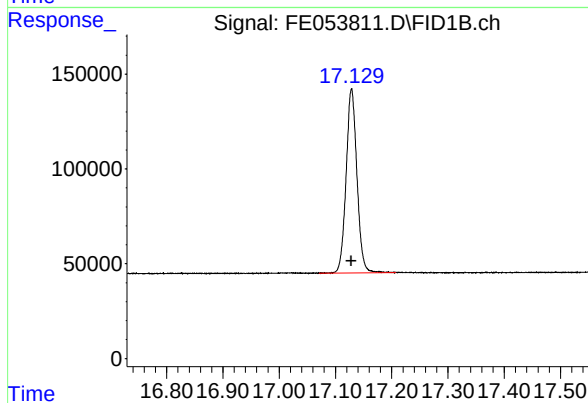
#14 n-Tetracosane (C24)

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



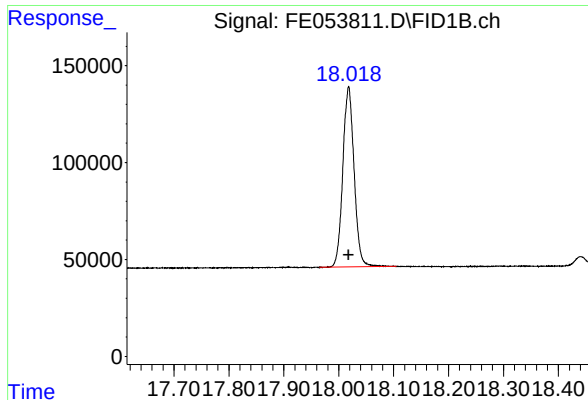
#15 n-Hexacosane (C26)

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



#16 n-Octacosane (C28)

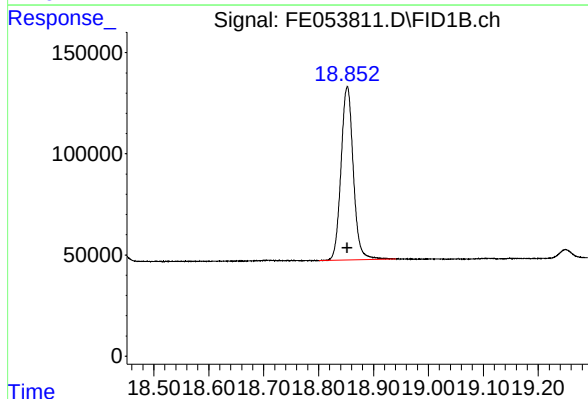
R.T.: 17.129 min
Delta R.T.: 0.000 min
Response: 1292696
Conc: 10.75 ug/ml



#17 n-Tricontane (C30)

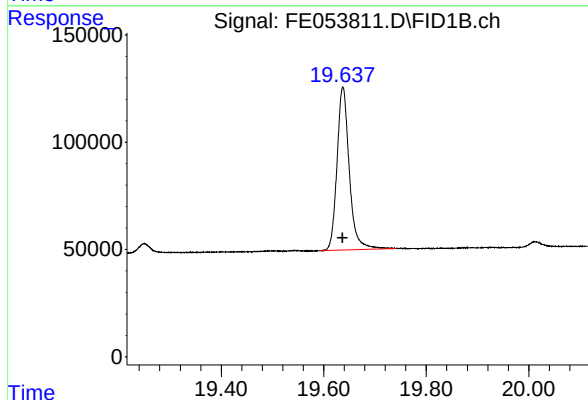
R.T.: 18.018 min
Delta R.T.: 0.000 min
Response: 1326771
Conc: 10.88 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



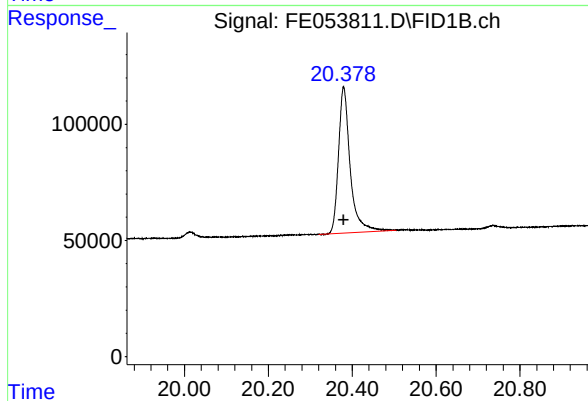
#18 n-Dotriacontane (C32)

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



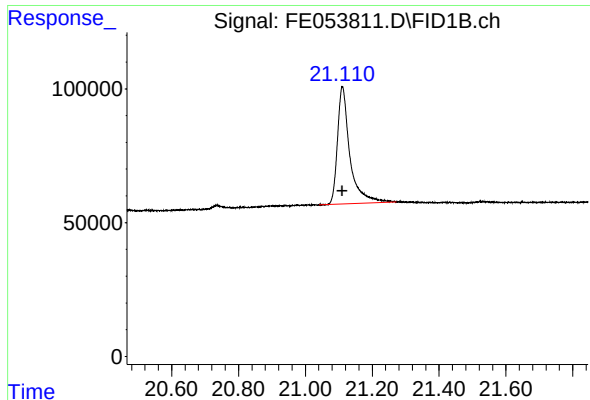
#19 n-Tetratriacontane (C34)

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



#20 n-Hexatriacontane (C36)

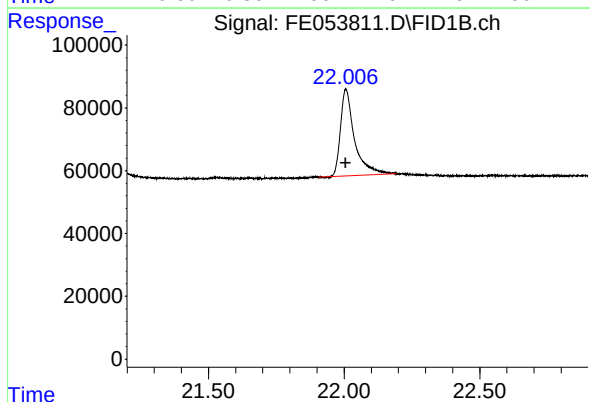
R.T.: 20.380 min
Delta R.T.: 0.000 min
Response: 1211680
Conc: 10.55 ug/ml



#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

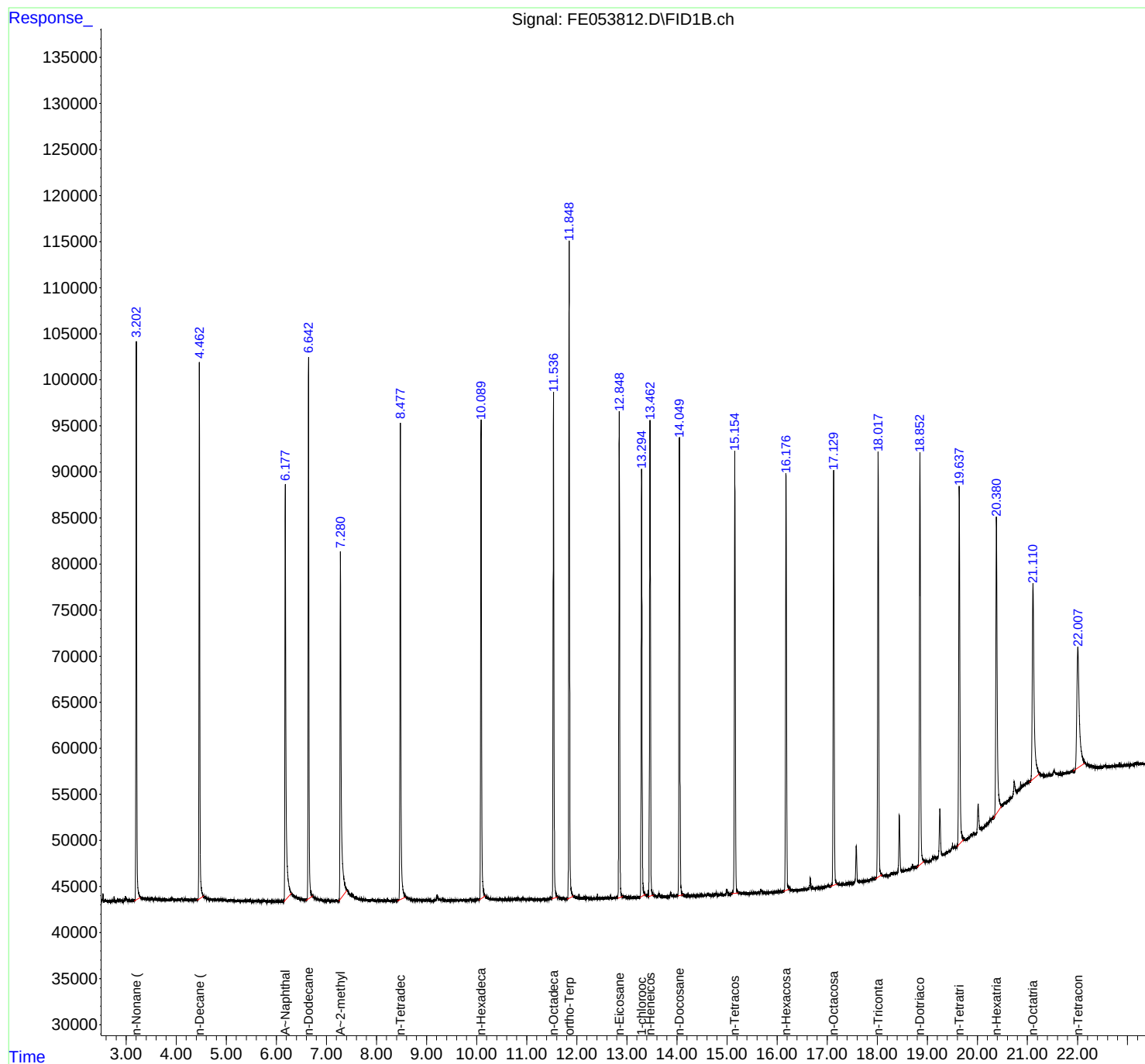
(m)=manual int.

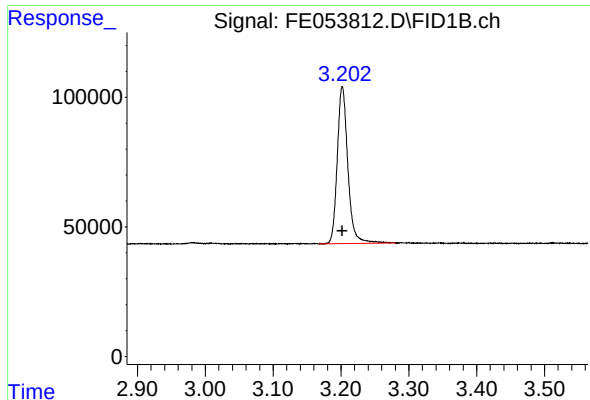
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053812.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 11:48
Operator : YP\AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 10 Sample Multiplier: 1

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

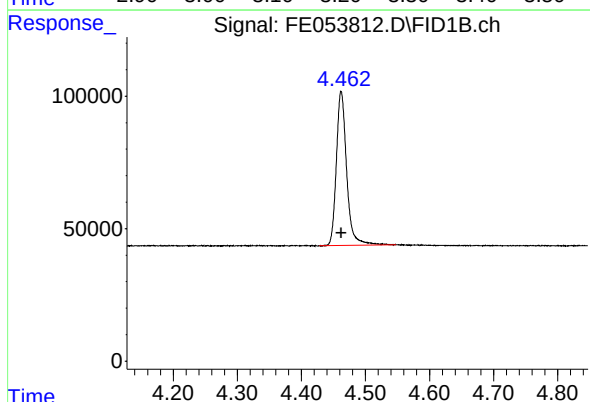




#1 n-Nonane (C9)

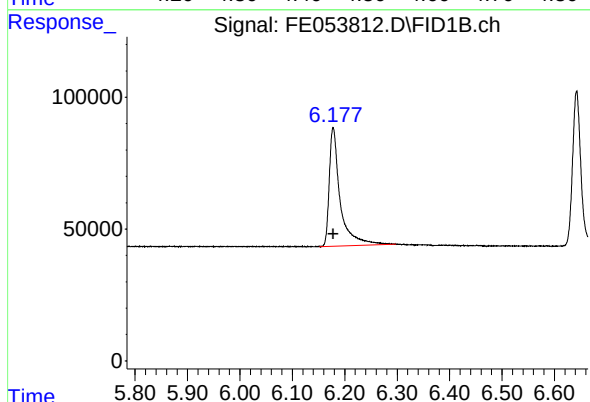
R.T.: 3.202 min
Delta R.T.: 0.000 min
Response: 656566
Conc: 4.86 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



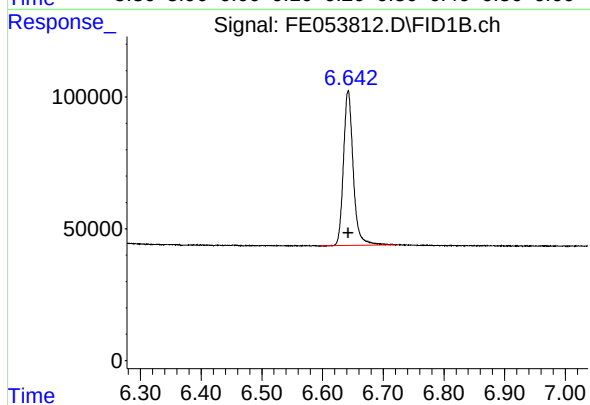
#2 n-Decane (C10)

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



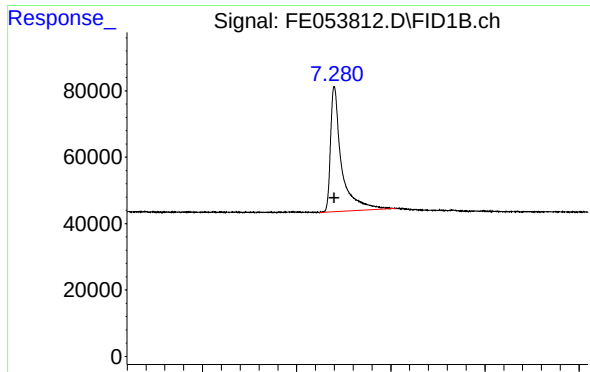
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

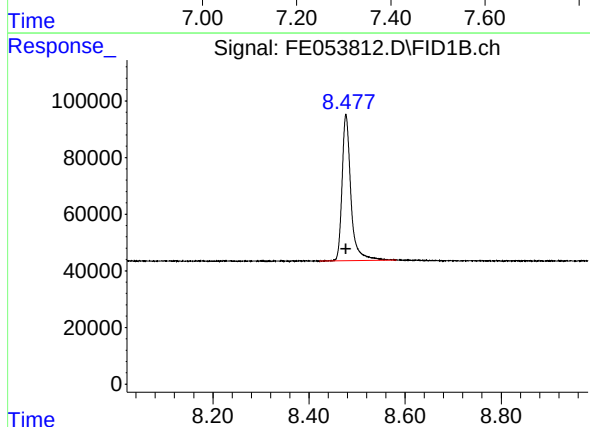
R.T.: 6.642 min
Delta R.T.: 0.000 min
Response: 655154
Conc: 4.80 ug/ml



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

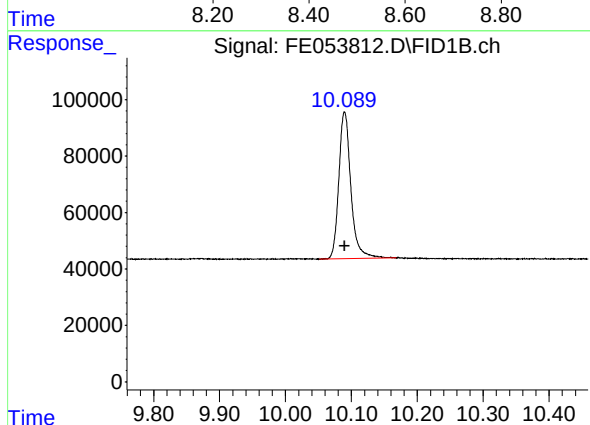
R.T.: 7.280 min
Delta R.T.: 0.000 min
Response: 614016
Conc: 4.43 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



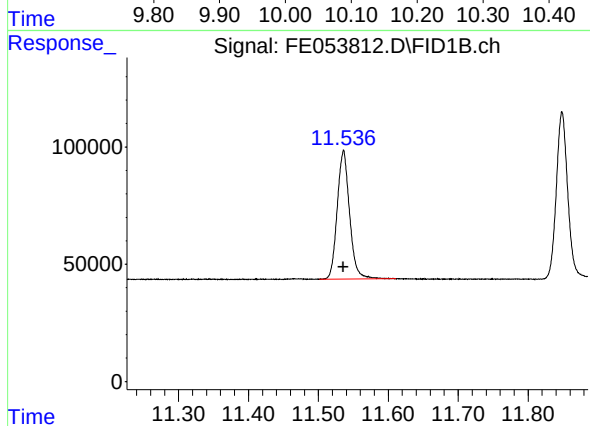
#6 n-Tetradecane (C14)

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



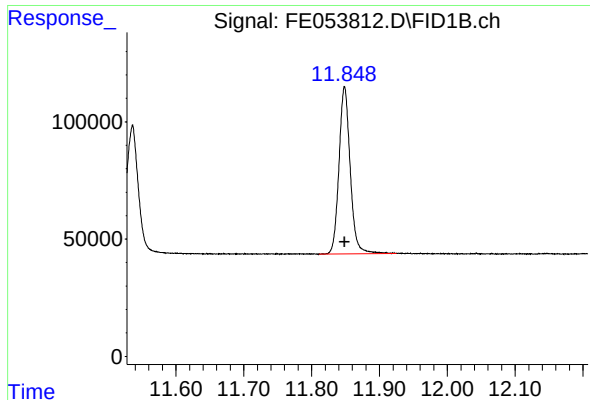
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

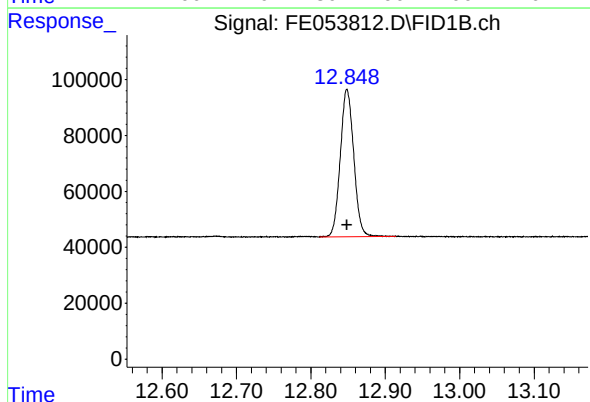
R.T.: 11.536 min
Delta R.T.: 0.000 min
Response: 672526
Conc: 4.99 ug/ml



#9 ortho-Terphenyl (SURR)

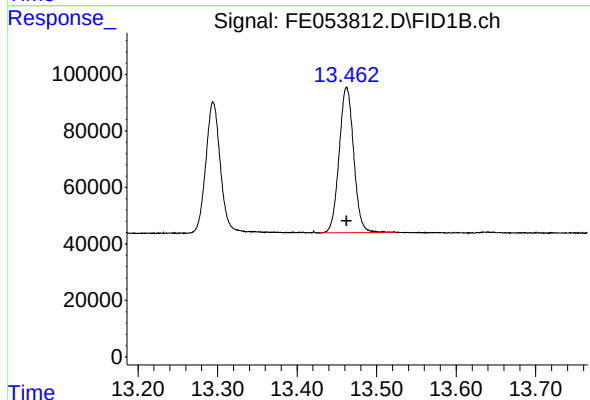
R.T.: 11.849 min
Delta R.T.: 0.000 min
Response: 817153
Conc: 5.03 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



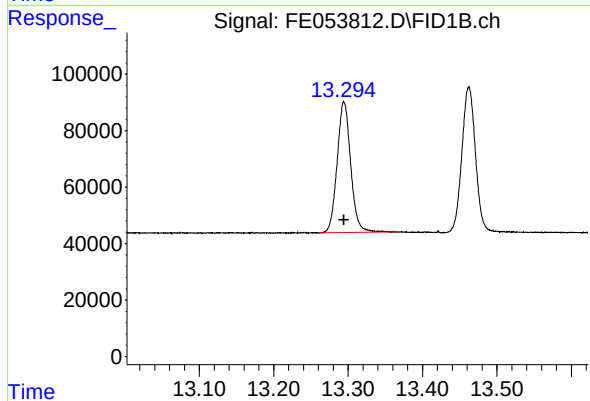
#10 n-Eicosane (C20)

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



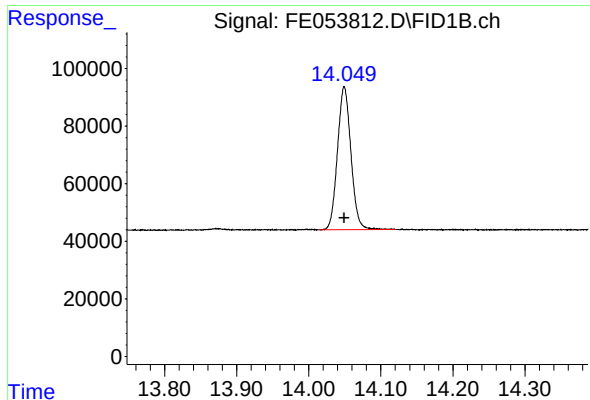
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

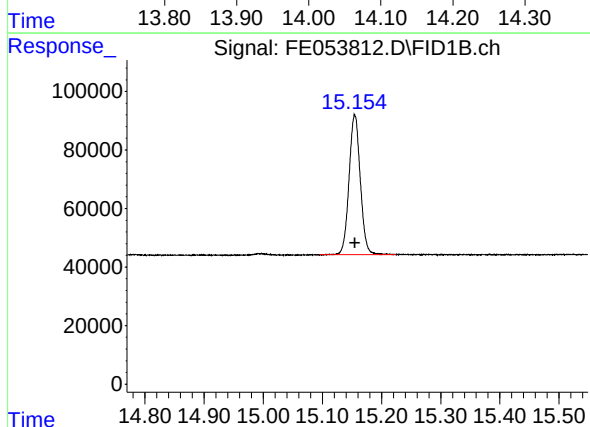
R.T.: 13.295 min
Delta R.T.: 0.000 min
Response: 587641
Conc: 4.96 ug/ml



#13 n-Docosane (C22)

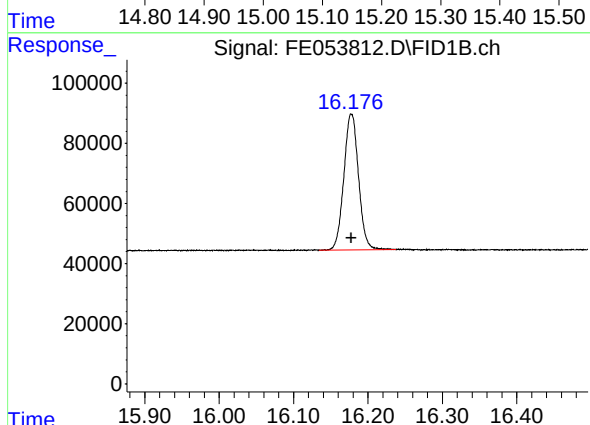
R.T.: 14.049 min
Delta R.T.: 0.000 min
Response: 643626
Conc: 5.05 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



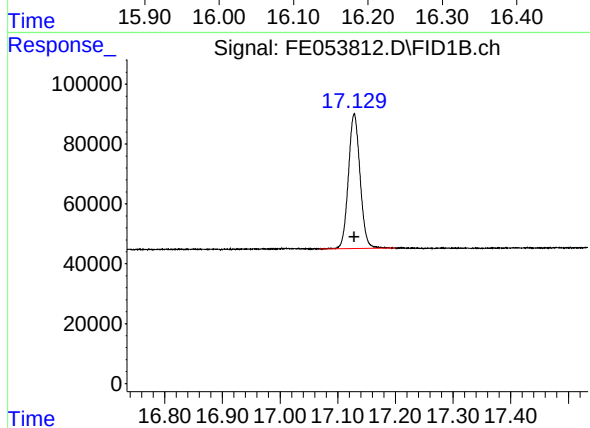
#14 n-Tetracosane (C24)

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



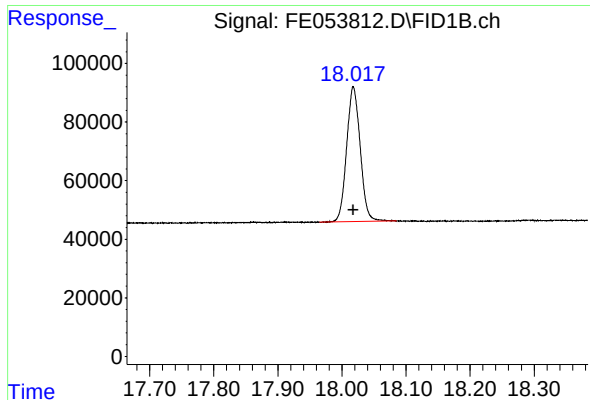
#15 n-Hexacosane (C26)

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



#16 n-Octacosane (C28)

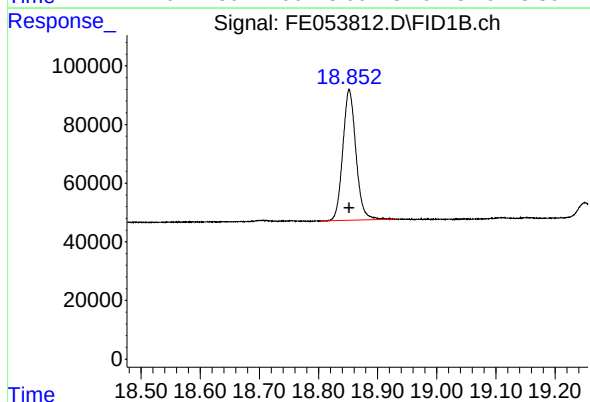
R.T.: 17.129 min
Delta R.T.: 0.000 min
Response: 632971
Conc: 5.21 ug/ml



#17 n-Tricontane (C30)

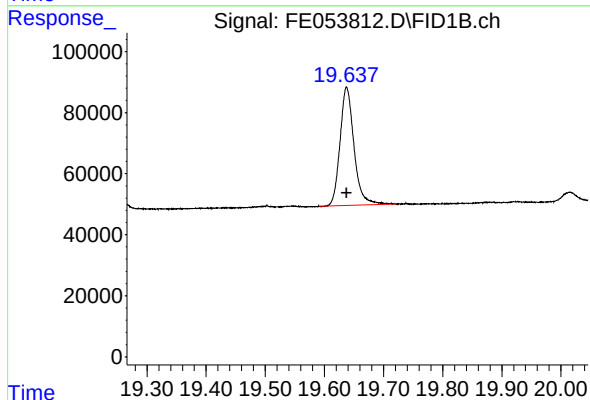
R.T.: 18.018 min
Delta R.T.: 0.000 min
Response: 674483
Conc: 5.41 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



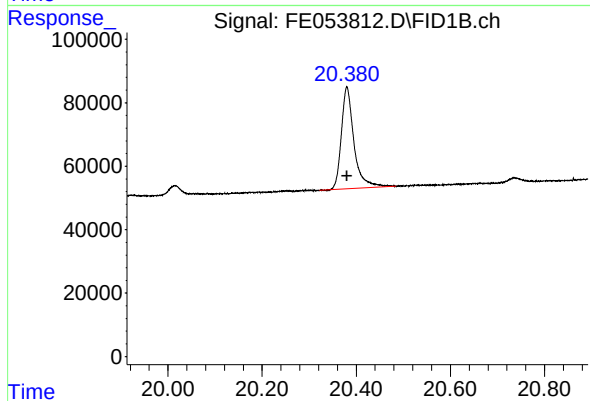
#18 n-Dotriacontane (C32)

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



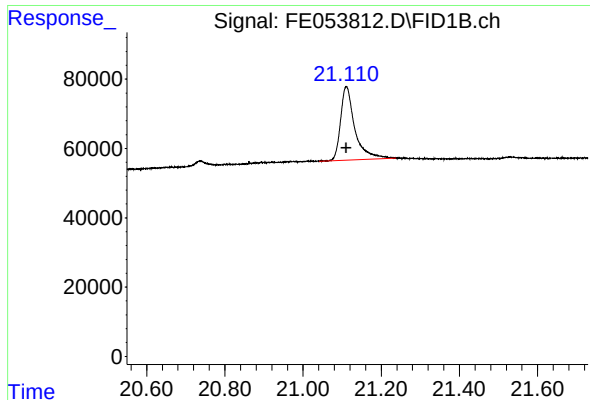
#19 n-Tetratriacontane (C34)

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



#20 n-Hexatriacontane (C36)

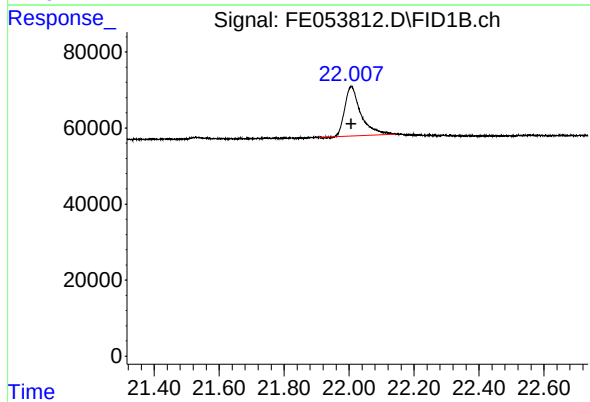
R.T.: 20.380 min
Delta R.T.: 0.000 min
Response: 597732
Conc: 5.16 ug/ml



#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

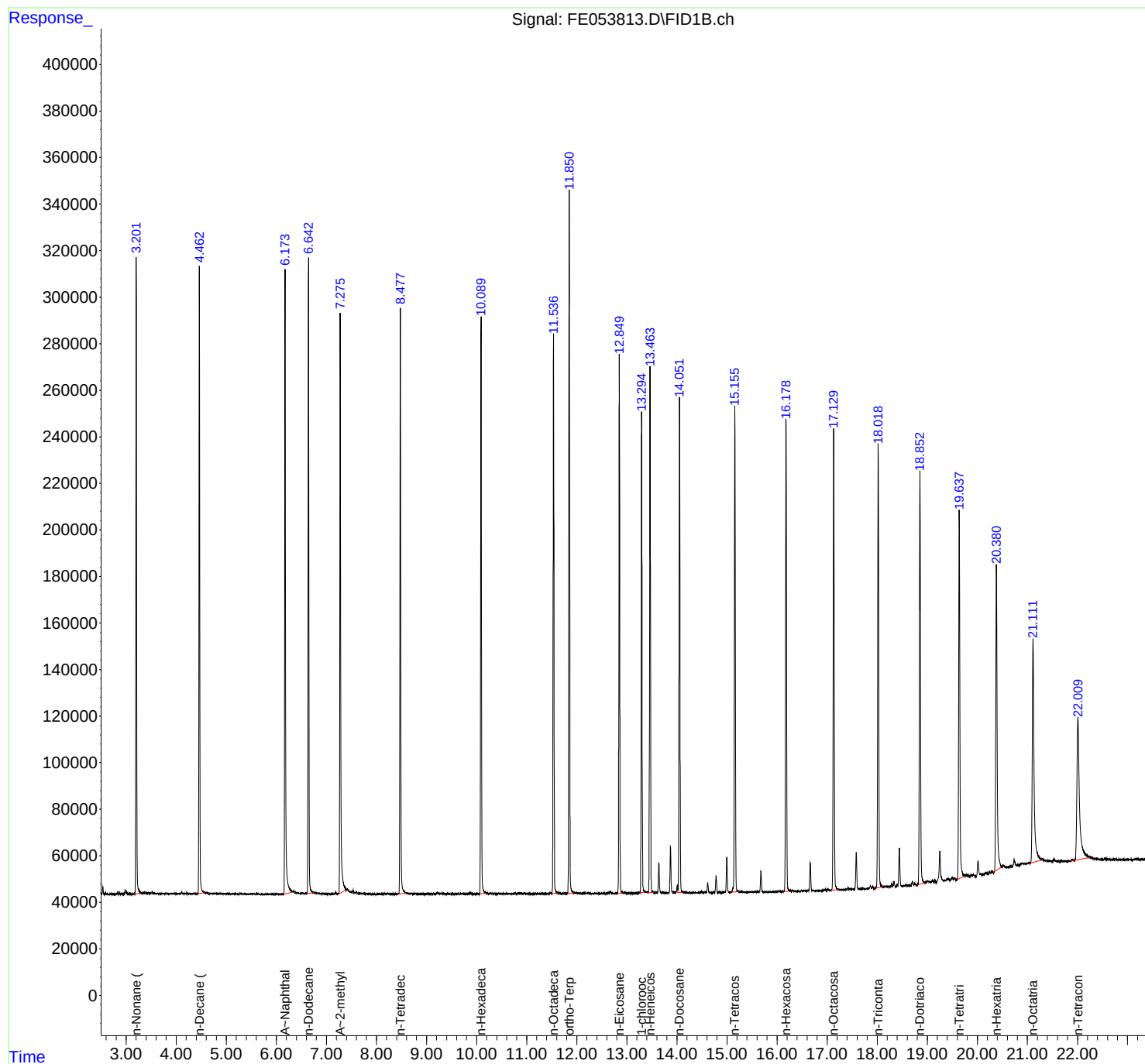
(m)=manual int.

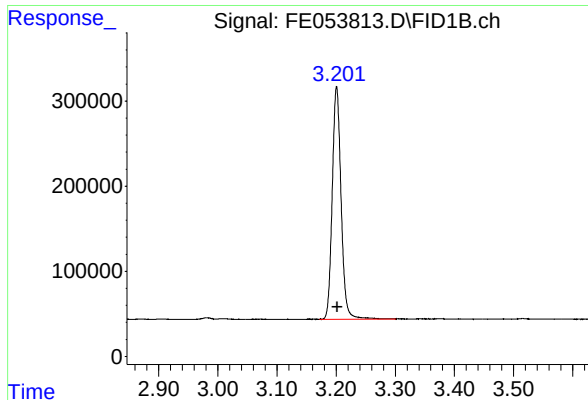
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053813.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 12:18
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 11 Sample Multiplier: 1

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)

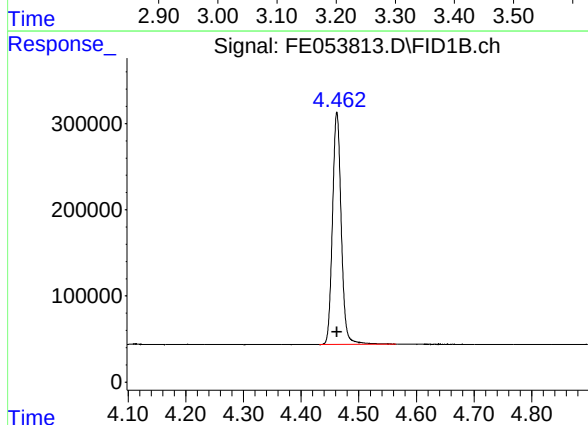
R.T.: 3.201 min
Delta R.T.: -0.001 min
Response: 2840477
Conc: 21.02 ug/ml

Instrument :

FID_E

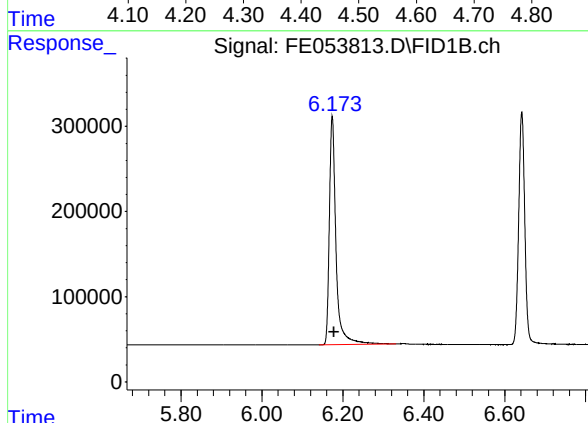
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



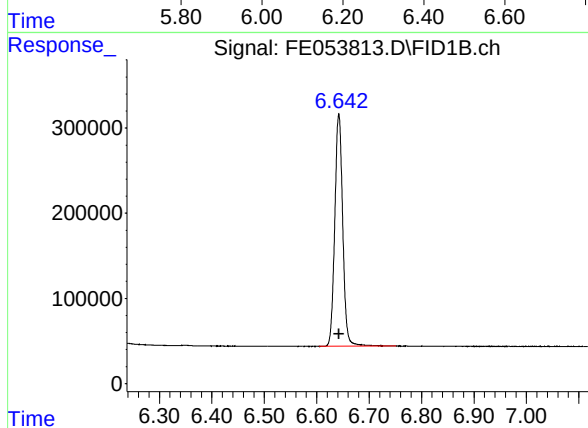
#2 n-Decane (C10)

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



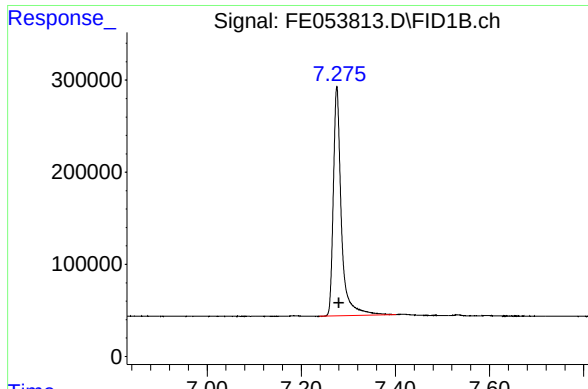
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

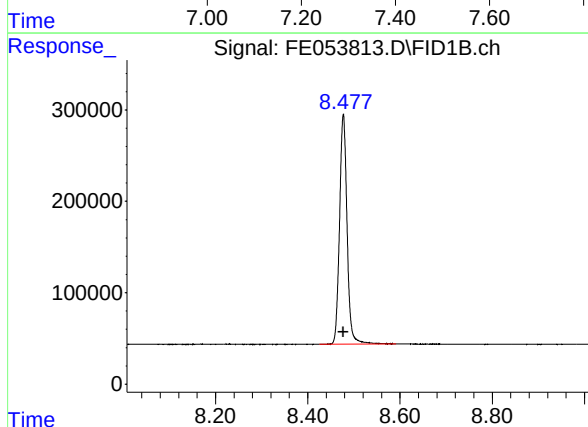
R.T.: 6.642 min
Delta R.T.: 0.000 min
Response: 2883394
Conc: 21.14 ug/ml



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

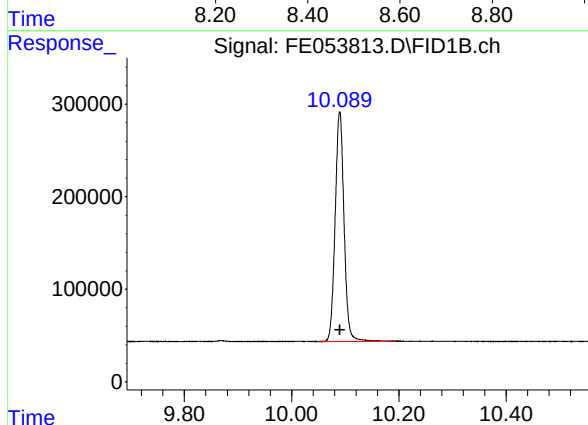
R.T.: 7.276 min
Delta R.T.: -0.005 min
Response: 2959846
Conc: 21.34 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



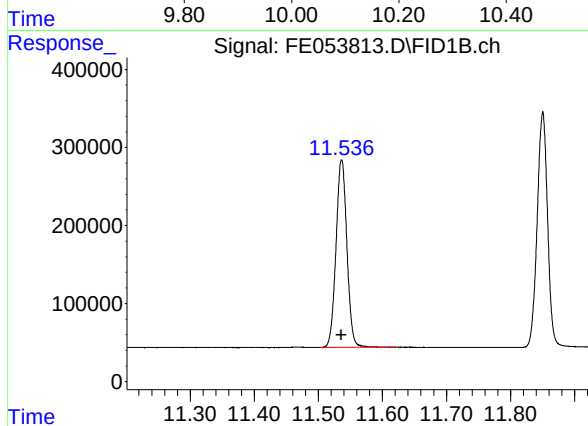
#6 n-Tetradecane (C14)

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



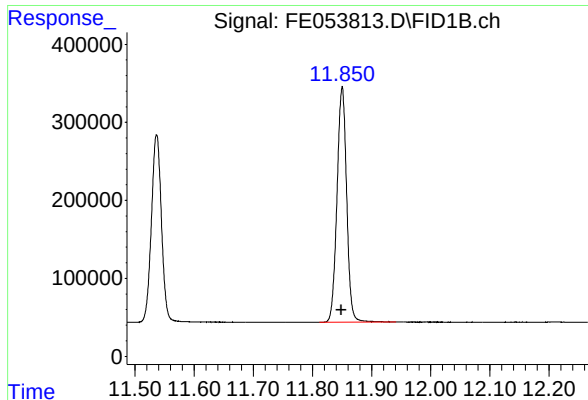
#7 n-Hexadecane (C16)

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)

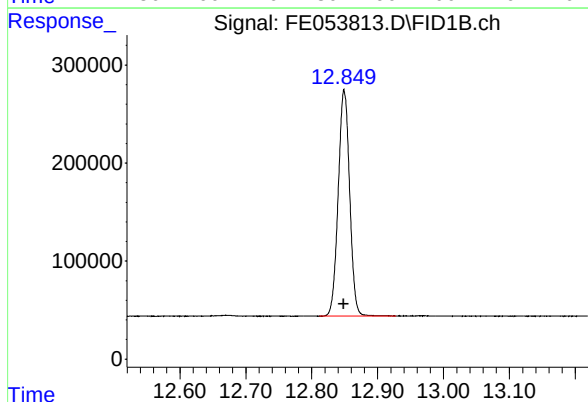
R.T.: 11.850 min
Delta R.T.: 0.002 min
Response: 3413619
Conc: 21.01 ug/ml

Instrument :

FID_E

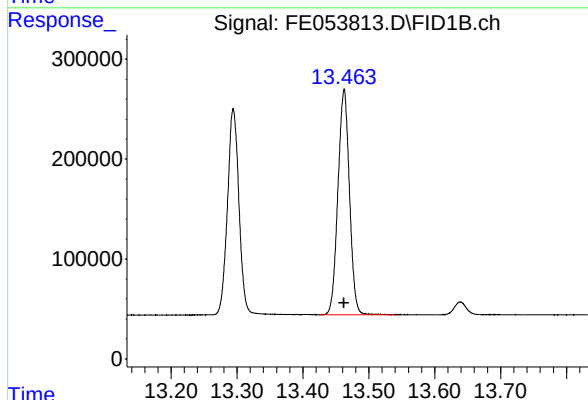
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



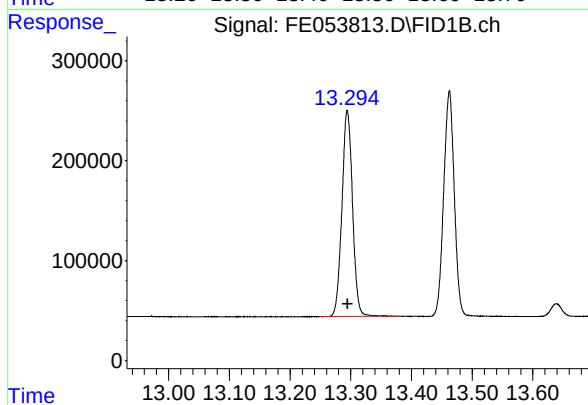
#10 n-Eicosane (C20)

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



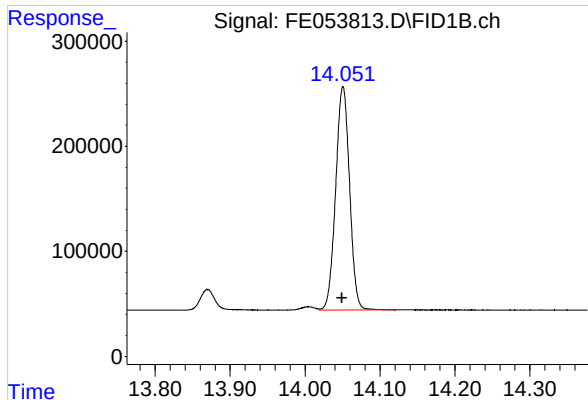
#11 n-Heneicosane (C21)

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)

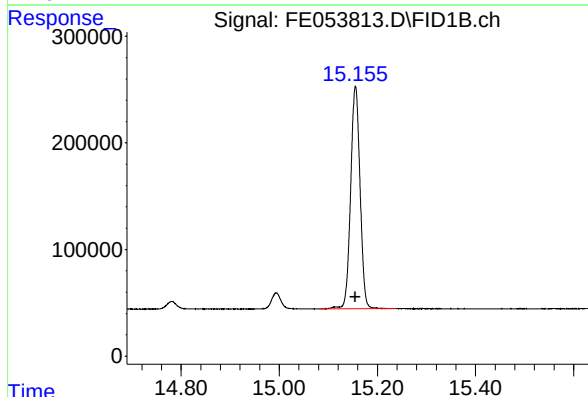
R.T.: 14.051 min
Delta R.T.: 0.001 min
Response: 2739221
Conc: 21.47 ug/ml

Instrument :

FID_E

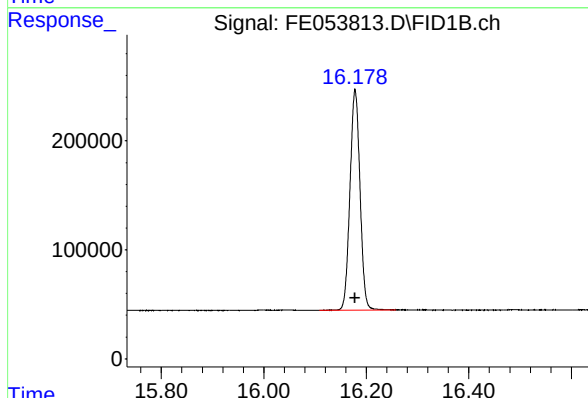
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



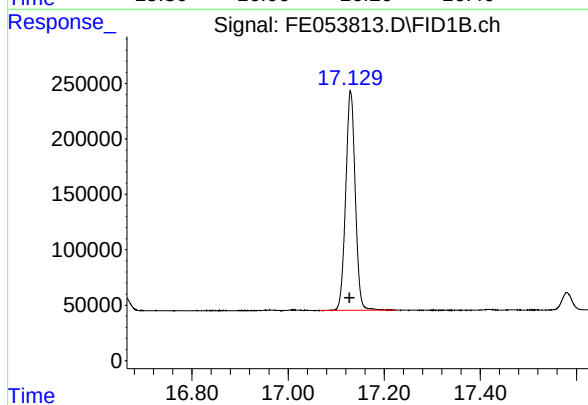
#14 n-Tetracosane (C24)

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



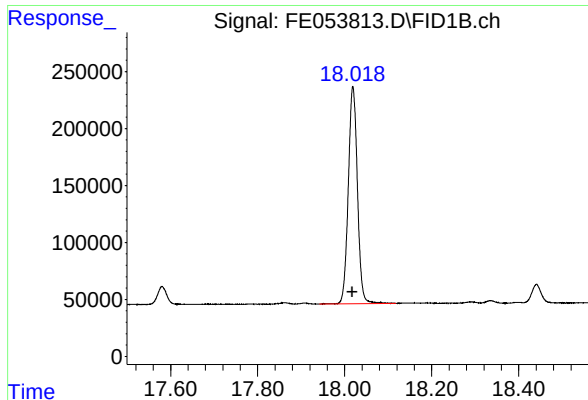
#15 n-Hexacosane (C26)

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)

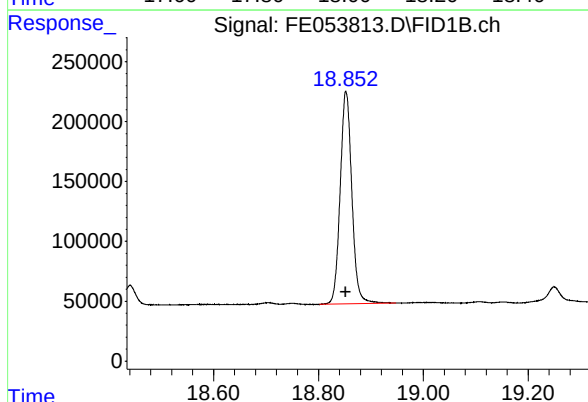
R.T.: 18.019 min
Delta R.T.: 0.001 min
Response: 2774148
Conc: 22.27 ug/ml

Instrument :

FID_E

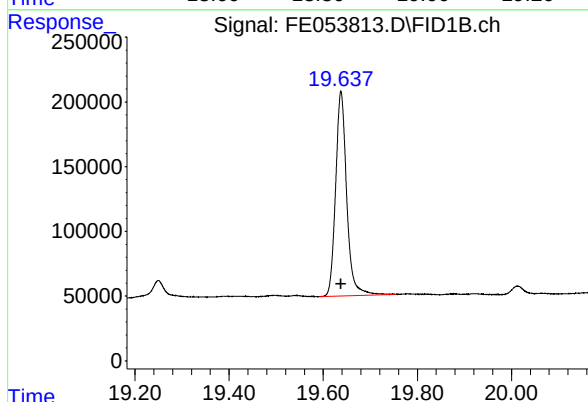
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



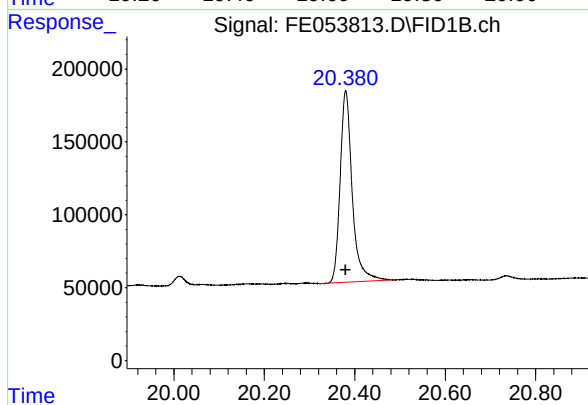
#18 n-Dotriacontane (C32)

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



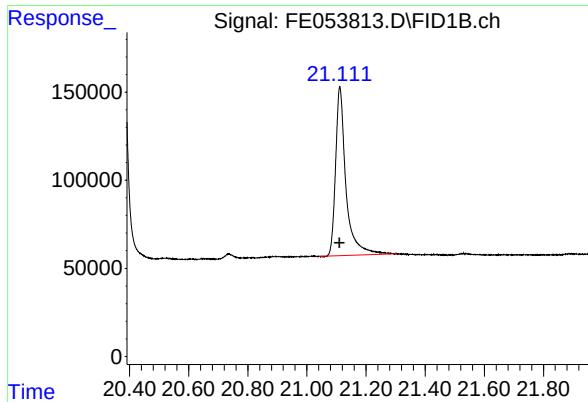
#19 n-Tetatriacontane (C34)

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



#20 n-Hexatriacontane (C36)

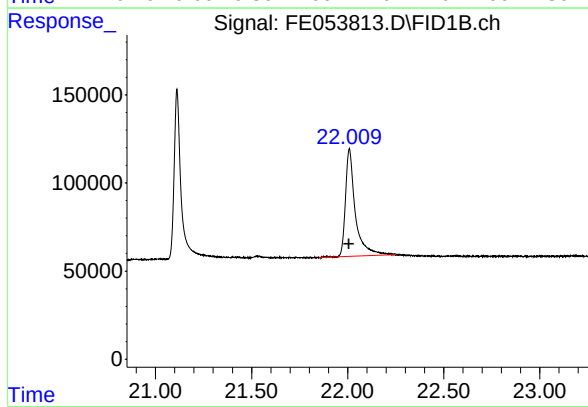
R.T.: 20.380 min
Delta R.T.: 0.000 min
Response: 2437142
Conc: 21.05 ug/ml



#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

File ID : FE054142.D

Aliphatic C9-C12	7621538.000	60.000	3.085	6.730	127025.633	135563.285	6.298
Aliphatic C12-C16	5508764.000	40.000	6.731	10.178	137719.100	134941.528	-2.058
Aliphatic C16-C21	8346475.000	60.000	10.179	13.552	139107.917	131910.826	-5.456
Aliphatic C21-C28	11093653.000	80.000	13.553	17.220	138670.663	124176.943	-11.672
Aliphatic C28-C40	14143478.000	120.000	17.221	22.091	117862.317	115430.822	-2.106
Aliphatic EPH	46713908.000	360.000	3.085	22.091	129760.856	125644.338	-3.276

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	03 Jun 2025 07:43
Client Sample ID:		Operator:	YP\AJ
Data file:	FE054142.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	7621538.000	60.000	ug/ml
Aliphatic C12-C16	6.731	10.178	5508764.000	40.000	ug/ml
Aliphatic C16-C21	10.179	13.552	8346475.000	60.000	ug/ml
Aliphatic C21-C28	13.553	17.220	11093653.000	80.000	ug/ml
Aliphatic C28-C40	17.221	22.091	14143478.000	120.000	ug/ml
Aliphatic EPH	3.085	22.091	46713908.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054142.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 07:43
 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 10:53:14 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)	11.839	3420659	21.049 ug/ml
Spiked Amount 50.000		Recovery =	42.10%
12) S 1-chlorooctadecane (S...	13.284	2545653	21.473 ug/ml
Spiked Amount 50.000		Recovery =	42.95%
Target Compounds			
1) T n-Nonane (C9)	3.185	2432505	17.998 ug/ml
2) T n-Decane (C10)	4.448	2525666	18.690 ug/ml
3) T A~Naphthalene (C11.7)	6.164	2842190	19.777 ug/ml
4) T n-Dodecane (C12)	6.630	2663367	19.525 ug/ml
5) T A~2-methylnaphthalene...	7.266	2819564	20.327 ug/ml
6) T n-Tetradecane (C14)	8.466	2704175	20.039 ug/ml
7) T n-Hexadecane (C16)	10.078	2804589	20.785 ug/ml
8) T n-Octadecane (C18)	11.525	2771905	20.584 ug/ml
10) T n-Eicosane (C20)	12.838	2801626	21.317 ug/ml
11) T n-Heneicosane (C21)	13.452	2772944	21.389 ug/ml
13) T n-Docosane (C22)	14.039	2775423	21.755 ug/ml
14) T n-Tetracosane (C24)	15.145	2818273	22.525 ug/ml
15) T n-Hexacosane (C26)	16.168	2771140	22.631 ug/ml
16) T n-Octacosane (C28)	17.120	2728817	22.448 ug/ml
17) T n-Tricontane (C30)	18.008	2760542	22.162 ug/ml
18) T n-Dotriacontane (C32)	18.843	2698313	21.577 ug/ml
19) T n-Tetratriacontane (C34)	19.628	2469088	20.727 ug/ml
20) T n-Hexatriacontane (C36)	20.370	2254035	19.467 ug/ml
21) T n-Octatriacontane (C38)	21.099	2024759	18.606 ug/ml
22) T n-Tetracontane (C40)	21.991	1936741	19.518 ug/ml

(f)=RT Delta > 1/2 Window

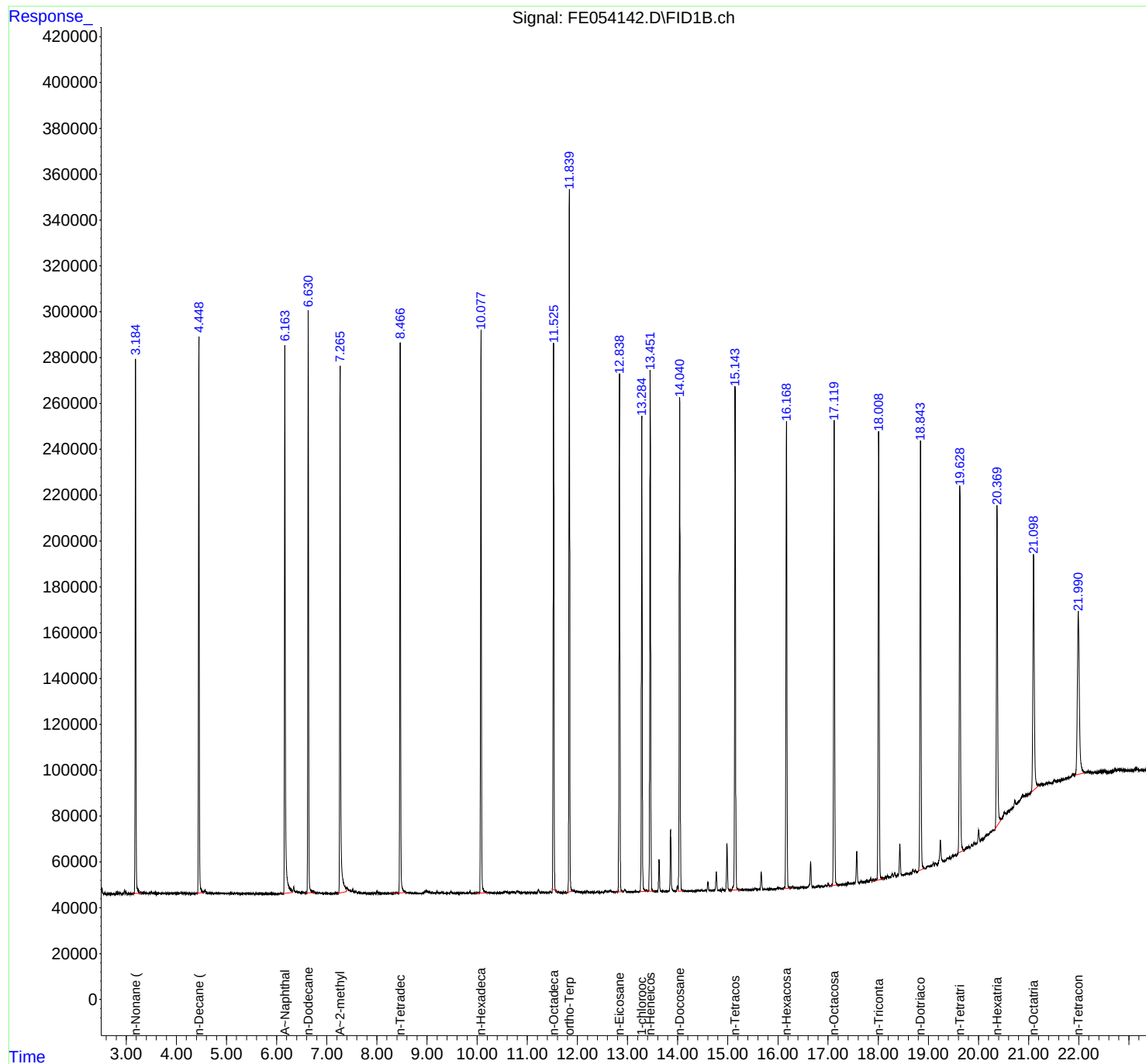
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054142.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 07:43
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 10:53:14 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



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054142.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 07:43
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	3.185	3.130	3.304	BB	232866	2432505	71.11%	4.169%
2	4.448	4.395	4.550	BV	242830	2525666	73.84%	4.329%
3	6.164	6.112	6.322	BV	238931	2842190	83.09%	4.872%
4	6.630	6.574	6.760	BB	253782	2663367	77.86%	4.565%
5	7.266	7.210	7.390	BV	229728	2819564	82.43%	4.833%
6	8.466	8.324	8.587	BB	240042	2704175	79.05%	4.635%
7	10.078	9.957	10.209	BB	245127	2804589	81.99%	4.807%
8	11.525	11.500	11.605	BB	238681	2771905	81.03%	4.751%
9	11.839	11.775	11.909	BV	304875	3420659	100.00%	5.863%
10	12.838	12.742	12.909	BB	226206	2801626	81.90%	4.802%
11	13.284	13.239	13.412	BB	207243	2545653	74.42%	4.363%
12	13.452	13.412	13.534	BB	226775	2772944	81.06%	4.753%
13	14.039	14.007	14.109	VB	215218	2775423	81.14%	4.757%
14	15.145	15.040	15.250	BB	218902	2818273	82.39%	4.831%
15	16.168	16.100	16.264	BB	203931	2771140	81.01%	4.750%
16	17.120	17.025	17.197	BB	202499	2728817	79.77%	4.677%
17	18.008	17.920	18.110	PB	195833	2760542	80.70%	4.732%
18	18.843	18.800	18.930	BB	187276	2698313	78.88%	4.625%
19	19.628	19.590	19.709	BV	159768	2469088	72.18%	4.232%
20	20.370	20.320	20.454	BV	139873	2254035	65.89%	3.863%
21	21.099	21.040	21.207	BB	102863	2024759	59.19%	3.471%
22	21.991	21.915	22.117	BV	71064	1936741	56.62%	3.320%
Sum of corrected areas:							58341972	

Aliphatic EPH 051425.M Tue Jun 03 11:01:30 2025

Continuing Calibration Report for SequenceID : FE060325AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV

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

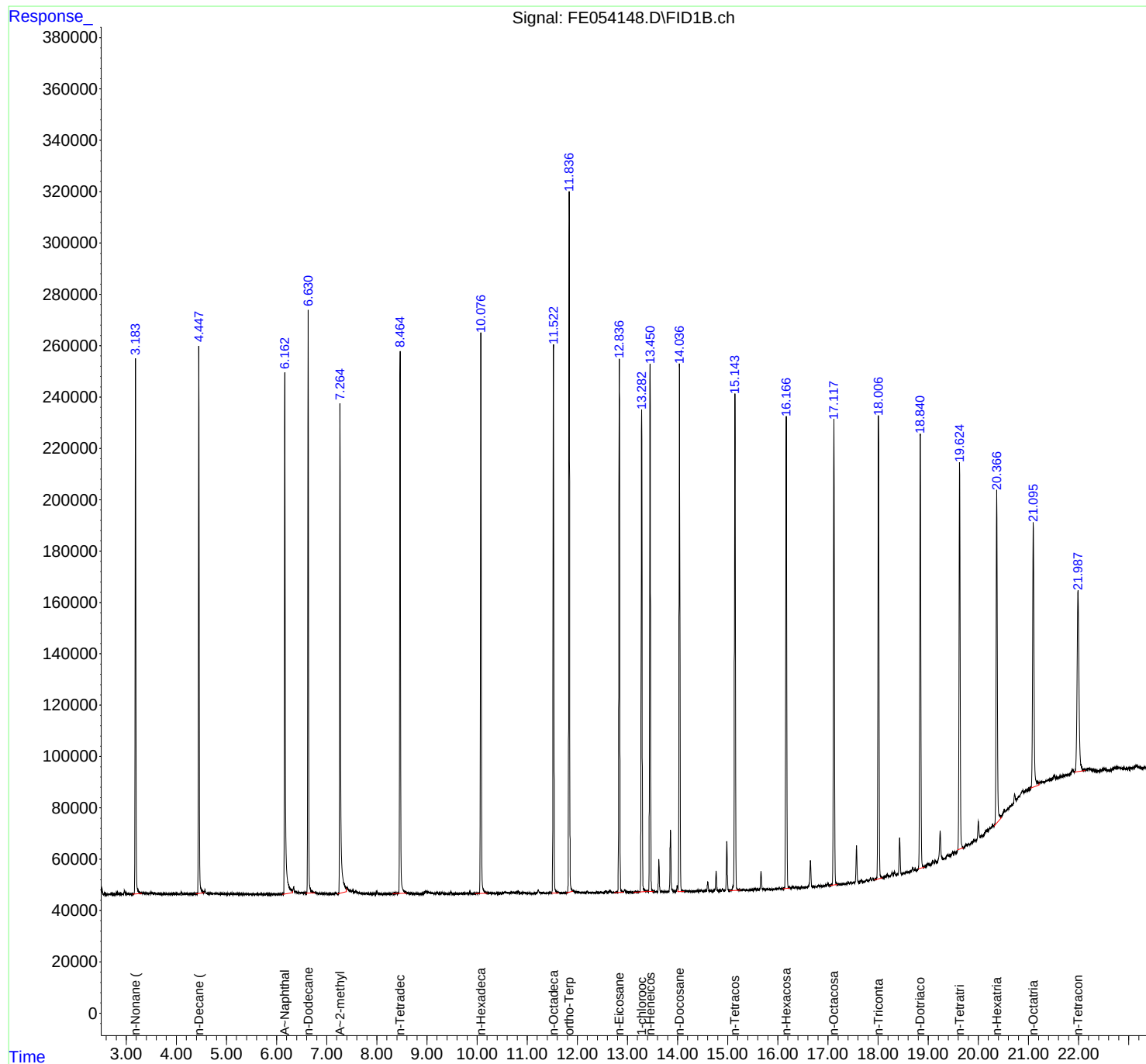
(m)=manual int.

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

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

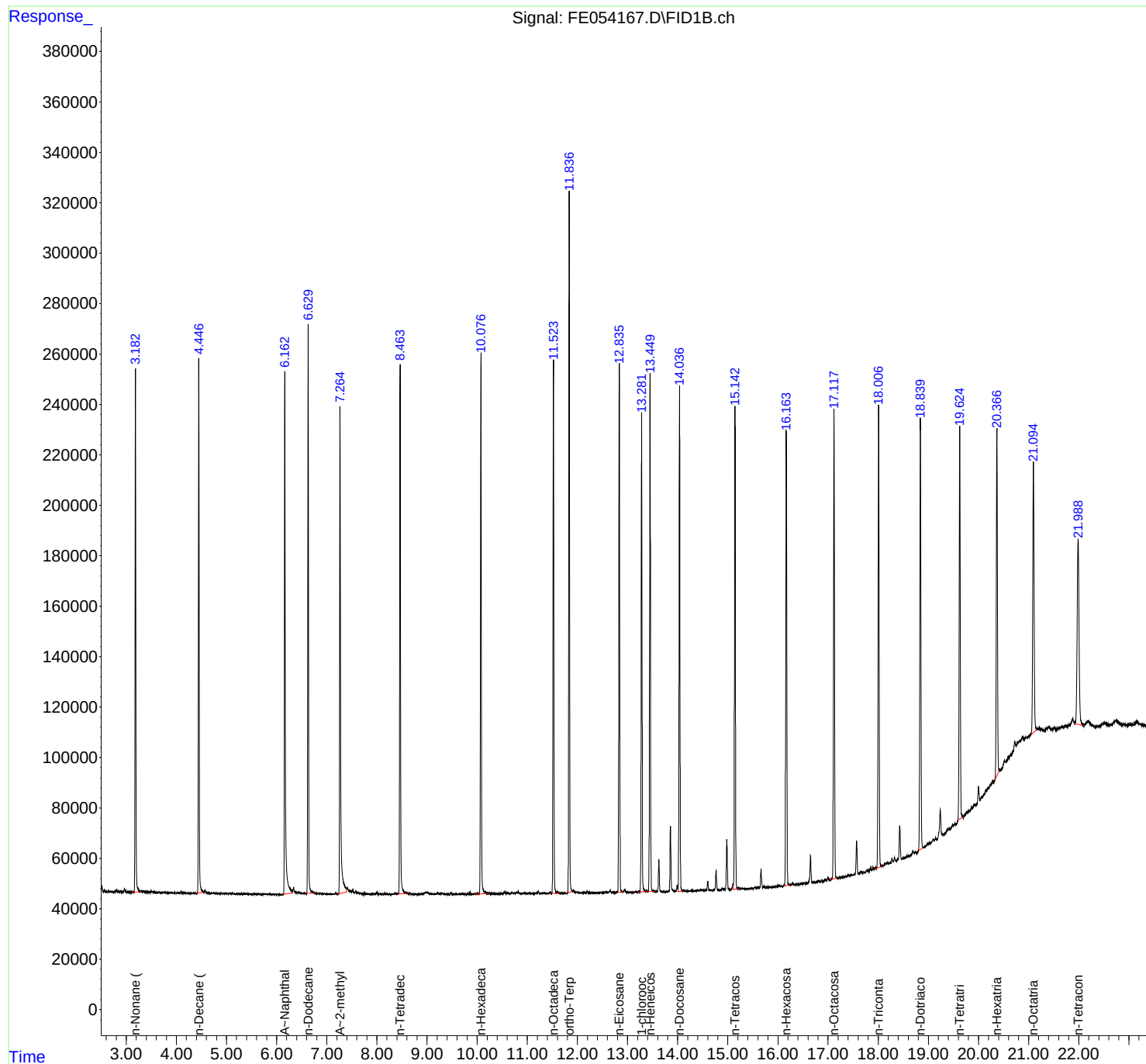
Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

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.:	Q2174
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.:	Q2174
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

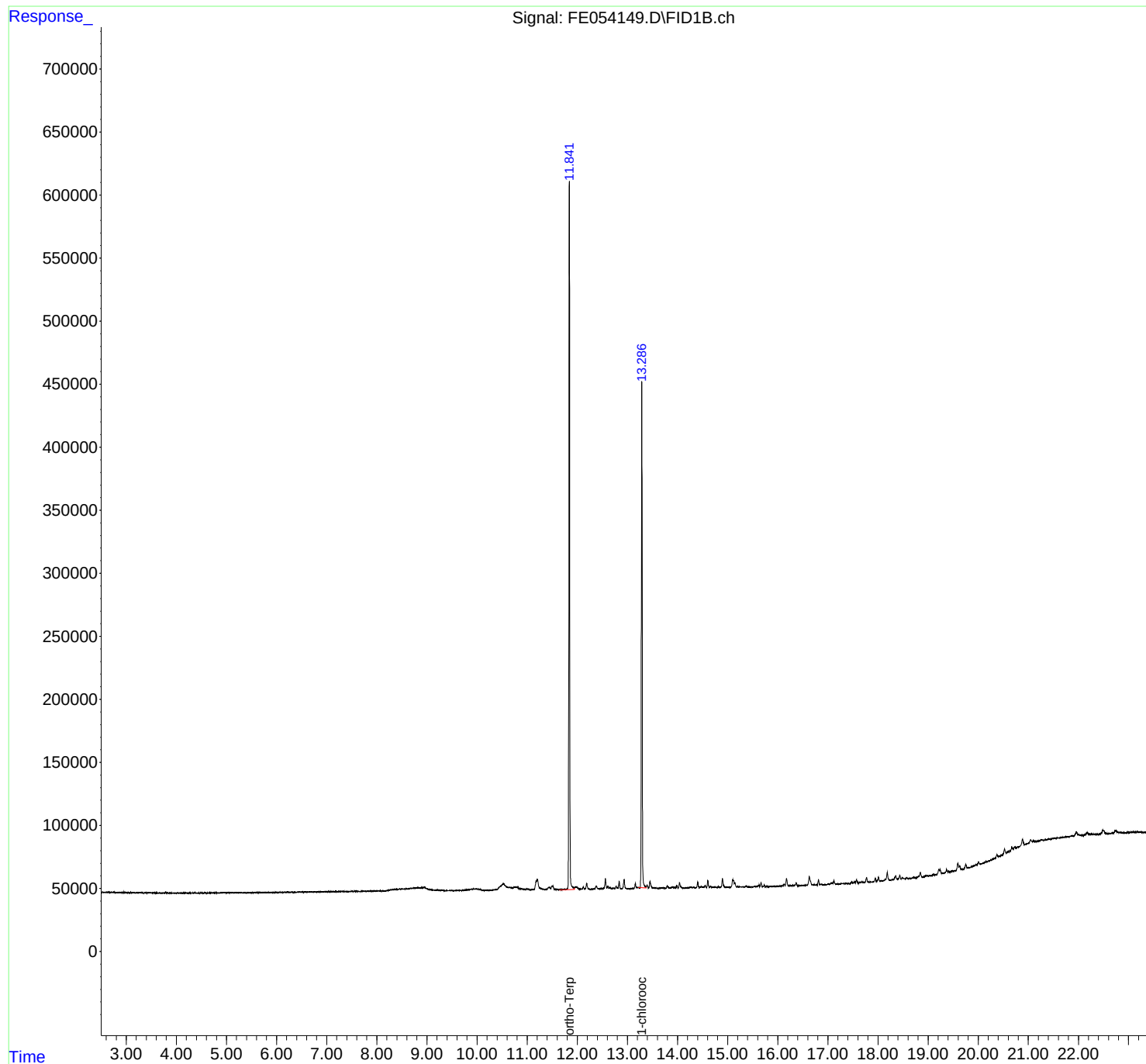
(m)=manual int.

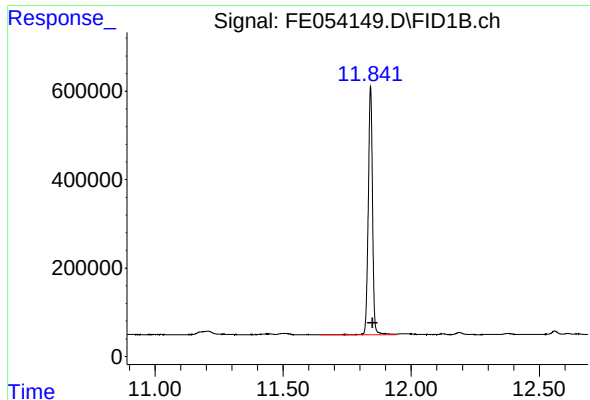
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054149.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 13:54
Operator : YP\AJ
Sample : PB168239BL
Misc :
ALS Vial : 6 Sample Multiplier: 1

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

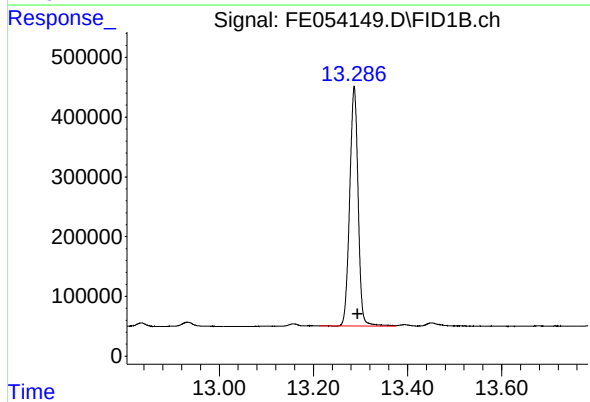




#9 ortho-Terphenyl (SURR)

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.:	Q2174
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.:	Q2174
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

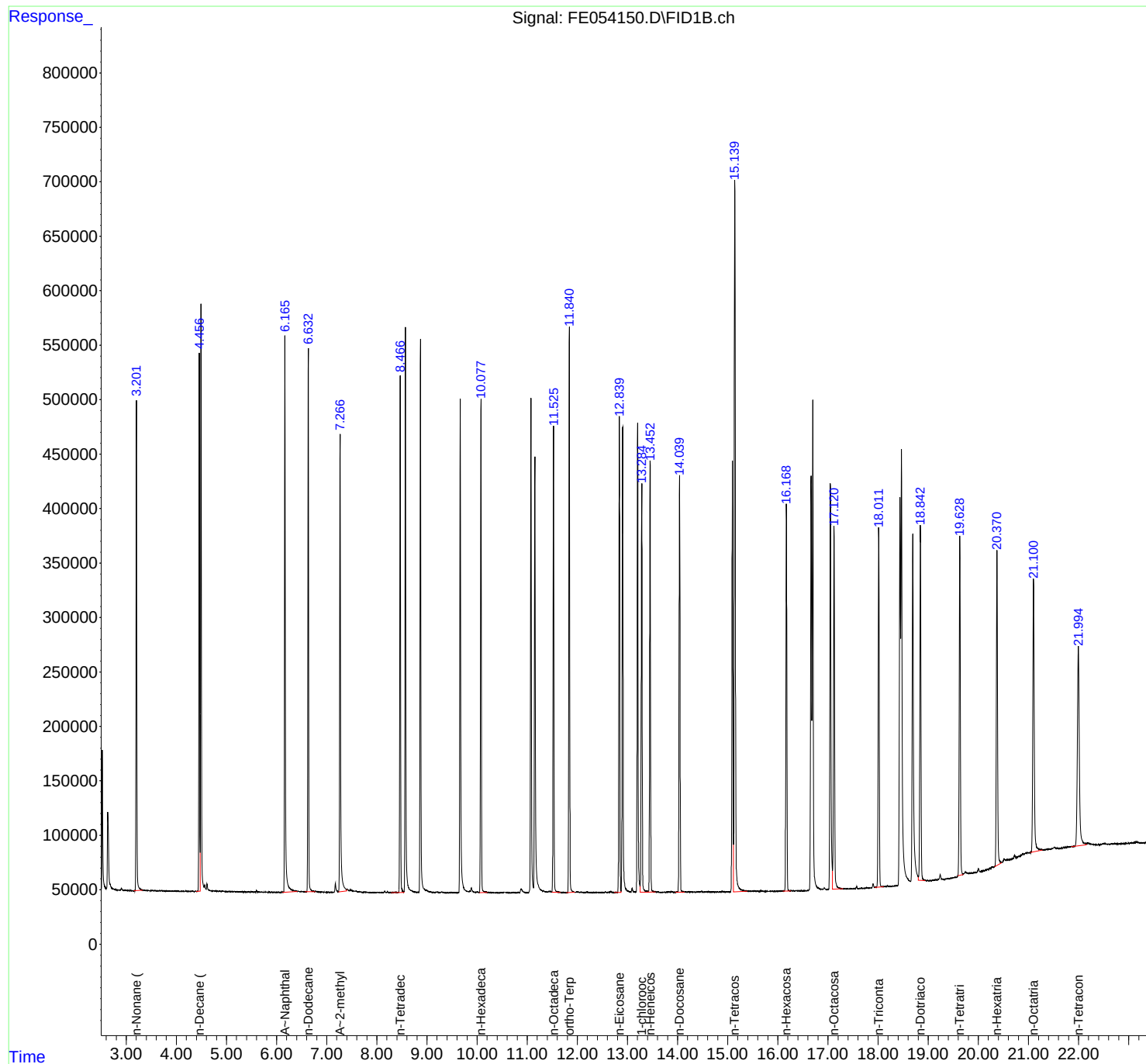
Response via : Initial Calibration

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: 1990

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.:	Q2174
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.:	Q2174
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/mlm
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

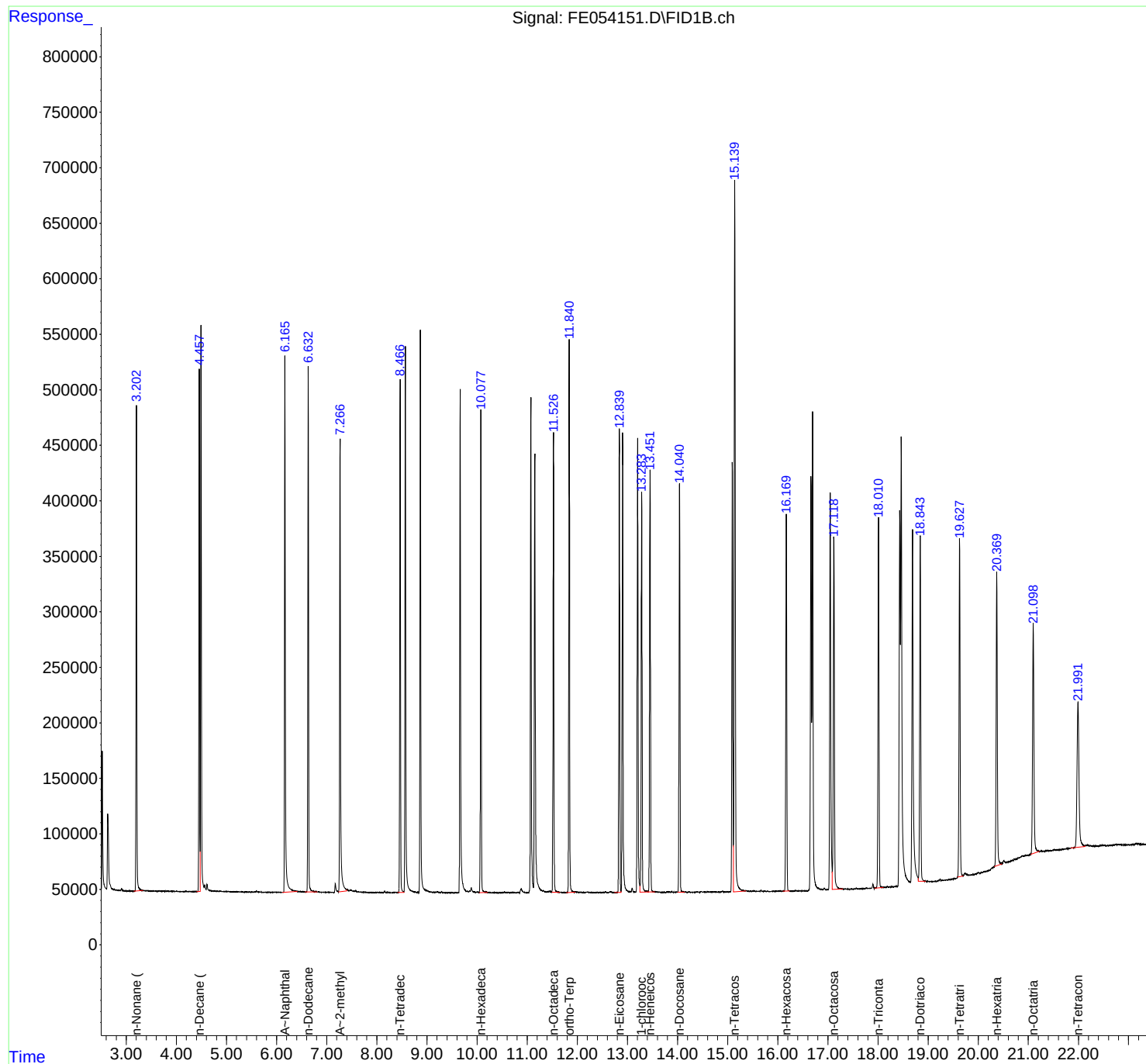
Instrument :
FID_E
ClientSampleId :
PB168239BSD

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.:	Q2174
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

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.:	Q2174
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 :			

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

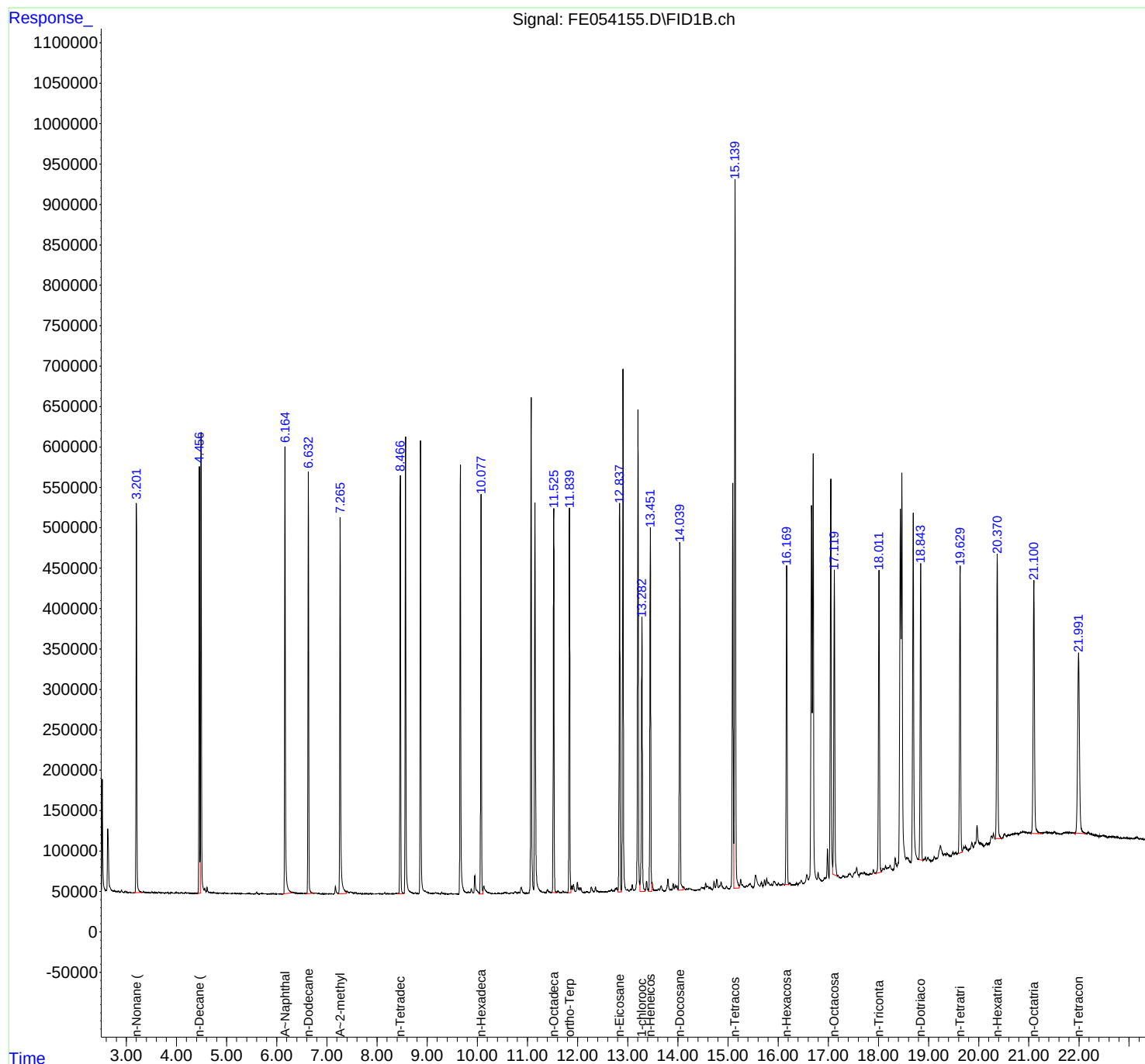
Instrument :
FID_E
ClientSampleId :
3MS

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 :

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ClientSampleId :

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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%

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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%	

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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%

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Supervised By :mohammad ahmed 06/05/2025

Chromatogram Data Table									
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%	0.553%	
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 :
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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.:	Q2174	
Lab Sample ID:	Q2147-05MSD		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	86.3	
Sample Wt/Vol:	30.06	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 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.:	Q2174
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

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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

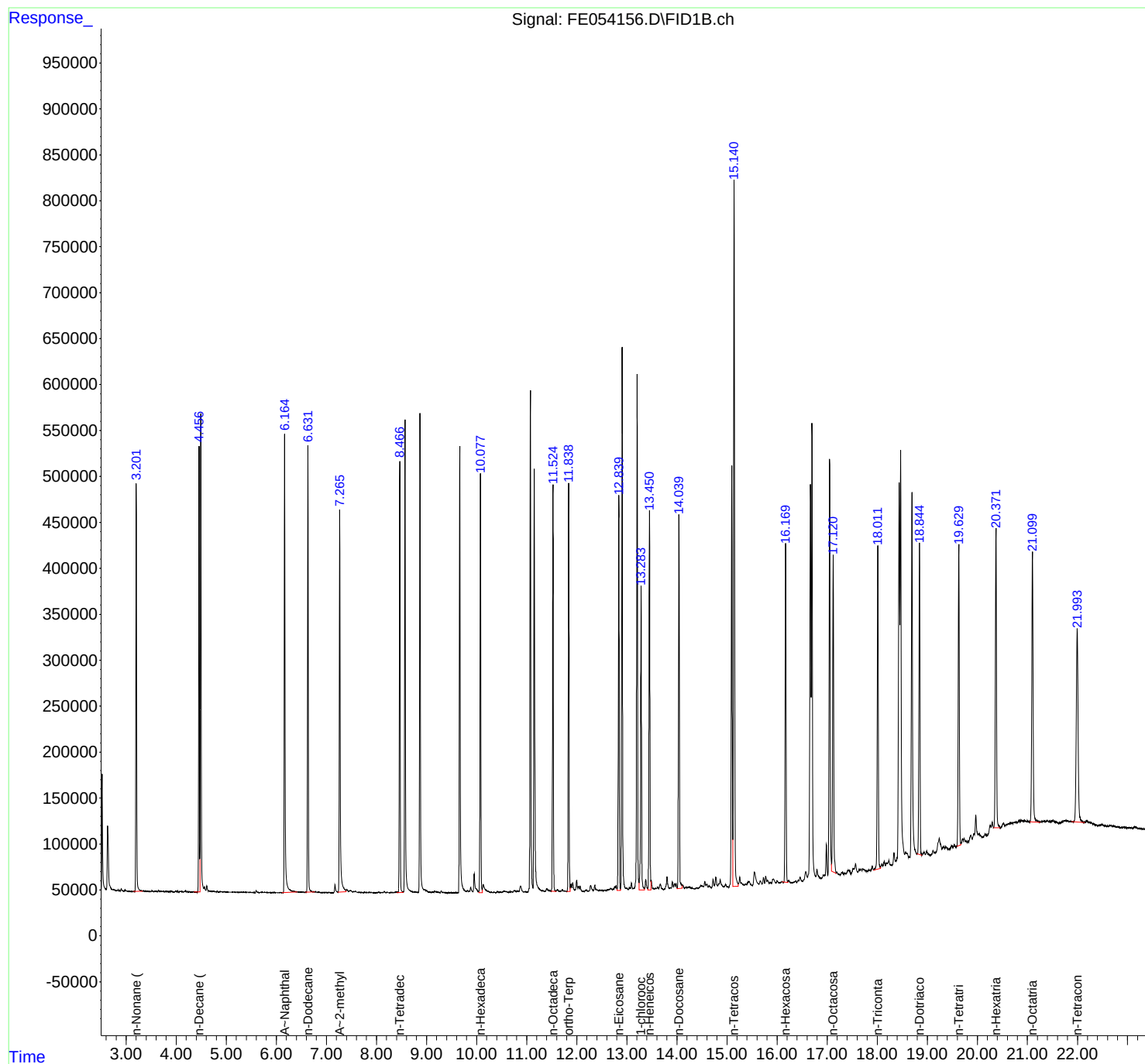
Instrument :
FID_E
ClientSampleId :
3MSD

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

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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 :

FID_E

ClientSampleId :

3MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 06/04/2025

Supervised By :mohammad ahmed 06/05/2025

Detailed Data							Summary Metrics	
Item ID	Category	Sub-Category	Material	Unit	Quantity	Value	Avg. Value	Max. Value
142	12.067	12.050	12.115	VV	5860	98559	0.87%	0.038%
143	12.132	12.115	12.151	PV	509	5592	0.00%	0.000%
144	12.190	12.151	12.231	PV	1370	30847	0.00%	0.000%
145	12.276	12.231	12.333	VV	6089	141603	0.00%	0.000%
146	12.358	12.333	12.394	VV	6556	109619	0.00%	0.000%
147	12.404	12.394	12.438	VV	1541	25428	0.00%	0.000%
148	12.456	12.438	12.488	VV	868	20021	0.18%	0.008%
149	12.501	12.488	12.524	VV	889	14304	0.13%	0.006%
150	12.564	12.524	12.590	VV	940	22820	0.20%	0.009%
151	12.630	12.590	12.643	VV	1385	33529	0.29%	0.013%
152	12.680	12.643	12.709	VV	2786	73285	0.64%	0.028%
153	12.724	12.709	12.737	VV	2241	27396	0.24%	0.011%
154	12.756	12.737	12.769	VV	4388	59903	0.53%	0.023%
155	12.784	12.769	12.803	VV	5165	75818	0.67%	0.029%
156	12.838	12.803	12.871	VV	425953	5296294	46.59%	2.048%
157	12.905	12.871	12.984	VV	589725	7137797	62.79%	2.760%
158	12.998	12.984	13.029	VV	2419	48715	0.43%	0.019%
159	13.057	13.029	13.072	VV	3228	56465	0.50%	0.022%
160	13.091	13.072	13.138	VV	8066	143875	1.27%	0.056%
161	13.204	13.138	13.242	VV	561643	6759023	59.46%	2.614%
162	13.283	13.242	13.349	VV	328514	4290316	37.74%	1.659%
163	13.377	13.349	13.413	VV	11286	198028	1.74%	0.077%
164	13.451	13.413	13.523	VV	413656	5213359	45.86%	2.016%
165	13.537	13.523	13.556	VV	1536	25292	0.22%	0.010%
166	13.576	13.556	13.591	VV	1614	27797	0.24%	0.011%
167	13.612	13.591	13.635	VV	2897	52575	0.46%	0.020%
168	13.667	13.635	13.728	VV	6167	150772	1.33%	0.058%
169	13.801	13.728	13.846	VV	13891	288784	2.54%	0.112%
170	13.863	13.846	13.883	VV	2069	36909	0.32%	0.014%
171	13.908	13.883	13.929	VV	8165	127188	1.12%	0.049%
172	13.949	13.929	13.965	VV	6475	102543	0.90%	0.040%
173	13.980	13.965	14.003	VV	6207	96179	0.85%	0.037%
174	14.039	14.003	14.105	VV	402969	5167181	45.46%	1.998%
175	14.116	14.105	14.161	VV	4683	93813	0.83%	0.036%
176	14.179	14.161	14.200	VV	2407	44045	0.39%	0.017%
177	14.224	14.200	14.361	VV	2440	124695	1.10%	0.048%
178	14.398	14.361	14.426	PV	1073	26926	0.24%	0.010%
179	14.473	14.426	14.496	VV	3270	85760	0.75%	0.033%
180	14.507	14.496	14.526	VV	2740	43744	0.38%	0.017%
181	14.556	14.526	14.576	VV	7649	133997	1.18%	0.052%
182	14.599	14.576	14.624	VV	4397	100490	0.88%	0.039%
183	14.641	14.624	14.686	VV	2473	60892	0.54%	0.024%
184	14.720	14.686	14.748	VV	9337	152713	1.34%	0.059%
185	14.776	14.748	14.813	VV	11492	231568	2.04%	0.090%
186	14.836	14.813	14.843	VV	4284	62735	0.55%	0.024%
187	14.863	14.843	14.918	VV	8645	193004	1.70%	0.075%
188	14.931	14.918	14.945	VV	1178	16918	0.15%	0.007%
189	14.970	14.945	15.034	VV	3010	61623	0.54%	0.024%
190	15.093	15.034	15.113	PV	460170	5990528	52.70%	2.317%
191	15.140	15.113	15.228	VV	768481	11366849	100.00%	4.396%
192	15.253	15.228	15.278	VV	10106	177400	1.56%	0.069%
193	15.286	15.278	15.348	VV	3819	90792	0.80%	0.035%
194	15.368	15.348	15.386	VV	2428	41623	0.37%	0.016%

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 :

FID_E

ClientSampleId :

3MSD

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 HC	100 PPM ALIPHATIC HC	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: Iwona
Analyst: jignesh
Date: 6/2/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 05/30/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:33
Out Date: 05/31/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135959

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
Q2159-01	TP05-MHO-WC	1	1.18	10.28	11.46	9.71	83.0	
Q2159-02	TP05-MHO-VOC	2	1.18	10.54	11.72	10.12	84.8	
Q2159-03	TP05-MHO-EPH	3	1.15	10.24	11.39	8.78	74.5	
Q2160-01	TP04-MHG-WC	4	1.19	10.38	11.57	10.25	87.3	
Q2160-02	TP04-MHG-VOC	5	1.19	10.30	11.49	10.17	87.2	
Q2160-03	TP04-MHG-EPH	6	1.17	10.09	11.26	9.99	87.4	
Q2160-05	TP05-MHG-WC	7	1.19	10.40	11.59	9.78	82.6	
Q2160-06	TP05-MHG-VOC	8	1.19	10.46	11.65	10.18	85.9	
Q2160-07	TP05-MHG-EPH	9	1.17	10.76	11.93	10.00	82.1	
Q2161-01	B27-SOIL-SAMPLE	20	1.15	10.13	11.28	10.15	88.8	
Q2161-02	B28-SOIL-SAMPLE	21	1.18	10.72	11.9	10.62	88.1	
Q2162-01	BP-VPB-182-GW-580-582	22	1.19	10.27	11.46	2.14	9.3	sludge sample
Q2164-05	SVOC-GPC-BLANK	10	1.00	1.00	2.00	2.00	100.0	
Q2164-06	PEST-GPC-BLANK	11	1.00	1.00	2.00	2.00	100.0	
Q2164-07	PEST-GPC-BLANK-SPIKE	12	1.00	1.00	2.00	2.00	100.0	
Q2164-08	PCB-GPC-BLANK	13	1.00	1.00	2.00	2.00	100.0	
Q2164-09	PCB-GPC-BLANK-SPIKE	14	1.00	1.00	2.00	2.00	100.0	
Q2164-10	SVOC-GPC2-BLANK	15	1.00	1.00	2.00	2.00	100.0	
Q2164-11	PEST-GPC2-BLANK	16	1.00	1.00	2.00	2.00	100.0	
Q2164-12	PEST-GPC2-BLANK-SPIKE	17	1.00	1.00	2.00	2.00	100.0	
Q2164-13	PCB-GPC2-BLANK	18	1.00	1.00	2.00	2.00	100.0	
Q2164-14	PCB-GPC2-BLANK-SPIKE	19	1.00	1.00	2.00	2.00	100.0	
Q2166-01	1	23	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-02	2	24	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-03	3	25	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-04	4	26	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-05	5	27	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-06	6	28	1.00	1.00	2.00	2.00	100.0	wipe sample



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 6/2/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 05/30/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:33
Out Date: 05/31/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135959

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
Q2166-07	7	29	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-08	8	30	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-09	9	31	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-10	10	32	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-11	11	33	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-12	12	34	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-13	13	35	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-14	14	36	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-15	15	37	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-16	16	38	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-17	17	39	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-18	18	40	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-19	19	41	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-20	20	42	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-21	21	43	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-22	22	44	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-23	23	45	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-24	24	46	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-25	25	47	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-26	26	48	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-27	27	49	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-28	28	50	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-29	29	51	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2166-30	30	52	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2172-01	TP06-MHQ	53	1.13	10.73	11.86	10.39	86.3	
Q2172-02	TP06-MHQ-VOC	54	1.14	9.96	11.1	9.95	88.5	
Q2172-03	TP06-MHQ-EPH	55	1.18	10.72	11.9	10.44	86.4	
Q2173-01	OR-400-CF-402B-COMP-23	56	1.16	10.24	11.4	10.00	86.3	



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 6/2/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 05/30/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:33
Out Date: 05/31/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135959

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
Q2173-02	OR-400-CF-402B-VOC-23	57	1.19	10.23	11.42	10.47	90.7	
Q2173-03	OR-400-CF-402B-61	58	1.16	10.13	11.29	10.28	90.0	
Q2173-04	OR-400-CF-402B-62	59	1.15	10.14	11.29	9.86	85.9	
Q2173-05	OR-400-CF-402B-63	60	1.15	10.80	11.95	10.03	82.2	
Q2173-07	OR-400-CF-402B-COMP-24	61	1.16	10.72	11.88	9.75	80.1	
Q2173-08	OR-400-CF-402B-VOC-24	62	1.12	10.85	11.97	9.91	81.0	
Q2173-09	OR-400-CF-402B-64	63	1.19	10.46	11.65	9.71	81.5	
Q2173-10	OR-400-CF-402B-65	64	1.17	10.74	11.91	9.63	78.8	
Q2173-11	OR-400-CF-402B-66	65	1.16	10.46	11.62	9.76	82.2	
Q2173-13	OR-400-CF-402B-COMP-25	66	1.16	10.51	11.67	9.82	82.4	
Q2173-14	OR-400-CF-402B-VOC-25	67	1.18	10.62	11.8	10.46	87.4	
Q2173-15	OR-400-CF-402B-67	68	1.15	10.81	11.96	9.84	80.4	
Q2173-16	OR-400-CF-402B-68	69	1.16	10.53	11.69	10.4	87.7	
Q2173-17	OR-400-CF-402B-69	70	1.13	10.79	11.92	9.96	81.8	
Q2174-01	DP1	71	1.15	10.03	11.18	10.82	96.4	
Q2174-02	D1	72	1.13	10.27	11.4	10.85	94.6	
Q2174-03	D2	73	1.13	10.26	11.39	10.22	88.6	

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

WORKLIST(Hardcopy Internal Chain)

135959

WorkList Name : %1-053025

WorkList ID : 189833

Department : Wet-Chemistry

Date : 05-30-2025 08:02:15

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2159-01	TP05-MHO-WC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/29/2025	Chemtech -SO
Q2159-02	TP05-MHO-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/29/2025	Chemtech -SO
Q2159-03	TP05-MHO-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/29/2025	Chemtech -SO
Q2160-01	TP04-MHG-WC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/29/2025	Chemtech -SO
Q2160-02	TP04-MHG-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/29/2025	Chemtech -SO
Q2160-03	TP04-MHG-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/29/2025	Chemtech -SO
Q2160-05	TP05-MHG-WC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/29/2025	Chemtech -SO
Q2160-06	TP05-MHG-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/29/2025	Chemtech -SO
Q2160-07	TP05-MHG-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/29/2025	Chemtech -SO
Q2161-01	B27-SOIL-SAMPLE	Solid	Percent Solids	Cool 4 deg C	SCAL01	L41	05/29/2025	Chemtech -SO
Q2161-02	B28-SOIL-SAMPLE	Solid	Percent Solids	Cool 4 deg C	SCAL01	L41	05/12/2025	Chemtech -SO
Q2162-01	BP-VPB-182-GW-580-582	Solid	Percent Solids	1:1 HCl to pH < 2	TETR06	L31	05/12/2025	Chemtech -SO
Q2164-05	SVOC-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	05/23/2025	Chemtech -SO
Q2164-06	PEST-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	05/23/2025	Chemtech -SO
Q2164-07	PEST-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	05/23/2025	Chemtech -SO
Q2164-08	PCB-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	05/23/2025	Chemtech -SO
Q2164-09	PCB-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	05/23/2025	Chemtech -SO
Q2164-10	SVOC-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	05/23/2025	Chemtech -SO
Q2164-11	PEST-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	05/23/2025	Chemtech -SO
Q2164-12	PEST-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	05/23/2025	Chemtech -SO
Q2164-13	PCB-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	05/23/2025	Chemtech -SO

Date/Time 05/30/25 15:10

Raw Sample Received by: BWC

Raw Sample Relinquished by: JCC

Date/Time

05/30/25

Raw Sample Received by:

Raw Sample Relinquished by:

17:30

JCC

JCC

WORKLIST(Hardcopy Internal Chain)

135959

WorkList Name : %1-053025

WorkList ID : 189833

Department : Wet-Chemistry

Date : 05-30-2025 08:02:15

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2164-14	PCB-GCP2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	05/23/2025	Chemtech -SO
Q2166-01	1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-02	2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-03	3	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-04	4	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-05	5	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-06	6	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-07	7	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-08	8	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-09	9	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-10	10	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-11	11	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-12	12	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-13	13	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-14	14	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-15	15	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-16	16	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-17	17	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-18	18	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-19	19	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-20	20	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO

Date/Time 05/30/25 15:10
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Date/Time 05/30/25 17:30
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

WORKLIST(Hardcopy Internal Chain)

135A59

WorkList Name : %1-053025

WorkList ID : 189833

Department : Wet-Chemistry

Date : 05-30-2025 08:02:15

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2166-21	21	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-22	22	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-23	23	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-24	24	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-25	25	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-26	26	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-27	27	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-28	28	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-29	29	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2166-30	30	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/30/2025	Chemtech -SO
Q2172-01	TP06-MHQ	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2172-02	TP06-MHQ-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2172-03	TP06-MHQ-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2173-01	OR-400-CF-402B-COMP-23	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2173-02	OR-400-CF-402B-VOC-23	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2173-03	OR-400-CF-402B-61	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2173-04	OR-400-CF-402B-62	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2173-05	OR-400-CF-402B-63	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2173-07	OR-400-CF-402B-COMP-24	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2173-08	OR-400-CF-402B-VOC-24	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2173-09	OR-400-CF-402B-64	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO

Date/Time 05/30/25 15:10
 Raw Sample Received by: SLC (sun)
 Raw Sample Relinquished by: SLC (sun)

Date/Time 05/30/25 17:13
 Raw Sample Received by: SLC (sun)
 Raw Sample Relinquished by: SLC (sun)

WORKLIST(Hardcopy Internal Chain)

135939

WorkList Name : %1-053025 WorkList ID : 189833 Department : Wet-Chemistry Date : 05-30-2025 08:02:15

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2173-10	OR-400-CF-402B-65	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2173-11	OR-400-CF-402B-66	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2173-13	OR-400-CF-402B-COMP-25	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2173-14	OR-400-CF-402B-VOC-25	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2173-15	OR-400-CF-402B-67	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2173-16	OR-400-CF-402B-68	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2173-17	OR-400-CF-402B-69	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/30/2025	Chemtech -SO
Q2174-01	DP1	Solid	Percent Solids	Cool 4 deg C	GENV01	L41	05/30/2025	Chemtech -SO
Q2174-02	D1	Solid	Percent Solids	Cool 4 deg C	GENV01	L41	05/30/2025	Chemtech -SO
Q2174-03	D2	Solid	Percent Solids	Cool 4 deg C	GENV01	L41	05/30/2025	Chemtech -SO

Date/Time 05/30/25 15:10
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Date/Time 05/30/25 17:30
 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

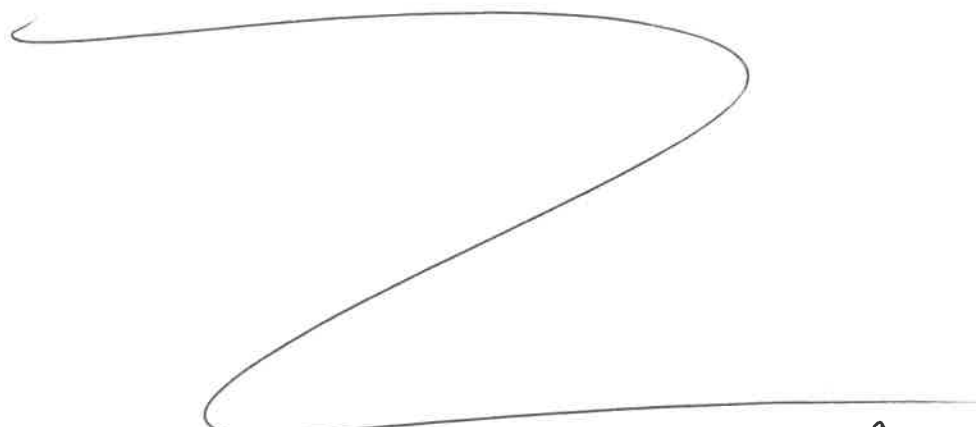
KD Bath ID:	N/A	Envap ID:	NEVAP-02
KD Bath Temperature:	N/A	Envap Temperature:	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
6/3/25	RS(Ext 666)	Y.P. PESTIPUB
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: [Signature]

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

Prep Standard - Chemical Standard Summary

Order ID : Q2174

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

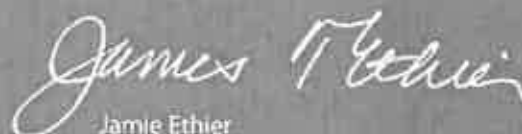
Certificate of Analysis

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



**PRODUCTOS
QUÍMICOS
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CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na 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)

avantor



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

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	4
Assay (CH 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

J. Croak

Jamie Croak
Director Quality Operations, Bioscience Production

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

Avantor Performance Materials, LLC

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

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)

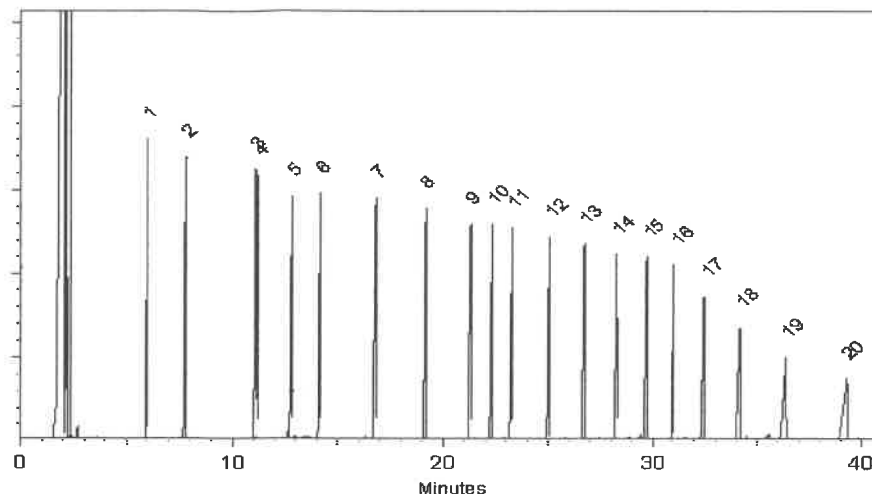
Carrier Gas:
hydrogen-constant pressure 10 psi.

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.



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.: 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:

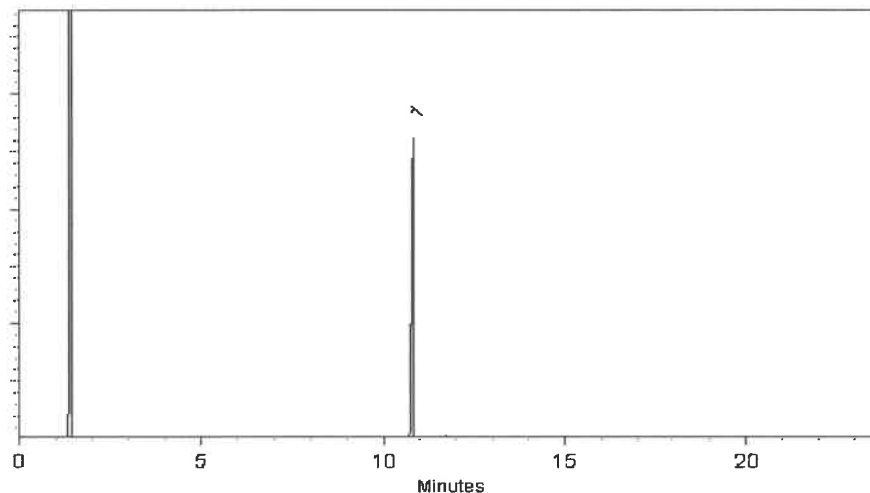
FID

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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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:

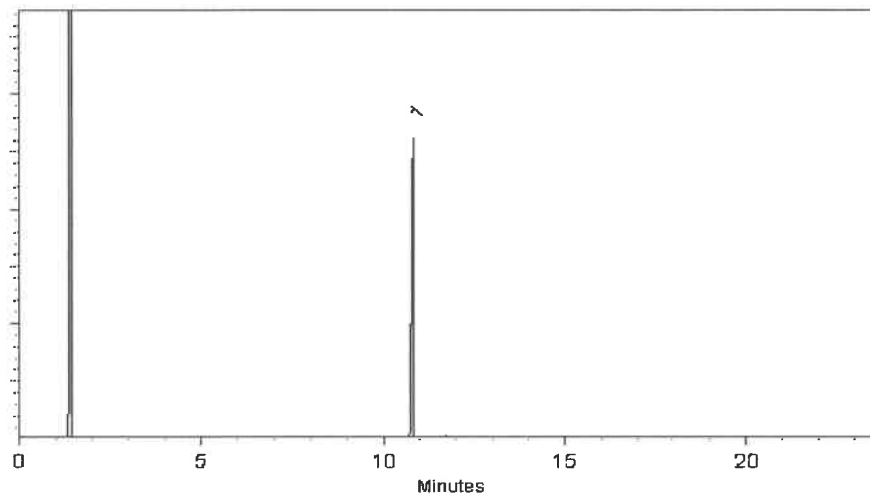
FID

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%.

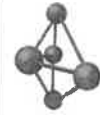
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

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:

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- 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.)	
																CAS#	OSHA PEL (TWA)
1.	2-Methylnaphthalene	(0214)	MKBF3783V	NA	NA	NA	NA	1000	97	0.2	NA	0.02579	0.02594	1005.7	5.7	91-57-6	N/A
2.	Naphthalene	(0222)	MKB28680V	NA	NA	NA	NA	1000	100	0.2	NA	0.02502	0.02511	1003.7	5.7	91-20-3	10 ppm (50mg/m ³ 8H) orl-rat 1630mg/kg
3.	n-Nonane	95708	120222	1.00	25.00	1000.7	1000.7	1000	NA	NA	0.013	NA	NA	1000.0	4.2	111-84-2	200 ppm (1050mg/m ³ 8H) orl-rat 490mg/kg
4.	n-Decane	95708	120222	1.00	25.00	1000.9	1000.9	1000	NA	NA	0.013	NA	NA	1000.2	4.2	124-18-5	ivn-mus 218mg/kg
5.	n-Dodecane	95708	120222	1.00	25.00	1000.7	1000.7	1000	NA	NA	0.013	NA	NA	1000.0	4.2	112-40-3	N/A
6.	n-Tetradecane	95708	120222	1.00	25.00	1002.1	1002.1	1000	NA	NA	0.013	NA	NA	1001.3	4.2	629-59-4	ivn-mus 3494mg/kg
7.	n-Hexadecane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	NA	0.013	NA	NA	999.7	4.2	544-76-3	N/A
8.	n-Octadecane	95708	120222	1.00	25.00	1001.0	1001.0	1000	NA	NA	0.013	NA	NA	1000.3	4.1	589-45-3	N/A
9.	n-Eicosane	95708	120222	1.00	25.00	1001.0	1001.0	1000	NA	NA	0.013	NA	NA	1000.3	4.2	112-95-8	N/A
10.	n-Henicosane	95708	120222	1.00	25.00	1002.4	1002.4	1000	NA	NA	0.013	NA	NA	1001.6	4.2	629-94-7	N/A
11.	n-Docosane	95708	120222	1.00	25.00	1001.9	1001.9	1000	NA	NA	0.013	NA	NA	1001.2	4.2	629-97-0	N/A
12.	n-Tetracosane	95708	120222	1.00	25.00	1000.8	1000.8	1000	NA	NA	0.013	NA	NA	1000.1	4.2	646-31-1	N/A
13.	n-Hexacosane	95708	120222	1.00	25.00	1001.2	1001.2	1000	NA	NA	0.013	NA	NA	1000.4	4.2	630-01-3	N/A
14.	n-Octacosane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	NA	0.013	NA	NA	999.8	4.2	630-02-4	N/A
15.	n-Triacontane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	NA	0.013	NA	NA	999.8	4.2	638-68-6	N/A
16.	n-Dotriacontane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	NA	0.013	NA	NA	999.8	4.3	544-85-4	ivn-mus 100mg/kg
17.	n-Tetracontane	95708	120222	1.00	25.00	1000.4	1000.4	1000	NA	NA	0.013	NA	NA	999.7	4.2	14167-59-0	N/A
18.	n-Hexatriacontane	95708	120222	1.00	25.00	1001.5	1001.5	1000	NA	NA	0.013	NA	NA	1000.8	4.2	630-08-8	N/A
19.	n-Octatriacontane	95708	120222	1.00	25.00	1000.3	1000.3	1000	NA	NA	0.013	NA	NA	999.6	4.3	7184-86-6	N/A
20.	n-Tetracontane	95708	120222	1.00	25.00	1000.6	1000.6	1000	NA	NA	0.013	NA	NA	999.9	4.3	4181-95-7	N/A

• The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
• Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
• Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
• All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
• Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



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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:

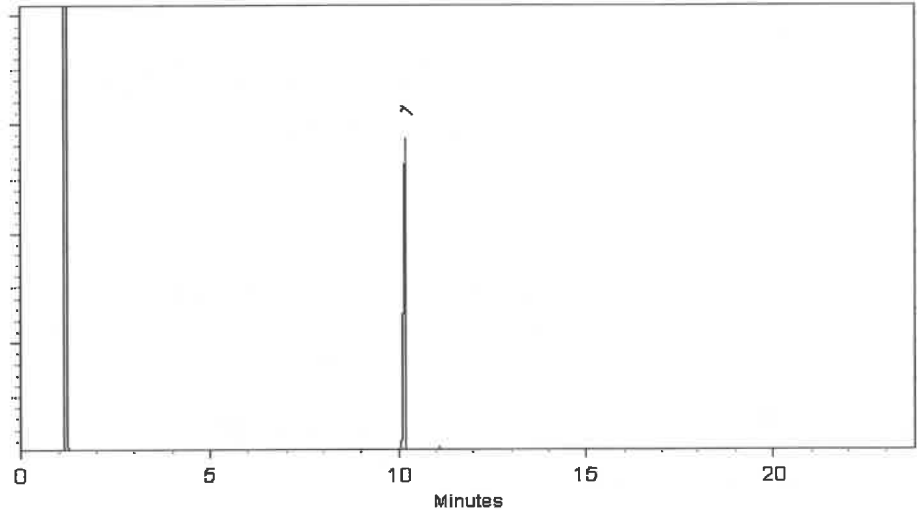
FID

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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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:

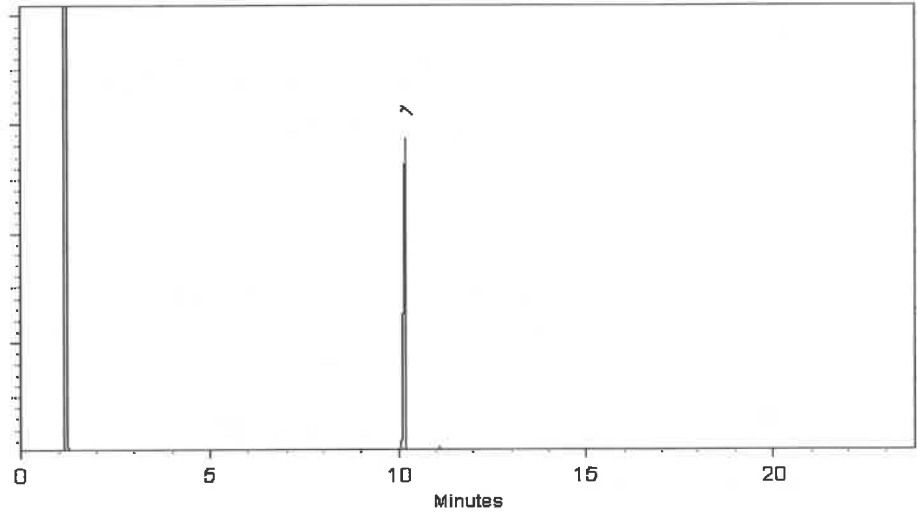
FID

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

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

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

Manufacturing Notes:

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

Handling Notes:

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31097 **Lot No.:** A0216631
Description : o-Terphenyl Standard
o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2028 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,065.0 µg/mL	+/- 453.3336

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

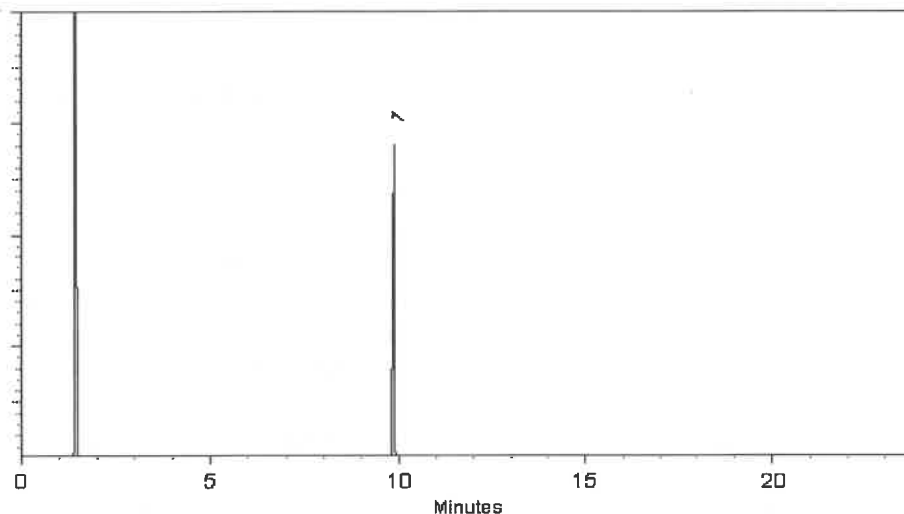
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

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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. : 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:

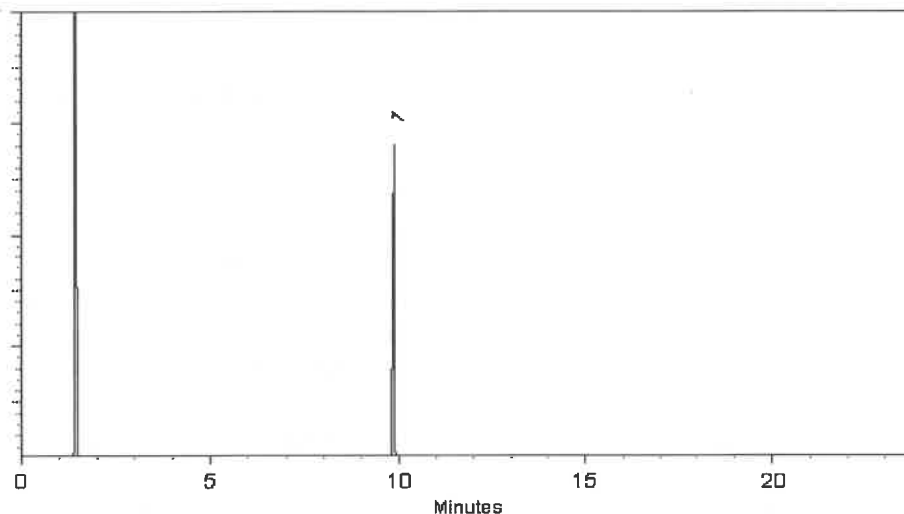
FID

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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- Purity of isomeric compounds is reported as the sum of the isomers.
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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:

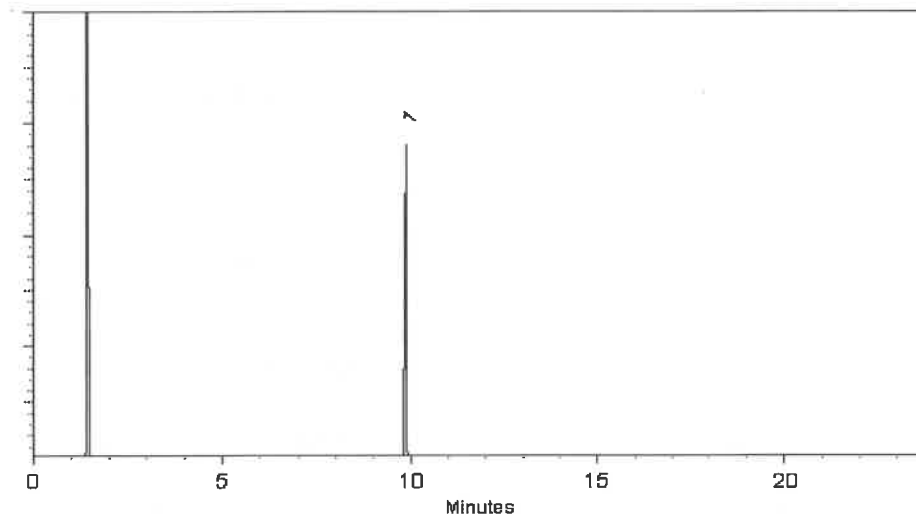
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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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:

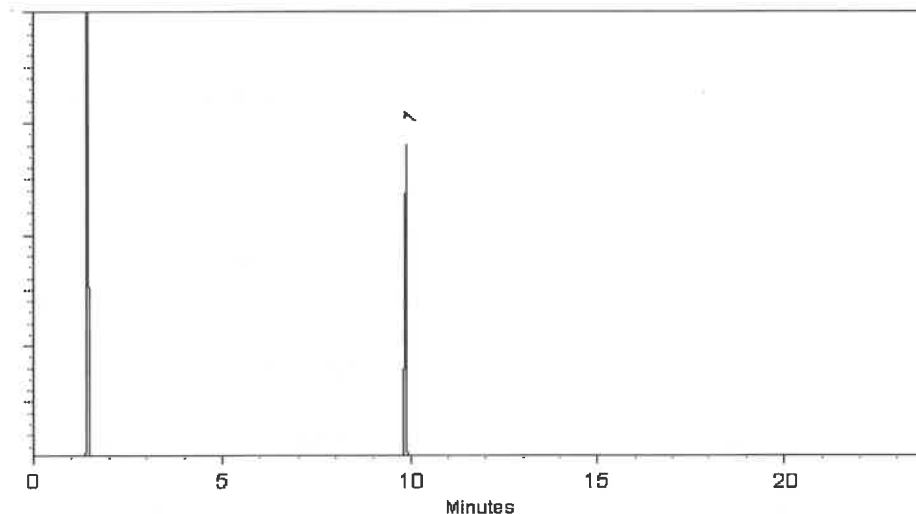
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- 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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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
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.)

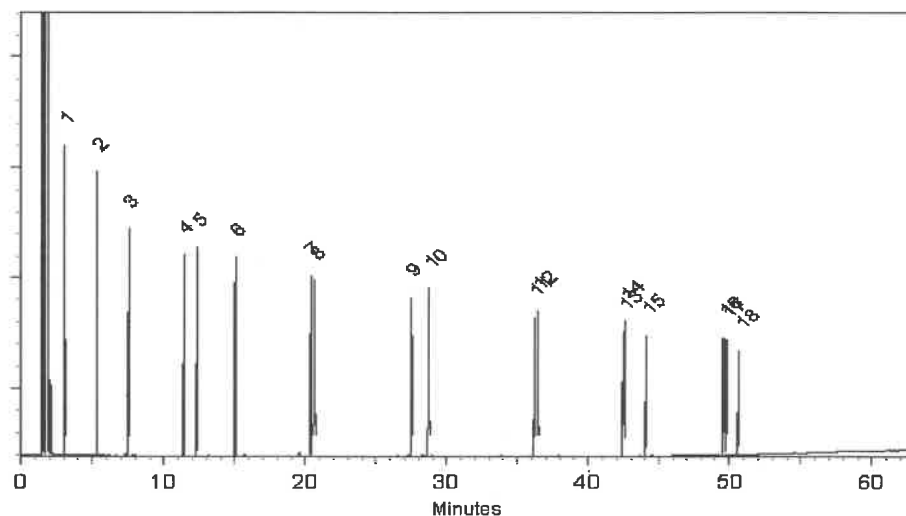
Inj. Temp:
250°C

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:

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

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

Manufacturing Notes:

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

Handling Notes:

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



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Certificate of Analysis

chromatographic plus



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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.)

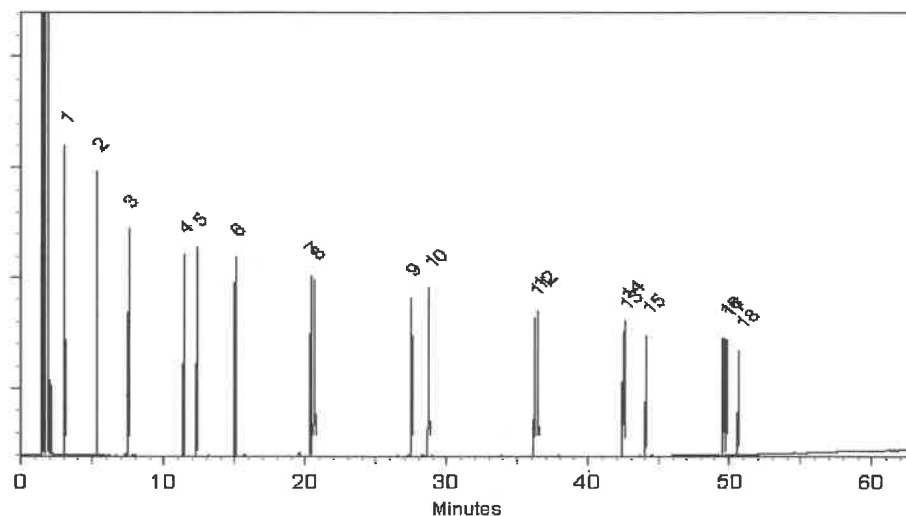
Inj. Temp:
250°C

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

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

Manufacturing Notes:

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Handling Notes:

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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
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8	Anthracene	120-12-7	MKCR0570	99%	200.4 µg/mL	+/- 9.0294
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13	Benzo(b)fluoranthene	205-99-2	012013B	99%	200.4 µg/mL	+/- 9.0294
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* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
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.)

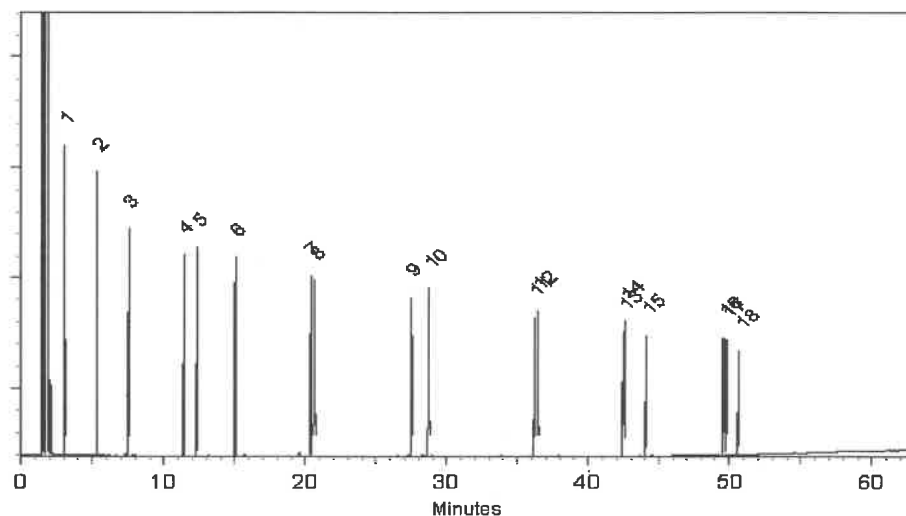
Inj. Temp:
250°C

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.
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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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- 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
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.)

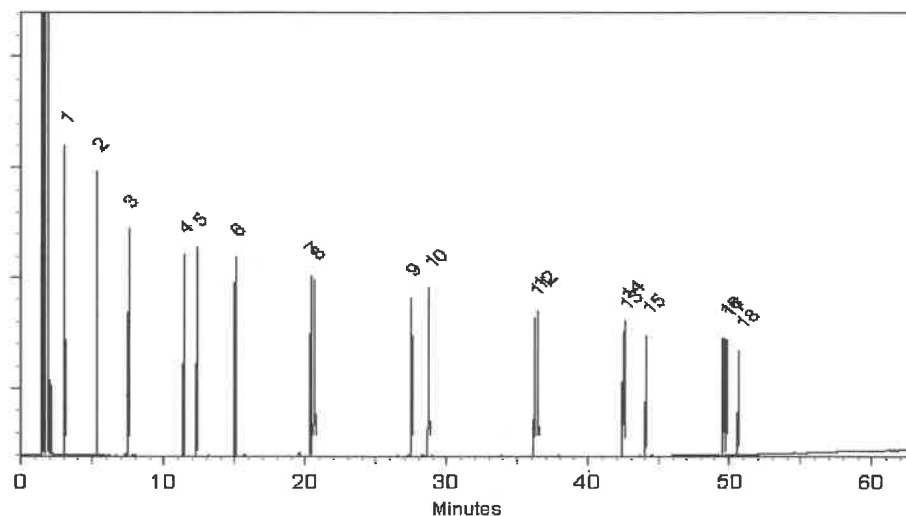
Inj. Temp:
250°C

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.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543

Lot No.: A0211254

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : April 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

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.)

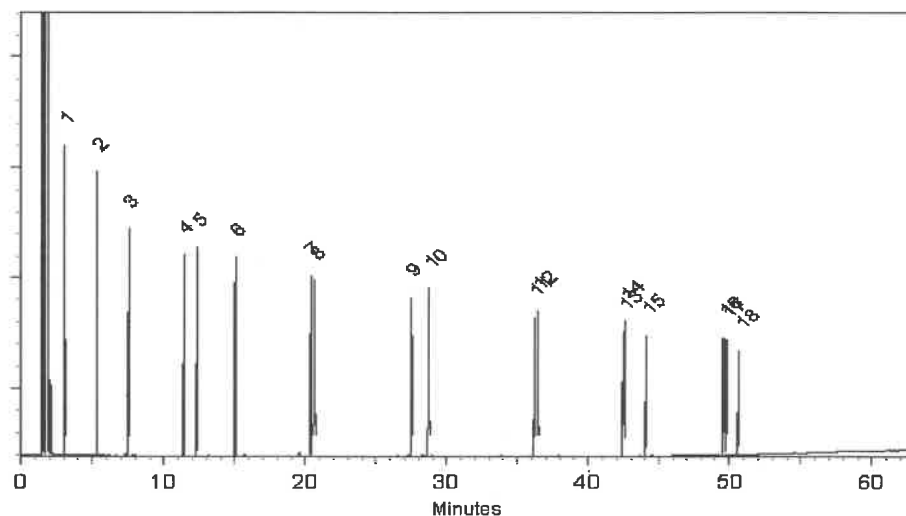
Inj. Temp:
250°C

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:

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aromatics Matrix Spike Mix

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

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

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

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

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.)

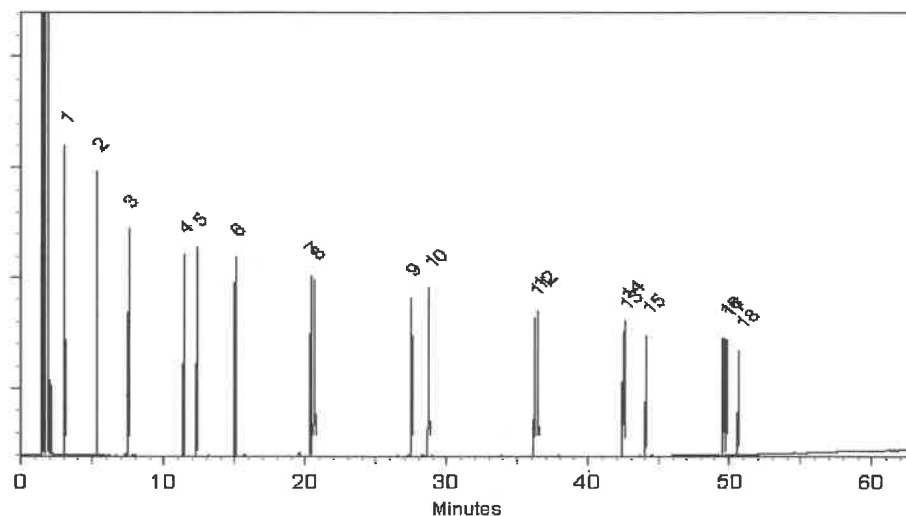
Inj. Temp:
250°C

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

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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.)

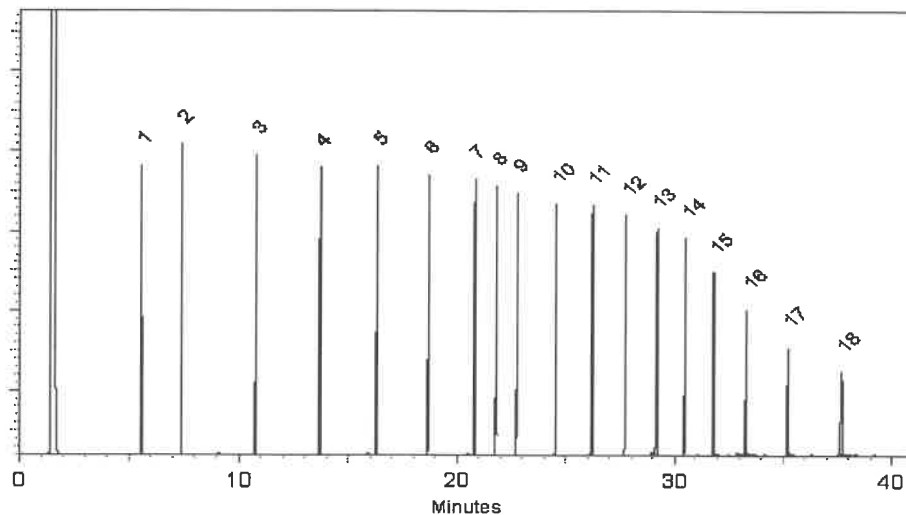
Inj. Temp:
 250°C

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



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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.)

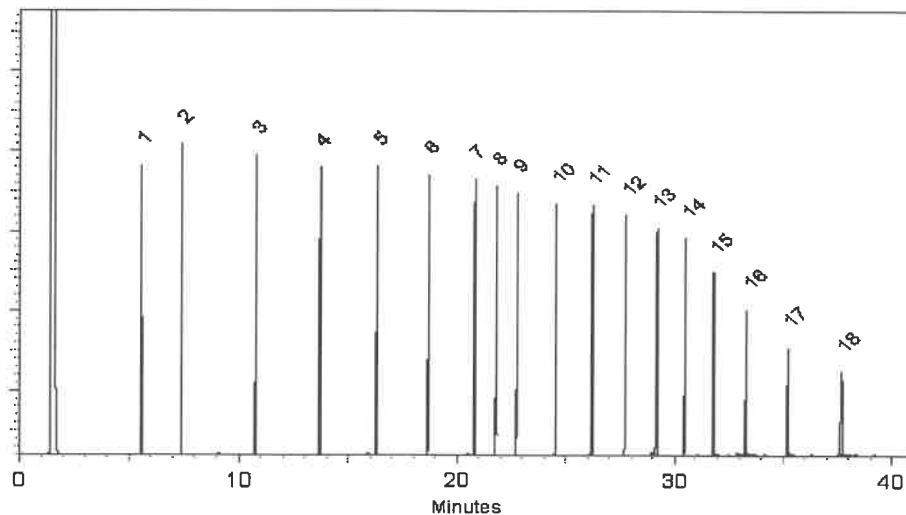
Inj. Temp:
250°C

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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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.)

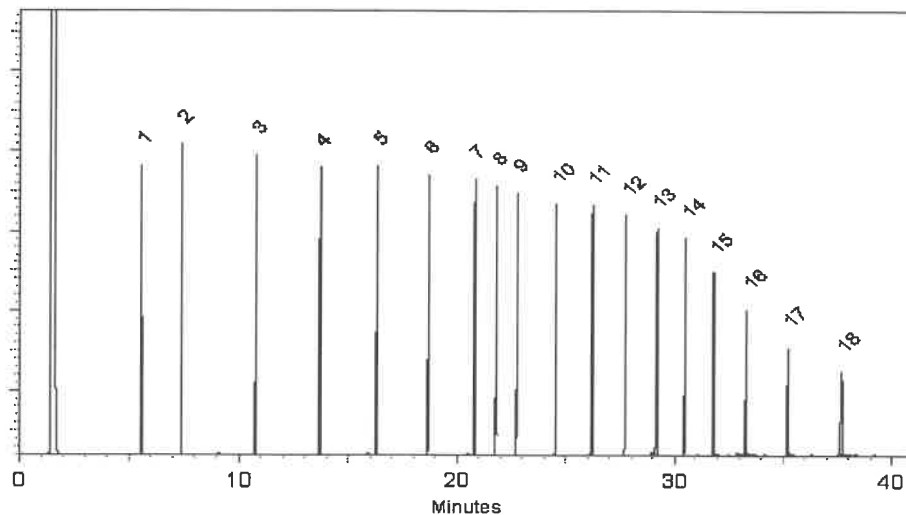
Inj. Temp:
 250°C

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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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:

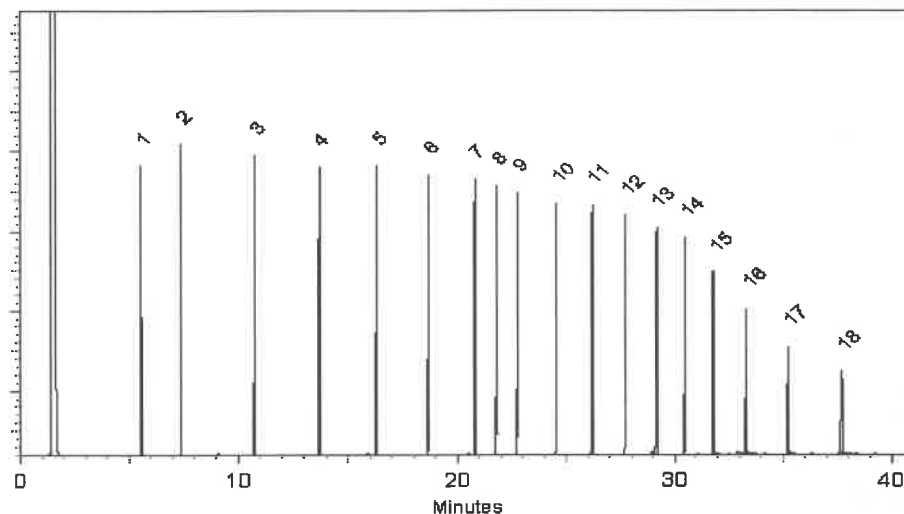
FID

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

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-S (cat.#10223)**Carrier Gas:**

hydrogen-constant pressure 10 psi.

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

250°C

Det. Temp:

330°C

Det. Type:

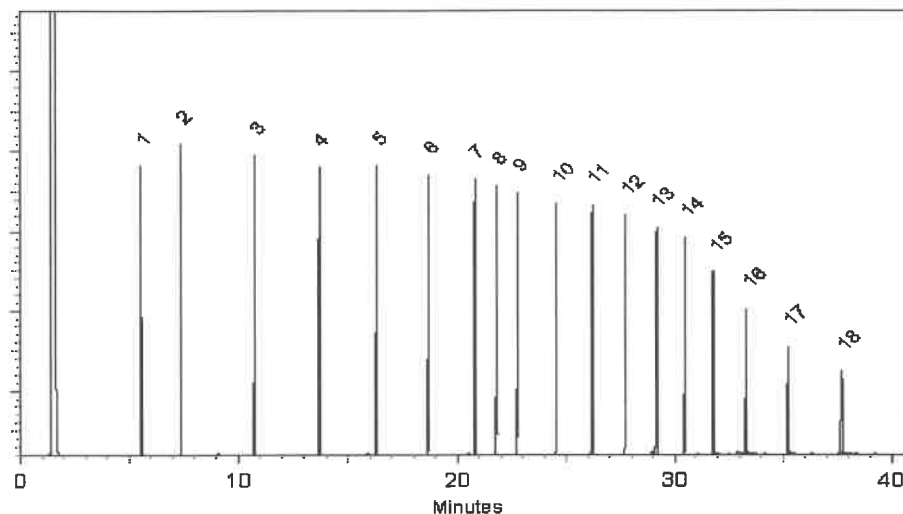
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



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

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.
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Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

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%.

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Manufacturing Notes:

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

Handling Notes:

- 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.:** 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.)

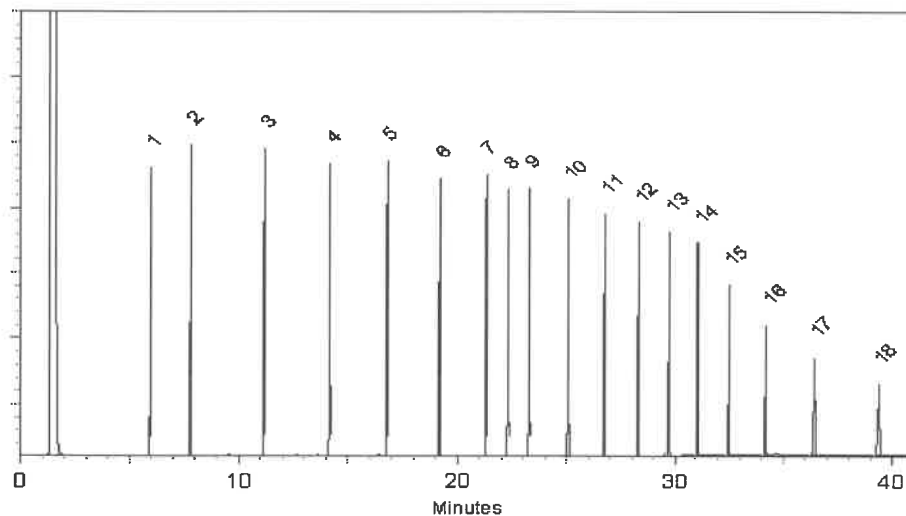
Inj. Temp:
250°C

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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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.)

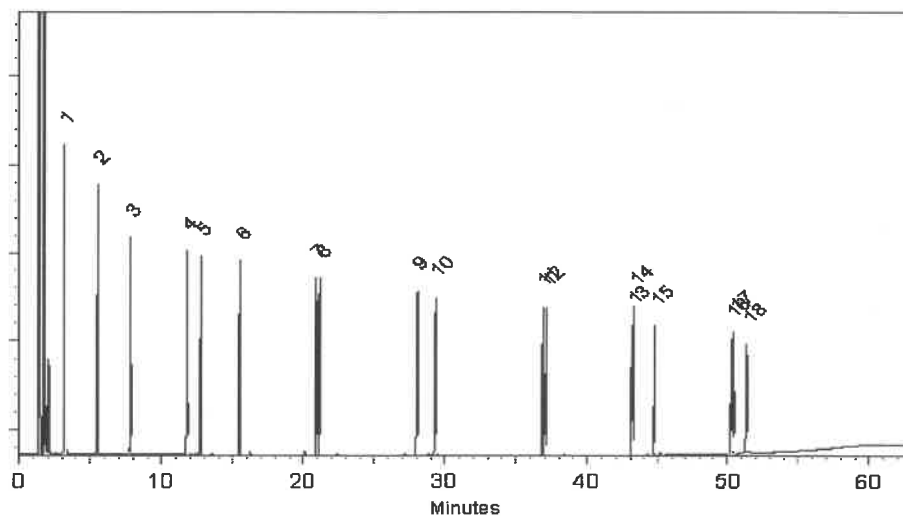
Inj. Temp:
250°C

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/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. : 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.)

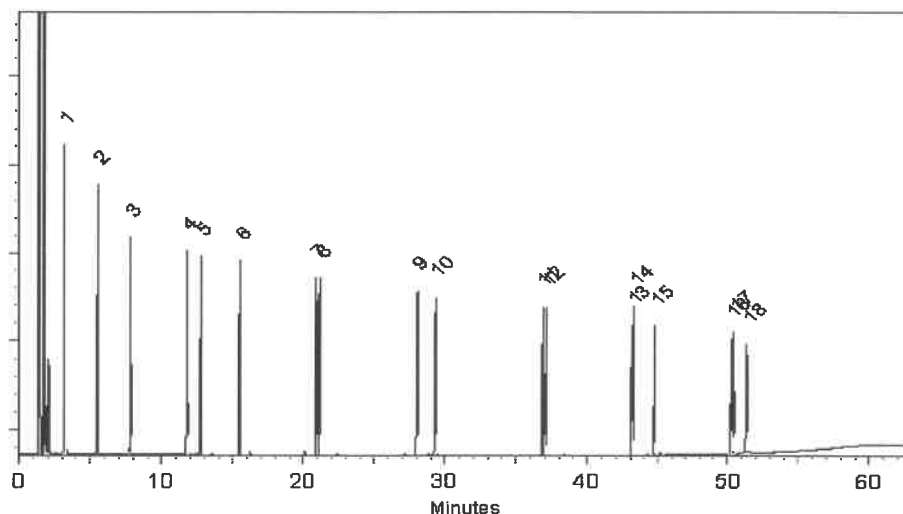
Inj. Temp:
250°C

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.
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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.)

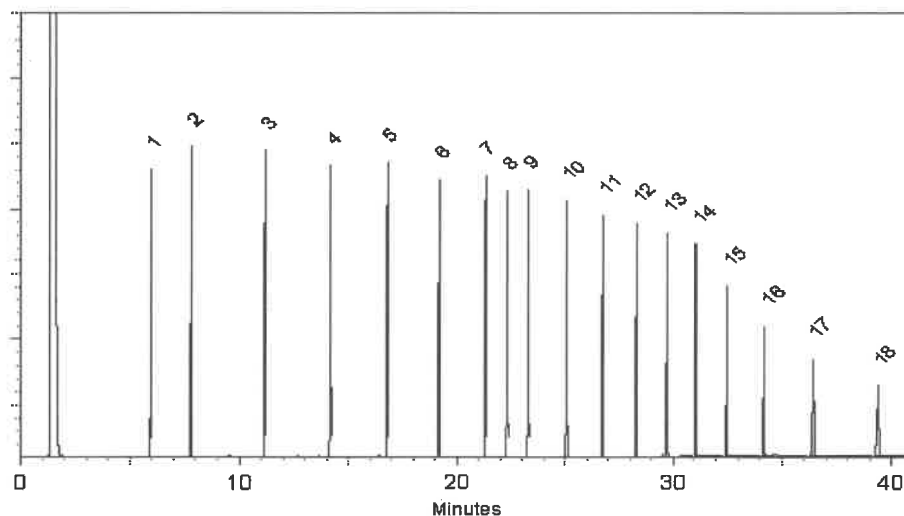
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

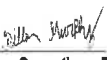
Inj. Vol
1µl



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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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. : 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.)

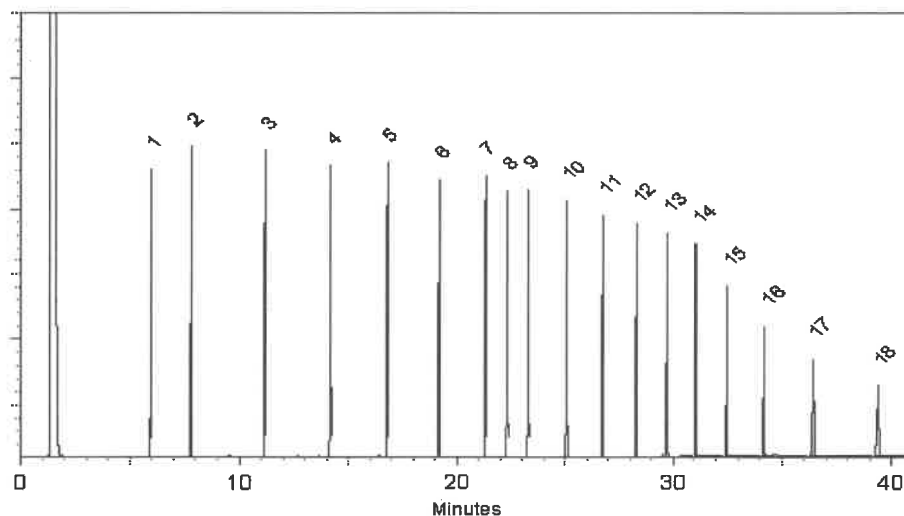
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

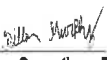
Inj. Vol
1µl



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



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

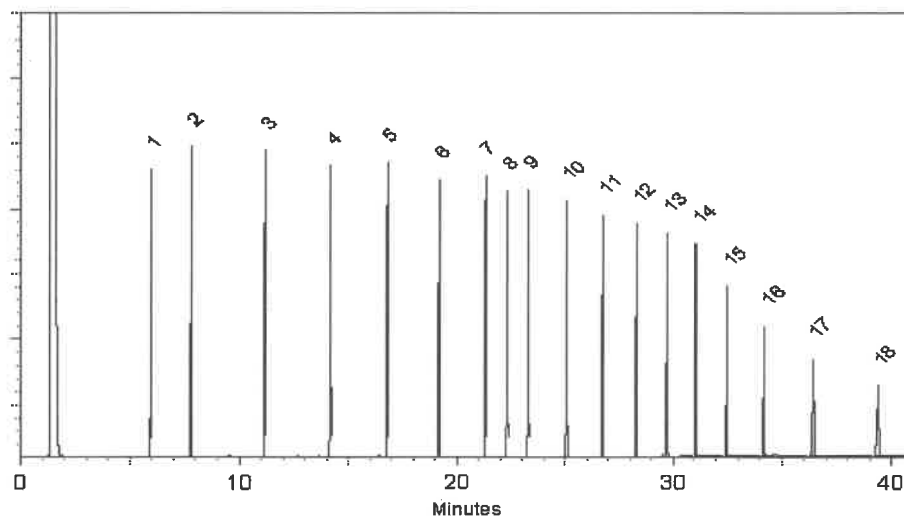
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

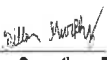
Inj. Vol
1µl



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



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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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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.)

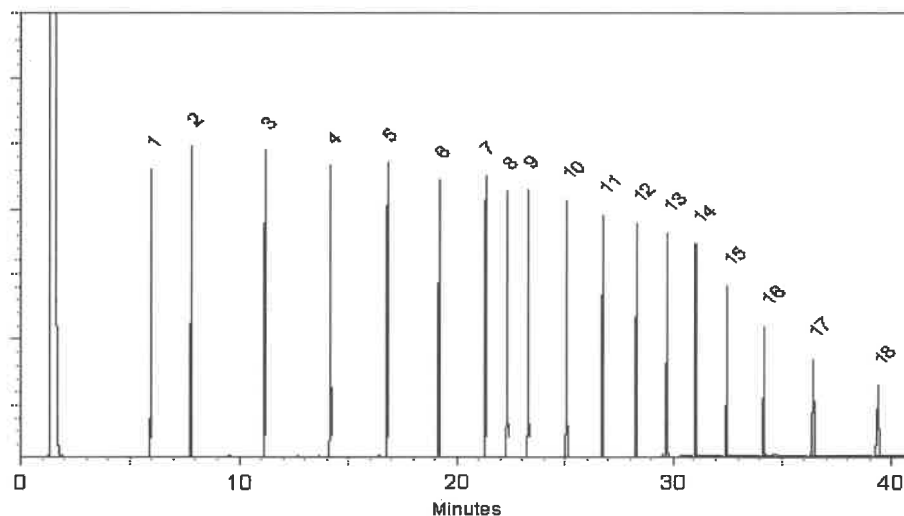
Inj. Temp:
250°C

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



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

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chromatographic plus



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

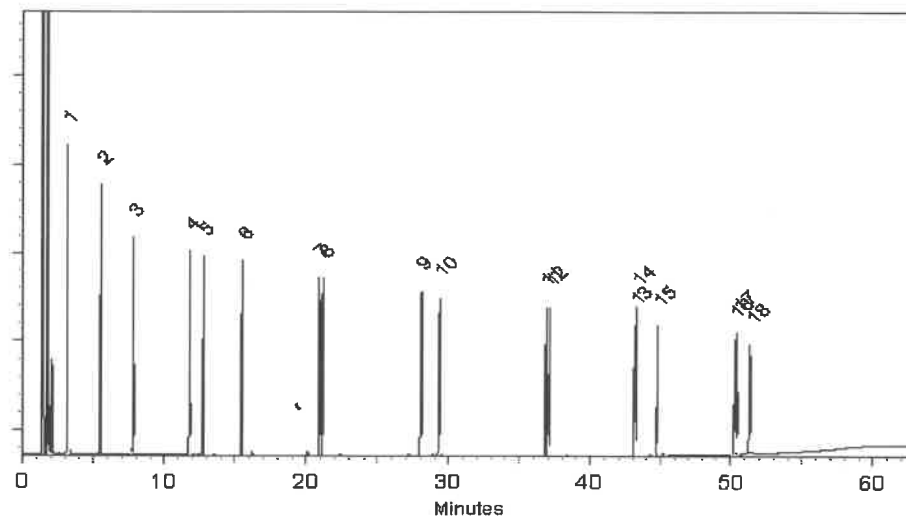
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	201.2 µg/mL	+/- 9.0655
18	Benzo(g,h,i)perylene	191-24-2	RP241014RSR	98%	200.3 µg/mL	+/- 9.0255

* 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
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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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

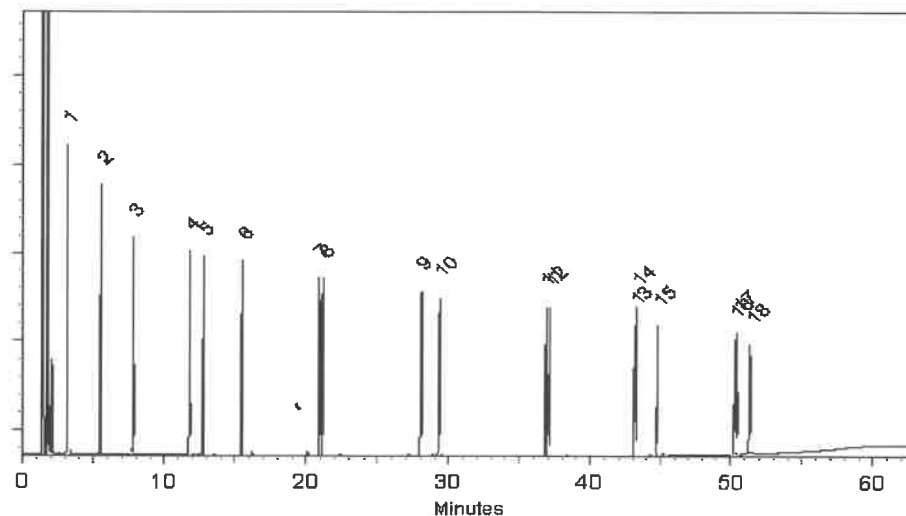
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	201.2 µg/mL	+/- 9.0655
18	Benzo(g,h,i)perylene	191-24-2	RP241014RSR	98%	200.3 µg/mL	+/- 9.0255

* 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**

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: Gen Environmental
ADDRESS: 8 Carrig Lane
CITY: Succasunna STATE: NJ ZIP: 07876
ATTENTION:
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: DeCamp
PROJECT NO.: LOCATION: NJ
PROJECT MANAGER: GL
e-mail:
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: Gen Environmental NO#:
ADDRESS: 8 Carrig Lane
CITY: Succasunna STATE: NJ ZIP: 07876
ATTENTION: PHONE:
ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) 5 day TAT EPH DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

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

EPH Cat 1
(contingency)
SPD NYS ASP B
2 photo copies

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	DP1 D1 D2	501	X	X	5/30/25	0935	1	X	(X)								contingency on EPH results
2.		501	X	X	5/30/25	1254	1	X	(X)								
3.		501	X	X	5/30/25	1315	1	X	(X)								
4.																	
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>1400</u>	RECEIVED BY: <u>[Signature]</u>	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP <u>2-6°C</u>
1. <u>[Signature]</u>	DATE/TIME: <u>5/30/25</u>	RECEIVED BY: <u>[Signature]</u>	Comments: <u>DeCamp</u>
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
2.			
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
3.			

Page ____ of ____ CLIENT: ☐ Hand Delivered ☐ Other Shipment Complete ☐ YES ☐ NO

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