

Cover Page

Order ID : Q1938

Project ID : Stan Hope

Client : Saxton Falls Sand and Gravel Co. Inc.

Lab Sample Number

Q1938-01
Q1938-02
Q1938-03
Q1938-04
Q1938-05
Q1938-06
Q1938-07
Q1938-08

Client Sample Number

LOWER-WALL-PILE-A
LOWER-WALL-PILE-A
LOWER-WALL-PILE-B
LOWER-WALL-PILE-B
LOWER-WALL-PILE-C
LOWER-WALL-PILE-C
LOWER-WALL-PILE-D
LOWER-WALL-PILE-D

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____

Date: 5/12/2025

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1938

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: PRATIK PATEL

Date: 05/12/2025

LAB CHRONICLE

OrderID:	Q1938	OrderDate:	5/1/2025 2:05:00 PM
Client:	Saxton Falls Sand and Gravel Co. Inc.	Project:	Stan Hope
Contact:	Rich Schindelar	Location:	L41,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1938-01	LOWER-WALL-PILE-A	SOIL	TPH GC	8015D	05/01/25	05/07/25	05/07/25	05/01/25
Q1938-02	LOWER-WALL-PILE-A	Solid	EPH_NF	NJEPH	05/01/25	05/05/25	05/05/25	05/01/25
Q1938-03	LOWER-WALL-PILE-B	SOIL	TPH GC	8015D	05/01/25	05/07/25	05/07/25	05/01/25
Q1938-04	LOWER-WALL-PILE-B	Solid	EPH_NF	NJEPH	05/01/25	05/05/25	05/05/25	05/01/25
Q1938-05	LOWER-WALL-PILE-C	SOIL	TPH GC	8015D	05/01/25	05/07/25	05/07/25	05/01/25
Q1938-06	LOWER-WALL-PILE-C	Solid	EPH_NF	NJEPH	05/01/25	05/05/25	05/05/25	05/01/25
Q1938-07	LOWER-WALL-PILE-D	SOIL	TPH GC	8015D	05/01/25	05/07/25	05/07/25	05/01/25
Q1938-08	LOWER-WALL-PILE-D	Solid	EPH_NF	NJEPH	05/01/25	05/05/25	05/05/25	05/01/25



QC SUMMARY

SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: SAXT01
Lab Code: CHEM CASE No.: Q1938 SAS No.: Q1938 SDG No.: Q1938
Run Number: FC050525AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)	ortho-Terphenyl (SURR)		TOT OUT
PB167855BL	68	66		0
PB167855BS	76	72		0
PB167855BSD	69	66		0
LARGE-PILE-AMS	75	72		0
LARGE-PILE-AMSD	71	68		0

QC LIMITS

1-chlorooctadecane (SURR)

(40-140)

ortho-Terphenyl (SURR)

(40-140)

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

SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: SAXT01
Lab Code: CHEM CASE No.: Q1938 SAS No.: Q1938 SDG No.: Q1938
Run Number: FE050525AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)	ortho-Terphenyl (SURR)		TOT OUT
LOWER-WALL-PILE-A	43	43		0
LOWER-WALL-PILE-B	53	51		0
LOWER-WALL-PILE-C	59	60		0
LOWER-WALL-PILE-D	67	67		0

QC LIMITS

1-chlorooctadecane (SURR)

(40-140)

ortho-Terphenyl (SURR)

(40-140)

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

SOIL EPH SURROGATE RECOVERY

QC LIMITS

1-chlorooctadecane (SURR)

(40-140)

ortho-Terphenyl (SURR)

(40-140)

Column to be used to flag recovery values

* Values outside of contract required QC Limits

D Surrogate diluted out

SOLID EPH_NF MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Saxton Falls Sand and Gravel Co. Inc.
Lab Code: CHEM **Cas No:** Q1938 **SAS No :** Q1938 **SDG No:** Q1938
Sample No : Q1937-02MS **Datafile:** FC068772.D
Client ID : LARGE-PILE-AMS

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C28-C40	31.8	2.76	31.6	91		(40-140)
Aliphatic C9-C28	106.1	1.50	73.3	68		(40-140)

SOLID EPH_NF MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Saxton Falls Sand and Gravel Co. Inc.
Lab Code: CHEM **Cas No:** Q1938 **SAS No :** Q1938 **SDG No:** Q1938
Sample No : Q1937-02MSD **Datafile:** FC068773.D
Client ID : LARGE-PILE-AMSD

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	31.8	2.76	26.9	76		17.9 (40-140) 25
Aliphatic C9-C28	106.1	1.50	69.8	64		5 (40-140) 25

SOLID EPH_NF LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Saxton Falls Sand and Gravel Co. Inc.
Lab Code: CHEM **Cas No:** Q1938 **SAS No :** Q1938 **SDG No:** Q1938
Sample No : PB167855BS **Datafile:** FC068768.D
Client ID : PB167855BS

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C28-C40	30.0	29.8	99		(40-140)
Aliphatic C9-C28	99.9	86.6	87		(40-140)

SOLID EPH_NF LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Saxton Falls Sand and Gravel Co. Inc.
Lab Code: CHEM **Cas No:** Q1938 **SAS No :** Q1938 **SDG No:** Q1938
Sample No : PB167855BSD **Datafile:** FC068769.D
Client ID : PB167855BSD

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS	QC Limit Of RPD
Aliphatic C28-C40	30.0	24.4	81		19.9 (40-140)	50
Aliphatic C9-C28	99.9	80.0	80		7.7 (40-140)	50

4B
METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167855BL

Lab Name: CHEMTECH

Contract: SAXT01

Lab Code: CHEM Case No.: Q1938

SAS No.: Q1938 SDG NO.: Q1938

Instrument ID: FID_C

Lab Sample ID: PB167855BL

Matrix: (soil/water) Solid

Date Extracted: 5/5/2025 9:05:00 AM

Level: (low/med) low

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

EPA SAMPLE NO.	LAB SAMPLE ID
PB167855BS	PB167855BS
PB167855BSD	PB167855BSD
LARGE-PILE-AMS	Q1937-02MS
LARGE-PILE-AMSD	Q1937-02MSD
LOWER-WALL-PILE-A	Q1938-02
LOWER-WALL-PILE-B	Q1938-04
LOWER-WALL-PILE-C	Q1938-06
LOWER-WALL-PILE-D	Q1938-08

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	05/01/25
Project:	Stan Hope	Date Received:	05/01/25
Client Sample ID:	LOWER-WALL-PILE-A	SDG No.:	Q1938
Lab Sample ID:	Q1938-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.9
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
05/05/25 09:05	05/05/25 17:16	PB167855

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C28-C40	Aliphatic C28-C40	18.3		1	1.30	2.20	mg/kg	FE053647.D
Aliphatic C9-C28	Aliphatic C9-C28	2.22	J	1	1.00	4.39	mg/kg	FE053647.D
Total AliphaticEPH	Total AliphaticEPH	20.5			2.30	6.59	mg/kg	
Total EPH	Total EPH	20.5			2.30	6.59	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	05/01/25
Project:	Stan Hope	Date Received:	05/01/25
Client Sample ID:	LOWER-WALL-PILE-A	SDG No.:	Q1938
Lab Sample ID:	Q1938-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.9
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE053647.D	1	05/05/25	05/05/25	PB167855

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	2.22	J	1.00	4.39	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	18.3		1.30	2.20	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	21.7		40 - 140	43%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	21.3		40 - 140	43%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1938-02	Acq On:	05 May 2025 17:16
Client Sample ID:	LOWER-WALL-PILE-A	Operator:	YP\AJ
Data file:	FE053647.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	3.112	6.755	447806	3.232	300	ug/ml
Aliphatic C12-C16	6.756	10.204	613385	4.326	200	ug/ml
Aliphatic C16-C21	10.205	13.579	892639	6.141	300	ug/ml
Aliphatic C21-C28	13.580	17.249	2367724	16.654	400	ug/ml
Aliphatic C28-C40	17.250	22.140	32340925	250.609	600	ug/ml
Aliphatic EPH	3.112	22.140	36662479	280.961		ug/ml
ortho-Terphenyl (SURR)	11.864	11.864	3839115	21.29		ug/ml
1-chlorooctadecane (SURR)	13.309	13.309	2928359	21.66		ug/ml
Aliphatic C9-C28	3.112	17.249	4321554	30.353	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
 Data File : FE053647.D
 Signal(s) : FID1B.ch
 Acq On : 05 May 2025 17:16
 Operator : YP\AJ
 Sample : Q1938-02
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 LOWER-WALL-PILE-A

Integration File: sample.E
 Quant Time: May 06 04:18:59 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 29 06:49:03 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)	11.864	3839115	21.286 ug/ml
Spiked Amount 50.000		Recovery =	42.57%
12) S 1-chlorooctadecane (S...	13.309	2928359	21.663 ug/ml
Spiked Amount 50.000		Recovery =	43.33%

Target Compounds

(f)=RT Delta > 1/2 Window

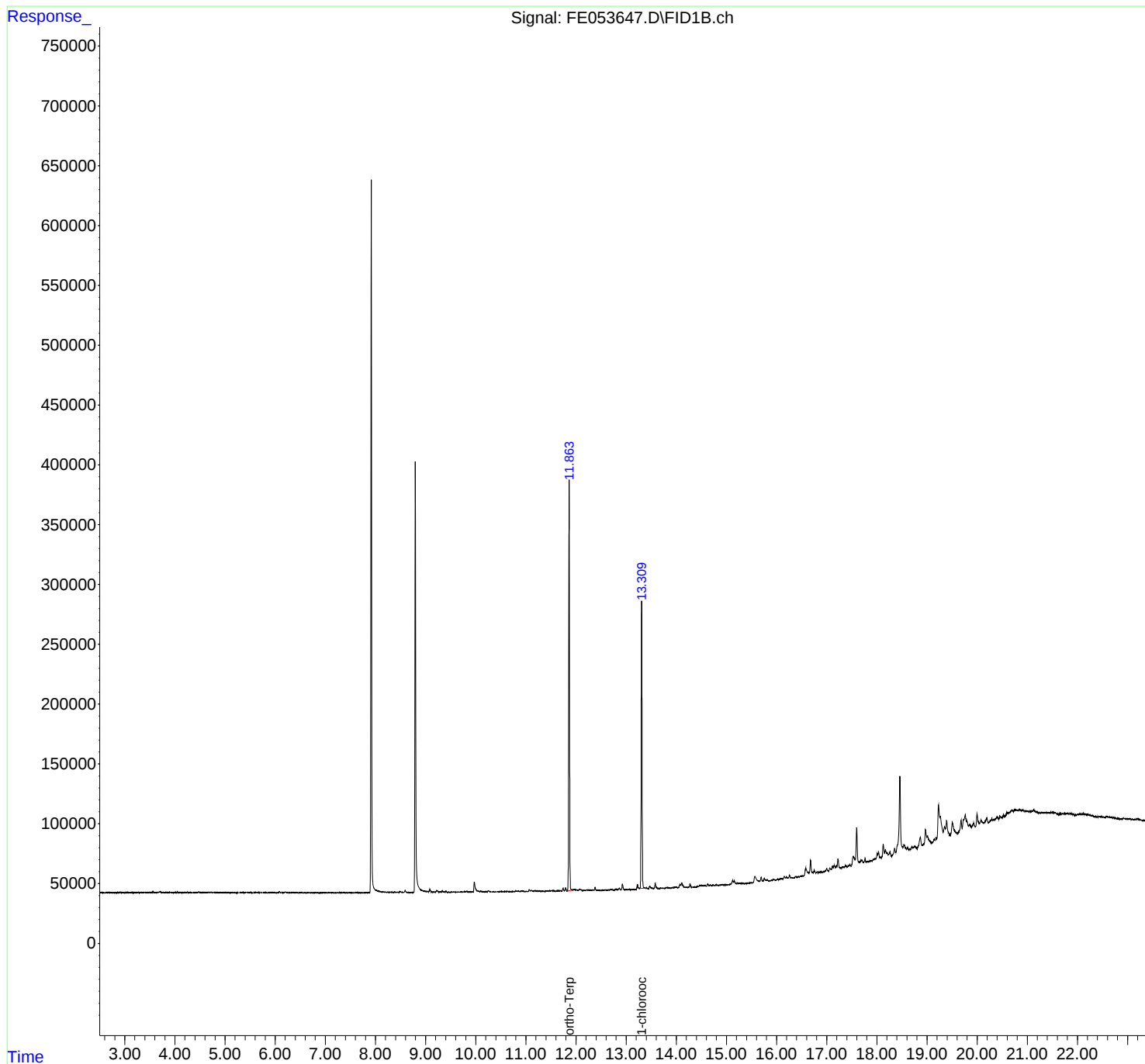
(m)=manual int.

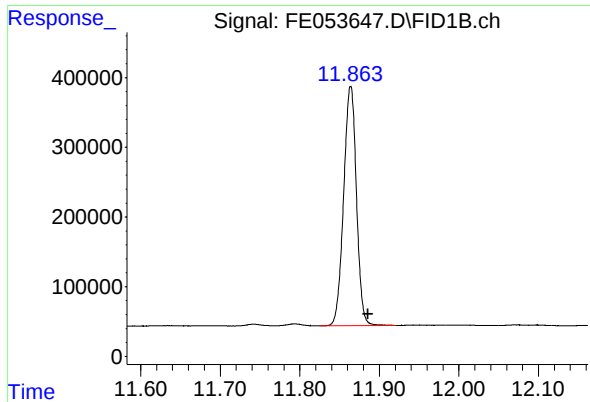
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
Data File : FE053647.D
Signal(s) : FID1B.ch
Acq On : 05 May 2025 17:16
Operator : YP\AJ
Sample : Q1938-02
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
LOWER-WALL-PILE-A

Integration File: sample.E
Quant Time: May 06 04:18:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
Quant Title : GC Extractables
QLast Update : Tue Apr 29 06:49:03 2025
Response via : Initial Calibration
Integrator: ChemStation

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

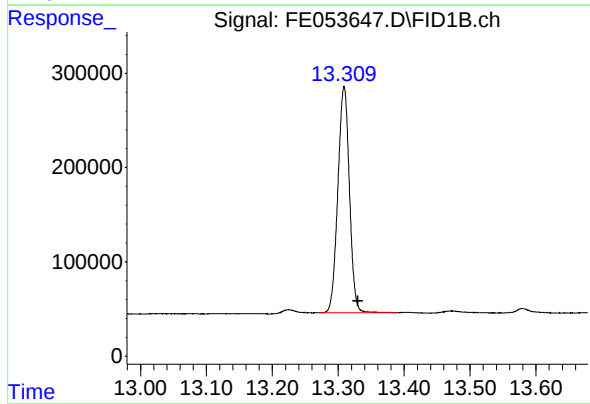




#9 ortho-Terphenyl (SURR)

R.T.: 11.864 min
Delta R.T.: -0.022 min
Response: 3839115
Conc: 21.29 ug/ml

Instrument :
FID_E
ClientSampleId :
LOWER-WALL-PILE-A



#12 1-chlorooctadecane (SURR)

R.T.: 13.309 min
Delta R.T.: -0.022 min
Response: 2928359
Conc: 21.66 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
 Data File : FE053647.D
 Signal(s) : FID1B.ch
 Acq On : 05 May 2025 17:16
 Sample : Q1938-02
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.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	2.838	2.804	2.884	BV	106	2438	0.06%	0.006%
2	2.892	2.884	2.911	VV	109	1168	0.03%	0.003%
3	2.959	2.911	3.011	VV	219	6874	0.18%	0.016%
4	3.016	3.011	3.025	VV	104	707	0.02%	0.002%
5	3.060	3.025	3.081	PV	190	4245	0.11%	0.010%
6	3.095	3.081	3.182	VV	197	8438	0.22%	0.019%
7	3.211	3.182	3.244	VV	260	6021	0.16%	0.014%
8	3.258	3.244	3.271	VV	161	2137	0.06%	0.005%
9	3.280	3.271	3.295	VV	129	1581	0.04%	0.004%
10	3.321	3.295	3.380	VV	179	6838	0.18%	0.016%
11	3.403	3.380	3.461	VV	367	10899	0.28%	0.025%
12	3.496	3.461	3.504	VV	262	4829	0.12%	0.011%
13	3.562	3.504	3.608	VV	834	18371	0.48%	0.042%
14	3.620	3.608	3.639	VV	210	3188	0.08%	0.007%
15	3.660	3.639	3.674	VV	339	5484	0.14%	0.012%
16	3.695	3.674	3.706	VV	658	8986	0.23%	0.020%
17	3.714	3.706	3.768	VV	603	11961	0.31%	0.027%
18	3.812	3.768	3.868	VV	446	14958	0.39%	0.034%
19	3.898	3.868	3.965	VV	587	14373	0.37%	0.033%
20	3.970	3.965	3.981	VV	209	1494	0.04%	0.003%
21	4.013	3.981	4.030	VV	353	7762	0.20%	0.018%
22	4.050	4.030	4.088	VV	563	10784	0.28%	0.025%
23	4.119	4.088	4.135	VV	296	6299	0.16%	0.014%
24	4.145	4.135	4.167	VV	217	3277	0.08%	0.007%
25	4.199	4.167	4.224	VV	354	8324	0.22%	0.019%
26	4.252	4.224	4.301	VV	330	11484	0.30%	0.026%
27	4.318	4.301	4.328	VV	259	3023	0.08%	0.007%
28	4.335	4.328	4.348	VV	184	1909	0.05%	0.004%
29	4.357	4.348	4.447	VV	210	10304	0.27%	0.023%
30	4.474	4.447	4.499	VV	632	10661	0.28%	0.024%
31	4.508	4.499	4.540	VV	236	5015	0.13%	0.011%
32	4.553	4.540	4.574	VV	276	4255	0.11%	0.010%
33	4.590	4.574	4.618	VV	305	5270	0.14%	0.012%
34	4.665	4.618	4.736	VV	477	20312	0.53%	0.046%
35	4.755	4.736	4.821	VV	367	13141	0.34%	0.030%
36	4.853	4.821	4.867	VV	270	5941	0.15%	0.014%

					rteres			
37	4.891	4.867	4.918	VV	324	7005	0.18%	0.016%
38	4.936	4.918	4.974	VV	278	8190	0.21%	0.019%
39	5.058	4.974	5.119	VV	282	15997	0.41%	0.036%
40	5.146	5.119	5.154	VV	204	3243	0.08%	0.007%
41	5.185	5.154	5.213	VV	198	5509	0.14%	0.013%
42	5.228	5.213	5.247	VV	213	2668	0.07%	0.006%
43	5.258	5.247	5.284	VV	136	2621	0.07%	0.006%
44	5.289	5.284	5.293	VV	148	632	0.02%	0.001%
45	5.327	5.293	5.348	VV	237	5386	0.14%	0.012%
46	5.358	5.348	5.368	VV	194	1954	0.05%	0.004%
47	5.389	5.368	5.404	VV	245	3927	0.10%	0.009%
48	5.429	5.404	5.549	VV	523	21163	0.55%	0.048%
49	5.562	5.549	5.594	VV	162	3259	0.08%	0.007%
50	5.618	5.594	5.699	VV	452	13253	0.34%	0.030%
51	5.731	5.699	5.757	VV	169	5119	0.13%	0.012%
52	5.776	5.757	5.794	VV	348	5161	0.13%	0.012%
53	5.809	5.794	5.858	VV	236	5907	0.15%	0.013%
54	5.876	5.858	5.893	VV	212	3579	0.09%	0.008%
55	5.923	5.893	5.958	VV	271	6492	0.17%	0.015%
56	5.981	5.958	5.989	VV	192	3195	0.08%	0.007%
57	5.993	5.989	6.021	VV	182	2442	0.06%	0.006%
58	6.033	6.021	6.046	VV	189	1804	0.05%	0.004%
59	6.086	6.046	6.174	VV	1226	20686	0.54%	0.047%
60	6.195	6.174	6.281	VV	551	17251	0.45%	0.039%
61	6.301	6.281	6.345	VV	209	5531	0.14%	0.013%
62	6.362	6.345	6.397	VV	227	5239	0.14%	0.012%
63	6.407	6.397	6.432	VV	169	3080	0.08%	0.007%
64	6.441	6.432	6.461	VV	189	2250	0.06%	0.005%
65	6.501	6.461	6.545	VV	312	8665	0.22%	0.020%
66	6.555	6.545	6.570	VV	184	2265	0.06%	0.005%
67	6.581	6.570	6.635	VV	198	5090	0.13%	0.012%
68	6.655	6.635	6.704	VV	247	5753	0.15%	0.013%
69	6.735	6.704	6.763	VV	181	4609	0.12%	0.010%
70	6.775	6.763	6.782	VV	118	1200	0.03%	0.003%
71	6.801	6.782	6.861	VV	187	5652	0.15%	0.013%
72	6.879	6.861	6.907	VV	97	1889	0.05%	0.004%
73	6.934	6.907	6.954	VV	121	1769	0.05%	0.004%
74	6.960	6.954	6.991	VV	46	1147	0.03%	0.003%
75	7.025	6.991	7.051	VV	81	1753	0.05%	0.004%
76	7.065	7.051	7.115	PV	225	4322	0.11%	0.010%
77	7.147	7.115	7.235	VV	140	6046	0.16%	0.014%
78	7.314	7.235	7.334	VV	224	7174	0.19%	0.016%
79	7.374	7.334	7.402	VV	185	5512	0.14%	0.013%
80	7.432	7.402	7.458	VV	154	3535	0.09%	0.008%
81	7.477	7.458	7.531	VV	344	7031	0.18%	0.016%
82	7.549	7.531	7.570	VV	145	2377	0.06%	0.005%
83	7.609	7.570	7.659	VV	236	7302	0.19%	0.017%
84	7.677	7.659	7.708	VV	90	1511	0.04%	0.003%
85	7.735	7.708	7.820	VV	125	4785	0.12%	0.011%
86	8.241	8.234	8.291	VV	526	12227	0.32%	0.028%
87	8.308	8.291	8.368	VV	524	17090	0.44%	0.039%
88	8.388	8.368	8.431	VV	477	13492	0.35%	0.031%
89	8.494	8.431	8.554	VV	703	27562	0.71%	0.063%

					rteres			
90	8.593	8.554	8.658	VV	1956	32485	0.84%	0.074%
91	8.674	8.658	8.701	VV	251	4139	0.11%	0.009%
92	8.721	8.701	8.755	VV	199	4319	0.11%	0.010%
93	9.039	9.014	9.061	VV	967	21892	0.57%	0.050%
94	9.085	9.061	9.151	VV	2508	52514	1.36%	0.120%
95	9.227	9.151	9.298	VV	1315	51267	1.33%	0.117%
96	9.336	9.298	9.380	VV	1119	27605	0.71%	0.063%
97	9.407	9.380	9.444	VV	1290	17762	0.46%	0.040%
98	9.466	9.444	9.487	VV	200	3644	0.09%	0.008%
99	9.515	9.487	9.571	VV	260	8292	0.21%	0.019%
100	9.601	9.571	9.631	VV	207	4074	0.11%	0.009%
101	9.652	9.631	9.673	PV	145	2417	0.06%	0.006%
102	9.704	9.673	9.734	VV	339	7454	0.19%	0.017%
103	9.781	9.734	9.800	VV	554	13632	0.35%	0.031%
104	9.821	9.800	9.857	VV	943	13189	0.34%	0.030%
105	9.880	9.857	9.906	VV	379	5544	0.14%	0.013%
106	9.975	9.906	10.078	VV	8377	186836	4.83%	0.425%
107	10.102	10.078	10.164	VV	911	22944	0.59%	0.052%
108	10.208	10.164	10.226	VV	321	7994	0.21%	0.018%
109	10.253	10.226	10.318	VV	1126	21969	0.57%	0.050%
110	10.347	10.318	10.382	VV	305	4473	0.12%	0.010%
111	10.439	10.382	10.468	PV	298	6186	0.16%	0.014%
112	10.494	10.468	10.514	VV	419	6923	0.18%	0.016%
113	10.532	10.514	10.560	VV	423	8183	0.21%	0.019%
114	10.580	10.560	10.600	VV	315	5303	0.14%	0.012%
115	10.623	10.600	10.651	VV	212	5841	0.15%	0.013%
116	10.687	10.651	10.728	VV	218	8458	0.22%	0.019%
117	10.801	10.728	10.824	VV	655	18373	0.48%	0.042%
118	10.845	10.824	10.878	VV	848	14209	0.37%	0.032%
119	10.919	10.878	11.014	VV	587	24327	0.63%	0.055%
120	11.067	11.014	11.088	VV	1709	26193	0.68%	0.060%
121	11.105	11.088	11.158	VV	1044	22319	0.58%	0.051%
122	11.184	11.158	11.214	VV	740	15173	0.39%	0.035%
123	11.237	11.214	11.328	VV	359	16983	0.44%	0.039%
124	11.349	11.328	11.381	VV	289	4287	0.11%	0.010%
125	11.443	11.381	11.461	PV	505	11601	0.30%	0.026%
126	11.478	11.461	11.498	VV	482	7051	0.18%	0.016%
127	11.549	11.498	11.601	VV	865	21020	0.54%	0.048%
128	11.634	11.601	11.661	PV	524	10145	0.26%	0.023%
129	11.677	11.661	11.718	VV	349	6681	0.17%	0.015%
130	11.742	11.718	11.768	VV	2495	32215	0.83%	0.073%
131	11.794	11.768	11.823	VV	2896	40692	1.05%	0.093%
132	11.864	11.823	11.924	VV	346887	3865097	100.00%	8.796%
133	11.948	11.924	11.991	VV	1182	37075	0.96%	0.084%
134	12.004	11.991	12.041	VV	994	21855	0.57%	0.050%
135	12.073	12.041	12.136	VV	1189	38293	0.99%	0.087%
136	12.160	12.136	12.182	PV	489	6061	0.16%	0.014%
137	12.220	12.182	12.261	VV	811	22236	0.58%	0.051%
138	12.274	12.261	12.292	VV	566	7957	0.21%	0.018%
139	12.339	12.292	12.356	VV	781	17340	0.45%	0.039%
140	12.381	12.356	12.448	VV	2798	38849	1.01%	0.088%
141	12.467	12.448	12.494	VV	252	3831	0.10%	0.009%

					rteres			
142	12.523	12.494	12.543	VV	320	3950	0.10%	0.009%
143	12.580	12.543	12.618	PV	450	10467	0.27%	0.024%
144	12.711	12.618	12.738	VV	880	25537	0.66%	0.058%
145	12.804	12.738	12.831	VV	874	23433	0.61%	0.053%
146	12.863	12.831	12.901	VV	1782	33047	0.86%	0.075%
147	12.926	12.901	12.994	VV	4986	78543	2.03%	0.179%
148	13.077	12.994	13.096	VV	299	13750	0.36%	0.031%
149	13.118	13.096	13.138	VV	364	5958	0.15%	0.014%
150	13.173	13.138	13.198	VV	308	7301	0.19%	0.017%
151	13.226	13.198	13.264	PV	4401	76693	1.98%	0.175%
152	13.309	13.264	13.441	VV	240432	3029610	78.38%	6.895%
153	13.473	13.441	13.544	VV	2591	73864	1.91%	0.168%
154	13.580	13.544	13.661	VV	4935	87237	2.26%	0.199%
155	13.692	13.661	13.711	VV	438	11176	0.29%	0.025%
156	13.727	13.711	13.764	VV	647	10413	0.27%	0.024%
157	13.816	13.764	13.844	VV	905	23792	0.62%	0.054%
158	13.924	13.844	13.941	VV	624	18255	0.47%	0.042%
159	14.005	13.941	14.038	VV	745	30453	0.79%	0.069%
160	14.108	14.038	14.238	VV	4096	155446	4.02%	0.354%
161	14.273	14.238	14.318	VV	2972	45868	1.19%	0.104%
162	14.353	14.318	14.381	VV	166	4274	0.11%	0.010%
163	14.500	14.381	14.538	PV	1286	63590	1.65%	0.145%
164	14.568	14.538	14.601	VV	1063	26680	0.69%	0.061%
165	14.627	14.601	14.650	VV	2078	32481	0.84%	0.074%
166	14.684	14.650	14.711	VV	888	23636	0.61%	0.054%
167	14.738	14.711	14.773	VV	803	20726	0.54%	0.047%
168	14.798	14.773	14.845	VV	963	17765	0.46%	0.040%
169	14.914	14.845	14.938	VV	613	16677	0.43%	0.038%
170	15.121	14.938	15.138	PV	3402	76511	1.98%	0.174%
171	15.156	15.138	15.194	VV	2914	61909	1.60%	0.141%
172	15.215	15.194	15.238	VV	1348	23054	0.60%	0.052%
173	15.273	15.238	15.292	VV	646	17096	0.44%	0.039%
174	15.309	15.292	15.343	VV	578	11518	0.30%	0.026%
175	15.363	15.343	15.384	VV	297	4261	0.11%	0.010%
176	15.490	15.384	15.524	PV	367	20873	0.54%	0.048%
177	15.567	15.524	15.668	PV	5314	186619	4.83%	0.425%
178	15.691	15.668	15.728	VV	3996	68819	1.78%	0.157%
179	15.755	15.728	15.854	VV	2560	81095	2.10%	0.185%
180	15.949	15.854	15.984	PV	924	33075	0.86%	0.075%
181	16.017	15.984	16.037	VV	360	9711	0.25%	0.022%
182	16.154	16.037	16.174	VV	2533	66566	1.72%	0.151%
183	16.196	16.174	16.228	VV	1943	37072	0.96%	0.084%
184	16.256	16.228	16.341	VV	2732	64927	1.68%	0.148%
185	16.384	16.341	16.411	PV	1001	20742	0.54%	0.047%
186	16.489	16.411	16.510	VV	673	19643	0.51%	0.045%
187	16.582	16.510	16.644	VV	6504	201282	5.21%	0.458%
188	16.677	16.644	16.728	VV	12277	225266	5.83%	0.513%
189	16.750	16.728	16.788	VV	2929	60453	1.56%	0.138%
190	16.811	16.788	16.851	VV	1481	32798	0.85%	0.075%
191	16.884	16.851	16.915	VV	537	14502	0.38%	0.033%
192	16.999	16.915	17.038	PV	2590	54702	1.42%	0.124%
193	17.062	17.038	17.086	VV	2571	42819	1.11%	0.097%
194	17.151	17.086	17.174	VV	3573	134040	3.47%	0.305%

					rteres			
195	17.224	17.174	17.291	VV	8519	209902	5.43%	0.478%
196	17.378	17.291	17.407	VV	1863	66372	1.72%	0.151%
197	17.461	17.407	17.485	VV	1730	45285	1.17%	0.103%
198	17.529	17.485	17.566	VV	8279	254617	6.59%	0.579%
199	17.597	17.566	17.646	VV	31891	560456	14.50%	1.275%
200	17.701	17.646	17.738	VV	3526	148877	3.85%	0.339%
201	17.763	17.738	17.791	VV	4008	75911	1.96%	0.173%
202	17.822	17.791	17.841	VV	1617	41714	1.08%	0.095%
203	18.032	17.841	18.088	VV	7675	437346	11.32%	0.995%
204	18.126	18.088	18.153	VV	13031	281638	7.29%	0.641%
205	18.172	18.153	18.238	VV	8489	290282	7.51%	0.661%
206	18.259	18.238	18.291	VV	5844	133141	3.44%	0.303%
207	18.353	18.291	18.376	VV	8105	227155	5.88%	0.517%
208	18.458	18.376	18.520	VV	67362	1695919	43.88%	3.860%
209	18.543	18.520	18.598	VV	9214	346111	8.95%	0.788%
210	18.612	18.598	18.648	VV	6149	158501	4.10%	0.361%
211	18.698	18.648	18.728	VV	6431	256088	6.63%	0.583%
212	18.756	18.728	18.804	VV	5939	244725	6.33%	0.557%
213	18.865	18.804	18.901	VV	12713	470322	12.17%	1.070%
214	18.971	18.901	19.091	VV	18257	1101138	28.49%	2.506%
215	19.144	19.091	19.164	VV	8751	325455	8.42%	0.741%
216	19.230	19.164	19.324	VV	36456	1910420	49.43%	4.348%
217	19.349	19.324	19.366	VV	17255	403253	10.43%	0.918%
218	19.391	19.366	19.463	VV	22506	854306	22.10%	1.944%
219	19.506	19.463	19.610	VV	19814	1160446	30.02%	2.641%
220	19.679	19.610	19.701	VV	20144	747658	19.34%	1.702%
221	19.761	19.701	19.827	VV	24343	1427115	36.92%	3.248%
222	19.849	19.827	19.890	VV	15262	533427	13.80%	1.214%
223	19.930	19.890	19.965	VV	15729	633050	16.38%	1.441%
224	19.999	19.965	20.047	VV	22793	827796	21.42%	1.884%
225	20.076	20.047	20.121	VV	16911	681743	17.64%	1.552%
226	20.193	20.121	20.225	VV	17632	954498	24.70%	2.172%
227	20.294	20.225	20.311	VV	16058	764652	19.78%	1.740%
228	20.395	20.311	20.438	VV	16475	1188640	30.75%	2.705%
229	20.461	20.438	20.483	VV	17030	446173	11.54%	1.015%
230	20.532	20.483	20.550	VV	16993	648803	16.79%	1.477%
231	20.596	20.550	20.614	VV	18953	682324	17.65%	1.553%
232	20.693	20.614	20.721	VV	20359	1222396	31.63%	2.782%
233	20.755	20.721	20.824	VV	19856	1198787	31.02%	2.728%
234	20.851	20.824	20.891	VV	19087	755913	19.56%	1.720%
235	20.908	20.891	21.038	VV	18293	1504343	38.92%	3.424%
236	21.054	21.038	21.071	VV	16082	321324	8.31%	0.731%
237	21.130	21.071	21.181	VV	16825	1032683	26.72%	2.350%
238	21.203	21.181	21.260	VV	14256	648052	16.77%	1.475%
239	21.298	21.260	21.318	VV	12867	442147	11.44%	1.006%
240	21.345	21.318	21.396	VV	12848	583242	15.09%	1.327%
241	21.417	21.396	21.441	VV	12055	321978	8.33%	0.733%
242	21.492	21.441	21.524	VV	11630	572040	14.80%	1.302%
243	21.550	21.524	21.641	VV	11034	690823	17.87%	1.572%
244	21.665	21.641	21.714	VV	9142	385748	9.98%	0.878%
245	21.740	21.714	21.768	VV	8735	268226	6.94%	0.610%
246	21.806	21.768	21.949	VV	8044	768666	19.89%	1.749%

						rteres		
247	22.069	21.949	22.091	VV	5536	459080	11.88%	1.045%
248	22.116	22.091	22.140	VV	4961	140120	3.63%	0.319%
249	22.160	22.140	22.194	VV	4264	134758	3.49%	0.307%
250	22.206	22.194	22.388	VV	3756	224892	5.82%	0.512%

Sum of corrected areas: 43940704

Aliphatic EPH 041725.M Tue May 06 04:43:24 2025

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	05/01/25
Project:	Stan Hope	Date Received:	05/01/25
Client Sample ID:	LOWER-WALL-PILE-B	SDG No.:	Q1938
Lab Sample ID:	Q1938-04	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	96
Sample Wt/Vol:	30.08 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
05/05/25 09:05	05/05/25 17:46	PB167855

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C28-C40	Aliphatic C28-C40	12.2		1	1.23	2.08	mg/kg	FE053648.D
Aliphatic C9-C28	Aliphatic C9-C28	1.86	J	1	0.95	4.16	mg/kg	FE053648.D
Total AliphaticEPH	Total AliphaticEPH	14.1			2.17	6.24	mg/kg	
Total EPH	Total EPH	14.1			2.17	6.24	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	05/01/25
Project:	Stan Hope	Date Received:	05/01/25
Client Sample ID:	LOWER-WALL-PILE-B	SDG No.:	Q1938
Lab Sample ID:	Q1938-04	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	96
Sample Wt/Vol:	30.08 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE053648.D	1	05/05/25	05/05/25	PB167855

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	1.86	J	0.95	4.16	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	12.2		1.23	2.08	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	26.3		40 - 140	53%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	25.4		40 - 140	51%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1938-04	Acq On:	05 May 2025 17:46
Client Sample ID:	LOWER-WALL-PILE-B	Operator:	YP\AJ
Data file:	FE053648.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	3.112	6.755	235842	1.702	300	ug/ml
Aliphatic C12-C16	6.756	10.204	623527	4.397	200	ug/ml
Aliphatic C16-C21	10.205	13.579	836553	5.755	300	ug/ml
Aliphatic C21-C28	13.580	17.249	2391438	16.82	400	ug/ml
Aliphatic C28-C40	17.250	22.140	22651517	175.526	600	ug/ml
Aliphatic EPH	3.112	22.140	26738877	204.201		ug/ml
ortho-Terphenyl (SURR)	11.864	11.864	4578716	25.39		ug/ml
1-chlorooctadecane (SURR)	13.309	13.309	3551166	26.27		ug/ml
Aliphatic C9-C28	3.112	17.249	4087360	28.674	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
Data File : FE053648.D
Signal(s) : FID1B.ch
Acq On : 05 May 2025 17:46
Operator : YP\AJ
Sample : Q1938-04
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
LOWER-WALL-PILE-B

Integration File: sample.E
Quant Time: May 06 04:19:08 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
Quant Title : GC Extractables
QLast Update : Tue Apr 29 06:49:03 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)	11.864	4578716	25.386 ug/ml
Spiked Amount	50.000	Recovery	= 50.77%
12) S 1-chlorooctadecane (S...	13.309	3551166	26.271 ug/ml
Spiked Amount	50.000	Recovery	= 52.54%

Target Compounds

(f)=RT Delta > 1/2 Window

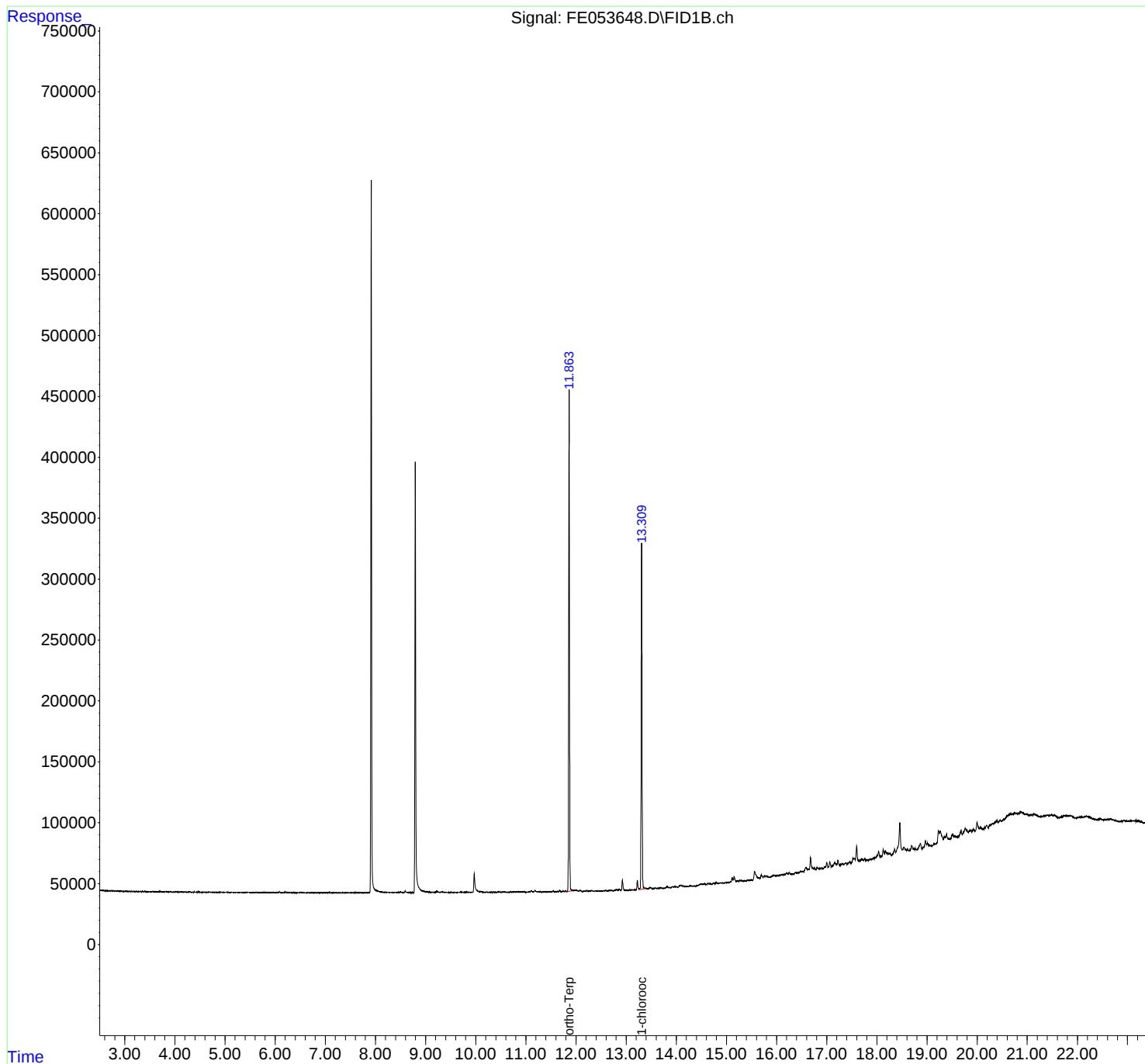
(m)=manual int.

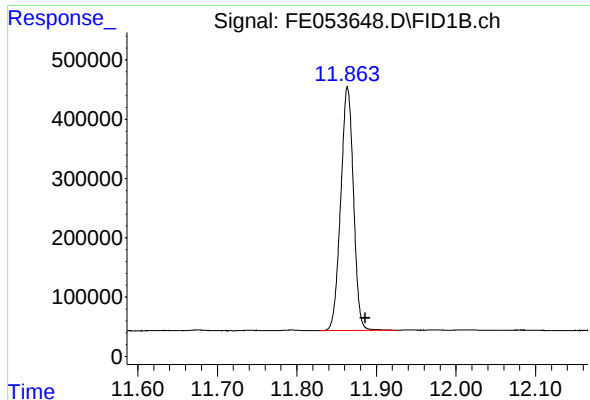
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
Data File : FE053648.D
Signal(s) : FID1B.ch
Acq On : 05 May 2025 17:46
Operator : YP\AJ
Sample : Q1938-04
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
LOWER-WALL-PILE-B

Integration File: sample.E
Quant Time: May 06 04:19:08 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
Quant Title : GC Extractables
QLast Update : Tue Apr 29 06:49:03 2025
Response via : Initial Calibration
Integrator: ChemStation

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

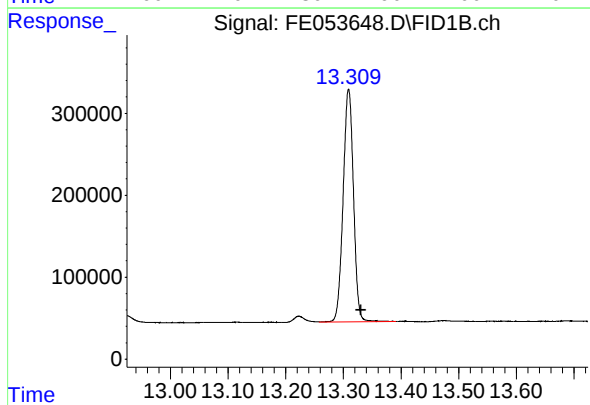




#9 ortho-Terphenyl (SURR)

R.T.: 11.864 min
Delta R.T.: -0.022 min
Response: 4578716
Conc: 25.39 ug/ml

Instrument :
FID_E
ClientSampleId :
LOWER-WALL-PILE-B



#12 1-chlorooctadecane (SURR)

R.T.: 13.309 min
Delta R.T.: -0.021 min
Response: 3551166
Conc: 26.27 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
 Data File : FE053648.D
 Signal(s) : FID1B.ch
 Acq On : 05 May 2025 17:46
 Sample : Q1938-04
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.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	2.842	2.805	2.943	BV	113	4127	0.09%	0.012%
2	2.956	2.943	3.008	PV	92	1830	0.04%	0.005%
3	3.016	3.008	3.036	VV	112	1124	0.02%	0.003%
4	3.059	3.036	3.085	PV	145	2051	0.04%	0.006%
5	3.096	3.085	3.151	VV	93	2652	0.06%	0.007%
6	3.161	3.151	3.191	VV	101	1226	0.03%	0.003%
7	3.205	3.191	3.295	VV	228	4063	0.09%	0.011%
8	3.310	3.295	3.371	PV	83	1810	0.04%	0.005%
9	3.401	3.371	3.440	VV	279	4717	0.10%	0.013%
10	3.456	3.440	3.477	VV	126	1568	0.03%	0.004%
11	3.487	3.477	3.544	VV	134	2936	0.06%	0.008%
12	3.562	3.544	3.584	VV	241	2910	0.06%	0.008%
13	3.610	3.584	3.644	PV	110	2473	0.05%	0.007%
14	3.662	3.644	3.674	VV	183	2286	0.05%	0.006%
15	3.694	3.674	3.706	VV	452	5227	0.11%	0.015%
16	3.712	3.706	3.789	VV	324	5669	0.12%	0.016%
17	3.815	3.789	3.855	VV	281	6253	0.14%	0.018%
18	3.865	3.855	3.876	VV	130	1240	0.03%	0.004%
19	3.898	3.876	3.984	VV	392	7069	0.15%	0.020%
20	4.014	3.984	4.097	VV	210	8699	0.19%	0.025%
21	4.117	4.097	4.148	VV	142	2919	0.06%	0.008%
22	4.158	4.148	4.167	PV	71	666	0.01%	0.002%
23	4.201	4.167	4.222	VV	191	4491	0.10%	0.013%
24	4.241	4.222	4.326	VV	199	6295	0.14%	0.018%
25	4.362	4.326	4.392	PV	168	2616	0.06%	0.007%
26	4.412	4.392	4.445	VV	126	2484	0.05%	0.007%
27	4.471	4.445	4.533	VV	426	8470	0.18%	0.024%
28	4.551	4.533	4.568	VV	112	1479	0.03%	0.004%
29	4.592	4.568	4.618	VV	164	2686	0.06%	0.008%
30	4.646	4.618	4.660	VV	171	2427	0.05%	0.007%
31	4.670	4.660	4.681	VV	157	1532	0.03%	0.004%
32	4.698	4.681	4.711	VV	207	2819	0.06%	0.008%
33	4.714	4.711	4.745	VV	180	2708	0.06%	0.008%
34	4.757	4.745	4.849	VV	225	7226	0.16%	0.020%
35	4.903	4.849	5.015	VV	156	11071	0.24%	0.031%
36	5.024	5.015	5.051	VV	93	1954	0.04%	0.006%

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37	5.057	5.051	5.123	VV	148	2965	0.06%	0.008%
38	5.135	5.123	5.165	VV	141	2119	0.05%	0.006%
39	5.184	5.165	5.198	VV	63	1383	0.03%	0.004%
40	5.206	5.198	5.262	VV	124	2978	0.06%	0.008%
41	5.279	5.262	5.335	VV	110	3741	0.08%	0.011%
42	5.367	5.335	5.384	VV	130	2217	0.05%	0.006%
43	5.392	5.384	5.406	VV	120	1207	0.03%	0.003%
44	5.431	5.406	5.565	VV	251	13085	0.28%	0.037%
45	5.575	5.565	5.600	VV	90	1304	0.03%	0.004%
46	5.619	5.600	5.703	PV	394	9927	0.22%	0.028%
47	5.717	5.703	5.734	VV	132	1854	0.04%	0.005%
48	5.741	5.734	5.762	VV	138	1548	0.03%	0.004%
49	5.778	5.762	5.805	VV	227	2906	0.06%	0.008%
50	5.814	5.805	5.833	VV	141	1703	0.04%	0.005%
51	5.938	5.833	5.998	VV	235	11746	0.26%	0.033%
52	6.002	5.998	6.008	VV	134	634	0.01%	0.002%
53	6.015	6.008	6.023	VV	131	802	0.02%	0.002%
54	6.030	6.023	6.041	VV	101	817	0.02%	0.002%
55	6.049	6.041	6.056	VV	111	609	0.01%	0.002%
56	6.086	6.056	6.131	VV	653	9431	0.20%	0.027%
57	6.144	6.131	6.155	VV	121	1104	0.02%	0.003%
58	6.196	6.155	6.250	VV	446	12219	0.27%	0.035%
59	6.262	6.250	6.275	VV	136	1590	0.03%	0.004%
60	6.298	6.275	6.341	VV	131	2818	0.06%	0.008%
61	6.363	6.341	6.406	VV	169	4062	0.09%	0.011%
62	6.438	6.406	6.478	VV	146	3348	0.07%	0.009%
63	6.499	6.478	6.528	VV	277	5017	0.11%	0.014%
64	6.544	6.528	6.582	VV	203	4311	0.09%	0.012%
65	6.604	6.582	6.615	VV	129	1766	0.04%	0.005%
66	6.656	6.615	6.701	VV	172	4242	0.09%	0.012%
67	6.711	6.701	6.754	PV	92	2400	0.05%	0.007%
68	6.763	6.754	6.855	VV	162	4222	0.09%	0.012%
69	6.865	6.855	6.958	VV	110	3231	0.07%	0.009%
70	6.980	6.958	7.030	VV	95	1671	0.04%	0.005%
71	7.041	7.030	7.051	PV	79	533	0.01%	0.002%
72	7.067	7.051	7.131	VV	174	5886	0.13%	0.017%
73	7.149	7.131	7.191	VV	123	2838	0.06%	0.008%
74	7.209	7.191	7.271	VV	114	3932	0.09%	0.011%
75	7.300	7.271	7.421	VV	172	10309	0.22%	0.029%
76	7.429	7.421	7.461	VV	147	2512	0.05%	0.007%
77	7.480	7.461	7.520	VV	178	4415	0.10%	0.012%
78	7.603	7.520	7.653	VV	272	10700	0.23%	0.030%
79	7.675	7.653	7.710	VV	122	2827	0.06%	0.008%
80	7.782	7.710	7.831	VV	154	5647	0.12%	0.016%
81	8.307	8.280	8.331	VV	353	9330	0.20%	0.026%
82	8.381	8.331	8.431	VV	333	18359	0.40%	0.052%
83	8.494	8.431	8.571	VV	661	32221	0.70%	0.091%
84	8.596	8.571	8.761	VV	1513	35146	0.76%	0.099%
85	9.082	9.062	9.114	VV	925	17283	0.38%	0.049%
86	9.132	9.114	9.157	VV	417	8978	0.20%	0.025%
87	9.225	9.157	9.298	VV	1142	41283	0.90%	0.117%
88	9.322	9.298	9.386	VV	614	19902	0.43%	0.056%
89	9.405	9.386	9.442	VV	378	6768	0.15%	0.019%

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90	9.466	9.442	9.486	VV	168	3660	0.08%	0.010%
91	9.516	9.486	9.539	VV	273	5575	0.12%	0.016%
92	9.560	9.539	9.622	VV	168	5662	0.12%	0.016%
93	9.701	9.622	9.745	VV	407	13706	0.30%	0.039%
94	9.776	9.745	9.805	VV	400	8806	0.19%	0.025%
95	9.822	9.805	9.908	VV	346	10683	0.23%	0.030%
96	9.972	9.908	10.081	VV	15224	298751	6.49%	0.844%
97	10.101	10.081	10.185	VV	1118	28691	0.62%	0.081%
98	10.209	10.185	10.235	VV	310	6284	0.14%	0.018%
99	10.262	10.235	10.328	VV	244	7828	0.17%	0.022%
100	10.344	10.328	10.368	VV	197	2476	0.05%	0.007%
101	10.384	10.368	10.415	VV	125	1934	0.04%	0.005%
102	10.444	10.415	10.470	PV	468	8625	0.19%	0.024%
103	10.494	10.470	10.515	VV	363	6655	0.14%	0.019%
104	10.539	10.515	10.556	VV	374	6427	0.14%	0.018%
105	10.580	10.556	10.615	VV	338	8414	0.18%	0.024%
106	10.628	10.615	10.675	VV	248	4913	0.11%	0.014%
107	10.756	10.675	10.788	VV	294	14076	0.31%	0.040%
108	10.803	10.788	10.818	VV	340	4910	0.11%	0.014%
109	10.843	10.818	10.877	VV	787	14012	0.30%	0.040%
110	10.914	10.877	11.012	VV	595	18574	0.40%	0.052%
111	11.066	11.012	11.082	PV	668	10754	0.23%	0.030%
112	11.106	11.082	11.155	VV	1321	27262	0.59%	0.077%
113	11.183	11.155	11.231	VV	1522	30532	0.66%	0.086%
114	11.239	11.231	11.330	VV	452	14876	0.32%	0.042%
115	11.351	11.330	11.374	VV	168	1868	0.04%	0.005%
116	11.410	11.374	11.438	PV	207	3669	0.08%	0.010%
117	11.479	11.438	11.498	VV	378	5759	0.13%	0.016%
118	11.548	11.498	11.605	VV	838	15821	0.34%	0.045%
119	11.635	11.605	11.658	VV	534	8988	0.20%	0.025%
120	11.676	11.658	11.721	VV	1371	18660	0.41%	0.053%
121	11.741	11.721	11.771	VV	671	9295	0.20%	0.026%
122	11.793	11.771	11.828	VV	1151	15093	0.33%	0.043%
123	11.864	11.828	11.925	VV	411790	4603321	100.00%	13.006%
124	11.941	11.925	11.958	VV	1063	19147	0.42%	0.054%
125	11.974	11.958	11.991	VV	1079	19285	0.42%	0.054%
126	12.015	11.991	12.040	VV	1206	26321	0.57%	0.074%
127	12.081	12.040	12.132	VV	867	28946	0.63%	0.082%
128	12.159	12.132	12.179	PV	226	3387	0.07%	0.010%
129	12.219	12.179	12.251	VV	865	15926	0.35%	0.045%
130	12.309	12.251	12.358	VV	632	18379	0.40%	0.052%
131	12.381	12.358	12.428	VV	474	8835	0.19%	0.025%
132	12.445	12.428	12.501	VV	244	5852	0.13%	0.017%
133	12.582	12.501	12.625	VV	383	11396	0.25%	0.032%
134	12.708	12.625	12.741	VV	451	18092	0.39%	0.051%
135	12.806	12.741	12.828	PV	1191	28022	0.61%	0.079%
136	12.862	12.828	12.898	VV	1434	29089	0.63%	0.082%
137	12.926	12.898	12.998	VV	8614	127599	2.77%	0.361%
138	13.067	12.998	13.098	VV	303	7644	0.17%	0.022%
139	13.116	13.098	13.138	VV	495	6876	0.15%	0.019%
140	13.172	13.138	13.193	VV	324	6785	0.15%	0.019%
141	13.223	13.193	13.258	PV	7508	104839	2.28%	0.296%

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142	13.309	13.258	13.439	VV	285043	3614533	78.52%	10.212%
143	13.475	13.439	13.538	VV	1618	49787	1.08%	0.141%
144	13.558	13.538	13.665	VV	719	32641	0.71%	0.092%
145	13.688	13.665	13.768	VV	857	20270	0.44%	0.057%
146	13.819	13.768	13.863	PV	1546	35507	0.77%	0.100%
147	13.925	13.863	13.945	VV	1056	26369	0.57%	0.074%
148	13.967	13.945	14.028	VV	1243	35296	0.77%	0.100%
149	14.094	14.028	14.118	VV	1840	58531	1.27%	0.165%
150	14.134	14.118	14.185	VV	1349	25179	0.55%	0.071%
151	14.217	14.185	14.241	VV	254	5368	0.12%	0.015%
152	14.276	14.241	14.338	PV	734	16889	0.37%	0.048%
153	14.502	14.338	14.551	VV	1043	56912	1.24%	0.161%
154	14.568	14.551	14.602	VV	1059	20205	0.44%	0.057%
155	14.629	14.602	14.648	VV	1407	21294	0.46%	0.060%
156	14.684	14.648	14.708	VV	770	20064	0.44%	0.057%
157	14.744	14.708	14.778	VV	922	22791	0.50%	0.064%
158	14.797	14.778	14.845	VV	1600	28585	0.62%	0.081%
159	14.916	14.845	14.938	VV	724	19984	0.43%	0.056%
160	15.115	14.938	15.132	VV	3798	77677	1.69%	0.219%
161	15.152	15.132	15.193	VV	4611	90822	1.97%	0.257%
162	15.216	15.193	15.248	VV	815	20061	0.44%	0.057%
163	15.272	15.248	15.334	VV	1170	33540	0.73%	0.095%
164	15.366	15.334	15.385	VV	270	5266	0.11%	0.015%
165	15.422	15.385	15.441	PV	607	11482	0.25%	0.032%
166	15.563	15.441	15.661	VV	6827	240213	5.22%	0.679%
167	15.697	15.661	15.727	VV	2919	71442	1.55%	0.202%
168	15.788	15.727	15.858	VV	2120	98593	2.14%	0.279%
169	15.949	15.858	15.978	VV	1616	65800	1.43%	0.186%
170	16.013	15.978	16.038	VV	899	25881	0.56%	0.073%
171	16.153	16.038	16.168	VV	1107	65491	1.42%	0.185%
172	16.196	16.168	16.225	VV	1920	44911	0.98%	0.127%
173	16.254	16.225	16.298	VV	1911	46947	1.02%	0.133%
174	16.320	16.298	16.345	VV	455	9152	0.20%	0.026%
175	16.382	16.345	16.407	PV	1374	29742	0.65%	0.084%
176	16.432	16.407	16.447	VV	827	15208	0.33%	0.043%
177	16.583	16.447	16.622	VV	3929	179211	3.89%	0.506%
178	16.677	16.622	16.731	VV	11093	266914	5.80%	0.754%
179	16.750	16.731	16.782	VV	2255	48254	1.05%	0.136%
180	16.809	16.782	16.858	VV	2195	60069	1.30%	0.170%
181	16.888	16.858	16.935	VV	931	35619	0.77%	0.101%
182	17.000	16.935	17.035	VV	4881	114958	2.50%	0.325%
183	17.060	17.035	17.098	VV	4942	90252	1.96%	0.255%
184	17.159	17.098	17.205	VV	3560	137782	2.99%	0.389%
185	17.224	17.205	17.275	VV	4826	92907	2.02%	0.262%
186	17.318	17.275	17.345	VV	1331	39297	0.85%	0.111%
187	17.379	17.345	17.401	VV	1756	40136	0.87%	0.113%
188	17.460	17.401	17.485	VV	1802	58640	1.27%	0.166%
189	17.530	17.485	17.571	VV	4317	151318	3.29%	0.428%
190	17.596	17.571	17.648	VV	13942	252882	5.49%	0.714%
191	17.707	17.648	17.735	VV	2325	94185	2.05%	0.266%
192	17.761	17.735	17.785	VV	2364	46504	1.01%	0.131%
193	17.815	17.785	17.832	VV	1079	22728	0.49%	0.064%
194	18.035	17.832	18.088	VV	6240	290388	6.31%	0.820%

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195	18.127	18.088	18.150	VV	7401	146535	3.18%	0.414%
196	18.172	18.150	18.245	VV	5659	216542	4.70%	0.612%
197	18.260	18.245	18.291	VV	3221	67937	1.48%	0.192%
198	18.352	18.291	18.375	VV	5701	153654	3.34%	0.434%
199	18.457	18.375	18.505	VV	27101	767392	16.67%	2.168%
200	18.541	18.505	18.591	VV	5975	229500	4.99%	0.648%
201	18.608	18.591	18.634	VV	3781	81806	1.78%	0.231%
202	18.696	18.634	18.758	VV	6024	256295	5.57%	0.724%
203	18.765	18.758	18.793	VV	2969	52937	1.15%	0.150%
204	18.867	18.793	18.903	VV	6680	252250	5.48%	0.713%
205	18.969	18.903	18.995	VV	8246	245164	5.33%	0.693%
206	19.010	18.995	19.095	VV	5783	243616	5.29%	0.688%
207	19.230	19.095	19.248	VV	14388	556887	12.10%	1.573%
208	19.266	19.248	19.323	VV	13794	481454	10.46%	1.360%
209	19.350	19.323	19.364	VV	8393	189847	4.12%	0.536%
210	19.389	19.364	19.451	VV	9834	388531	8.44%	1.098%
211	19.511	19.451	19.599	VV	9240	653398	14.19%	1.846%
212	19.678	19.599	19.708	VV	11485	531174	11.54%	1.501%
213	19.764	19.708	19.828	VV	12207	723387	15.71%	2.044%
214	19.870	19.828	19.895	VV	9657	374536	8.14%	1.058%
215	19.929	19.895	19.960	VV	10276	379329	8.24%	1.072%
216	19.999	19.960	20.045	VV	15756	597891	12.99%	1.689%
217	20.066	20.045	20.128	VV	11027	490720	10.66%	1.386%
218	20.190	20.128	20.218	VV	11803	555977	12.08%	1.571%
219	20.396	20.218	20.425	VV	14039	1493588	32.45%	4.220%
220	20.459	20.425	20.485	VV	13585	471658	10.25%	1.333%
221	20.664	20.485	20.685	VV	17382	1845923	40.10%	5.215%
222	20.752	20.685	20.815	VV	18149	1340012	29.11%	3.786%
223	20.876	20.815	21.048	VV	17363	2203815	47.87%	6.226%
224	21.134	21.048	21.293	VV	14027	1849985	40.19%	5.227%
225	21.400	21.293	21.424	VV	11134	850192	18.47%	2.402%
226	21.485	21.424	21.620	VV	10679	1126715	24.48%	3.183%
227	21.759	21.620	21.788	VV	7963	766034	16.64%	2.164%
228	21.800	21.788	21.838	VV	7730	224447	4.88%	0.634%
229	21.857	21.838	21.988	VV	7064	518945	11.27%	1.466%
230	22.059	21.988	22.111	VV	4698	327366	7.11%	0.925%
231	22.189	22.111	22.384	VV	4058	426134	9.26%	1.204%
Sum of corrected areas:							35394649	

Aliphatic EPH 041725.M Tue May 06 04:43:40 2025

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	05/01/25
Project:	Stan Hope	Date Received:	05/01/25
Client Sample ID:	LOWER-WALL-PILE-C	SDG No.:	Q1938
Lab Sample ID:	Q1938-06	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	97.6
Sample Wt/Vol:	30.06 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
05/05/25 09:05	05/05/25 18:16	PB167855

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C28-C40	Aliphatic C28-C40	8.07		1	1.21	2.05	mg/kg	FE053649.D
Aliphatic C9-C28	Aliphatic C9-C28	0.93	U	1	0.93	4.08	mg/kg	FE053649.D
Total AliphaticEPH	Total AliphaticEPH	8.07			2.14	6.13	mg/kg	
Total EPH	Total EPH	8.07			2.14	6.13	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	05/01/25
Project:	Stan Hope	Date Received:	05/01/25
Client Sample ID:	LOWER-WALL-PILE-C	SDG No.:	Q1938
Lab Sample ID:	Q1938-06	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	97.6
Sample Wt/Vol:	30.06 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE053649.D	1	05/05/25	05/05/25	PB167855

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	0.93	U	0.93	4.08	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	8.07		1.21	2.05	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	29.5		40 - 140	59%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	30.1		40 - 140	60%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1938-06	Acq On:	05 May 2025 18:16
Client Sample ID:	LOWER-WALL-PILE-C	Operator:	YP\AJ
Data file:	FE053649.D	Misc:	
Instrument:	FID_E	ALS Vial:	14
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.112	6.755	250346	1.807	300	ug/ml
Aliphatic C12-C16	6.756	10.204	659968	4.654	200	ug/ml
Aliphatic C16-C21	10.205	13.579	464130	3.193	300	ug/ml
Aliphatic C21-C28	13.580	17.249	1128241	7.936	400	ug/ml
Aliphatic C28-C40	17.250	22.140	15284852	118.442	600	ug/ml
Aliphatic EPH	3.112	22.140	17787537	136.031		ug/ml
ortho-Terphenyl (SURR)	11.865	11.865	5422784	30.07		ug/ml
1-chlorooctadecane (SURR)	13.310	13.310	3983700	29.47		ug/ml
Aliphatic C9-C28	3.112	17.249	2502685	17.59	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
 Data File : FE053649.D
 Signal(s) : FID1B.ch
 Acq On : 05 May 2025 18:16
 Operator : YP\AJ
 Sample : Q1938-06
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 LOWER-WALL-PILE-C

Integration File: sample.E
 Quant Time: May 06 04:19:16 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 29 06:49:03 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)	11.865	5422784	30.066 ug/ml
Spiked Amount 50.000		Recovery =	60.13%
12) S 1-chlorooctadecane (S...	13.310	3983700	29.471 ug/ml
Spiked Amount 50.000		Recovery =	58.94%

Target Compounds

(f)=RT Delta > 1/2 Window

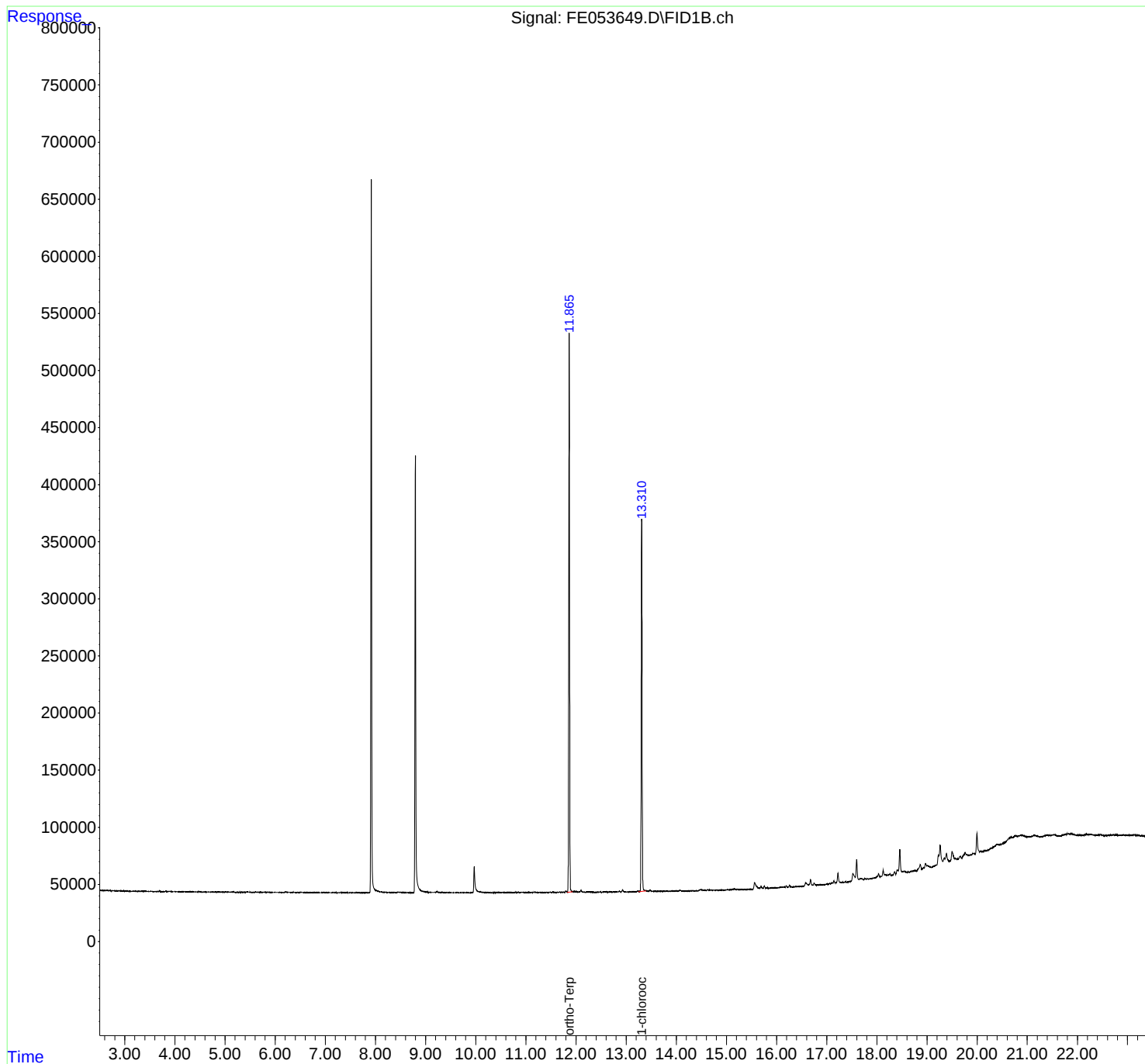
(m)=manual int.

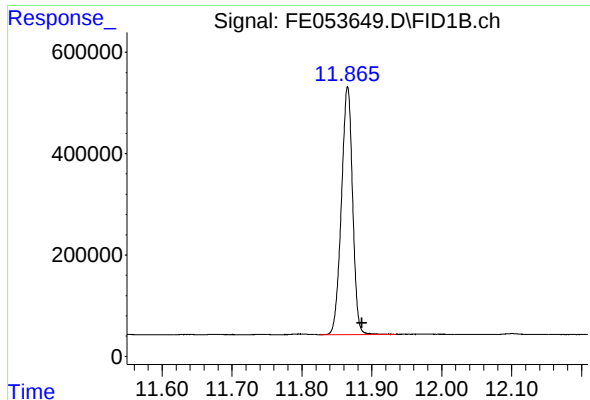
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
Data File : FE053649.D
Signal(s) : FID1B.ch
Acq On : 05 May 2025 18:16
Operator : YP\AJ
Sample : Q1938-06
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
LOWER-WALL-PILE-C

Integration File: sample.E
Quant Time: May 06 04:19:16 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
Quant Title : GC Extractables
QLast Update : Tue Apr 29 06:49:03 2025
Response via : Initial Calibration
Integrator: ChemStation

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

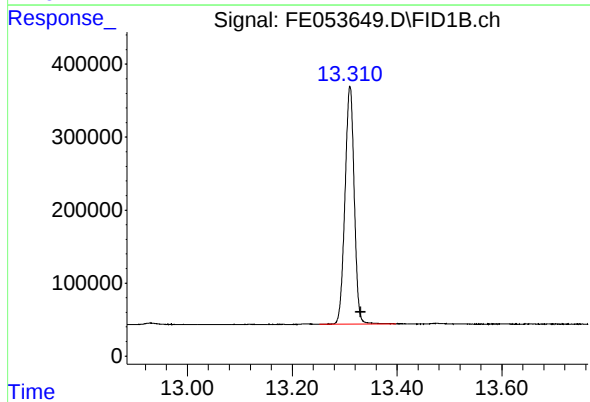




#9 ortho-Terphenyl (SURR)

R.T.: 11.865 min
Delta R.T.: -0.021 min
Response: 5422784
Conc: 30.07 ug/ml

Instrument :
FID_E
ClientSampleId :
LOWER-WALL-PILE-C



#12 1-chlorooctadecane (SURR)

R.T.: 13.310 min
Delta R.T.: -0.020 min
Response: 3983700
Conc: 29.47 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
Data File : FE053649.D
Signal(s) : FID1B.ch
Acq On : 05 May 2025 18:16
Sample : Q1938-06
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.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	2.847	2.805	2.888	BV	108	2092	0.04%	0.008%
2	2.895	2.888	2.902	PV	67	273	0.01%	0.001%
3	2.907	2.902	2.919	VV	92	359	0.01%	0.001%
4	2.928	2.919	2.969	VV	26	1057	0.02%	0.004%
5	2.981	2.969	3.001	VV	155	771	0.01%	0.003%
6	3.007	3.001	3.051	VV	82	1255	0.02%	0.005%
7	3.060	3.051	3.075	PV	126	771	0.01%	0.003%
8	3.097	3.075	3.137	VV	108	2058	0.04%	0.007%
9	3.148	3.137	3.173	VV	120	1760	0.03%	0.006%
10	3.207	3.173	3.291	VV	231	8167	0.15%	0.030%
11	3.317	3.291	3.338	PV	148	2955	0.05%	0.011%
12	3.348	3.338	3.361	VV	138	1403	0.03%	0.005%
13	3.403	3.361	3.438	VV	404	7785	0.14%	0.028%
14	3.447	3.438	3.465	VV	185	1768	0.03%	0.006%
15	3.473	3.465	3.501	VV	132	2176	0.04%	0.008%
16	3.512	3.501	3.564	VV	183	4605	0.08%	0.017%
17	3.583	3.564	3.605	VV	141	2598	0.05%	0.009%
18	3.608	3.605	3.629	VV	130	1211	0.02%	0.004%
19	3.660	3.629	3.674	VV	221	3239	0.06%	0.012%
20	3.695	3.674	3.724	VV	605	8120	0.15%	0.029%
21	3.748	3.724	3.780	VV	168	3447	0.06%	0.012%
22	3.812	3.780	3.836	VV	380	6127	0.11%	0.022%
23	3.845	3.836	3.869	VV	159	1780	0.03%	0.006%
24	3.898	3.869	3.951	VV	450	7636	0.14%	0.028%
25	3.958	3.951	3.967	VV	97	558	0.01%	0.002%
26	3.985	3.967	3.995	VV	112	1233	0.02%	0.004%
27	4.012	3.995	4.073	VV	148	4237	0.08%	0.015%
28	4.118	4.073	4.171	VV	127	3765	0.07%	0.014%
29	4.194	4.171	4.227	VV	164	3567	0.07%	0.013%
30	4.243	4.227	4.323	VV	131	4252	0.08%	0.015%
31	4.332	4.323	4.355	VV	82	1134	0.02%	0.004%
32	4.363	4.355	4.453	VV	100	3174	0.06%	0.012%
33	4.472	4.453	4.492	VV	549	6191	0.11%	0.022%
34	4.504	4.492	4.525	VV	135	1752	0.03%	0.006%
35	4.535	4.525	4.630	PV	91	4661	0.09%	0.017%
36	4.647	4.630	4.681	VV	140	2793	0.05%	0.010%

					rteres			
37	4.688	4.681	4.718	VV	139	2395	0.04%	0.009%
38	4.723	4.718	4.739	VV	150	1290	0.02%	0.005%
39	4.757	4.739	4.824	VV	264	6304	0.12%	0.023%
40	4.834	4.824	4.848	VV	131	1337	0.02%	0.005%
41	4.858	4.848	4.875	VV	107	1358	0.02%	0.005%
42	4.902	4.875	5.120	VV	189	18345	0.34%	0.067%
43	5.141	5.120	5.158	VV	173	2737	0.05%	0.010%
44	5.164	5.158	5.172	VV	132	1170	0.02%	0.004%
45	5.182	5.172	5.205	VV	153	2451	0.04%	0.009%
46	5.225	5.205	5.242	PV	91	1695	0.03%	0.006%
47	5.255	5.242	5.290	VV	149	2199	0.04%	0.008%
48	5.298	5.290	5.340	VV	159	2348	0.04%	0.009%
49	5.356	5.340	5.375	VV	72	1300	0.02%	0.005%
50	5.386	5.375	5.400	VV	103	1138	0.02%	0.004%
51	5.433	5.400	5.529	VV	349	14793	0.27%	0.054%
52	5.537	5.529	5.578	VV	146	3133	0.06%	0.011%
53	5.585	5.578	5.597	VV	90	880	0.02%	0.003%
54	5.618	5.597	5.661	VV	429	7188	0.13%	0.026%
55	5.678	5.661	5.691	PV	135	1718	0.03%	0.006%
56	5.696	5.691	5.715	VV	133	1316	0.02%	0.005%
57	5.735	5.715	5.761	VV	159	3512	0.06%	0.013%
58	5.767	5.761	5.777	VV	152	1253	0.02%	0.005%
59	5.791	5.777	5.805	VV	192	2010	0.04%	0.007%
60	5.814	5.805	5.861	VV	152	3243	0.06%	0.012%
61	5.903	5.861	5.918	VV	145	3631	0.07%	0.013%
62	5.924	5.918	5.985	VV	197	3749	0.07%	0.014%
63	5.992	5.985	6.002	VV	103	847	0.02%	0.003%
64	6.009	6.002	6.025	VV	100	1049	0.02%	0.004%
65	6.034	6.025	6.050	VV	97	1138	0.02%	0.004%
66	6.061	6.050	6.148	VV	109	3807	0.07%	0.014%
67	6.158	6.148	6.178	VV	106	1225	0.02%	0.004%
68	6.197	6.178	6.268	VV	467	13254	0.24%	0.048%
69	6.278	6.268	6.311	VV	171	3072	0.06%	0.011%
70	6.365	6.311	6.478	VV	259	10724	0.20%	0.039%
71	6.497	6.478	6.525	VV	204	4744	0.09%	0.017%
72	6.544	6.525	6.565	VV	207	4187	0.08%	0.015%
73	6.585	6.565	6.637	VV	178	4695	0.09%	0.017%
74	6.654	6.637	6.698	VV	236	4212	0.08%	0.015%
75	6.709	6.698	6.716	VV	73	641	0.01%	0.002%
76	6.740	6.716	6.755	VV	135	2164	0.04%	0.008%
77	6.762	6.755	6.839	VV	124	5639	0.10%	0.020%
78	6.859	6.839	6.914	VV	91	2596	0.05%	0.009%
79	6.934	6.914	7.047	VV	157	5104	0.09%	0.019%
80	7.068	7.047	7.097	VV	170	2863	0.05%	0.010%
81	7.109	7.097	7.125	VV	72	764	0.01%	0.003%
82	7.137	7.125	7.155	VV	122	1382	0.03%	0.005%
83	7.208	7.155	7.265	VV	136	4768	0.09%	0.017%
84	7.341	7.265	7.359	VV	176	5937	0.11%	0.022%
85	7.374	7.359	7.410	VV	198	3141	0.06%	0.011%
86	7.432	7.410	7.456	VV	169	3020	0.06%	0.011%
87	7.483	7.456	7.538	VV	179	5186	0.10%	0.019%
88	7.552	7.538	7.578	VV	118	2544	0.05%	0.009%
89	7.607	7.578	7.668	VV	255	6782	0.12%	0.025%

					rteres			
90	7.681	7.668	7.718	PV	93	1840	0.03%	0.007%
91	7.761	7.718	7.807	VV	135	4108	0.08%	0.015%
92	7.842	7.807	7.871	VV	96	2159	0.04%	0.008%
93	8.387	8.348	8.428	VV	389	14427	0.26%	0.052%
94	8.456	8.428	8.474	VV	657	12004	0.22%	0.044%
95	8.496	8.474	8.569	VV	609	20661	0.38%	0.075%
96	8.591	8.569	8.623	VV	230	6546	0.12%	0.024%
97	8.638	8.623	8.668	VV	229	4166	0.08%	0.015%
98	8.689	8.668	8.706	VV	181	2628	0.05%	0.010%
99	8.720	8.706	8.765	VV	127	3234	0.06%	0.012%
100	9.225	9.161	9.291	VV	1172	40856	0.75%	0.148%
101	9.320	9.291	9.381	VV	446	17232	0.32%	0.062%
102	9.386	9.381	9.491	VV	277	10439	0.19%	0.038%
103	9.516	9.491	9.578	VV	168	6807	0.12%	0.025%
104	9.618	9.578	9.664	VV	180	6817	0.13%	0.025%
105	9.700	9.664	9.745	VV	339	7943	0.15%	0.029%
106	9.763	9.745	9.808	VV	217	5096	0.09%	0.018%
107	9.824	9.808	9.848	VV	168	2507	0.05%	0.009%
108	9.872	9.848	9.899	VV	97	2219	0.04%	0.008%
109	9.972	9.899	10.085	VV	22896	405563	7.44%	1.471%
110	10.101	10.085	10.183	VV	952	27179	0.50%	0.099%
111	10.199	10.183	10.235	VV	236	5811	0.11%	0.021%
112	10.255	10.235	10.331	VV	185	5776	0.11%	0.021%
113	10.345	10.331	10.405	VV	148	3138	0.06%	0.011%
114	10.444	10.405	10.481	PV	537	12084	0.22%	0.044%
115	10.494	10.481	10.509	VV	215	3807	0.07%	0.014%
116	10.529	10.509	10.605	VV	328	11742	0.22%	0.043%
117	10.630	10.605	10.666	VV	312	7276	0.13%	0.026%
118	10.688	10.666	10.708	VV	199	4014	0.07%	0.015%
119	10.764	10.708	10.781	VV	225	8145	0.15%	0.030%
120	10.800	10.781	10.825	VV	283	5801	0.11%	0.021%
121	10.844	10.825	10.888	VV	491	9661	0.18%	0.035%
122	10.917	10.888	11.013	VV	334	12944	0.24%	0.047%
123	11.067	11.013	11.091	VV	580	9770	0.18%	0.035%
124	11.109	11.091	11.165	VV	307	8837	0.16%	0.032%
125	11.183	11.165	11.228	VV	493	9701	0.18%	0.035%
126	11.274	11.228	11.385	VV	233	11011	0.20%	0.040%
127	11.410	11.385	11.455	VV	145	3609	0.07%	0.013%
128	11.480	11.455	11.505	VV	389	6444	0.12%	0.023%
129	11.548	11.505	11.605	VV	508	12890	0.24%	0.047%
130	11.635	11.605	11.658	PV	319	6935	0.13%	0.025%
131	11.678	11.658	11.721	VV	615	10830	0.20%	0.039%
132	11.743	11.721	11.768	VV	603	7682	0.14%	0.028%
133	11.797	11.768	11.824	VV	1406	23715	0.44%	0.086%
134	11.865	11.824	11.933	VV	490597	5449991	100.00%	19.763%
135	11.975	11.933	12.048	VV	1025	46253	0.85%	0.168%
136	12.101	12.048	12.141	VV	2105	40644	0.75%	0.147%
137	12.156	12.141	12.185	VV	316	5224	0.10%	0.019%
138	12.221	12.185	12.250	VV	563	11672	0.21%	0.042%
139	12.272	12.250	12.290	VV	390	5557	0.10%	0.020%
140	12.311	12.290	12.365	VV	385	6177	0.11%	0.022%
141	12.382	12.365	12.399	VV	125	1313	0.02%	0.005%

					rteres			
142	12.577	12.399	12.620	VV	353	16212	0.30%	0.059%
143	12.674	12.620	12.755	VV	344	11272	0.21%	0.041%
144	12.802	12.755	12.831	PV	350	10551	0.19%	0.038%
145	12.863	12.831	12.901	VV	789	14419	0.26%	0.052%
146	12.930	12.901	13.051	VV	1956	38448	0.71%	0.139%
147	13.119	13.051	13.146	PV	221	4251	0.08%	0.015%
148	13.227	13.146	13.251	PV	727	14049	0.26%	0.051%
149	13.310	13.251	13.442	VV	329134	4048136	74.28%	14.680%
150	13.476	13.442	13.566	VV	1275	42276	0.78%	0.153%
151	13.603	13.566	13.641	VV	414	12167	0.22%	0.044%
152	13.657	13.641	13.678	VV	256	4799	0.09%	0.017%
153	13.693	13.678	13.767	VV	259	8156	0.15%	0.030%
154	13.823	13.767	13.845	VV	292	7225	0.13%	0.026%
155	13.922	13.845	13.952	VV	358	13111	0.24%	0.048%
156	14.010	13.952	14.041	VV	421	11668	0.21%	0.042%
157	14.066	14.041	14.232	VV	636	23042	0.42%	0.084%
158	14.302	14.232	14.322	PV	145	4680	0.09%	0.017%
159	14.346	14.322	14.385	VV	143	2742	0.05%	0.010%
160	14.499	14.385	14.551	PV	1132	47012	0.86%	0.170%
161	14.571	14.551	14.600	VV	490	10775	0.20%	0.039%
162	14.628	14.600	14.651	VV	1028	15832	0.29%	0.057%
163	14.686	14.651	14.711	VV	763	15120	0.28%	0.055%
164	14.748	14.711	14.778	VV	252	7531	0.14%	0.027%
165	14.802	14.778	14.828	VV	202	4544	0.08%	0.016%
166	14.876	14.828	14.901	VV	179	5017	0.09%	0.018%
167	14.918	14.901	14.933	VV	133	1906	0.03%	0.007%
168	15.165	14.933	15.193	PV	899	41305	0.76%	0.150%
169	15.215	15.193	15.301	VV	746	15352	0.28%	0.056%
170	15.359	15.301	15.385	VV	161	4006	0.07%	0.015%
171	15.564	15.385	15.665	PV	5607	189591	3.48%	0.688%
172	15.690	15.665	15.728	VV	2286	43149	0.79%	0.156%
173	15.756	15.728	15.800	VV	2113	40460	0.74%	0.147%
174	15.820	15.800	15.851	VV	581	7816	0.14%	0.028%
175	15.950	15.851	15.971	VV	311	12034	0.22%	0.044%
176	16.008	15.971	16.031	VV	149	5248	0.10%	0.019%
177	16.155	16.031	16.170	PV	713	28898	0.53%	0.105%
178	16.193	16.170	16.228	VV	1320	22522	0.41%	0.082%
179	16.256	16.228	16.301	VV	1448	25494	0.47%	0.092%
180	16.325	16.301	16.345	VV	172	3539	0.06%	0.013%
181	16.386	16.345	16.413	VV	223	5672	0.10%	0.021%
182	16.484	16.413	16.516	VV	203	6457	0.12%	0.023%
183	16.582	16.516	16.648	PV	2898	105816	1.94%	0.384%
184	16.677	16.648	16.718	VV	5515	95927	1.76%	0.348%
185	16.749	16.718	16.791	VV	2113	42591	0.78%	0.154%
186	16.812	16.791	16.840	VV	379	8014	0.15%	0.029%
187	16.885	16.840	16.911	VV	265	6257	0.11%	0.023%
188	17.069	16.911	17.088	PV	458	14651	0.27%	0.053%
189	17.144	17.088	17.175	VV	2087	48063	0.88%	0.174%
190	17.223	17.175	17.291	VV	8743	160052	2.94%	0.580%
191	17.316	17.291	17.337	VV	361	7824	0.14%	0.028%
192	17.379	17.337	17.401	VV	472	8499	0.16%	0.031%
193	17.525	17.401	17.568	PV	6548	201823	3.70%	0.732%
194	17.596	17.568	17.645	VV	18637	318836	5.85%	1.156%

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195	17.693	17.645	17.738	VV	1460	60984	1.12%	0.221%
196	17.761	17.738	17.788	VV	1117	18836	0.35%	0.068%
197	17.817	17.788	17.835	VV	316	7116	0.13%	0.026%
198	18.033	17.835	18.088	PV	3408	98784	1.81%	0.358%
199	18.126	18.088	18.191	VV	5663	137915	2.53%	0.500%
200	18.258	18.191	18.291	VV	1588	53992	0.99%	0.196%
201	18.352	18.291	18.375	PV	2918	51626	0.95%	0.187%
202	18.409	18.375	18.423	VV	3755	75665	1.39%	0.274%
203	18.457	18.423	18.528	VV	21540	404861	7.43%	1.468%
204	18.549	18.528	18.594	VV	1757	46342	0.85%	0.168%
205	18.615	18.594	18.638	VV	368	8403	0.15%	0.030%
206	18.865	18.638	18.900	PV	4868	144929	2.66%	0.526%
207	18.971	18.900	19.091	VV	4771	217626	3.99%	0.789%
208	19.262	19.091	19.314	VV	18354	683494	12.54%	2.479%
209	19.388	19.314	19.451	VV	9945	449103	8.24%	1.629%
210	19.501	19.451	19.594	VV	10729	463204	8.50%	1.680%
211	19.658	19.594	19.694	VV	4991	230781	4.23%	0.837%
212	19.761	19.694	19.842	VV	7189	476645	8.75%	1.728%
213	19.931	19.842	19.961	VV	5465	349695	6.42%	1.268%
214	19.996	19.961	20.055	VV	22280	576310	10.57%	2.090%
215	20.079	20.055	20.110	VV	5916	191394	3.51%	0.694%
216	20.166	20.110	20.188	VV	5904	263285	4.83%	0.955%
217	20.396	20.188	20.438	VV	9567	1100523	20.19%	3.991%
218	20.689	20.438	20.712	VV	13148	1732892	31.80%	6.284%
219	20.759	20.712	20.804	VV	13519	729349	13.38%	2.645%
220	20.888	20.804	20.999	VV	12958	1442879	26.47%	5.232%
221	21.133	20.999	21.263	VV	10764	1579966	28.99%	5.729%
222	21.391	21.263	21.431	VV	8634	848567	15.57%	3.077%
223	21.538	21.431	21.635	VV	7854	896991	16.46%	3.253%
224	21.818	21.635	21.835	VV	6162	733898	13.47%	2.661%
225	21.858	21.835	21.990	VV	5855	457446	8.39%	1.659%
226	22.038	21.990	22.107	VV	3323	214369	3.93%	0.777%
227	22.180	22.107	22.232	VV	2640	183705	3.37%	0.666%
228	22.250	22.232	22.385	VV	1956	98138	1.80%	0.356%
Sum of corrected areas:					27576141			

Aliphatic EPH 041725.M Tue May 06 04:43:57 2025

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	05/01/25
Project:	Stan Hope	Date Received:	05/01/25
Client Sample ID:	LOWER-WALL-PILE-D	SDG No.:	Q1938
Lab Sample ID:	Q1938-08	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.7
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
05/05/25 09:05	05/05/25 18:46	PB167855

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C28-C40	Aliphatic C28-C40	5.80		1	1.25	2.11	mg/kg	FE053650.D
Aliphatic C9-C28	Aliphatic C9-C28	0.96	U	1	0.96	4.23	mg/kg	FE053650.D
Total AliphaticEPH	Total AliphaticEPH	5.80	J		2.21	6.34	mg/kg	
Total EPH	Total EPH	5.80	J		2.21	6.34	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	05/01/25
Project:	Stan Hope	Date Received:	05/01/25
Client Sample ID:	LOWER-WALL-PILE-D	SDG No.:	Q1938
Lab Sample ID:	Q1938-08	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.7
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE053650.D	1	05/05/25	05/05/25	PB167855

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	0.96	U	0.96	4.23	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	5.80		1.25	2.11	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	33.7		40 - 140	67%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	33.6		40 - 140	67%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1938-08	Acq On:	05 May 2025 18:46
Client Sample ID:	LOWER-WALL-PILE-D	Operator:	YP\AJ
Data file:	FE053650.D	Misc:	
Instrument:	FID_E	ALS Vial:	15
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.112	6.755	237373	1.713	300	ug/ml
Aliphatic C12-C16	6.756	10.204	737932	5.204	200	ug/ml
Aliphatic C16-C21	10.205	13.579	465027	3.199	300	ug/ml
Aliphatic C21-C28	13.580	17.249	904045	6.359	400	ug/ml
Aliphatic C28-C40	17.250	22.140	10638233	82.435	600	ug/ml
Aliphatic EPH	3.112	22.140	12982610	98.91		ug/ml
ortho-Terphenyl (SURR)	11.865	11.865	6066208	33.63		ug/ml
1-chlorooctadecane (SURR)	13.310	13.310	4555624	33.7		ug/ml
Aliphatic C9-C28	3.112	17.249	2344377	16.475	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
 Data File : FE053650.D
 Signal(s) : FID1B.ch
 Acq On : 05 May 2025 18:46
 Operator : YP\AJ
 Sample : Q1938-08
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 LOWER-WALL-PILE-D

Integration File: sample.E
 Quant Time: May 06 04:19:24 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 29 06:49:03 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)	11.865	6066208	33.634 ug/ml
Spiked Amount	50.000	Recovery	= 67.27%
12) S 1-chlorooctadecane (S...	13.310	4555624	33.702 ug/ml
Spiked Amount	50.000	Recovery	= 67.40%

Target Compounds

(f)=RT Delta > 1/2 Window

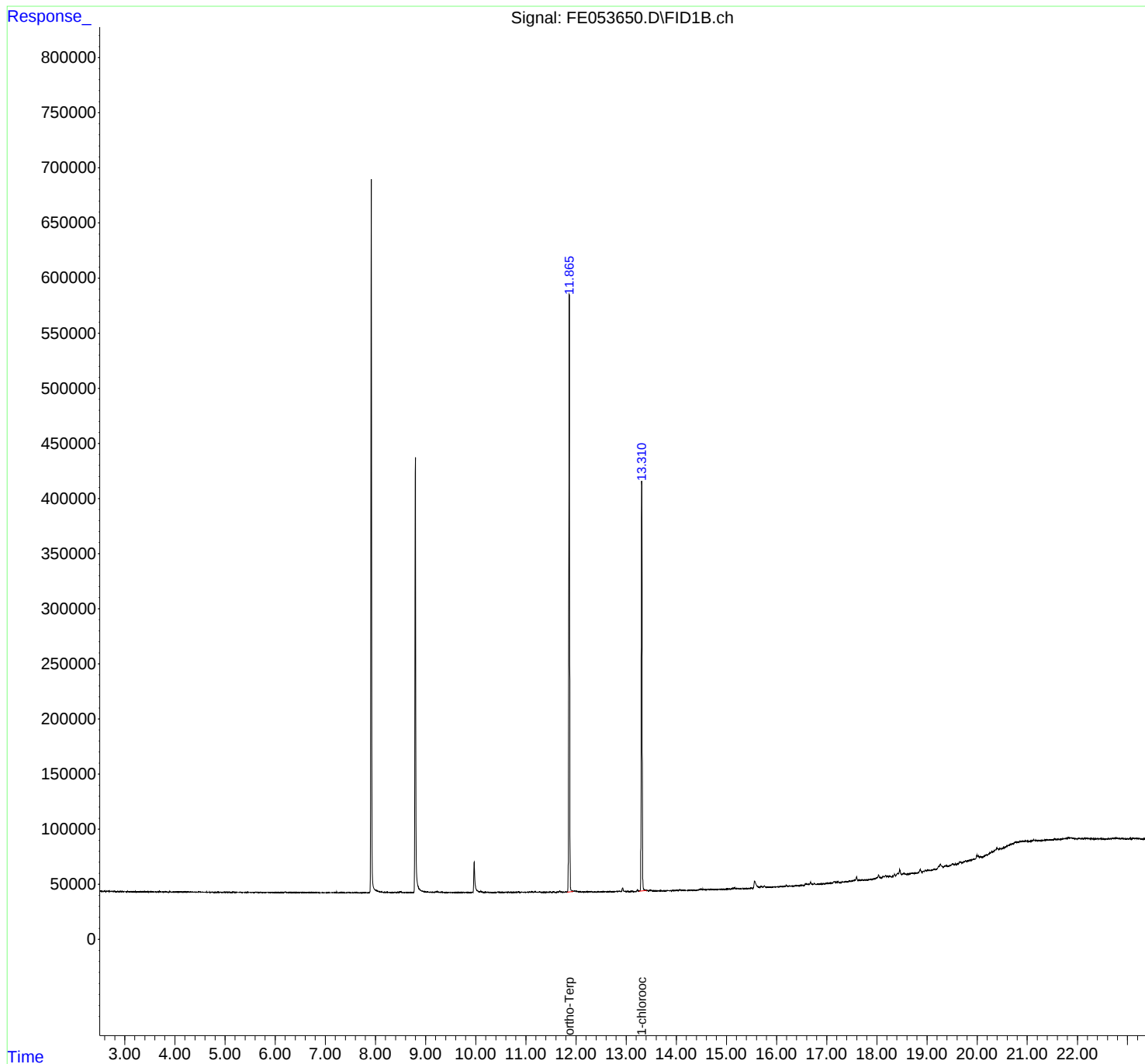
(m)=manual int.

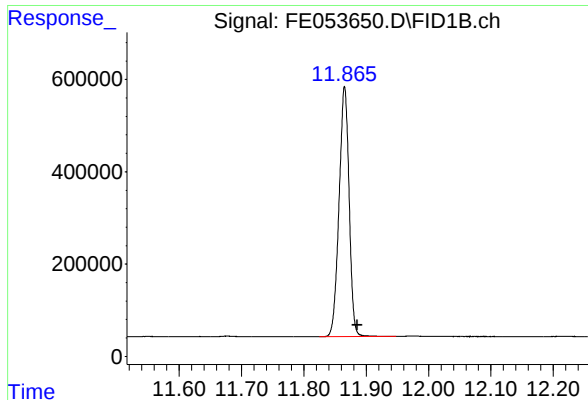
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
Data File : FE053650.D
Signal(s) : FID1B.ch
Acq On : 05 May 2025 18:46
Operator : YP\AJ
Sample : Q1938-08
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
LOWER-WALL-PILE-D

Integration File: sample.E
Quant Time: May 06 04:19:24 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
Quant Title : GC Extractables
QLast Update : Tue Apr 29 06:49:03 2025
Response via : Initial Calibration
Integrator: ChemStation

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

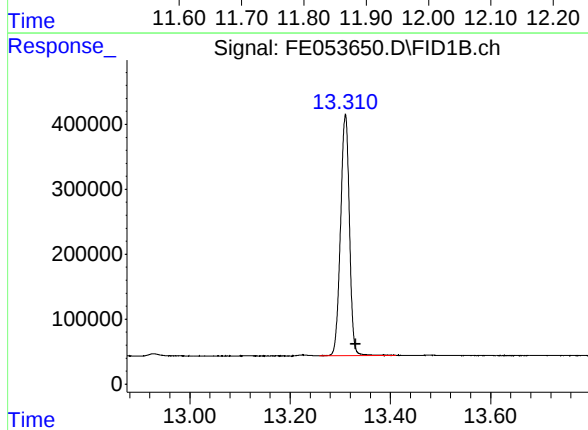




#9 ortho-Terphenyl (SURR)

R.T.: 11.865 min
Delta R.T.: -0.021 min
Response: 6066208
Conc: 33.63 ug/ml

Instrument :
FID_E
ClientSampleId :
LOWER-WALL-PILE-D



#12 1-chlorooctadecane (SURR)

R.T.: 13.310 min
Delta R.T.: -0.020 min
Response: 4555624
Conc: 33.70 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
 Data File : FE053650.D
 Signal(s) : FID1B.ch
 Acq On : 05 May 2025 18:46
 Sample : Q1938-08
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.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	2.831	2.804	2.914	BV	52	3139	0.05%	0.013%
2	2.923	2.914	2.955	VV	164	2042	0.03%	0.009%
3	2.976	2.955	3.016	PV	114	2596	0.04%	0.011%
4	3.020	3.016	3.040	VV	75	712	0.01%	0.003%
5	3.067	3.040	3.104	VV	159	2983	0.05%	0.012%
6	3.119	3.104	3.161	VV	102	2324	0.04%	0.010%
7	3.170	3.161	3.180	VV	74	785	0.01%	0.003%
8	3.211	3.180	3.254	VV	253	4381	0.07%	0.018%
9	3.261	3.254	3.290	VV	106	849	0.01%	0.004%
10	3.300	3.290	3.322	VV	92	855	0.01%	0.004%
11	3.333	3.322	3.344	PV	117	837	0.01%	0.004%
12	3.356	3.344	3.383	VV	118	1914	0.03%	0.008%
13	3.402	3.383	3.493	VV	299	6371	0.10%	0.027%
14	3.502	3.493	3.510	VV	91	754	0.01%	0.003%
15	3.520	3.510	3.558	VV	101	2088	0.03%	0.009%
16	3.566	3.558	3.639	VV	128	3165	0.05%	0.013%
17	3.656	3.639	3.677	PV	170	2621	0.04%	0.011%
18	3.696	3.677	3.771	VV	588	10011	0.16%	0.042%
19	3.814	3.771	3.877	VV	362	9283	0.15%	0.039%
20	3.898	3.877	3.926	VV	464	6424	0.11%	0.027%
21	3.938	3.926	3.966	VV	119	1802	0.03%	0.008%
22	3.982	3.966	3.991	VV	157	1075	0.02%	0.005%
23	4.009	3.991	4.026	VV	200	2359	0.04%	0.010%
24	4.042	4.026	4.064	VV	139	2357	0.04%	0.010%
25	4.074	4.064	4.087	VV	128	1182	0.02%	0.005%
26	4.114	4.087	4.164	VV	150	3503	0.06%	0.015%
27	4.192	4.164	4.226	VV	243	4683	0.08%	0.020%
28	4.241	4.226	4.342	VV	190	7148	0.12%	0.030%
29	4.348	4.342	4.376	VV	100	1342	0.02%	0.006%
30	4.411	4.376	4.428	VV	138	2115	0.03%	0.009%
31	4.472	4.428	4.501	VV	577	8593	0.14%	0.036%
32	4.510	4.501	4.524	VV	129	1568	0.03%	0.007%
33	4.551	4.524	4.565	VV	142	2080	0.03%	0.009%
34	4.580	4.565	4.610	VV	142	2669	0.04%	0.011%
35	4.627	4.610	4.656	VV	254	3163	0.05%	0.013%
36	4.662	4.656	4.671	VV	116	937	0.02%	0.004%

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37	4.682	4.671	4.711	VV	151	2511	0.04%	0.011%
38	4.723	4.711	4.744	VV	151	1457	0.02%	0.006%
39	4.757	4.744	4.827	PV	222	6124	0.10%	0.026%
40	4.838	4.827	4.851	VV	130	1379	0.02%	0.006%
41	4.894	4.851	4.964	VV	197	8063	0.13%	0.034%
42	4.976	4.964	5.024	VV	173	3853	0.06%	0.016%
43	5.030	5.024	5.045	VV	102	941	0.02%	0.004%
44	5.057	5.045	5.068	PV	129	1051	0.02%	0.004%
45	5.091	5.068	5.122	VV	131	2494	0.04%	0.010%
46	5.150	5.122	5.173	VV	158	3613	0.06%	0.015%
47	5.184	5.173	5.221	VV	132	2026	0.03%	0.008%
48	5.228	5.221	5.268	VV	133	1843	0.03%	0.008%
49	5.307	5.268	5.373	VV	122	3861	0.06%	0.016%
50	5.432	5.373	5.591	VV	225	12714	0.21%	0.053%
51	5.618	5.591	5.671	PV	441	8040	0.13%	0.034%
52	5.706	5.671	5.904	VV	180	14771	0.24%	0.062%
53	5.922	5.904	6.081	VV	215	10576	0.17%	0.044%
54	6.096	6.081	6.124	VV	132	1916	0.03%	0.008%
55	6.142	6.124	6.171	VV	113	1598	0.03%	0.007%
56	6.198	6.171	6.328	PV	490	17281	0.28%	0.072%
57	6.364	6.328	6.428	VV	194	6593	0.11%	0.028%
58	6.441	6.428	6.484	VV	91	3131	0.05%	0.013%
59	6.502	6.484	6.525	VV	242	4736	0.08%	0.020%
60	6.541	6.525	6.628	VV	220	7788	0.13%	0.033%
61	6.653	6.628	6.699	VV	211	5479	0.09%	0.023%
62	6.722	6.699	6.758	VV	128	4296	0.07%	0.018%
63	6.770	6.758	6.914	VV	167	9162	0.15%	0.038%
64	6.938	6.914	6.959	VV	136	2369	0.04%	0.010%
65	6.990	6.959	7.009	VV	119	2188	0.04%	0.009%
66	7.068	7.009	7.124	PV	237	6445	0.11%	0.027%
67	7.137	7.124	7.171	VV	146	2911	0.05%	0.012%
68	7.231	7.171	7.266	VV	383	6199	0.10%	0.026%
69	7.335	7.266	7.410	VV	254	9949	0.16%	0.042%
70	7.437	7.410	7.533	VV	149	6419	0.11%	0.027%
71	7.607	7.533	7.751	VV	225	10284	0.17%	0.043%
72	7.779	7.751	7.794	VV	87	1265	0.02%	0.005%
73	7.824	7.794	7.844	VV	120	1635	0.03%	0.007%
74	8.313	8.303	8.354	VV	252	6712	0.11%	0.028%
75	8.386	8.354	8.434	VV	360	12329	0.20%	0.052%
76	8.456	8.434	8.472	VV	563	8492	0.14%	0.036%
77	8.497	8.472	8.548	VV	597	17950	0.29%	0.075%
78	8.555	8.548	8.574	VV	291	3697	0.06%	0.015%
79	8.597	8.574	8.683	VV	280	10278	0.17%	0.043%
80	8.701	8.683	8.764	VV	120	3310	0.05%	0.014%
81	9.096	9.075	9.158	VV	543	18856	0.31%	0.079%
82	9.223	9.158	9.298	VV	1039	38640	0.63%	0.162%
83	9.320	9.298	9.414	VV	563	17410	0.29%	0.073%
84	9.435	9.414	9.486	VV	213	6312	0.10%	0.026%
85	9.511	9.486	9.535	VV	231	4322	0.07%	0.018%
86	9.550	9.535	9.581	VV	138	2564	0.04%	0.011%
87	9.604	9.581	9.671	VV	119	3729	0.06%	0.016%
88	9.702	9.671	9.744	VV	299	6799	0.11%	0.028%
89	9.761	9.744	9.800	VV	165	4308	0.07%	0.018%

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90	9.819	9.800	9.878	PV	249	5156	0.08%	0.022%
91	9.883	9.878	9.914	VV	119	1244	0.02%	0.005%
92	9.971	9.914	10.084	VV	26940	472732	7.75%	1.979%
93	10.101	10.084	10.188	VV	1095	29372	0.48%	0.123%
94	10.203	10.188	10.229	VV	196	4894	0.08%	0.020%
95	10.266	10.229	10.308	VV	183	5699	0.09%	0.024%
96	10.368	10.308	10.403	VV	126	3716	0.06%	0.016%
97	10.445	10.403	10.481	VV	647	12188	0.20%	0.051%
98	10.491	10.481	10.511	VV	305	3564	0.06%	0.015%
99	10.542	10.511	10.610	VV	231	11011	0.18%	0.046%
100	10.633	10.610	10.691	VV	207	5084	0.08%	0.021%
101	10.766	10.691	10.785	VV	191	8572	0.14%	0.036%
102	10.845	10.785	10.888	VV	578	15333	0.25%	0.064%
103	10.915	10.888	11.014	VV	281	12019	0.20%	0.050%
104	11.065	11.014	11.088	PV	351	6464	0.11%	0.027%
105	11.111	11.088	11.153	VV	665	13954	0.23%	0.058%
106	11.182	11.153	11.261	VV	1076	22188	0.36%	0.093%
107	11.274	11.261	11.331	VV	403	9129	0.15%	0.038%
108	11.349	11.331	11.378	VV	102	2086	0.03%	0.009%
109	11.406	11.378	11.448	PV	109	2588	0.04%	0.011%
110	11.480	11.448	11.508	PV	416	6489	0.11%	0.027%
111	11.549	11.508	11.594	VV	605	10794	0.18%	0.045%
112	11.633	11.594	11.654	VV	332	6152	0.10%	0.026%
113	11.677	11.654	11.724	VV	1222	18663	0.31%	0.078%
114	11.743	11.724	11.767	VV	310	3500	0.06%	0.015%
115	11.865	11.767	11.948	VV	542400	6098466	100.00%	25.527%
116	11.975	11.948	12.137	VV	1346	58222	0.95%	0.244%
117	12.161	12.137	12.178	VV	141	2438	0.04%	0.010%
118	12.220	12.178	12.254	VV	564	10415	0.17%	0.044%
119	12.309	12.254	12.371	VV	317	8888	0.15%	0.037%
120	12.384	12.371	12.408	VV	52	761	0.01%	0.003%
121	12.579	12.408	12.630	PV	332	15964	0.26%	0.067%
122	12.671	12.630	12.738	VV	416	10262	0.17%	0.043%
123	12.801	12.738	12.834	PV	345	11715	0.19%	0.049%
124	12.862	12.834	12.898	VV	808	14572	0.24%	0.061%
125	12.928	12.898	13.028	VV	3479	61676	1.01%	0.258%
126	13.118	13.028	13.157	VV	317	11652	0.19%	0.049%
127	13.175	13.157	13.201	VV	191	3252	0.05%	0.014%
128	13.226	13.201	13.254	PV	1520	25316	0.42%	0.106%
129	13.310	13.254	13.448	VV	375326	4630288	75.93%	19.382%
130	13.477	13.448	13.539	VV	1089	34515	0.57%	0.144%
131	13.553	13.539	13.628	VV	394	16186	0.27%	0.068%
132	13.691	13.628	13.731	VV	407	15297	0.25%	0.064%
133	13.737	13.731	13.774	VV	241	4185	0.07%	0.018%
134	13.825	13.774	13.871	VV	313	11255	0.18%	0.047%
135	13.931	13.871	13.954	VV	365	12669	0.21%	0.053%
136	14.012	13.954	14.041	VV	543	17668	0.29%	0.074%
137	14.065	14.041	14.241	VV	729	29593	0.49%	0.124%
138	14.296	14.241	14.318	PV	246	6919	0.11%	0.029%
139	14.359	14.318	14.408	VV	154	5544	0.09%	0.023%
140	14.500	14.408	14.551	PV	1153	40923	0.67%	0.171%
141	14.570	14.551	14.598	VV	422	8967	0.15%	0.038%

					rteres			
142	14.627	14.598	14.651	VV	629	11579	0.19%	0.048%
143	14.685	14.651	14.711	VV	534	11940	0.20%	0.050%
144	14.749	14.711	14.768	VV	208	6859	0.11%	0.029%
145	14.795	14.768	14.814	VV	244	5853	0.10%	0.025%
146	14.915	14.814	14.973	VV	283	15862	0.26%	0.066%
147	15.021	14.973	15.041	PV	261	7054	0.12%	0.030%
148	15.164	15.041	15.192	VV	1169	46696	0.77%	0.195%
149	15.212	15.192	15.284	VV	570	17100	0.28%	0.072%
150	15.306	15.284	15.344	VV	186	5293	0.09%	0.022%
151	15.368	15.344	15.389	VV	230	4115	0.07%	0.017%
152	15.482	15.389	15.516	PV	197	9101	0.15%	0.038%
153	15.563	15.516	15.663	PV	6555	216971	3.56%	0.908%
154	15.693	15.663	15.726	VV	1513	38317	0.63%	0.160%
155	15.756	15.726	15.804	VV	1707	38313	0.63%	0.160%
156	15.819	15.804	15.848	VV	533	8915	0.15%	0.037%
157	15.949	15.848	15.971	VV	337	15964	0.26%	0.067%
158	16.108	15.971	16.113	VV	413	23288	0.38%	0.097%
159	16.193	16.113	16.220	VV	1053	29910	0.49%	0.125%
160	16.255	16.220	16.304	VV	553	16265	0.27%	0.068%
161	16.326	16.304	16.344	VV	191	3842	0.06%	0.016%
162	16.377	16.344	16.413	PV	394	9244	0.15%	0.039%
163	16.515	16.413	16.534	VV	334	12451	0.20%	0.052%
164	16.584	16.534	16.624	VV	1271	38775	0.64%	0.162%
165	16.678	16.624	16.731	VV	2401	55201	0.91%	0.231%
166	16.752	16.731	16.787	VV	947	17959	0.29%	0.075%
167	16.814	16.787	16.859	VV	312	8336	0.14%	0.035%
168	16.882	16.859	16.898	VV	197	2735	0.04%	0.011%
169	17.004	16.898	17.038	VV	492	9649	0.16%	0.040%
170	17.066	17.038	17.091	PV	415	6951	0.11%	0.029%
171	17.147	17.091	17.175	VV	1368	33237	0.55%	0.139%
172	17.191	17.175	17.206	VV	779	11341	0.19%	0.047%
173	17.224	17.206	17.254	VV	816	11909	0.20%	0.050%
174	17.380	17.254	17.401	PV	502	12790	0.21%	0.054%
175	17.462	17.401	17.494	PV	478	12469	0.20%	0.052%
176	17.595	17.494	17.645	VV	3667	89960	1.48%	0.377%
177	17.702	17.645	17.737	VV	684	17511	0.29%	0.073%
178	17.764	17.737	17.784	VV	505	5639	0.09%	0.024%
179	18.034	17.784	18.094	PV	3144	74805	1.23%	0.313%
180	18.171	18.094	18.241	VV	1992	78814	1.29%	0.330%
181	18.262	18.241	18.298	VV	769	13559	0.22%	0.057%
182	18.353	18.298	18.374	PV	1983	33543	0.55%	0.140%
183	18.456	18.374	18.495	VV	5086	161831	2.65%	0.677%
184	18.540	18.495	18.591	VV	1894	60475	0.99%	0.253%
185	18.698	18.591	18.721	VV	704	33239	0.55%	0.139%
186	18.768	18.721	18.791	VV	233	11361	0.19%	0.048%
187	18.865	18.791	18.901	PV	2713	59850	0.98%	0.251%
188	18.966	18.901	18.994	PV	1590	38630	0.63%	0.162%
189	19.013	18.994	19.079	VV	1130	26514	0.43%	0.111%
190	19.142	19.079	19.162	PV	638	15228	0.25%	0.064%
191	19.267	19.162	19.318	VV	3856	164396	2.70%	0.688%
192	19.387	19.318	19.413	VV	1640	82892	1.36%	0.347%
193	19.505	19.413	19.541	VV	2253	107866	1.77%	0.452%
194	19.566	19.541	19.588	VV	1601	40363	0.66%	0.169%

					rteres			
195	19.656	19.588	19.698	VV	2791	122046	2.00%	0.511%
196	19.769	19.698	19.791	VV	2666	117039	1.92%	0.490%
197	20.000	19.791	20.048	VV	5879	481390	7.89%	2.015%
198	20.069	20.048	20.094	VV	4104	105283	1.73%	0.441%
199	20.396	20.094	20.433	VV	8797	1140893	18.71%	4.776%
200	20.458	20.433	20.474	VV	7940	188443	3.09%	0.789%
201	20.918	20.474	20.934	VV	10529	2661990	43.65%	11.143%
202	20.971	20.934	21.037	VV	10153	605934	9.94%	2.536%
203	21.132	21.037	21.291	VV	9738	1351549	22.16%	5.657%
204	21.395	21.291	21.468	VV	7532	786340	12.89%	3.292%
205	21.551	21.468	21.611	VV	6879	562538	9.22%	2.355%
206	21.831	21.611	21.858	VV	5361	826843	13.56%	3.461%
207	21.877	21.858	21.991	VV	5072	334102	5.48%	1.399%
208	22.029	21.991	22.078	VV	3289	156184	2.56%	0.654%
209	22.095	22.078	22.118	VV	2369	55924	0.92%	0.234%
210	22.172	22.118	22.284	VV	1993	152554	2.50%	0.639%
211	22.297	22.284	22.338	VV	663	14597	0.24%	0.061%
Sum of corrected areas:						23889991		

Aliphatic EPH 041725.M Tue May 06 04:44:14 2025



CALIBRATION SUMMARY

Initial Calibration Report for SequenceID : FC040925AL

AreaCount

Parameter Range	FC068515.D	FC068516.D	FC068517.D	FC068518.D	FC068519.D	
Aliphatic C9-C12	28917690.000	15222657.000	6286032.000	3422392.000	1645296.000	
Aliphatic C12-C16	18431489.000	9897338.000	4088590.000	2253140.000	1056103.000	
Aliphatic C16-C21	26693561.000	14380121.000	5937795.000	3290227.000	1508988.000	
Aliphatic C21-C28	34681529.000	18246305.000	7529133.000	4137443.000	1908822.000	
Aliphatic C28-C40	51686216.000	25852842.000	10689091.000	5728785.000	2776165.000	
Aliphatic EPH	160410485.000	83599263.000	34530641.000	18831987.000	8895374.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aliphatic C9-C12	105282.0026666	6.555				
Aliphatic C12-C16	102322.575	7.446				
Aliphatic C16-C21	98816.5386664	7.616				
Aliphatic C21-C28	94185.337	6.542				
Aliphatic C28-C40	89882.8349998	4.545				
Aliphatic EPH	96276.6184442	6.125				

Concentration

Parameter Range	FC068515.D	FC068516.D	FC068517.D	FC068518.D	FC068519.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	FC068515.D	FC068516.D	FC068517.D	FC068518.D	FC068519.D	
Aliphatic C9-C12	96392.300000	101484.380000	104767.200000	114079.733333	109686.400000	
Aliphatic C12-C16	92157.445000	98973.380000	102214.750000	112657.000000	105610.300000	
Aliphatic C16-C21	88978.536666	95867.473333	98963.250000	109674.233333	100599.200000	

Initial Calibration Report for SequenceID : FC040925AL

Aliphatic C21-C28	86703.822500	91231.525000	94114.162500	103436.075000	95441.100000	
Aliphatic C28-C40	86143.693333	86176.140000	89075.758333	95479.750000	92538.833333	
Aliphatic EPH	89116.936111	92888.070000	95918.447222	104622.150000	98837.488888	

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
 Data File : FC068515.D
 Signal(s) : FID1A.ch
 Acq On : 08 Apr 2025 14:19
 Operator : YP/AJ
 Sample : 100 PPM ALIPHATIC HC STD1
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
 Quant Time: Apr 08 16:11:35 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 08 16:09:32 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)	11.728	11630513	95.399 ug/ml
Spiked Amount 50.000		Recovery =	190.80%
12) S 1-chlorooctadecane (S...	13.158	8442696	95.111 ug/ml
Spiked Amount 50.000		Recovery =	190.22%
Target Compounds			
1) T n-Nonane (C9)	3.453	9676433	96.008 ug/ml
2) T n-Decane (C10)	4.529	9659989	95.940 ug/ml
3) T A~Naphthalene (C11.7)	6.128	10706854	96.012 ug/ml
4) T n-Dodecane (C12)	6.555	9581268	95.561 ug/ml
5) T A~2-methylnaphthalene...	7.187	10590076	95.557 ug/ml
6) T n-Tetradecane (C14)	8.352	9286080	95.024 ug/ml
7) T n-Hexadecane (C16)	9.956	9145409	94.626 ug/ml
8) T n-Octadecane (C18)	11.401	9035245	94.602 ug/ml
10) T n-Eicosane (C20)	12.711	8860913	94.629 ug/ml
11) T n-Heneicosane (C21)	13.324	8797403	94.833 ug/ml
13) T n-Docosane (C22)	13.911	8749331	94.989 ug/ml
14) T n-Tetracosane (C24)	15.015	8697977	95.532 ug/ml
15) T n-Hexacosane (C26)	16.037	8653533	96.207 ug/ml
16) T n-Octacosane (C28)	16.989	8580688	96.922 ug/ml
17) T n-Tricontane (C30)	17.879	8693384	97.557 ug/ml
18) T n-Dotriacontane (C32)	18.714	8726742	98.108 ug/ml
19) T n-Tetratriacontane (C34)	19.499	8562598	98.394 ug/ml
20) T n-Hexatriacontane (C36)	20.240	8639575	98.692 ug/ml
21) T n-Octatriacontane (C38)	21.019	8521663	98.543 ug/ml
22) T n-Tetracontane (C40)	22.004	8542254	98.690 ug/ml

(f)=RT Delta > 1/2 Window

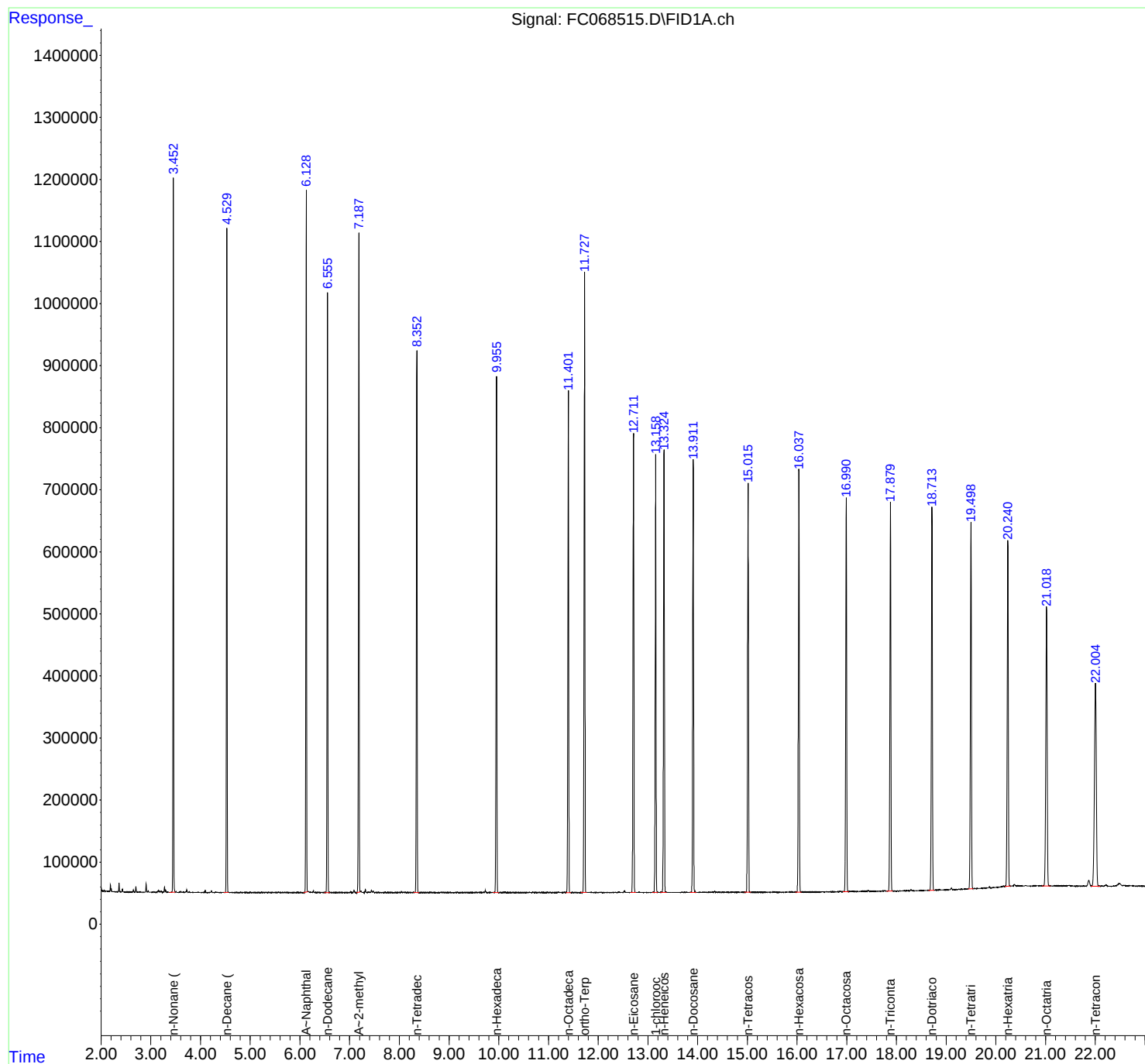
(m)=manual int.

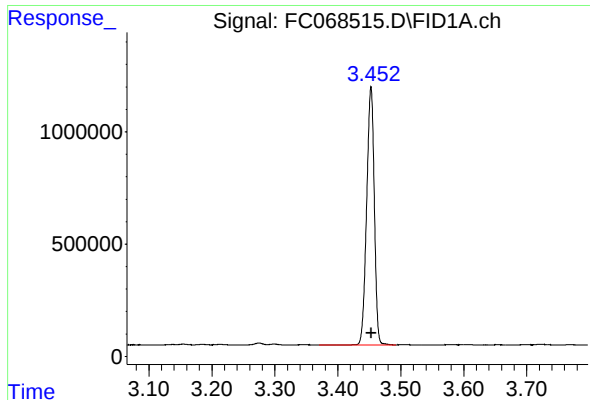
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
Data File : FC068515.D
Signal(s) : FID1A.ch
Acq On : 08 Apr 2025 14:19
Operator : YP/AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Apr 08 16:11:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Quant Title : GC Extractables
QLast Update : Tue Apr 08 16:09:32 2025
Response via : Initial Calibration
Integrator: ChemStation

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

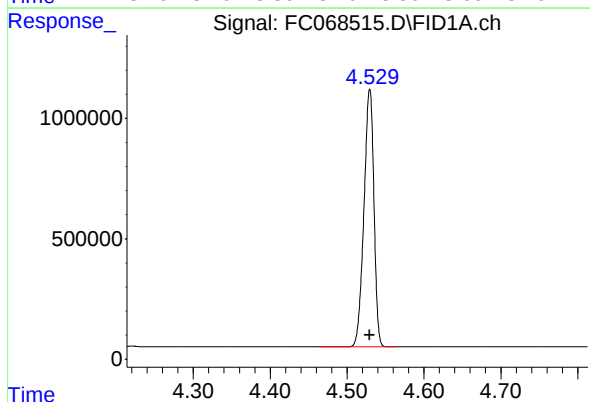




#1 n-Nonane (C9)

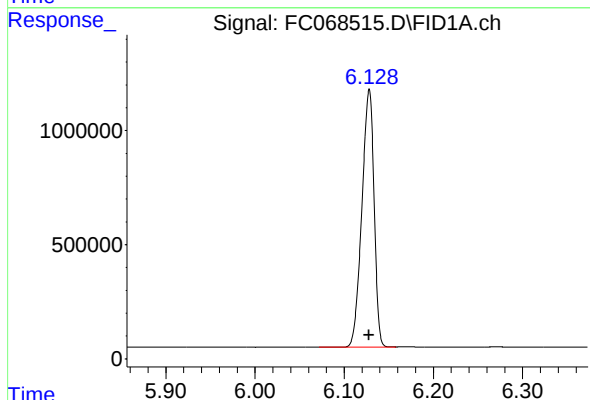
R.T.: 3.453 min
Delta R.T.: 0.000 min
Response: 9676433
Conc: 96.01 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



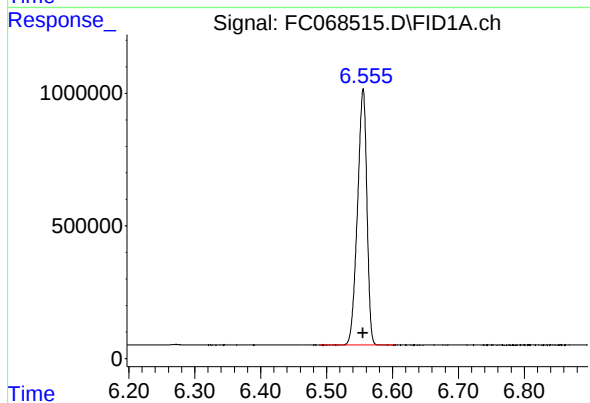
#2 n-Decane (C10)

R.T.: 4.529 min
Delta R.T.: 0.000 min
Response: 9659989
Conc: 95.94 ug/ml



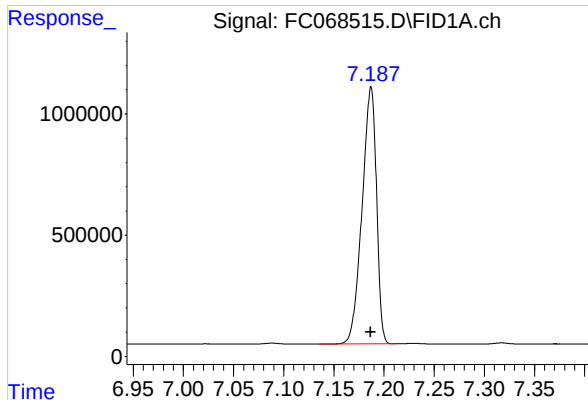
#3 A~Naphthalene (C11.7)

R.T.: 6.128 min
Delta R.T.: 0.000 min
Response: 10706854
Conc: 96.01 ug/ml



#4 n-Dodecane (C12)

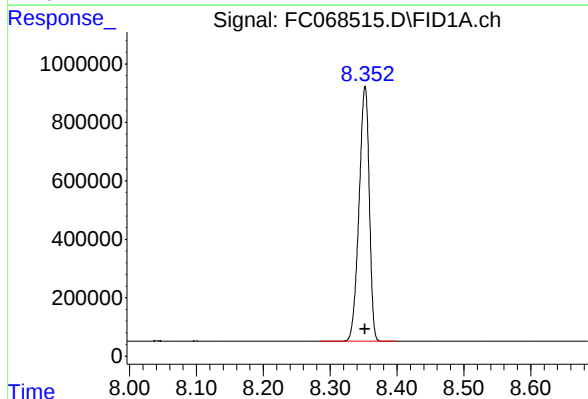
R.T.: 6.555 min
Delta R.T.: 0.000 min
Response: 9581268
Conc: 95.56 ug/ml



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

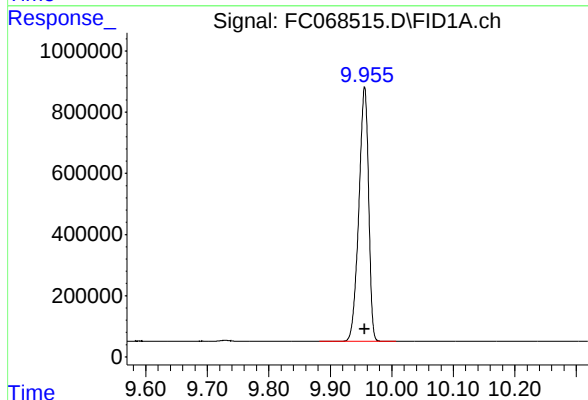
R.T.: 7.187 min
Delta R.T.: 0.000 min
Response: 10590076
Conc: 95.56 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



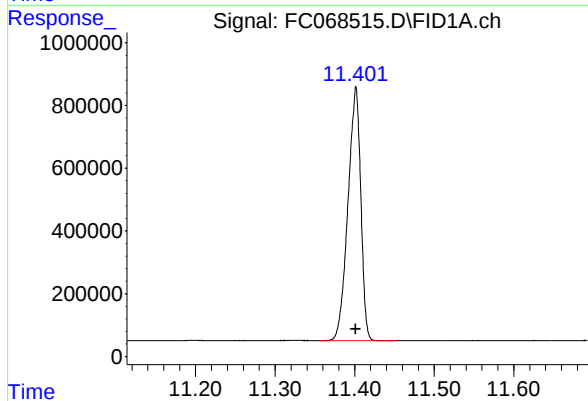
#6 n-Tetradecane (C14)

R.T.: 8.352 min
Delta R.T.: 0.000 min
Response: 9286080
Conc: 95.02 ug/ml



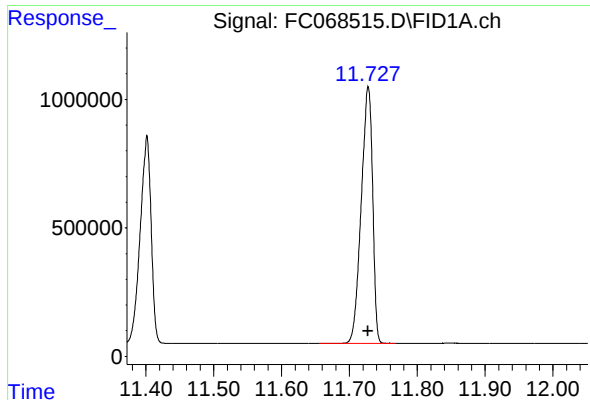
#7 n-Hexadecane (C16)

R.T.: 9.956 min
Delta R.T.: 0.000 min
Response: 9145409
Conc: 94.63 ug/ml



#8 n-Octadecane (C18)

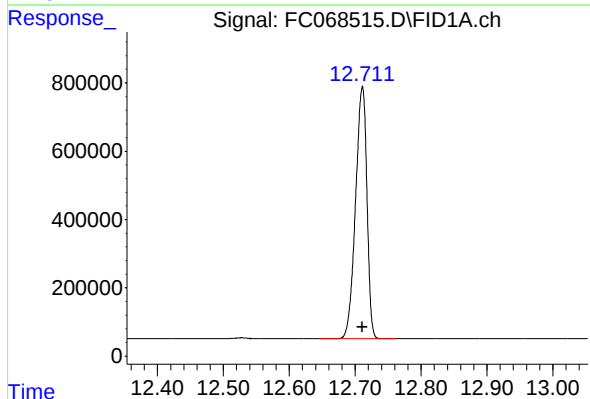
R.T.: 11.401 min
Delta R.T.: 0.000 min
Response: 9035245
Conc: 94.60 ug/ml



#9 ortho-Terphenyl (SURR)

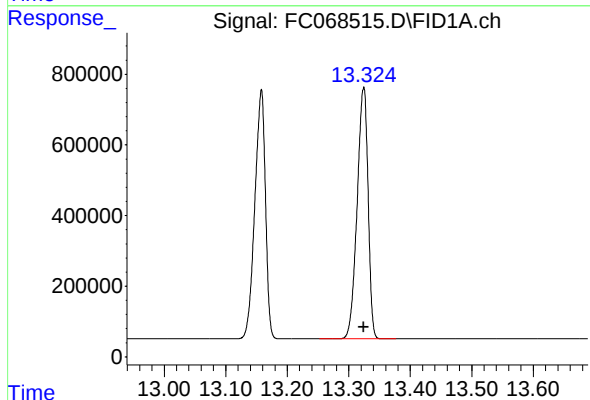
R.T.: 11.728 min
Delta R.T.: 0.000 min
Response: 11630513
Conc: 95.40 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



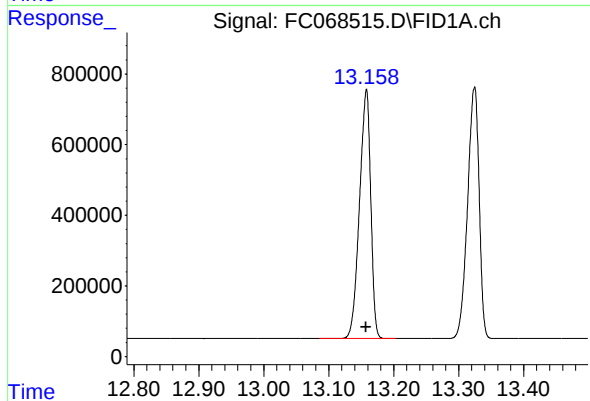
#10 n-Eicosane (C20)

R.T.: 12.711 min
Delta R.T.: 0.000 min
Response: 8860913
Conc: 94.63 ug/ml



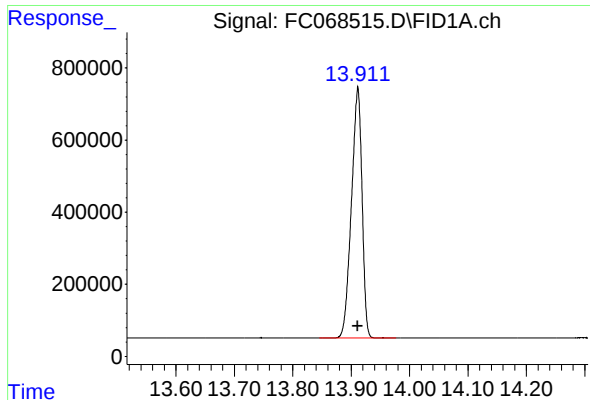
#11 n-Heneicosane (C21)

R.T.: 13.324 min
Delta R.T.: 0.000 min
Response: 8797403
Conc: 94.83 ug/ml



#12 1-chlorooctadecane (SURR)

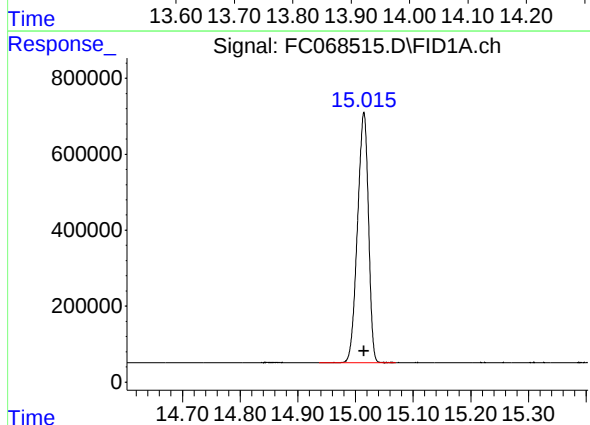
R.T.: 13.158 min
Delta R.T.: 0.000 min
Response: 8442696
Conc: 95.11 ug/ml



#13 n-Docosane (C22)

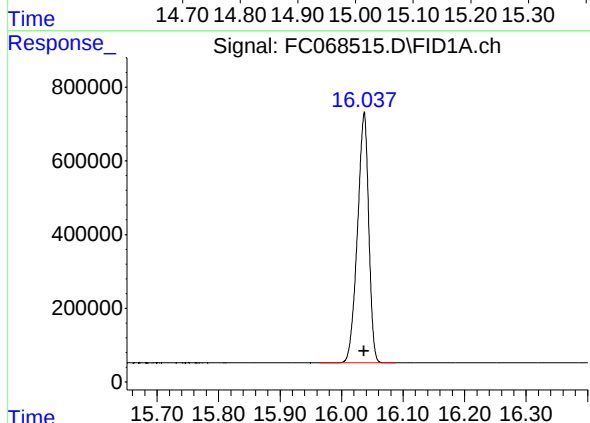
R.T.: 13.911 min
Delta R.T.: 0.000 min
Response: 8749331
Conc: 94.99 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



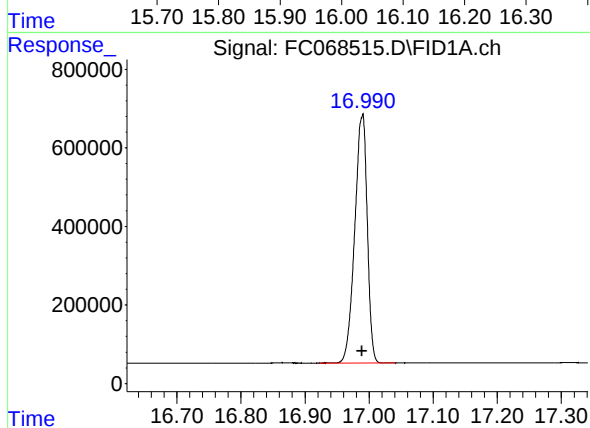
#14 n-Tetracosane (C24)

R.T.: 15.015 min
Delta R.T.: 0.000 min
Response: 8697977
Conc: 95.53 ug/ml



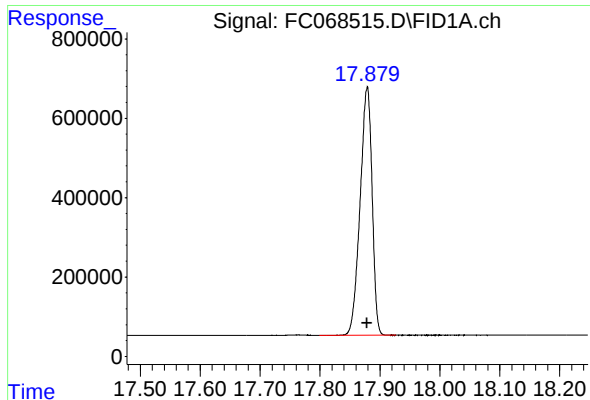
#15 n-Hexacosane (C26)

R.T.: 16.037 min
Delta R.T.: 0.000 min
Response: 8653533
Conc: 96.21 ug/ml



#16 n-Octacosane (C28)

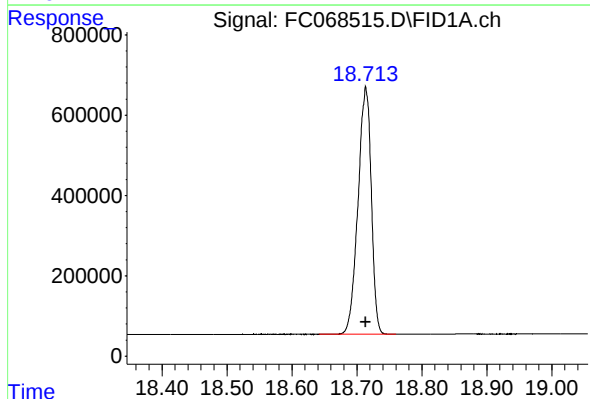
R.T.: 16.989 min
Delta R.T.: 0.000 min
Response: 8580688
Conc: 96.92 ug/ml



#17 n-Tricontane (C30)

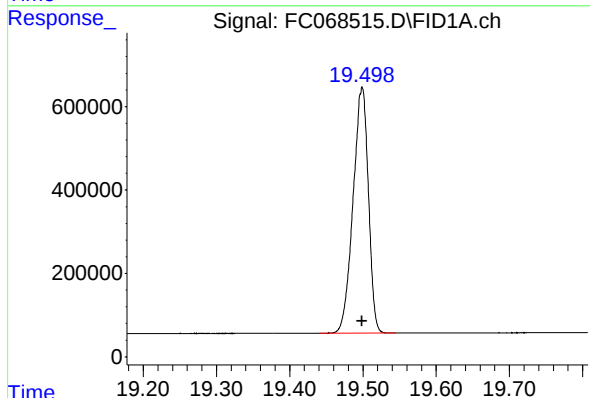
R.T.: 17.879 min
Delta R.T.: 0.000 min
Response: 8693384
Conc: 97.56 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



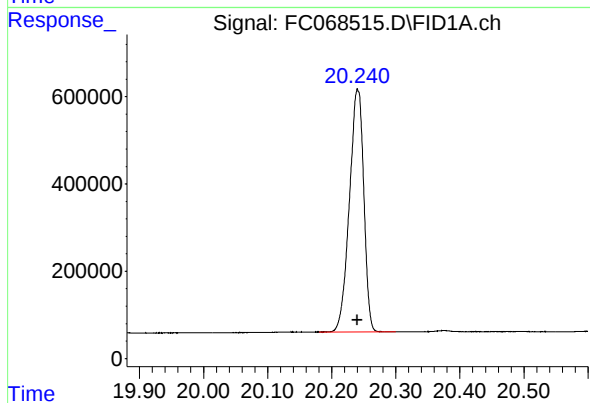
#18 n-Dotriacontane (C32)

R.T.: 18.714 min
Delta R.T.: 0.000 min
Response: 8726742
Conc: 98.11 ug/ml



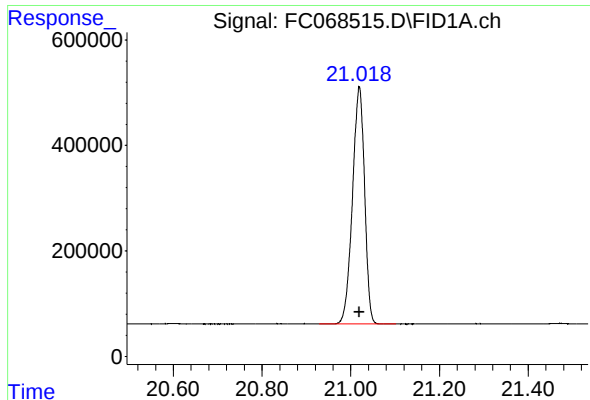
#19 n-Tetratriacontane (C34)

R.T.: 19.499 min
Delta R.T.: 0.000 min
Response: 8562598
Conc: 98.39 ug/ml



#20 n-Hexatriacontane (C36)

R.T.: 20.240 min
Delta R.T.: 0.000 min
Response: 8639575
Conc: 98.69 ug/ml



#21 n-Octatriacontane (C38)

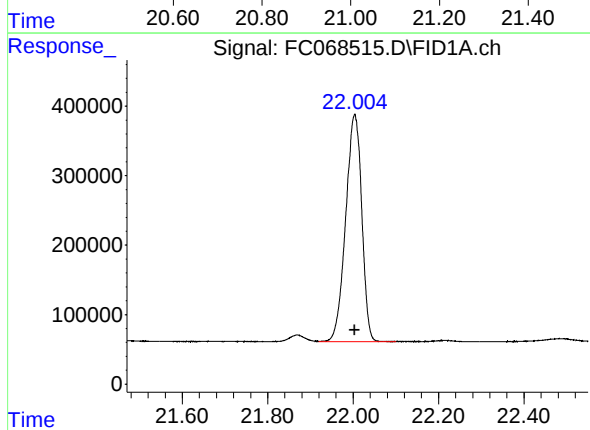
R.T.: 21.019 min
Delta R.T.: 0.000 min
Response: 8521663
Conc: 98.54 ug/ml

Instrument :

FID_C

ClientSampleId :

100 PPM ALIPHATIC HC STD1



#22 n-Tetracontane (C40)

R.T.: 22.004 min
Delta R.T.: 0.000 min
Response: 8542254
Conc: 98.69 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
Data File : FC068515.D
Signal(s) : FID1A.ch
Acq On : 08 Apr 2025 14:19
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.453	3.370	3.492	BV	1145582	9676433	83.20%	4.796%
2	4.529	4.463	4.563	BB	1078376	9659989	83.06%	4.787%
3	6.128	6.072	6.158	BV	1138205	10706854	92.06%	5.306%
4	6.555	6.488	6.605	BB	967686	9581268	82.38%	4.748%
5	7.187	7.135	7.212	BV	1064531	10590076	91.05%	5.248%
6	8.352	8.283	8.398	BB	872245	9286080	79.84%	4.602%
7	9.956	9.882	10.007	BB	832904	9145409	78.63%	4.532%
8	11.401	11.355	11.452	BB	815335	9035245	77.69%	4.478%
9	11.728	11.655	11.768	BB	999215	11630513	100.00%	5.764%
10	12.711	12.645	12.762	BB	736232	8860913	76.19%	4.391%
11	13.158	13.085	13.203	BB	702214	8442696	72.59%	4.184%
12	13.324	13.252	13.377	BB	710181	8797403	75.64%	4.360%
13	13.911	13.845	13.977	BB	699886	8749331	75.23%	4.336%
14	15.015	14.937	15.070	BB	660889	8697977	74.79%	4.311%
15	16.037	15.990	16.088	BB	681330	8649133	74.37%	4.286%
16	16.989	16.922	17.042	BB	627588	8580688	73.78%	4.253%
17	17.879	17.798	17.927	BB	624317	8693384	74.75%	4.308%
18	18.714	18.642	18.760	BB	617422	8726742	75.03%	4.325%
19	19.499	19.440	19.545	BB	589437	8562598	73.62%	4.244%
20	20.240	20.180	20.300	BB	556281	8639575	74.28%	4.282%
21	21.019	20.928	21.102	BB	451075	8521663	73.27%	4.223%
22	22.004	21.920	22.100	VB	327316	8542254	73.45%	4.234%

Sum of corrected areas: 201776225

Aliphatic EPH 040925.M Wed Apr 09 02:01:57 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
 Data File : FC068516.D
 Signal(s) : FID1A.ch
 Acq On : 08 Apr 2025 14:56
 Operator : YP/AJ
 Sample : 50 PPM ALIPHATIC HC STD2
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
 Quant Time: Apr 08 16:13:04 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 08 16:09:32 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)	11.725	6161100	50.356 ug/ml
Spiked Amount 50.000		Recovery =	100.71%
12) S 1-chlorooctadecane (S...	13.157	4514187	50.566 ug/ml
Spiked Amount 50.000		Recovery =	101.13%
Target Compounds			
1) T n-Nonane (C9)	3.450	5067341	50.185 ug/ml
2) T n-Decane (C10)	4.527	5076375	50.277 ug/ml
3) T A~Naphthalene (C11.7)	6.125	5619945	50.263 ug/ml
4) T n-Dodecane (C12)	6.553	5078941	50.435 ug/ml
5) T A~2-methylnaphthalene...	7.185	5572356	50.187 ug/ml
6) T n-Tetradecane (C14)	8.351	4969100	50.562 ug/ml
7) T n-Hexadecane (C16)	9.955	4928238	50.657 ug/ml
8) T n-Octadecane (C18)	11.400	4878449	50.714 ug/ml
10) T n-Eicosane (C20)	12.711	4775746	50.664 ug/ml
11) T n-Heneicosane (C21)	13.324	4725926	50.625 ug/ml
13) T n-Docosane (C22)	13.910	4681649	50.548 ug/ml
14) T n-Tetracosane (C24)	15.015	4612534	50.438 ug/ml
15) T n-Hexacosane (C26)	16.037	4527712	50.224 ug/ml
16) T n-Octacosane (C28)	16.988	4424410	49.984 ug/ml
17) T n-Tricontane (C30)	17.878	4424204	49.765 ug/ml
18) T n-Dotriacontane (C32)	18.712	4393250	49.592 ug/ml
19) T n-Tetratriacontane (C34)	19.496	4277762	49.434 ug/ml
20) T n-Hexatriacontane (C36)	20.237	4294870	49.370 ug/ml
21) T n-Octatriacontane (C38)	21.016	4234644	49.308 ug/ml
22) T n-Tetracontane (C40)	22.000	4228112	49.226 ug/ml

(f)=RT Delta > 1/2 Window

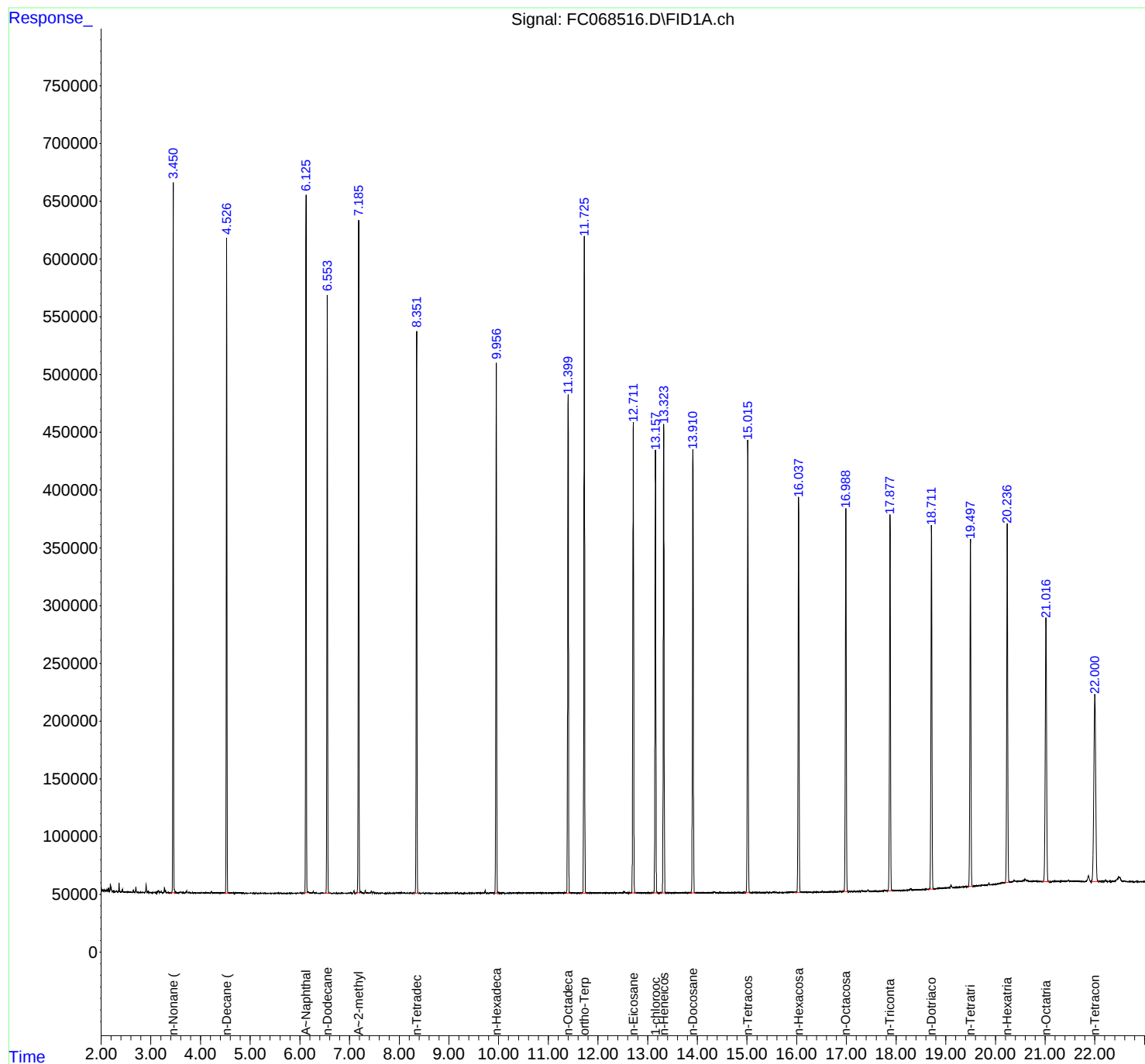
(m)=manual int.

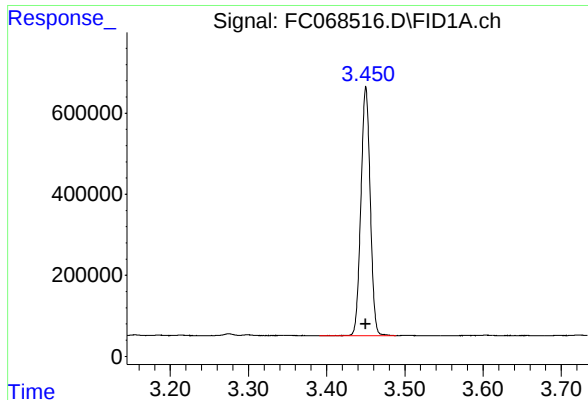
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
Data File : FC068516.D
Signal(s) : FID1A.ch
Acq On : 08 Apr 2025 14:56
Operator : YP/AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Apr 08 16:13:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Quant Title : GC Extractables
QLast Update : Tue Apr 08 16:09:32 2025
Response via : Initial Calibration
Integrator: ChemStation

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

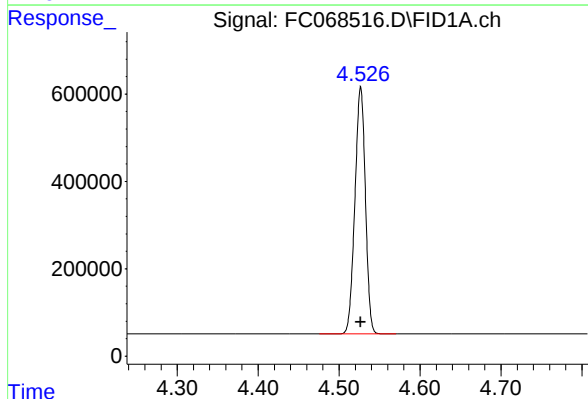




#1 n-Nonane (C9)

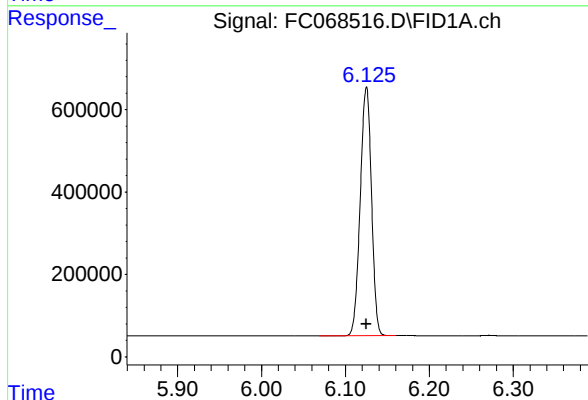
R.T.: 3.450 min
Delta R.T.: 0.000 min
Response: 5067341
Conc: 50.18 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



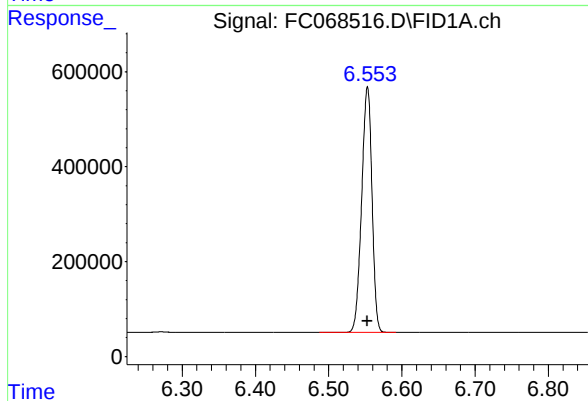
#2 n-Decane (C10)

R.T.: 4.527 min
Delta R.T.: 0.000 min
Response: 5076375
Conc: 50.28 ug/ml



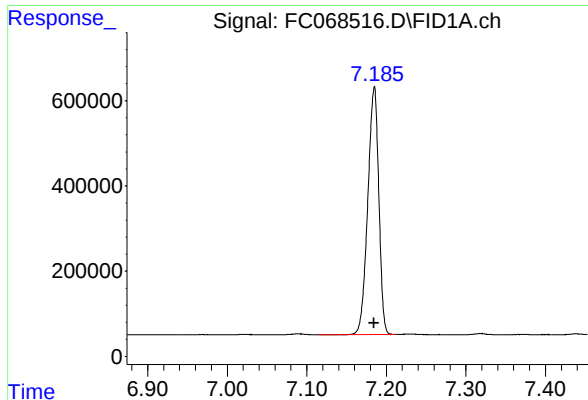
#3 A~Naphthalene (C11.7)

R.T.: 6.125 min
Delta R.T.: 0.000 min
Response: 5619945
Conc: 50.26 ug/ml



#4 n-Dodecane (C12)

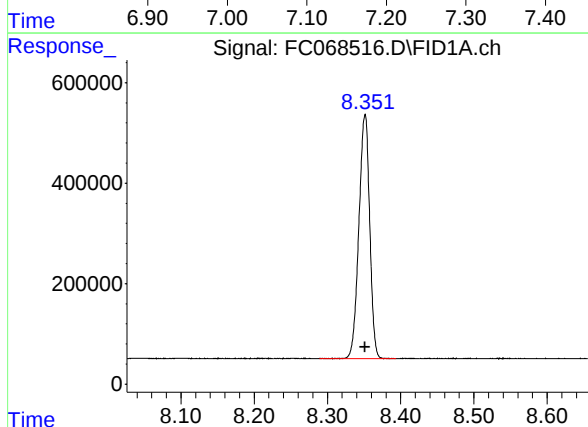
R.T.: 6.553 min
Delta R.T.: 0.000 min
Response: 5078941
Conc: 50.44 ug/ml



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

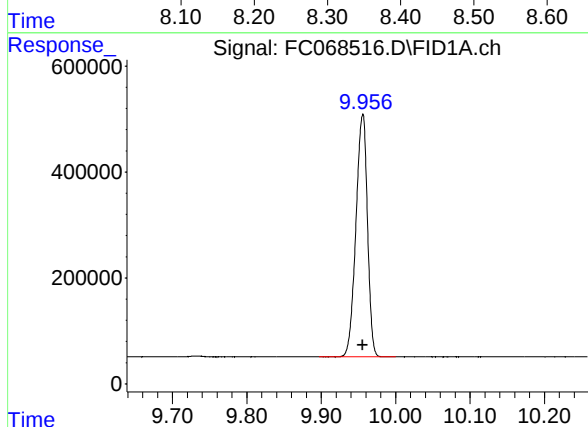
R.T.: 7.185 min
Delta R.T.: 0.000 min
Response: 5572356
Conc: 50.19 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



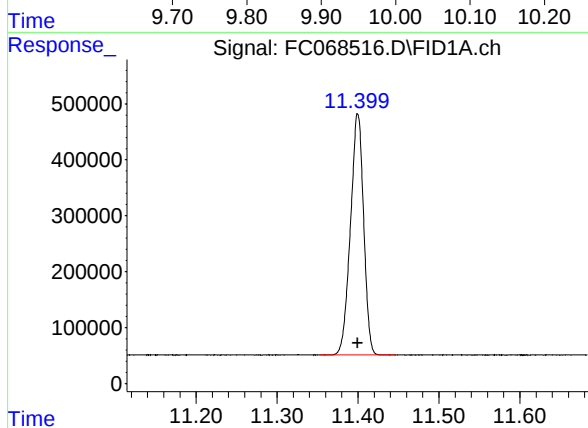
#6 n-Tetradecane (C14)

R.T.: 8.351 min
Delta R.T.: 0.000 min
Response: 4969100
Conc: 50.56 ug/ml



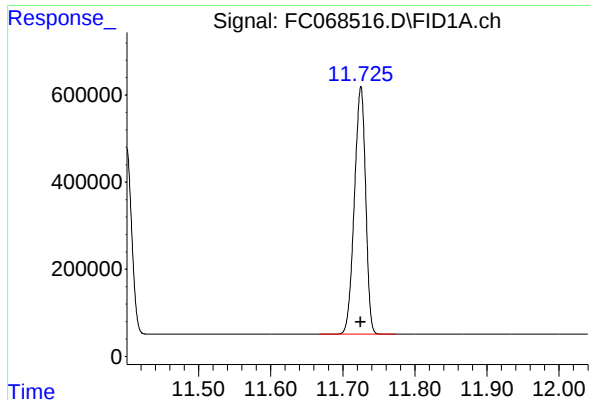
#7 n-Hexadecane (C16)

R.T.: 9.955 min
Delta R.T.: 0.000 min
Response: 4928238
Conc: 50.66 ug/ml



#8 n-Octadecane (C18)

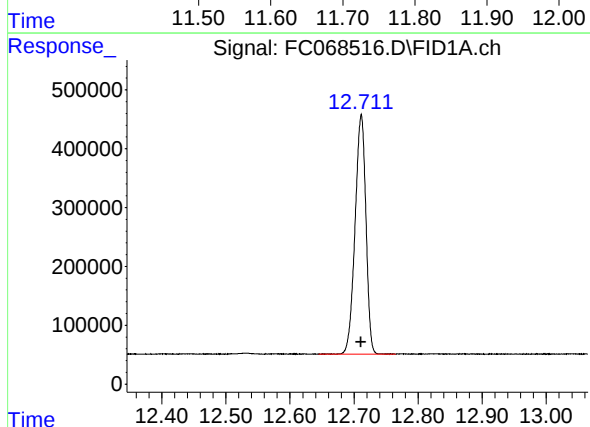
R.T.: 11.400 min
Delta R.T.: 0.000 min
Response: 4878449
Conc: 50.71 ug/ml



#9 ortho-Terphenyl (SURR)

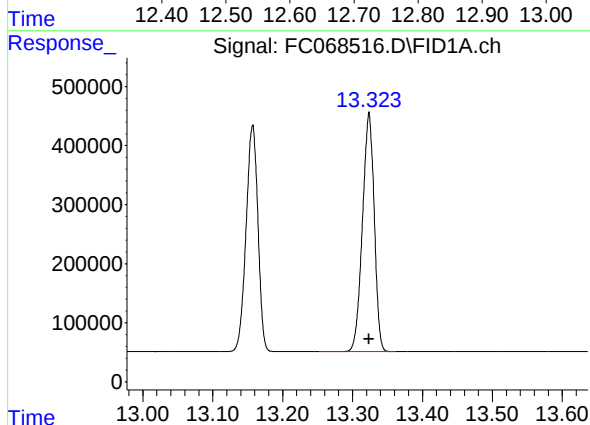
R.T.: 11.725 min
Delta R.T.: 0.000 min
Response: 6161100
Conc: 50.36 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



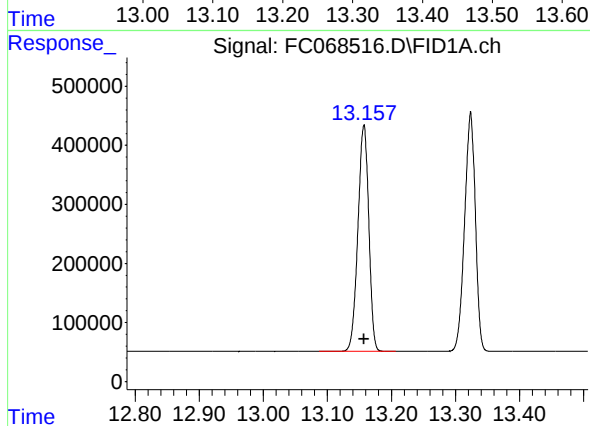
#10 n-Eicosane (C20)

R.T.: 12.711 min
Delta R.T.: 0.000 min
Response: 4775746
Conc: 50.66 ug/ml



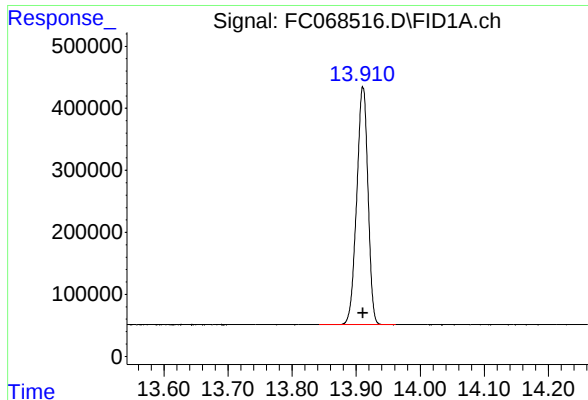
#11 n-Heneicosane (C21)

R.T.: 13.324 min
Delta R.T.: 0.000 min
Response: 4725926
Conc: 50.63 ug/ml



#12 1-chlorooctadecane (SURR)

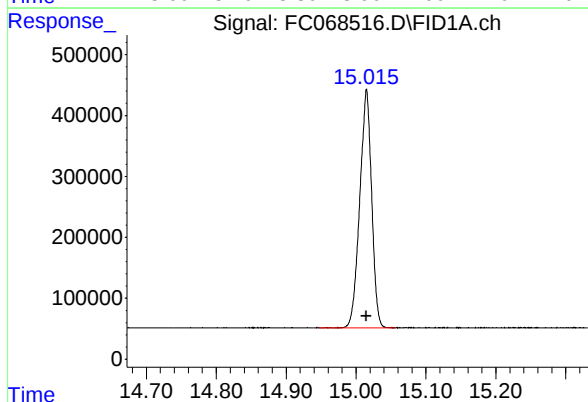
R.T.: 13.157 min
Delta R.T.: 0.000 min
Response: 4514187
Conc: 50.57 ug/ml



#13 n-Docosane (C22)

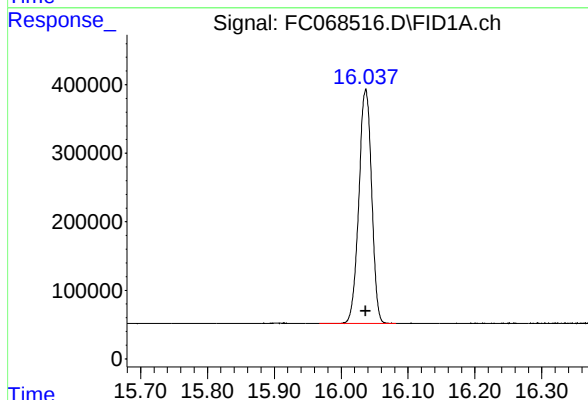
R.T.: 13.910 min
Delta R.T.: 0.000 min
Response: 4681649
Conc: 50.55 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



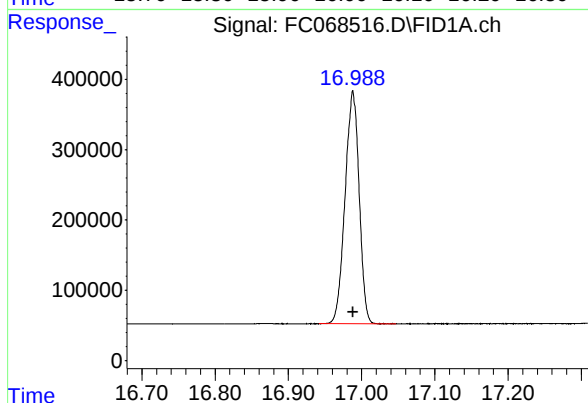
#14 n-Tetracosane (C24)

R.T.: 15.015 min
Delta R.T.: 0.000 min
Response: 4612534
Conc: 50.44 ug/ml



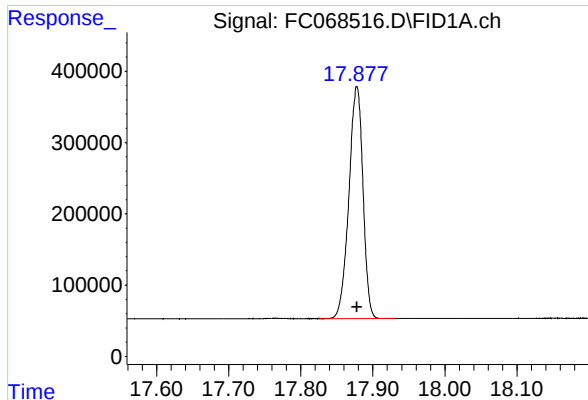
#15 n-Hexacosane (C26)

R.T.: 16.037 min
Delta R.T.: 0.000 min
Response: 4527712
Conc: 50.22 ug/ml



#16 n-Octacosane (C28)

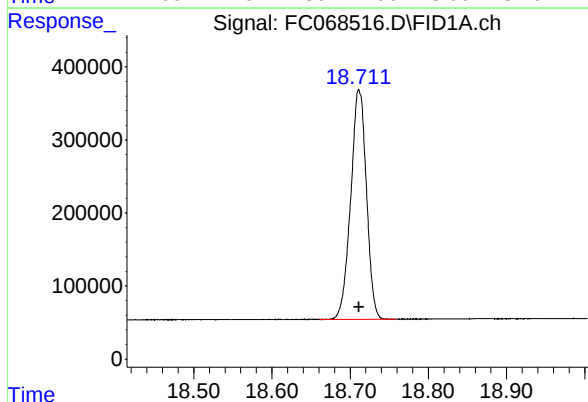
R.T.: 16.988 min
Delta R.T.: 0.000 min
Response: 4424410
Conc: 49.98 ug/ml



#17 n-Tricontane (C30)

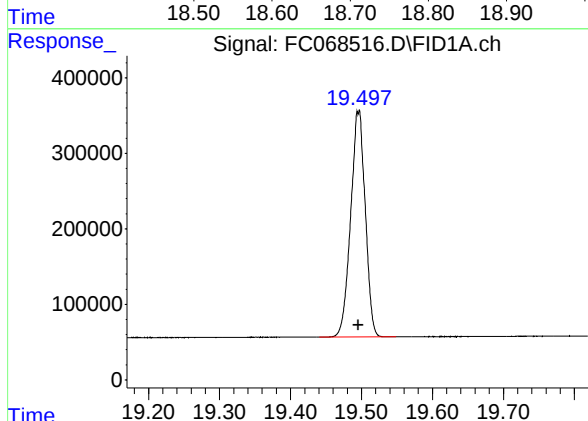
R.T.: 17.878 min
Delta R.T.: 0.000 min
Response: 4424204
Conc: 49.77 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



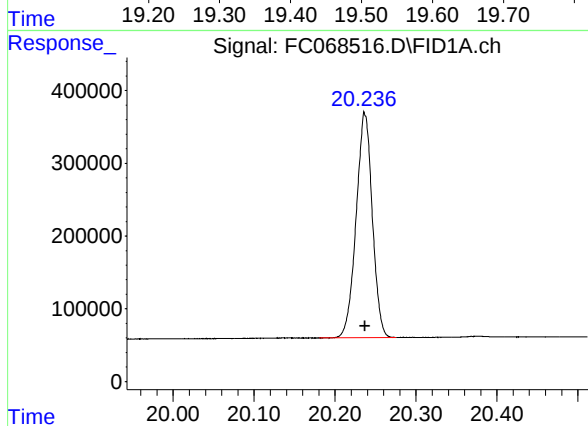
#18 n-Dotriacontane (C32)

R.T.: 18.712 min
Delta R.T.: 0.000 min
Response: 4393250
Conc: 49.59 ug/ml



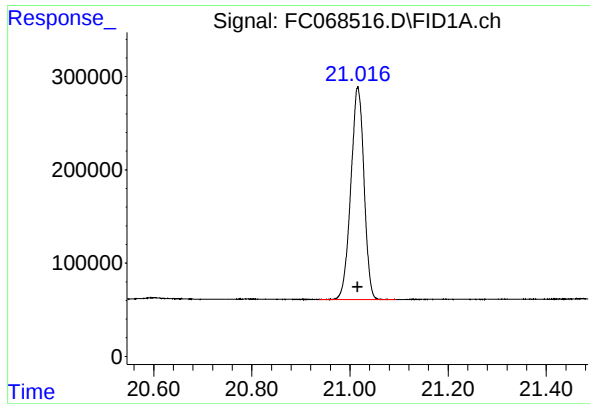
#19 n-Tetratriacontane (C34)

R.T.: 19.496 min
Delta R.T.: 0.000 min
Response: 4277762
Conc: 49.43 ug/ml



#20 n-Hexatriacontane (C36)

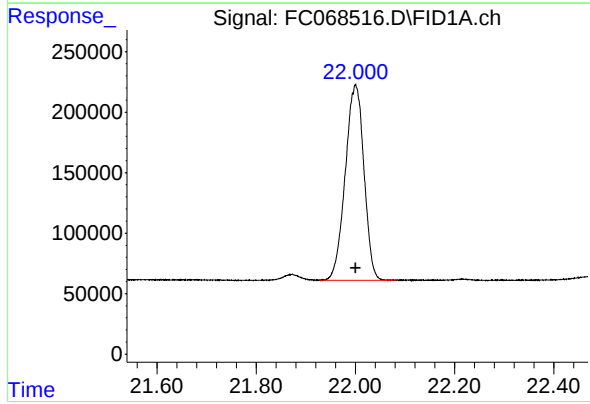
R.T.: 20.237 min
Delta R.T.: 0.000 min
Response: 4294870
Conc: 49.37 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.016 min
Delta R.T.: 0.000 min
Response: 4234644
Conc: 49.31 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



#22 n-Tetracontane (C40)

R.T.: 22.000 min
Delta R.T.: 0.000 min
Response: 4228112
Conc: 49.23 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
Data File : FC068516.D
Signal(s) : FID1A.ch
Acq On : 08 Apr 2025 14:56
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.450	3.390	3.489	BV	614195	5067341	82.25%	4.805%
2	4.527	4.475	4.570	BB	566581	5076375	82.39%	4.813%
3	6.125	6.069	6.160	BV	605260	5619945	91.22%	5.329%
4	6.553	6.487	6.592	BB	518970	5078941	82.44%	4.816%
5	7.185	7.115	7.212	BV	587046	5572356	90.44%	5.284%
6	8.351	8.289	8.394	BB	488782	4969100	80.65%	4.712%
7	9.955	9.897	10.000	BB	457482	4928238	79.99%	4.673%
8	11.400	11.352	11.447	BB	430140	4878449	79.18%	4.626%
9	11.725	11.667	11.774	BB	570322	6161100	100.00%	5.842%
10	12.711	12.645	12.765	BB	404785	4775746	77.51%	4.528%
11	13.157	13.087	13.207	BB	383072	4514187	73.27%	4.280%
12	13.324	13.252	13.362	BB	405122	4725926	76.71%	4.481%
13	13.910	13.842	13.962	BB	383565	4681649	75.99%	4.439%
14	15.015	14.947	15.057	BB	393040	4612534	74.87%	4.373%
15	16.037	15.990	16.082	BB	342528	4526622	73.47%	4.292%
16	16.988	16.942	17.047	BB	330582	4424410	71.81%	4.195%
17	17.878	17.825	17.932	BB	326941	4424204	71.81%	4.195%
18	18.712	18.660	18.759	BB	312516	4393250	71.31%	4.166%
19	19.496	19.440	19.549	BB	296964	4277762	69.43%	4.056%
20	20.237	20.180	20.275	BB	306583	4294870	69.71%	4.072%
21	21.016	20.937	21.094	BB	228457	4234644	68.73%	4.015%
22	22.000	21.927	22.082	VB	161807	4228112	68.63%	4.009%

Sum of corrected areas: 105465761

Aliphatic EPH 040925.M Wed Apr 09 02:02:27 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
 Data File : FC068517.D
 Signal(s) : FID1A.ch
 Acq On : 08 Apr 2025 15:34
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD3
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
 Quant Time: Apr 08 16:09:48 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 08 16:09:32 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)	11.722	2550464	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
12) S 1-chlorooctadecane (S...	13.154	1862131	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
Target Compounds			
1) T n-Nonane (C9)	3.449	2096221	20.000 ug/ml
2) T n-Decane (C10)	4.526	2095530	20.000 ug/ml
3) T A~Naphthalene (C11.7)	6.124	2319276	20.000 ug/ml
4) T n-Dodecane (C12)	6.551	2094281	20.000 ug/ml
5) T A~2-methylnaphthalene...	7.183	2314991	20.000 ug/ml
6) T n-Tetradecane (C14)	8.350	2051743	20.000 ug/ml
7) T n-Hexadecane (C16)	9.953	2036847	20.000 ug/ml
8) T n-Octadecane (C18)	11.397	2013255	20.000 ug/ml
10) T n-Eicosane (C20)	12.708	1973342	20.000 ug/ml
11) T n-Heneicosane (C21)	13.320	1951198	20.000 ug/ml
13) T n-Docosane (C22)	13.907	1934500	20.000 ug/ml
14) T n-Tetracosane (C24)	15.012	1902333	20.000 ug/ml
15) T n-Hexacosane (C26)	16.034	1867179	20.000 ug/ml
16) T n-Octacosane (C28)	16.985	1825121	20.000 ug/ml
17) T n-Tricontane (C30)	17.874	1825746	20.000 ug/ml
18) T n-Dotriacontane (C32)	18.708	1812670	20.000 ug/ml
19) T n-Tetratriacontane (C34)	19.492	1768427	20.000 ug/ml
20) T n-Hexatriacontane (C36)	20.234	1773721	20.000 ug/ml
21) T n-Octatriacontane (C38)	21.012	1754719	20.000 ug/ml
22) T n-Tetracontane (C40)	21.991	1753808	20.000 ug/ml

(f)=RT Delta > 1/2 Window

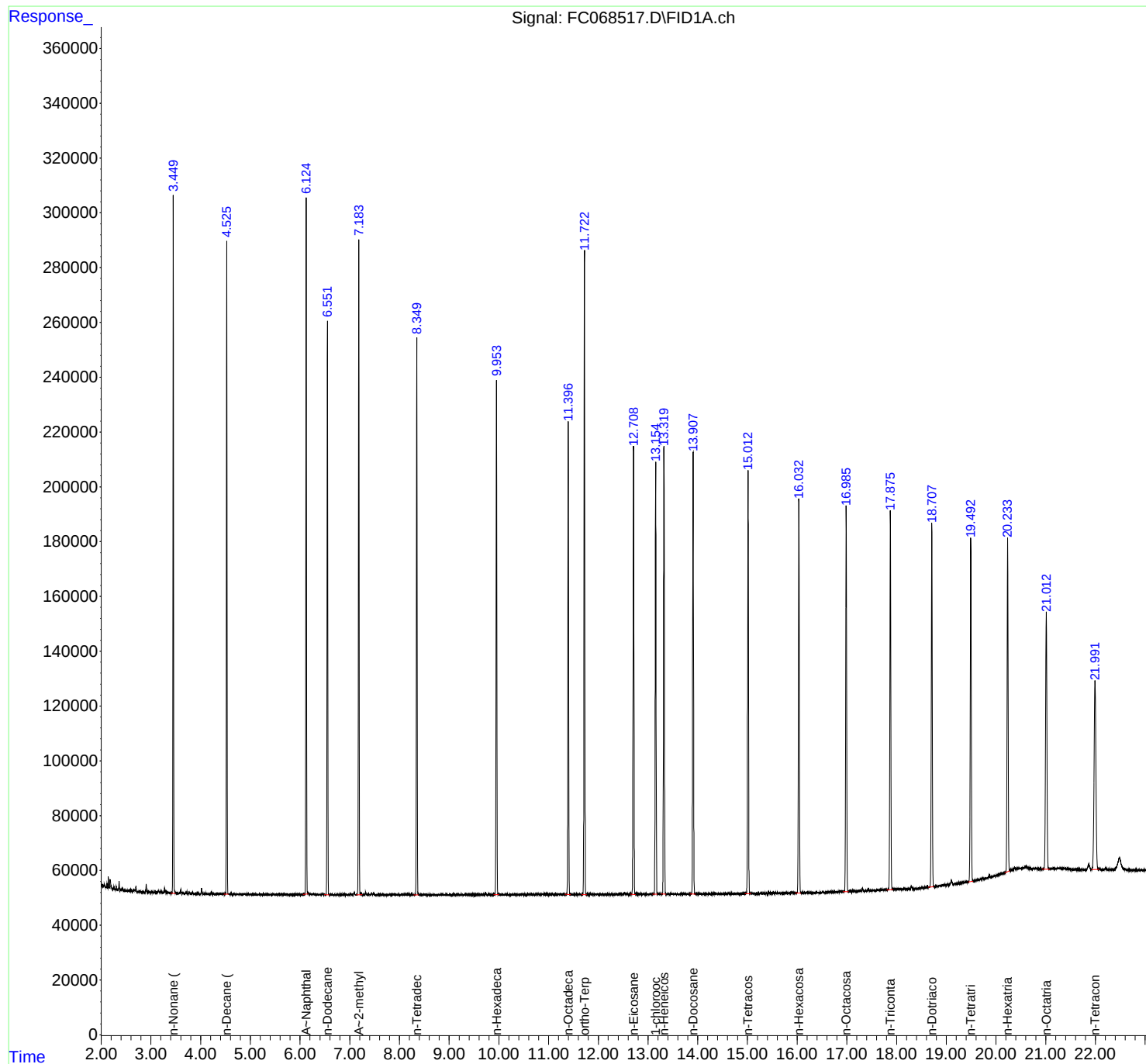
(m)=manual int.

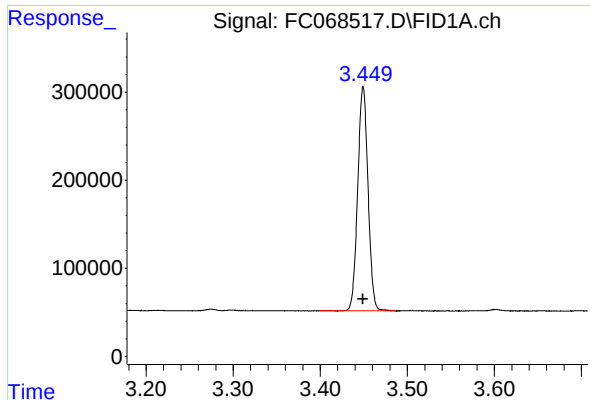
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
Data File : FC068517.D
Signal(s) : FID1A.ch
Acq On : 08 Apr 2025 15:34
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Apr 08 16:09:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Quant Title : GC Extractables
QLast Update : Tue Apr 08 16:09:32 2025
Response via : Initial Calibration
Integrator: ChemStation

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

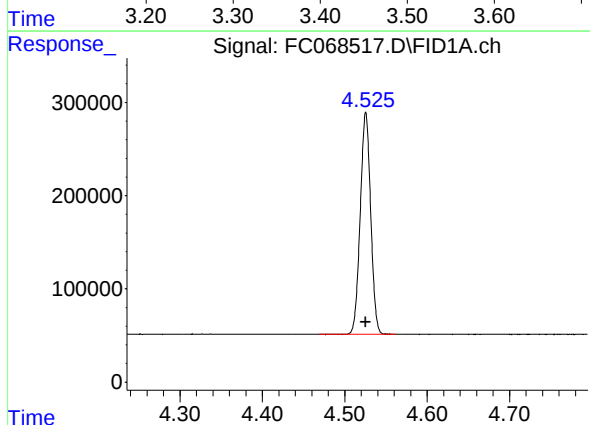




#1 n-Nonane (C9)

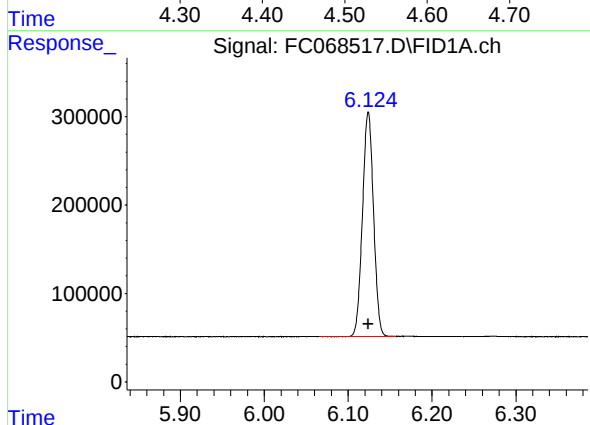
R.T.: 3.449 min
Delta R.T.: 0.000 min
Response: 2096221
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



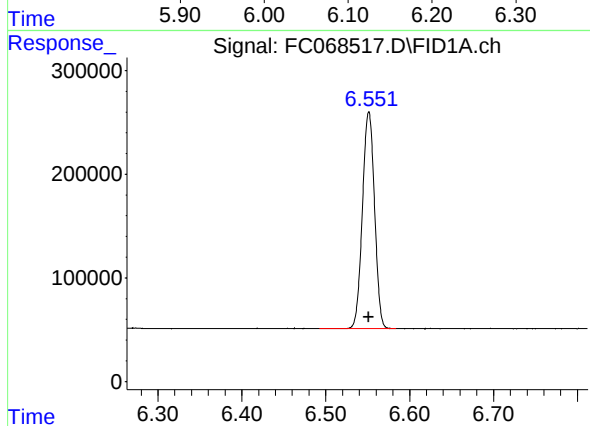
#2 n-Decane (C10)

R.T.: 4.526 min
Delta R.T.: 0.000 min
Response: 2095530
Conc: 20.00 ug/ml



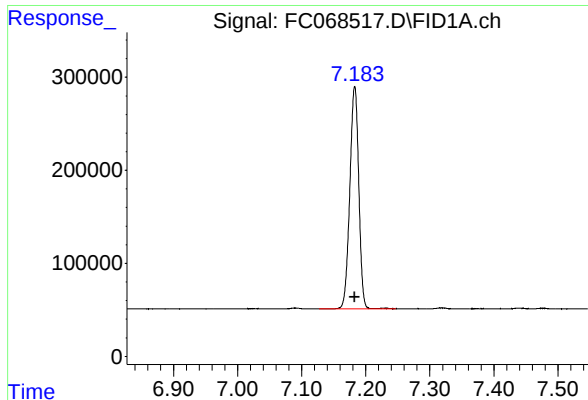
#3 A~Naphthalene (C11.7)

R.T.: 6.124 min
Delta R.T.: 0.000 min
Response: 2319276
Conc: 20.00 ug/ml



#4 n-Dodecane (C12)

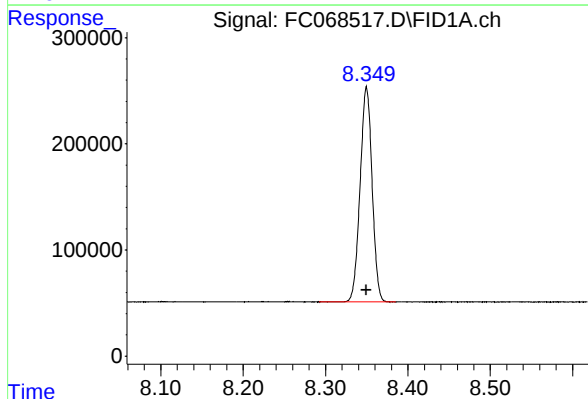
R.T.: 6.551 min
Delta R.T.: 0.000 min
Response: 2094281
Conc: 20.00 ug/ml



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

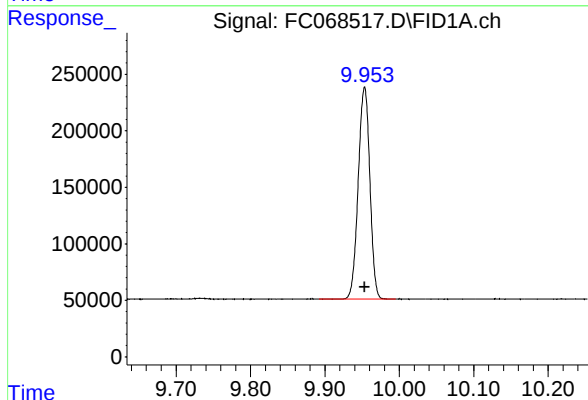
R.T.: 7.183 min
Delta R.T.: 0.000 min
Response: 2314991
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



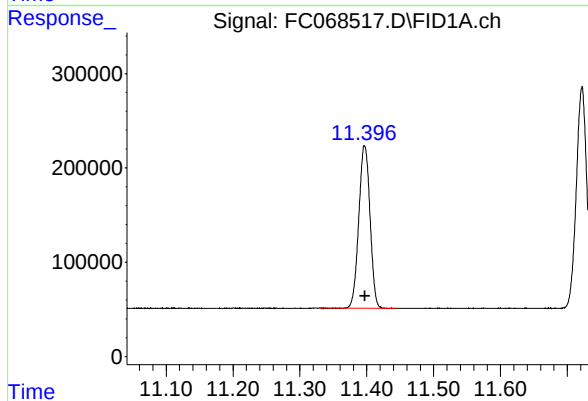
#6 n-Tetradecane (C14)

R.T.: 8.350 min
Delta R.T.: 0.000 min
Response: 2051743
Conc: 20.00 ug/ml



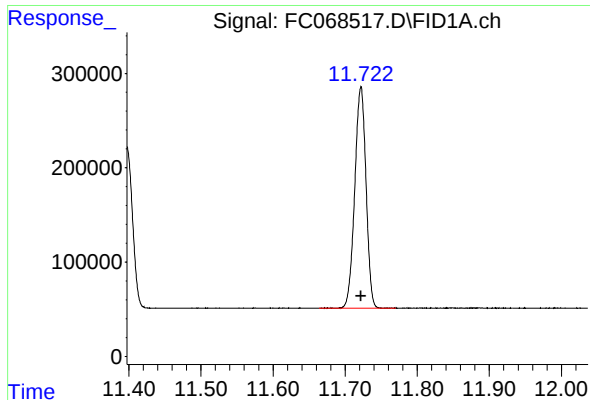
#7 n-Hexadecane (C16)

R.T.: 9.953 min
Delta R.T.: 0.000 min
Response: 2036847
Conc: 20.00 ug/ml



#8 n-Octadecane (C18)

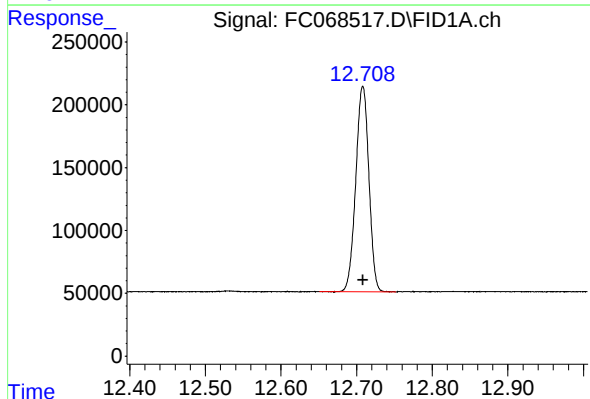
R.T.: 11.397 min
Delta R.T.: 0.000 min
Response: 2013255
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURR)

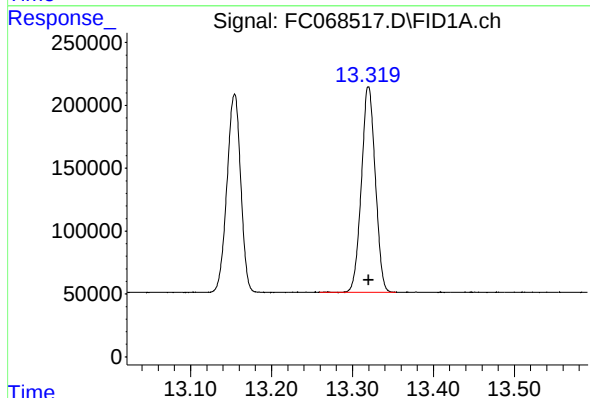
R.T.: 11.722 min
Delta R.T.: 0.000 min
Response: 2550464
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



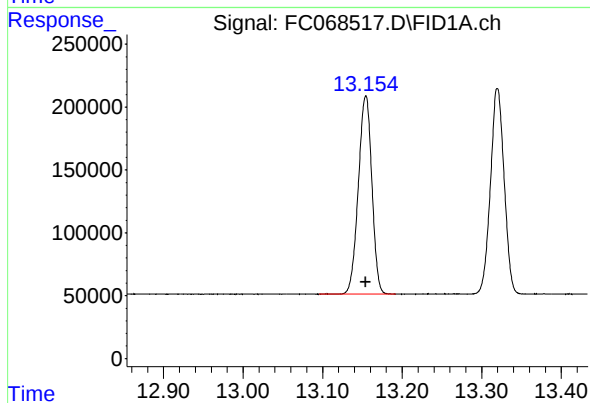
#10 n-Eicosane (C20)

R.T.: 12.708 min
Delta R.T.: 0.000 min
Response: 1973342
Conc: 20.00 ug/ml



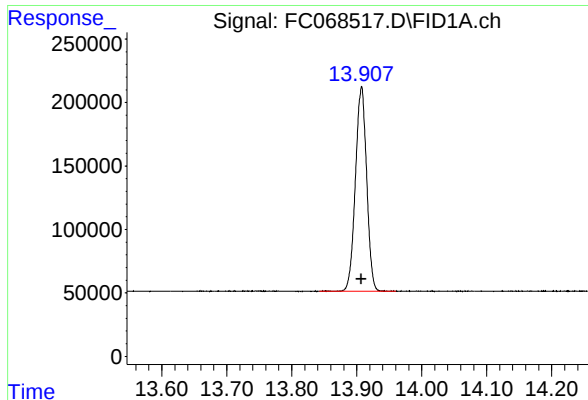
#11 n-Heneicosane (C21)

R.T.: 13.320 min
Delta R.T.: 0.000 min
Response: 1951198
Conc: 20.00 ug/ml



#12 1-chlorooctadecane (SURR)

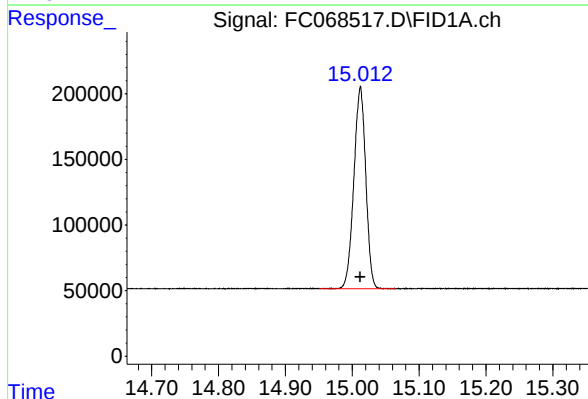
R.T.: 13.154 min
Delta R.T.: 0.000 min
Response: 1862131
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

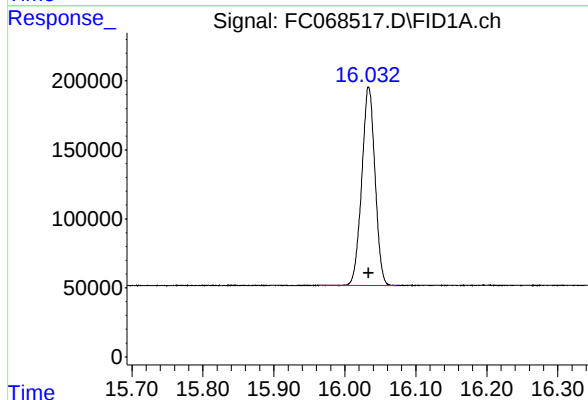
R.T.: 13.907 min
Delta R.T.: 0.000 min
Response: 1934500
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



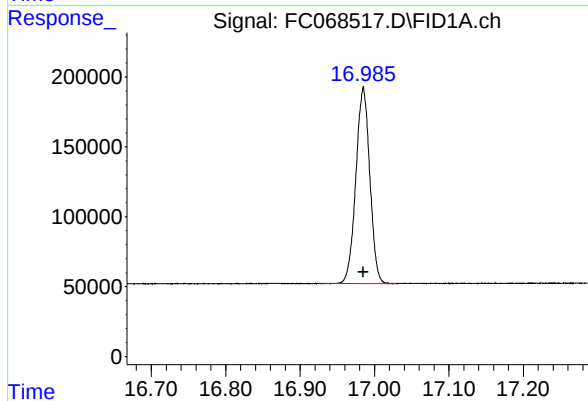
#14 n-Tetracosane (C24)

R.T.: 15.012 min
Delta R.T.: 0.000 min
Response: 1902333
Conc: 20.00 ug/ml



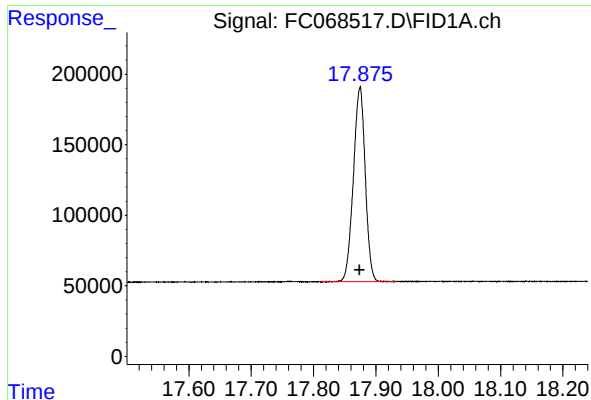
#15 n-Hexacosane (C26)

R.T.: 16.034 min
Delta R.T.: 0.000 min
Response: 1867179
Conc: 20.00 ug/ml



#16 n-Octacosane (C28)

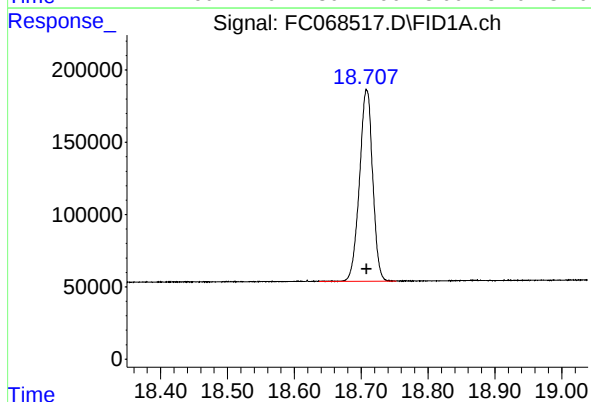
R.T.: 16.985 min
Delta R.T.: 0.000 min
Response: 1825121
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

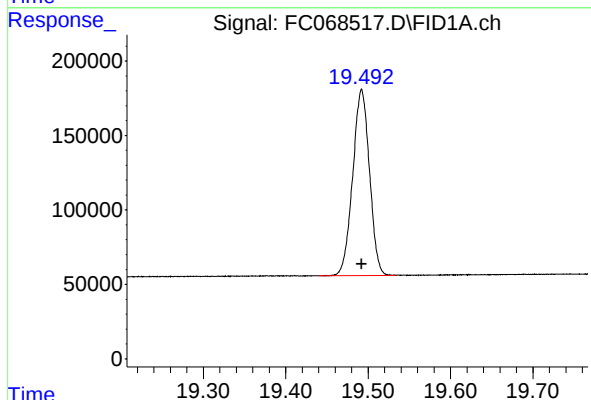
R.T.: 17.874 min
Delta R.T.: 0.000 min
Response: 1825746
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



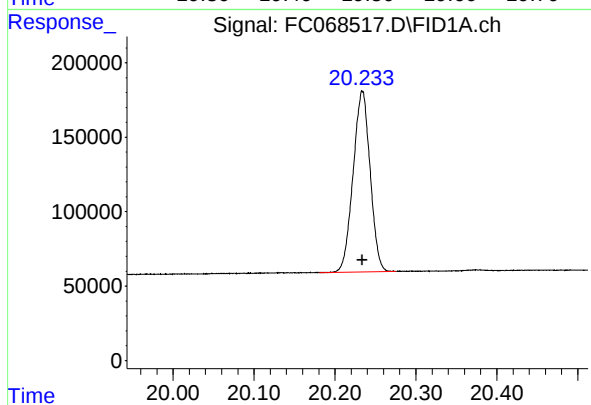
#18 n-Dotriacontane (C32)

R.T.: 18.708 min
Delta R.T.: 0.000 min
Response: 1812670
Conc: 20.00 ug/ml



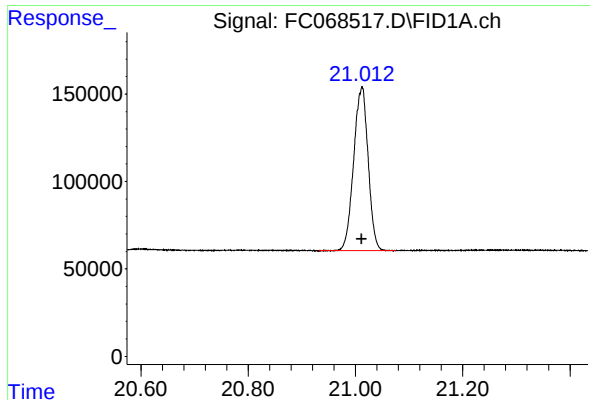
#19 n-Tetratriacontane (C34)

R.T.: 19.492 min
Delta R.T.: 0.000 min
Response: 1768427
Conc: 20.00 ug/ml



#20 n-Hexatriacontane (C36)

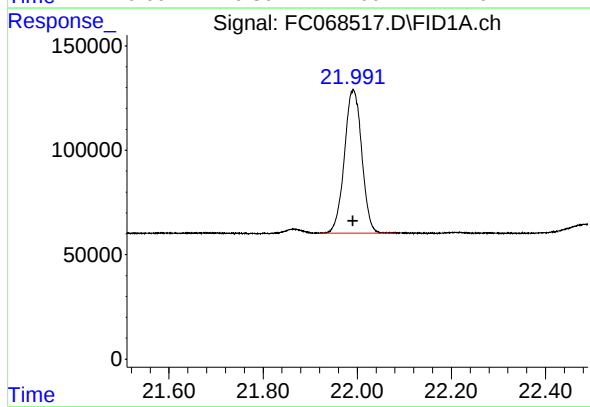
R.T.: 20.234 min
Delta R.T.: 0.000 min
Response: 1773721
Conc: 20.00 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.012 min
Delta R.T.: 0.000 min
Response: 1754719
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



#22 n-Tetracontane (C40)

R.T.: 21.991 min
Delta R.T.: 0.000 min
Response: 1753808
Conc: 20.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
Data File : FC068517.D
Signal(s) : FID1A.ch
Acq On : 08 Apr 2025 15:34
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.449	3.399	3.487	BV	253958	2096221	82.19%	4.810%
2	4.526	4.469	4.562	BB	238340	2095530	82.16%	4.809%
3	6.124	6.065	6.157	BB	253815	2319276	90.94%	5.322%
4	6.551	6.492	6.584	BB	209737	2094281	82.11%	4.806%
5	7.183	7.127	7.247	BB	239201	2314991	90.77%	5.312%
6	8.350	8.292	8.385	BB	201953	2051743	80.45%	4.708%
7	9.953	9.892	9.995	BB	188220	2036847	79.86%	4.674%
8	11.397	11.329	11.444	BB	171872	2013255	78.94%	4.620%
9	11.722	11.664	11.770	BB	235078	2550464	100.00%	5.853%
10	12.708	12.650	12.752	BB	163857	1973342	77.37%	4.528%
11	13.154	13.095	13.192	BB	157485	1862131	73.01%	4.273%
12	13.320	13.259	13.354	BB	163602	1951198	76.50%	4.478%
13	13.907	13.842	13.960	BB	161073	1934500	75.85%	4.439%
14	15.012	14.950	15.065	BB	154219	1902333	74.59%	4.365%
15	16.034	15.990	16.072	BB	143647	1867249	73.21%	4.285%
16	16.985	16.925	17.029	BB	140633	1825121	71.56%	4.188%
17	17.874	17.809	17.932	BB	137283	1825746	71.58%	4.190%
18	18.708	18.637	18.752	BB	132106	1812670	71.07%	4.160%
19	19.492	19.440	19.534	BB	125064	1768427	69.34%	4.058%
20	20.234	20.180	20.275	BB	121667	1773721	69.55%	4.070%
21	21.012	20.932	21.075	BB	93948	1754719	68.80%	4.027%
22	21.991	21.919	22.082	BB	68732	1753808	68.76%	4.025%
Sum of corrected areas:							43577572	

Aliphatic EPH 040925.M Wed Apr 09 02:02:52 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
 Data File : FC068518.D
 Signal(s) : FID1A.ch
 Acq On : 08 Apr 2025 16:12
 Operator : YP/AJ
 Sample : 10 PPM ALIPHATIC HC STD4
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
 Quant Time: Apr 08 17:03:34 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 08 17:03:20 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)	11.720	1388282	10.977 ug/ml
Spiked Amount 50.000		Recovery =	21.95%
12) S 1-chlorooctadecane (S...	13.154	1026505	11.083 ug/ml
Spiked Amount 50.000		Recovery =	22.17%
Target Compounds			
1) T n-Nonane (C9)	3.450	1136561	10.913 ug/ml
2) T n-Decane (C10)	4.525	1140863	10.944 ug/ml
3) T A~Naphthalene (C11.7)	6.124	1256563	10.901 ug/ml
4) T n-Dodecane (C12)	6.551	1144968	10.993 ug/ml
5) T A~2-methylnaphthalene...	7.181	1247891	10.901 ug/ml
6) T n-Tetradecane (C14)	8.348	1128652	11.073 ug/ml
7) T n-Hexadecane (C16)	9.952	1124488	11.125 ug/ml
8) T n-Octadecane (C18)	11.396	1115425	11.151 ug/ml
10) T n-Eicosane (C20)	12.707	1092518	11.147 ug/ml
11) T n-Heneicosane (C21)	13.320	1082284	11.149 ug/ml
13) T n-Docosane (C22)	13.907	1070404	11.124 ug/ml
14) T n-Tetracosane (C24)	15.011	1051523	11.083 ug/ml
15) T n-Hexacosane (C26)	16.034	1022441	10.974 ug/ml
16) T n-Octacosane (C28)	16.985	993075	10.887 ug/ml
17) T n-Tricontane (C30)	17.873	990582	10.833 ug/ml
18) T n-Dotriacontane (C32)	18.707	985052	10.817 ug/ml
19) T n-Tetratriacontane (C34)	19.492	949339	10.711 ug/ml
20) T n-Hexatriacontane (C36)	20.233	947135	10.651 ug/ml
21) T n-Octatriacontane (C38)	21.009	932368	10.629 ug/ml
22) T n-Tetracontane (C40)	21.991	924309	10.560 ug/ml

(f)=RT Delta > 1/2 Window

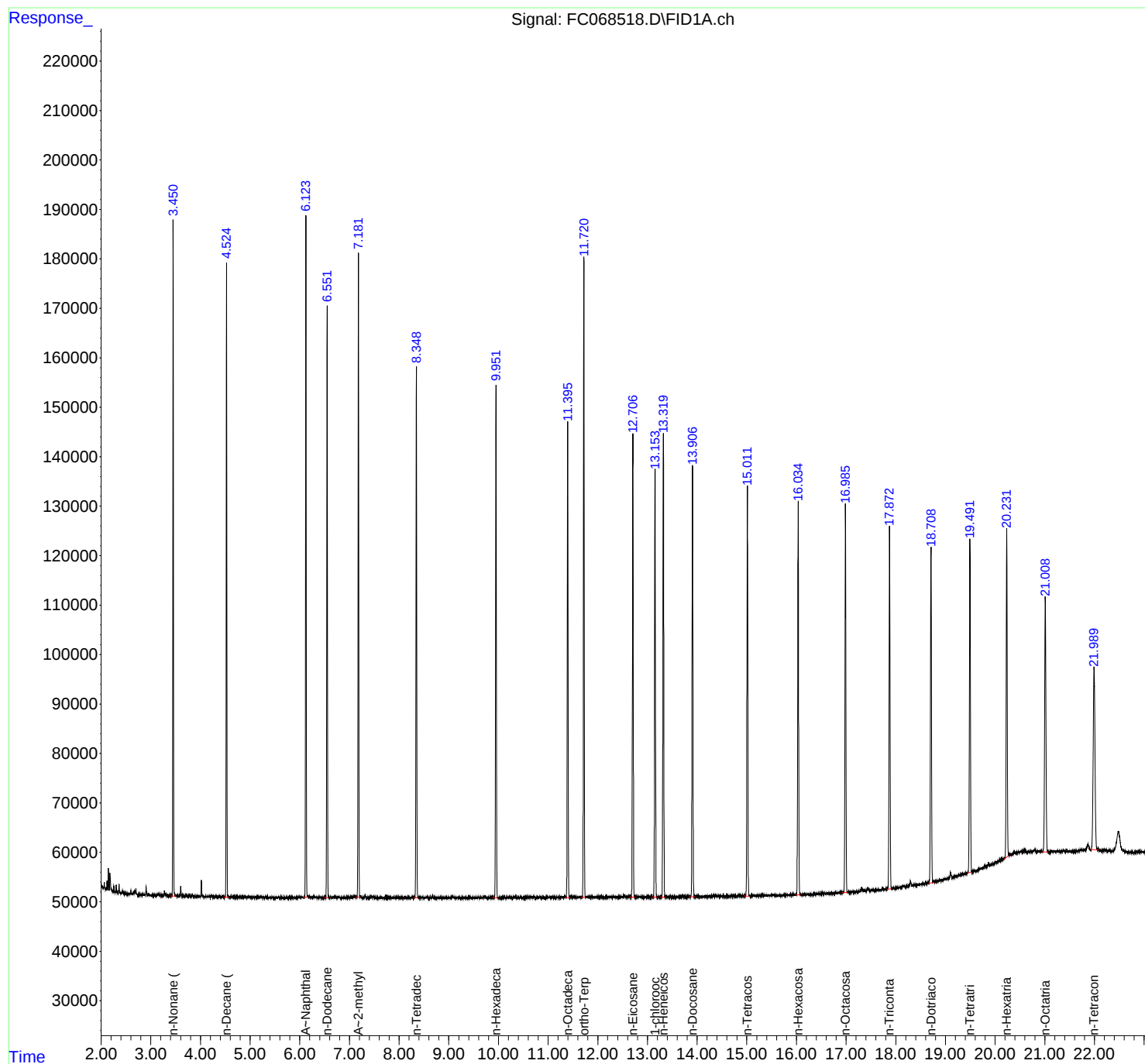
(m)=manual int.

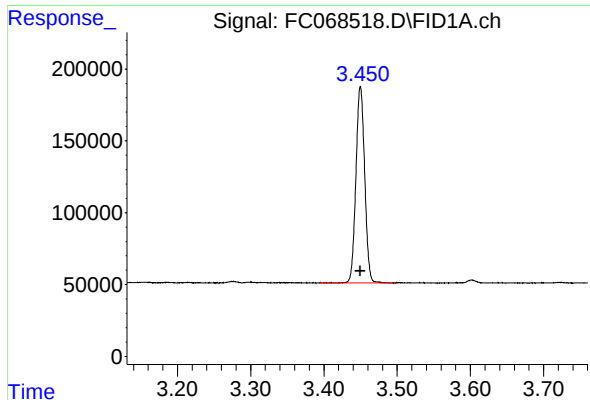
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
Data File : FC068518.D
Signal(s) : FID1A.ch
Acq On : 08 Apr 2025 16:12
Operator : YP/AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
Quant Time: Apr 08 17:03:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Quant Title : GC Extractables
QLast Update : Tue Apr 08 17:03:20 2025
Response via : Initial Calibration
Integrator: ChemStation

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

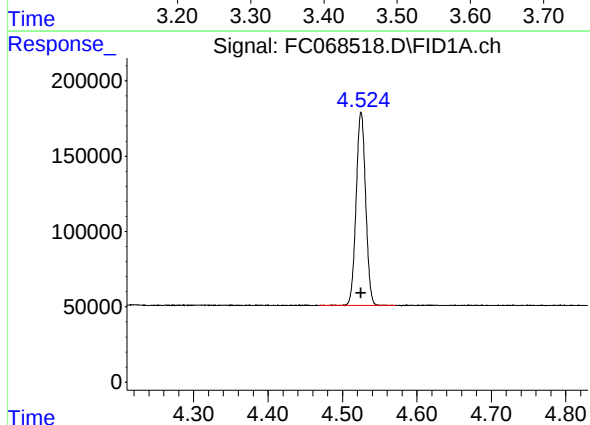




#1 n-Nonane (C9)

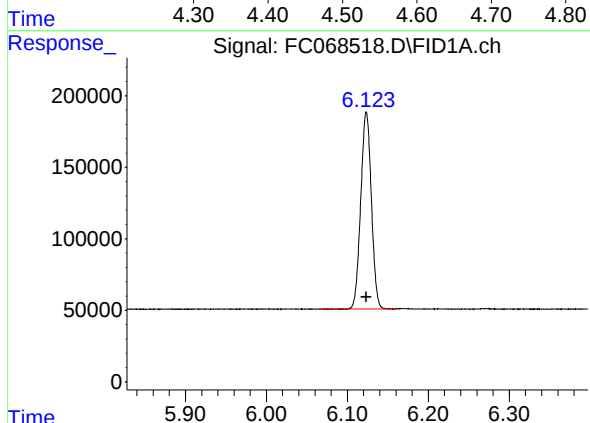
R.T.: 3.450 min
Delta R.T.: 0.000 min
Response: 1136561
Conc: 10.91 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



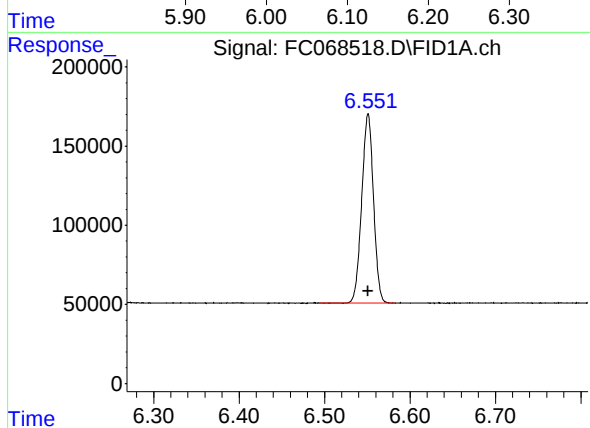
#2 n-Decane (C10)

R.T.: 4.525 min
Delta R.T.: 0.000 min
Response: 1140863
Conc: 10.94 ug/ml



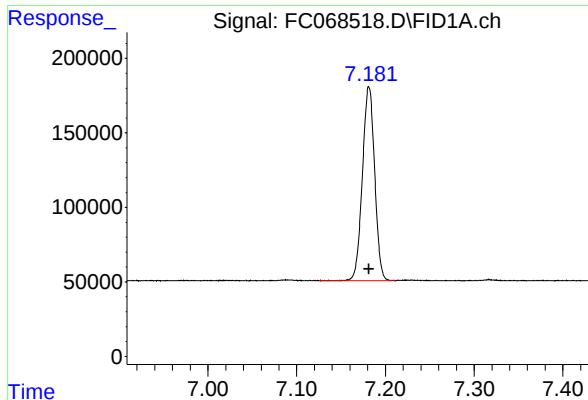
#3 A~Naphthalene (C11.7)

R.T.: 6.124 min
Delta R.T.: 0.000 min
Response: 1256563
Conc: 10.90 ug/ml



#4 n-Dodecane (C12)

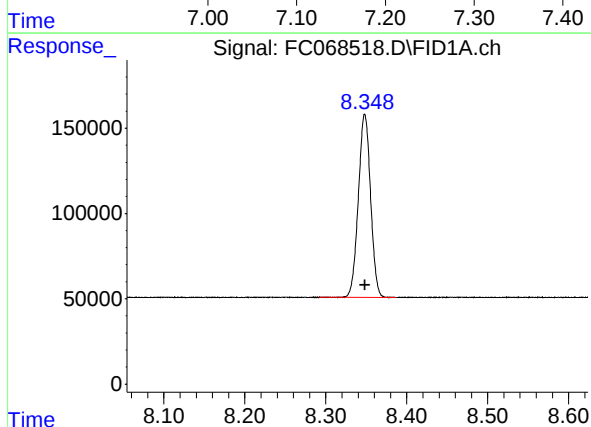
R.T.: 6.551 min
Delta R.T.: 0.000 min
Response: 1144968
Conc: 10.99 ug/ml



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

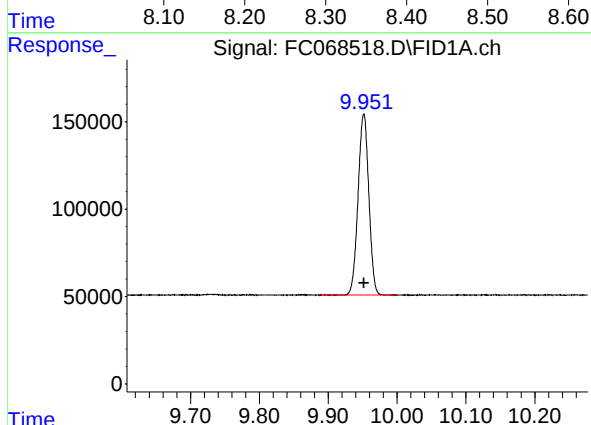
R.T.: 7.181 min
Delta R.T.: 0.000 min
Response: 1247891
Conc: 10.90 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



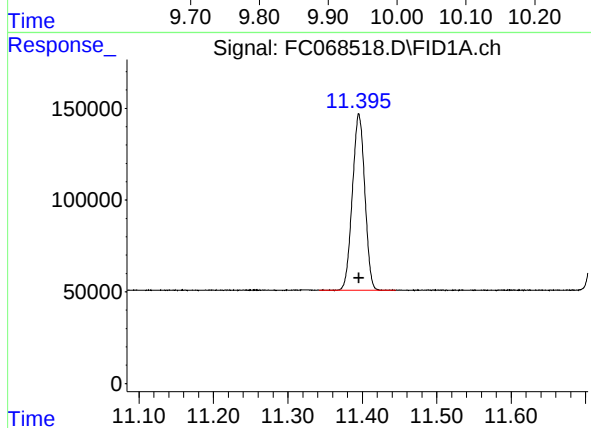
#6 n-Tetradecane (C14)

R.T.: 8.348 min
Delta R.T.: 0.000 min
Response: 1128652
Conc: 11.07 ug/ml



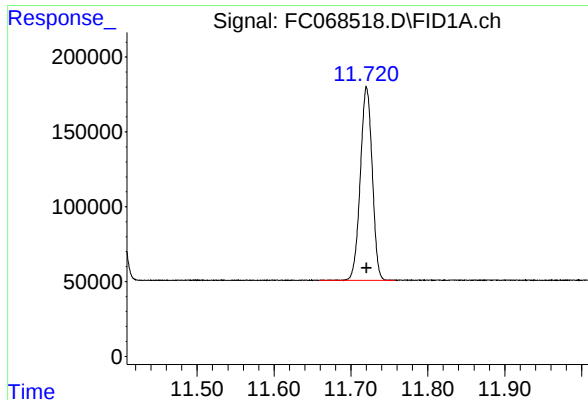
#7 n-Hexadecane (C16)

R.T.: 9.952 min
Delta R.T.: 0.000 min
Response: 1124488
Conc: 11.13 ug/ml



#8 n-Octadecane (C18)

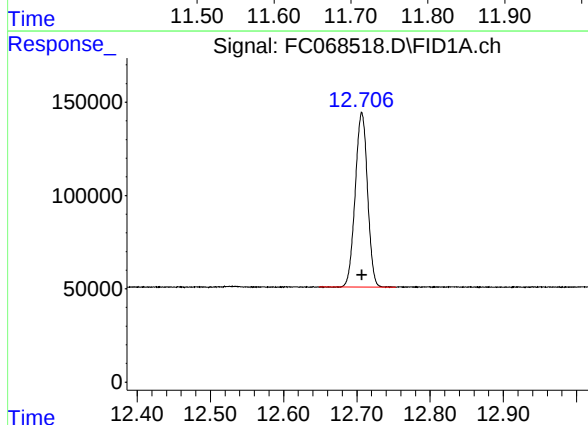
R.T.: 11.396 min
Delta R.T.: 0.000 min
Response: 1115425
Conc: 11.15 ug/ml



#9 ortho-Terphenyl (SURR)

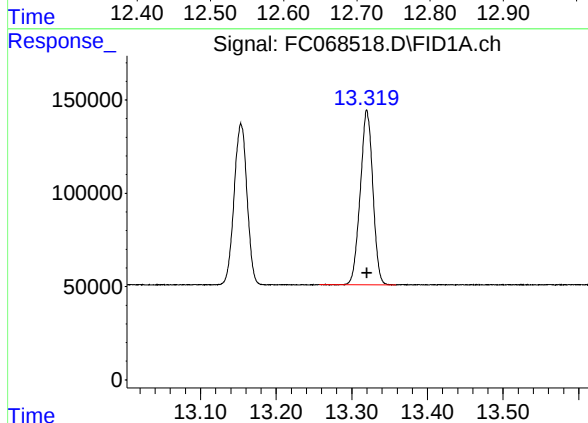
R.T.: 11.720 min
Delta R.T.: 0.000 min
Response: 1388282
Conc: 10.98 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



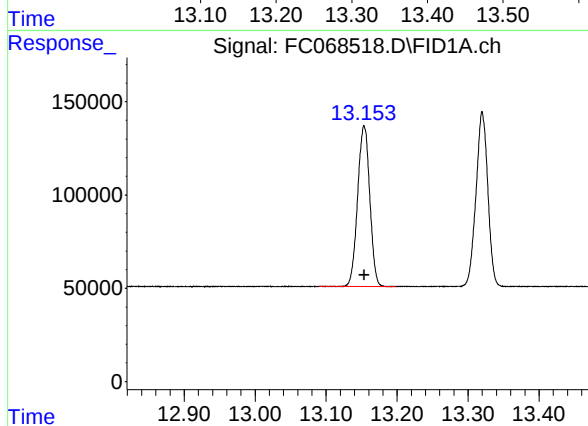
#10 n-Eicosane (C20)

R.T.: 12.707 min
Delta R.T.: 0.000 min
Response: 1092518
Conc: 11.15 ug/ml



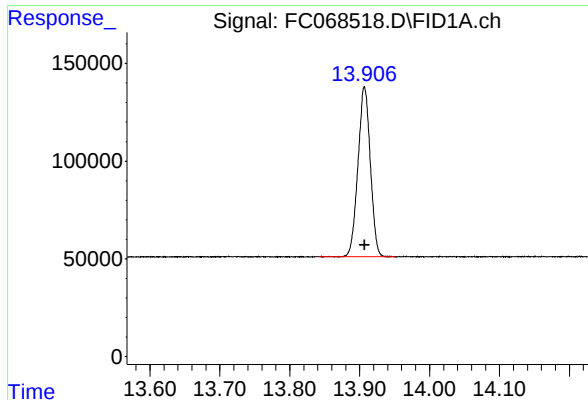
#11 n-Heneicosane (C21)

R.T.: 13.320 min
Delta R.T.: 0.000 min
Response: 1082284
Conc: 11.15 ug/ml



#12 1-chlorooctadecane (SURR)

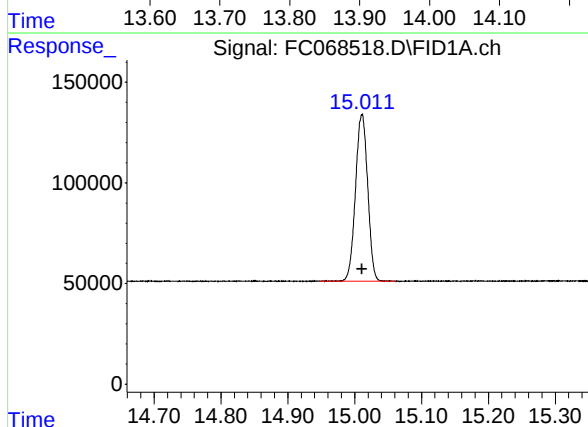
R.T.: 13.154 min
Delta R.T.: 0.000 min
Response: 1026505
Conc: 11.08 ug/ml



#13 n-Docosane (C22)

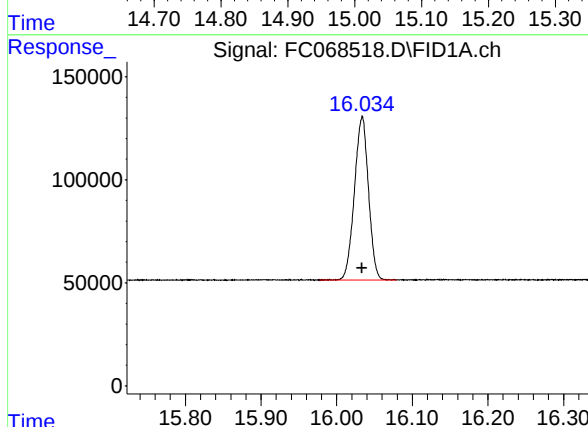
R.T.: 13.907 min
Delta R.T.: 0.000 min
Response: 1070404
Conc: 11.12 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



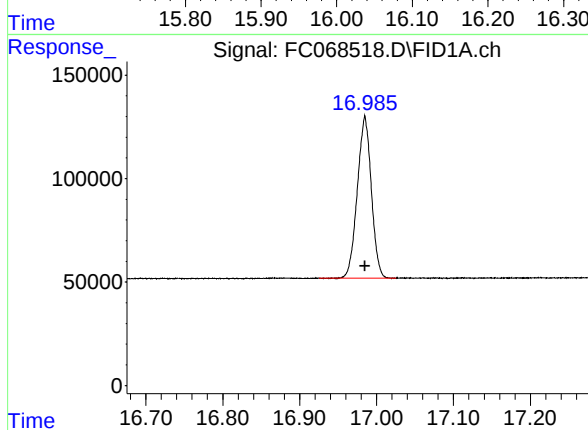
#14 n-Tetracosane (C24)

R.T.: 15.011 min
Delta R.T.: 0.000 min
Response: 1051523
Conc: 11.08 ug/ml



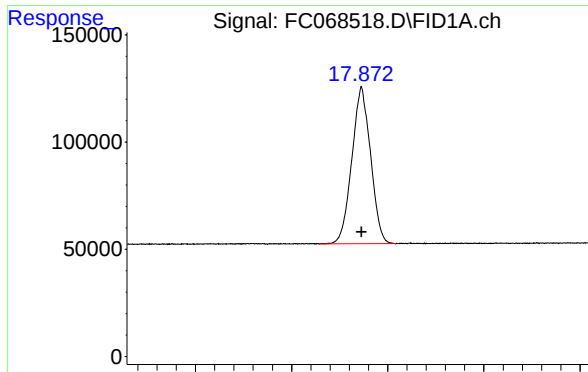
#15 n-Hexacosane (C26)

R.T.: 16.034 min
Delta R.T.: 0.000 min
Response: 1022441
Conc: 10.97 ug/ml



#16 n-Octacosane (C28)

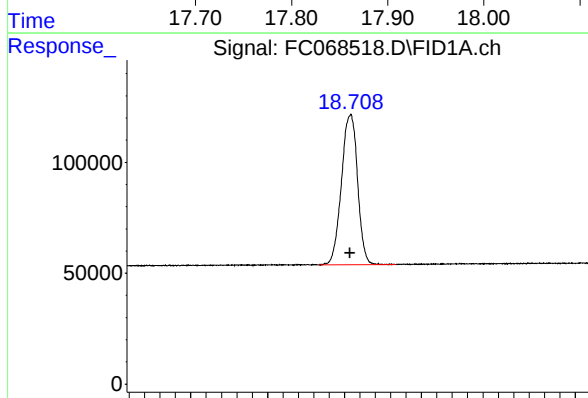
R.T.: 16.985 min
Delta R.T.: 0.000 min
Response: 993075
Conc: 10.89 ug/ml



#17 n-Tricontane (C30)

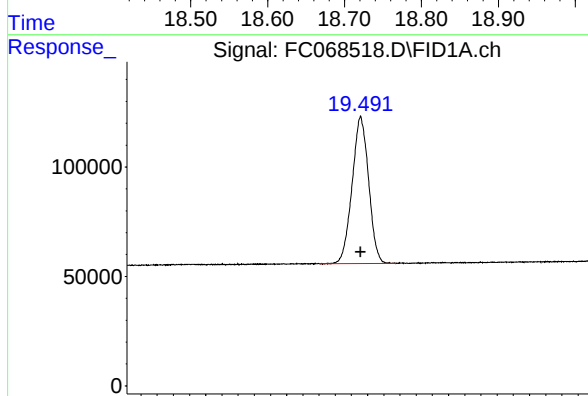
R.T.: 17.873 min
Delta R.T.: 0.000 min
Response: 990582
Conc: 10.83 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



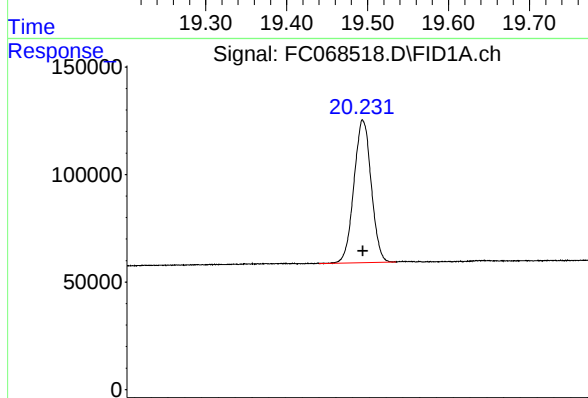
#18 n-Dotriacontane (C32)

R.T.: 18.707 min
Delta R.T.: 0.000 min
Response: 985052
Conc: 10.82 ug/ml



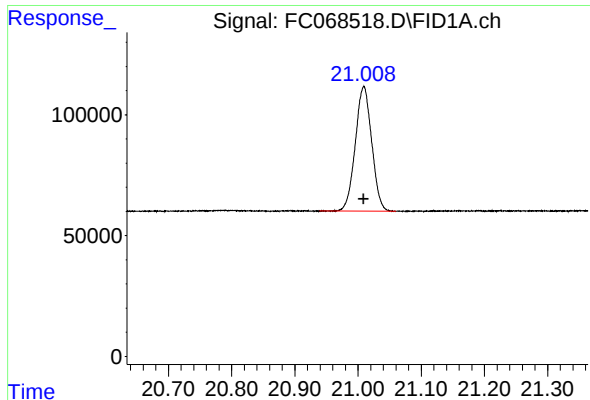
#19 n-Tetatriacontane (C34)

R.T.: 19.492 min
Delta R.T.: 0.000 min
Response: 949339
Conc: 10.71 ug/ml



#20 n-Hexatriacontane (C36)

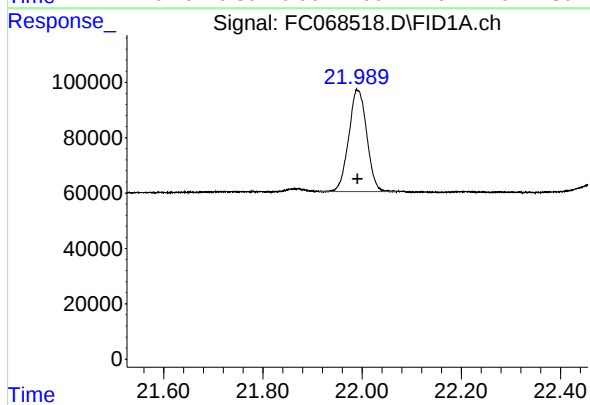
R.T.: 20.233 min
Delta R.T.: 0.000 min
Response: 947135
Conc: 10.65 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.009 min
Delta R.T.: 0.000 min
Response: 932368
Conc: 10.63 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



#22 n-Tetracontane (C40)

R.T.: 21.991 min
Delta R.T.: 0.000 min
Response: 924309
Conc: 10.56 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
Data File : FC068518.D
Signal(s) : FID1A.ch
Acq On : 08 Apr 2025 16:12
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.450	3.393	3.498	BB	136592	1136561	81.87%	4.786%
2	4.525	4.468	4.572	BB	128280	1140863	82.18%	4.804%
3	6.124	6.065	6.160	BB	137899	1256563	90.51%	5.291%
4	6.551	6.493	6.583	BB	119252	1144968	82.47%	4.821%
5	7.181	7.125	7.212	BB	129998	1247891	89.89%	5.255%
6	8.348	8.292	8.387	BB	107295	1128652	81.30%	4.752%
7	9.952	9.887	9.998	BB	103764	1124488	81.00%	4.735%
8	11.396	11.342	11.445	BB	96197	1115425	80.35%	4.697%
9	11.720	11.658	11.758	BB	129278	1388282	100.00%	5.846%
10	12.707	12.648	12.753	BB	93709	1092518	78.70%	4.600%
11	13.154	13.090	13.198	BB	86387	1026505	73.94%	4.322%
12	13.320	13.257	13.358	BB	93486	1082284	77.96%	4.557%
13	13.907	13.842	13.952	BB	86937	1070404	77.10%	4.507%
14	15.011	14.947	15.062	BB	82738	1051523	75.74%	4.428%
15	16.034	15.990	16.078	BB	79228	1020144	73.48%	4.296%
16	16.985	16.925	17.025	BB	78376	993075	71.53%	4.182%
17	17.873	17.828	17.908	BB	73117	990582	71.35%	4.171%
18	18.707	18.667	18.767	BB	67397	985052	70.95%	4.148%
19	19.492	19.440	19.535	BB	67160	949339	68.38%	3.997%
20	20.233	20.180	20.272	BB	66319	947135	68.22%	3.988%
21	21.009	20.938	21.060	BB	51593	932368	67.16%	3.926%
22	21.991	21.913	22.068	BB	36350	924309	66.58%	3.892%
Sum of corrected areas:							23748929	

Aliphatic EPH 040925.M Wed Apr 09 02:03:17 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
 Data File : FC068519.D
 Signal(s) : FID1A.ch
 Acq On : 08 Apr 2025 16:48
 Operator : YP/AJ
 Sample : 5 PPM ALIPHATIC HC STD5
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
 Quant Time: Apr 08 17:30:54 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 08 17:30:46 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)	11.719	654057	5.136 ug/ml
Spiked Amount 50.000		Recovery =	10.27%
12) S 1-chlorooctadecane (S...	13.152	470010	5.060 ug/ml
Spiked Amount 50.000		Recovery =	10.12%
Target Compounds			
1) T n-Nonane (C9)	3.449	550187	5.224 ug/ml
2) T n-Decane (C10)	4.525	549045	5.211 ug/ml
3) T A~Naphthalene (C11.7)	6.124	606085	5.204 ug/ml
4) T n-Dodecane (C12)	6.550	546064	5.193 ug/ml
5) T A~2-methylnaphthalene...	7.181	598007	5.178 ug/ml
6) T n-Tetradecane (C14)	8.348	531626	5.171 ug/ml
7) T n-Hexadecane (C16)	9.951	524477	5.150 ug/ml
8) T n-Octadecane (C18)	11.395	515183	5.119 ug/ml
10) T n-Eicosane (C20)	12.706	498787	5.071 ug/ml
11) T n-Heneicosane (C21)	13.318	495018	5.079 ug/ml
13) T n-Docosane (C22)	13.905	490416	5.077 ug/ml
14) T n-Tetracosane (C24)	15.010	482111	5.065 ug/ml
15) T n-Hexacosane (C26)	16.032	471652	5.050 ug/ml
16) T n-Octacosane (C28)	16.984	464643	5.075 ug/ml
17) T n-Tricontane (C30)	17.871	469479	5.107 ug/ml
18) T n-Dotriacontane (C32)	18.706	471859	5.144 ug/ml
19) T n-Tetratriacontane (C34)	19.492	460798	5.158 ug/ml
20) T n-Hexatriacontane (C36)	20.232	461012	5.146 ug/ml
21) T n-Octatriacontane (C38)	21.009	455897	5.156 ug/ml
22) T n-Tetracontane (C40)	21.989	457120	5.177 ug/ml

(f)=RT Delta > 1/2 Window

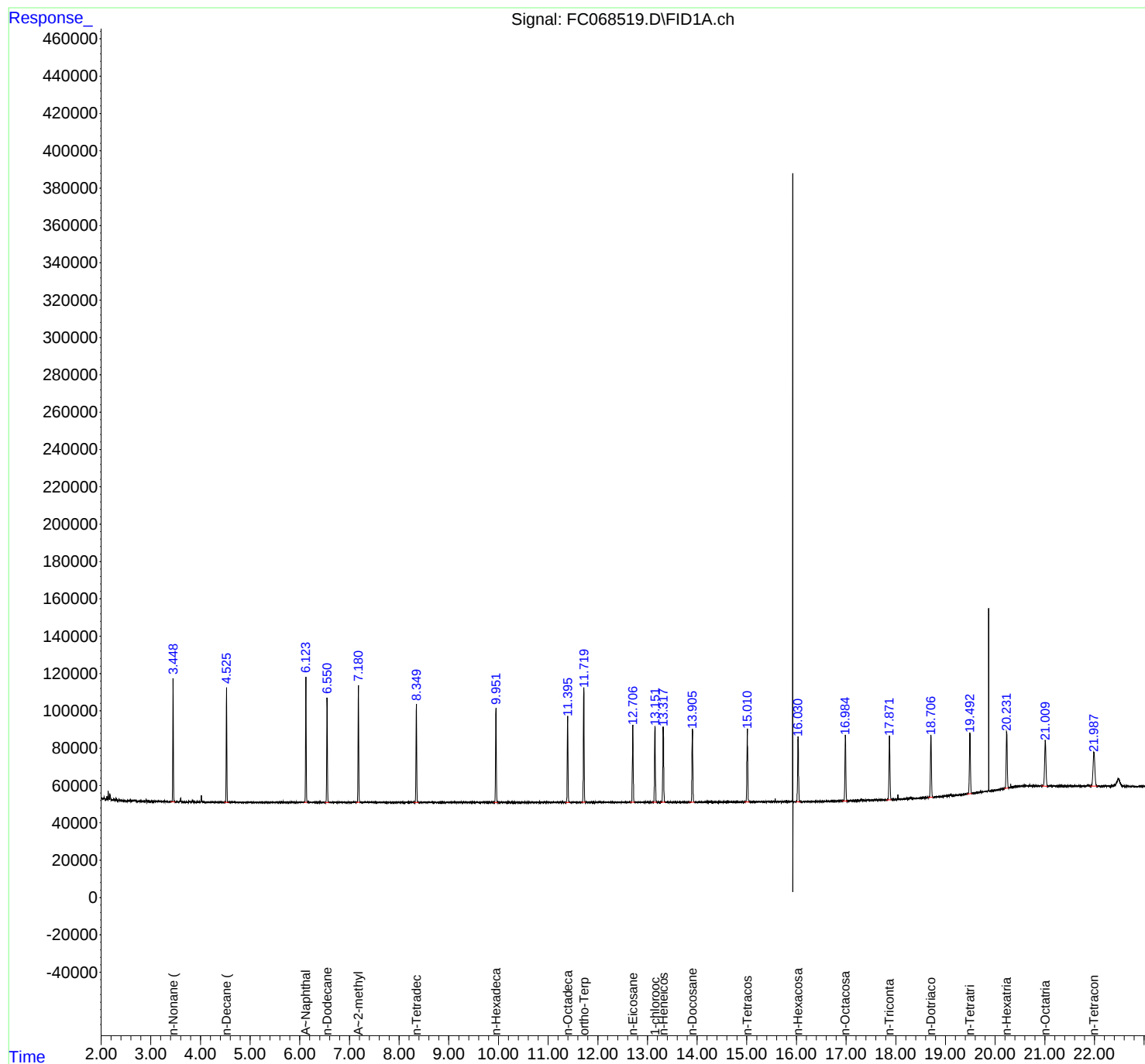
(m)=manual int.

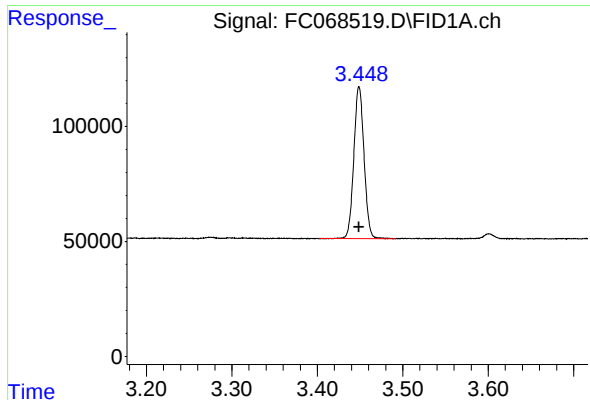
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
Data File : FC068519.D
Signal(s) : FID1A.ch
Acq On : 08 Apr 2025 16:48
Operator : YP/AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
Quant Time: Apr 08 17:30:54 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Quant Title : GC Extractables
QLast Update : Tue Apr 08 17:30:46 2025
Response via : Initial Calibration
Integrator: ChemStation

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

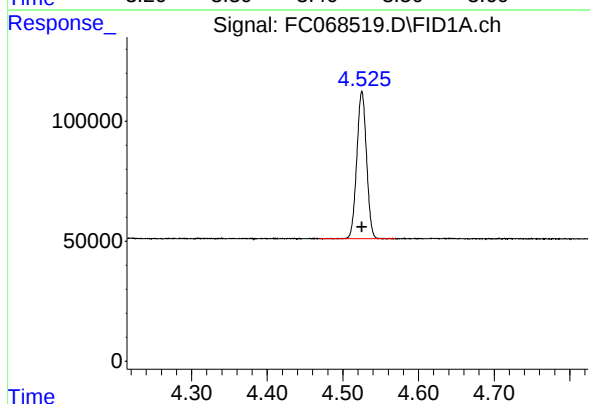




#1 n-Nonane (C9)

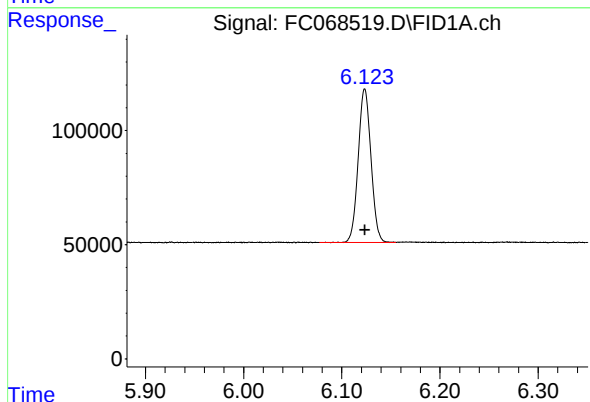
R.T.: 3.449 min
Delta R.T.: 0.000 min
Response: 550187
Conc: 5.22 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



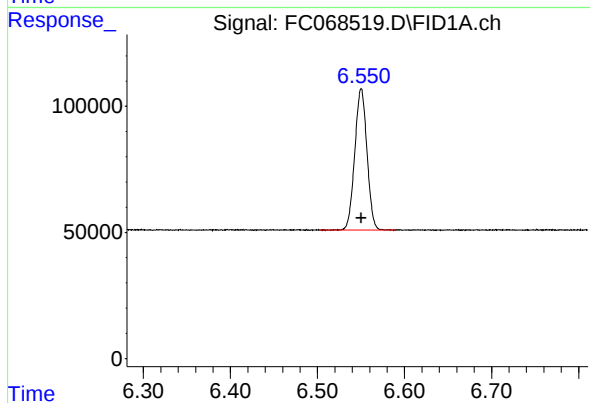
#2 n-Decane (C10)

R.T.: 4.525 min
Delta R.T.: 0.000 min
Response: 549045
Conc: 5.21 ug/ml



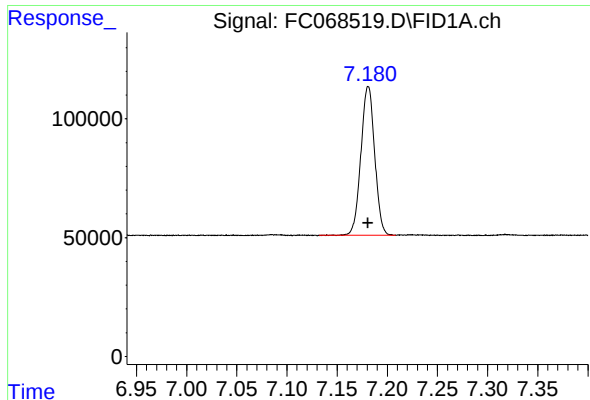
#3 A~Naphthalene (C11.7)

R.T.: 6.124 min
Delta R.T.: 0.000 min
Response: 606085
Conc: 5.20 ug/ml



#4 n-Dodecane (C12)

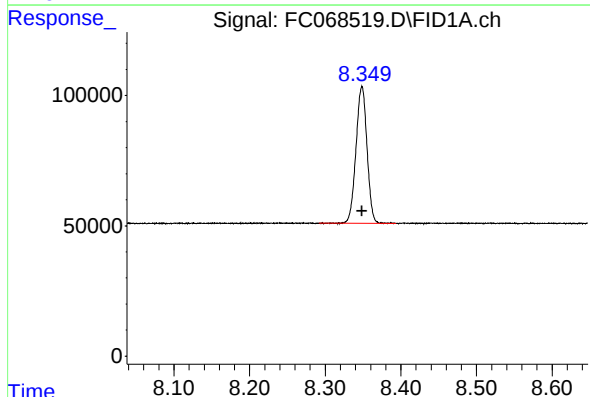
R.T.: 6.550 min
Delta R.T.: 0.000 min
Response: 546064
Conc: 5.19 ug/ml



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

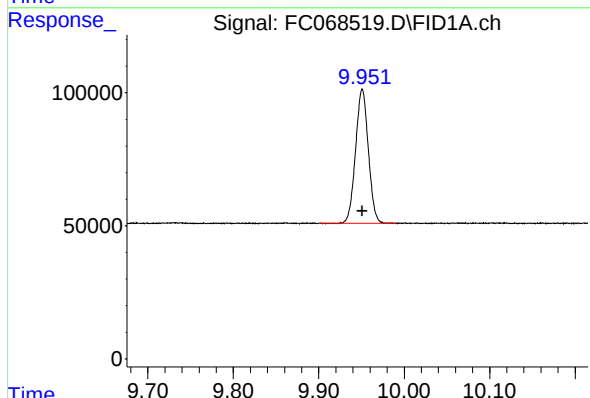
R.T.: 7.181 min
Delta R.T.: 0.000 min
Response: 598007
Conc: 5.18 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



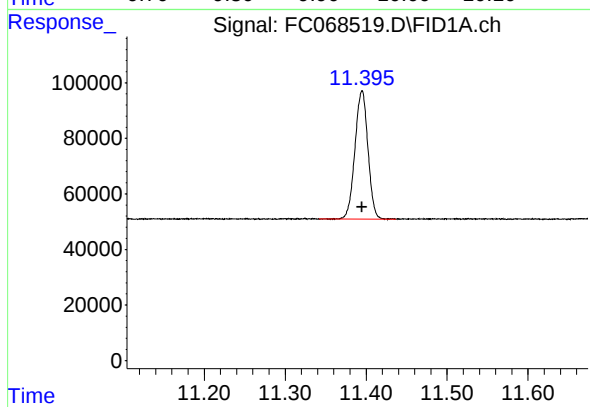
#6 n-Tetradecane (C14)

R.T.: 8.348 min
Delta R.T.: 0.000 min
Response: 531626
Conc: 5.17 ug/ml



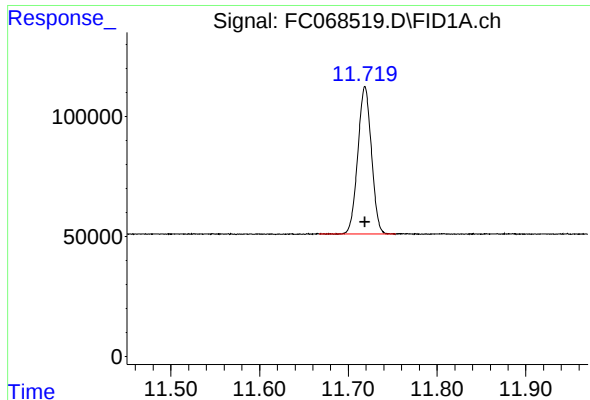
#7 n-Hexadecane (C16)

R.T.: 9.951 min
Delta R.T.: 0.000 min
Response: 524477
Conc: 5.15 ug/ml



#8 n-Octadecane (C18)

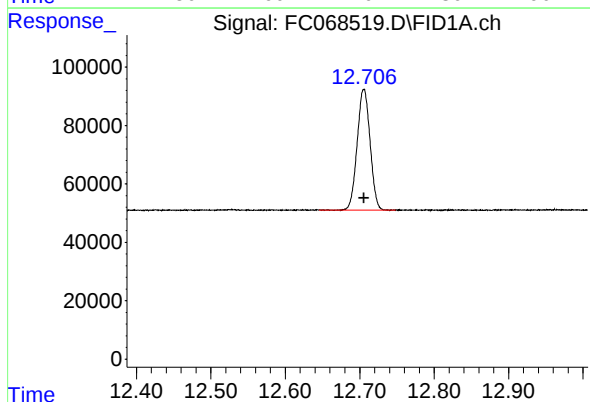
R.T.: 11.395 min
Delta R.T.: 0.000 min
Response: 515183
Conc: 5.12 ug/ml



#9 ortho-Terphenyl (SURR)

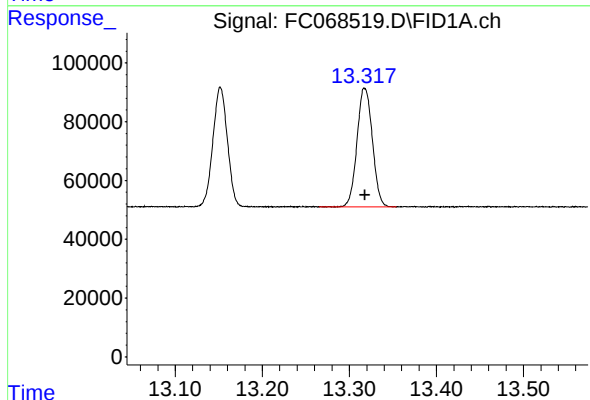
R.T.: 11.719 min
Delta R.T.: 0.000 min
Response: 654057
Conc: 5.14 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



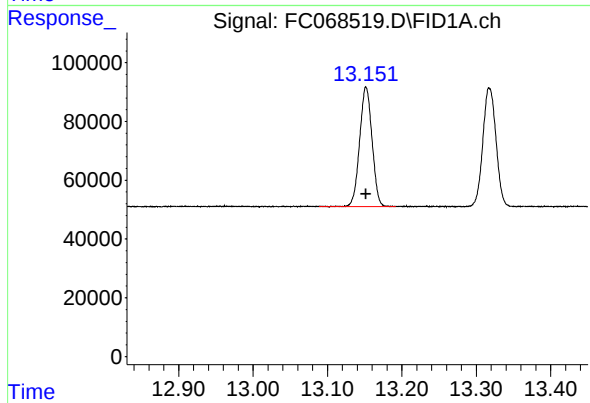
#10 n-Eicosane (C20)

R.T.: 12.706 min
Delta R.T.: 0.000 min
Response: 498787
Conc: 5.07 ug/ml



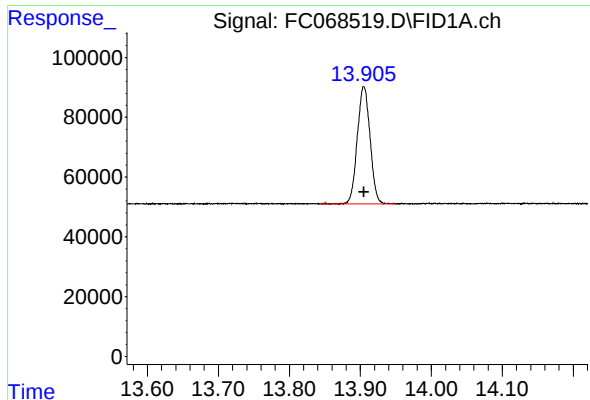
#11 n-Heneicosane (C21)

R.T.: 13.318 min
Delta R.T.: 0.000 min
Response: 495018
Conc: 5.08 ug/ml



#12 1-chlorooctadecane (SURR)

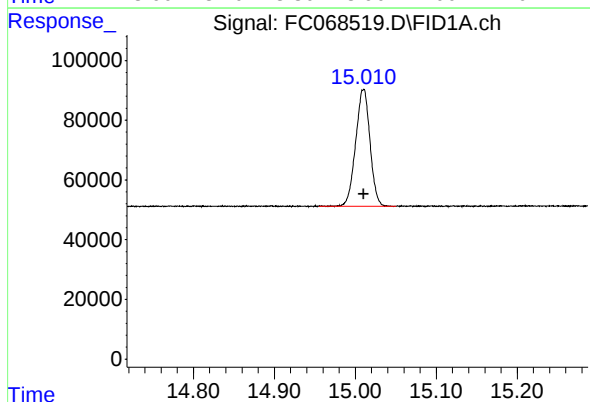
R.T.: 13.152 min
Delta R.T.: 0.000 min
Response: 470010
Conc: 5.06 ug/ml



#13 n-Docosane (C22)

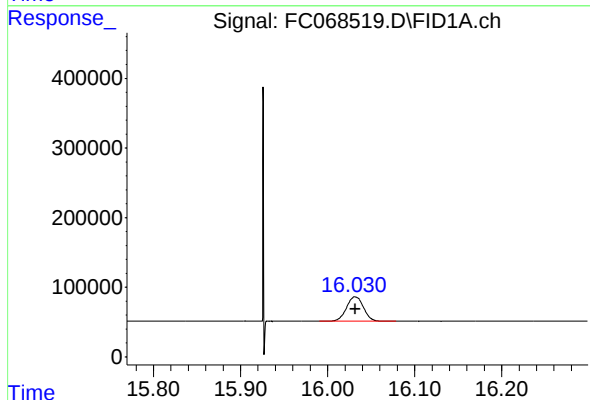
R.T.: 13.905 min
Delta R.T.: 0.000 min
Response: 490416
Conc: 5.08 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



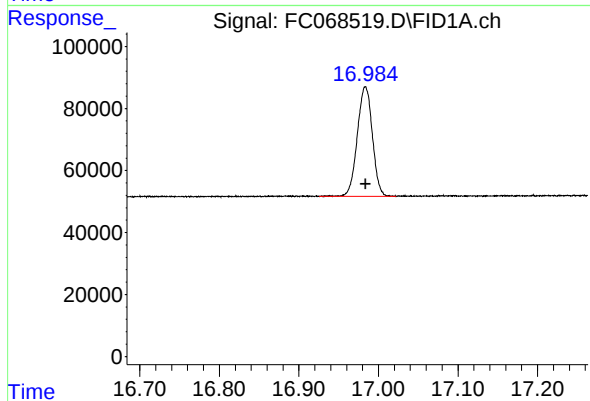
#14 n-Tetracosane (C24)

R.T.: 15.010 min
Delta R.T.: 0.000 min
Response: 482111
Conc: 5.07 ug/ml



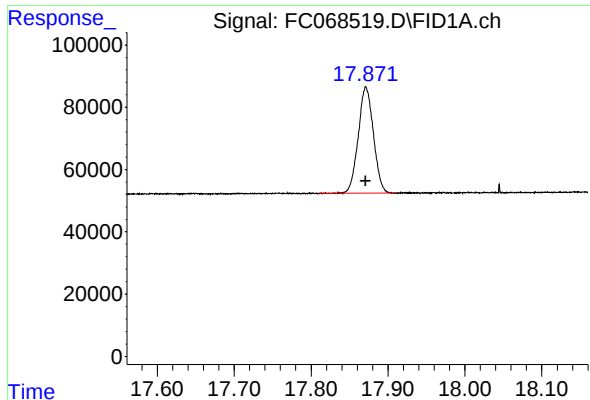
#15 n-Hexacosane (C26)

R.T.: 16.032 min
Delta R.T.: 0.000 min
Response: 471652
Conc: 5.05 ug/ml



#16 n-Octacosane (C28)

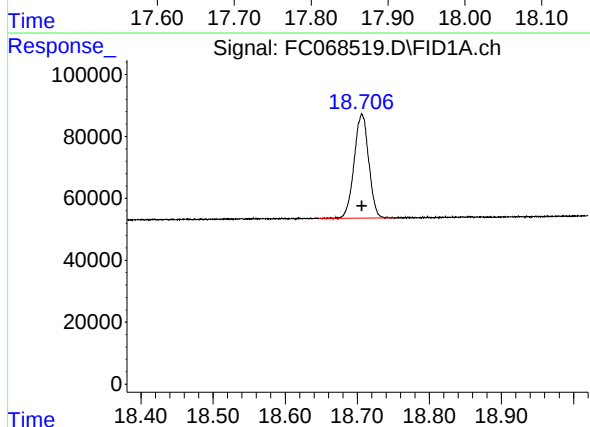
R.T.: 16.984 min
Delta R.T.: 0.000 min
Response: 464643
Conc: 5.07 ug/ml



#17 n-Tricontane (C30)

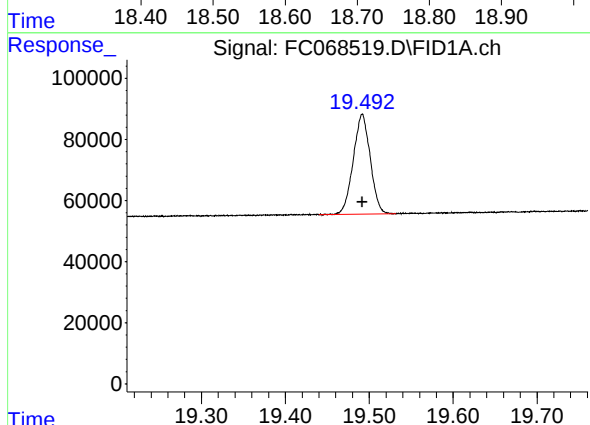
R.T.: 17.871 min
Delta R.T.: 0.000 min
Response: 469479
Conc: 5.11 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



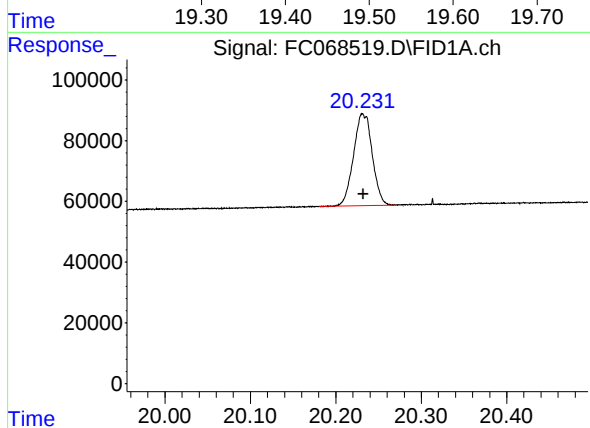
#18 n-Dotriacontane (C32)

R.T.: 18.706 min
Delta R.T.: 0.000 min
Response: 471859
Conc: 5.14 ug/ml



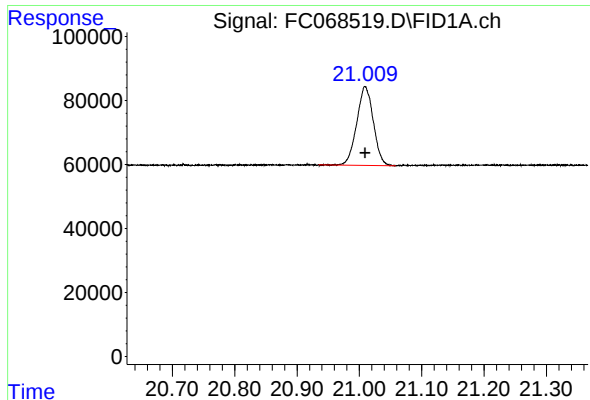
#19 n-Tetratriacontane (C34)

R.T.: 19.492 min
Delta R.T.: 0.000 min
Response: 460798
Conc: 5.16 ug/ml



#20 n-Hexatriacontane (C36)

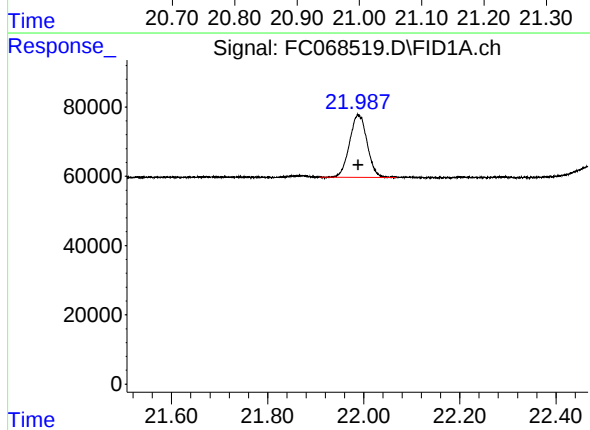
R.T.: 20.232 min
Delta R.T.: 0.000 min
Response: 461012
Conc: 5.15 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.009 min
Delta R.T.: 0.000 min
Response: 455897
Conc: 5.16 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



#22 n-Tetracontane (C40)

R.T.: 21.989 min
Delta R.T.: 0.000 min
Response: 457120
Conc: 5.18 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
 Data File : FC068519.D
 Signal(s) : FID1A.ch
 Acq On : 08 Apr 2025 16:48
 Sample : 5 PPM ALIPHATIC HC STD5
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.449	3.402	3.492	BB	66232	550187	84.12%	4.902%
2	4.525	4.469	4.570	BB	61433	549045	83.94%	4.892%
3	6.124	6.077	6.155	BB	67157	606085	92.67%	5.400%
4	6.550	6.502	6.590	BB	56117	546064	83.49%	4.865%
5	7.181	7.132	7.209	BB	62637	598007	91.43%	5.328%
6	8.348	8.292	8.394	BB	52506	531626	81.28%	4.737%
7	9.951	9.900	9.990	BB	50448	524477	80.19%	4.673%
8	11.395	11.342	11.437	BB	46359	515183	78.77%	4.590%
9	11.719	11.667	11.754	BB	61429	654057	100.00%	5.828%
10	12.706	12.645	12.749	BB	41337	498787	76.26%	4.444%
11	13.152	13.089	13.192	BB	40685	470010	71.86%	4.188%
12	13.318	13.265	13.354	BB	40194	495018	75.68%	4.411%
13	13.905	13.842	13.950	BB	39220	490416	74.98%	4.370%
14	15.010	14.955	15.050	BB	39129	482111	73.71%	4.296%
15	16.032	15.990	16.079	BB	34767	471652	72.11%	4.202%
16	16.984	16.925	17.022	BB	35366	464643	71.04%	4.140%
17	17.871	17.810	17.910	BB	34125	469479	71.78%	4.183%
18	18.706	18.647	18.754	BB	33576	471859	72.14%	4.204%
19	19.492	19.440	19.532	BB	32784	460798	70.45%	4.106%
20	20.232	20.180	20.270	BB	30000	461012	70.48%	4.108%
21	21.009	20.935	21.059	BB	24672	455897	69.70%	4.062%
22	21.989	21.907	22.067	BB	17907	457120	69.89%	4.073%
Sum of corrected areas:							11223533	

Aliphatic EPH 040925.M Wed Apr 09 02:04:09 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
 Data File : FC068520.D
 Signal(s) : FID1A.ch
 Acq On : 08 Apr 2025 17:26
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD ICV
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
 Quant Time: Apr 08 18:06:14 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 08 17:31:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.722	2509889	19.710 ug/ml
Spiked Amount 50.000		Recovery =	39.42%
12) S 1-chlorooctadecane (S...	13.154	1813783	19.525 ug/ml
Spiked Amount 50.000		Recovery =	39.05%
Target Compounds			
1) T n-Nonane (C9)	3.450	2152986	20.442 ug/ml
2) T n-Decane (C10)	4.526	2151620	20.422 ug/ml
3) T A~Naphthalene (C11.7)	6.124	2370053	20.351 ug/ml
4) T n-Dodecane (C12)	6.551	2138499	20.335 ug/ml
5) T A~2-methylnaphthalene...	7.182	2340318	20.263 ug/ml
6) T n-Tetradecane (C14)	8.349	2073539	20.170 ug/ml
7) T n-Hexadecane (C16)	9.952	2031391	19.947 ug/ml
8) T n-Octadecane (C18)	11.397	1983646	19.712 ug/ml
10) T n-Eicosane (C20)	12.708	1924584	19.567 ug/ml
11) T n-Heneicosane (C21)	13.322	1900069	19.497 ug/ml
13) T n-Docosane (C22)	13.908	1874678	19.408 ug/ml
14) T n-Tetracosane (C24)	15.012	1840193	19.333 ug/ml
15) T n-Hexacosane (C26)	16.035	1805920	19.334 ug/ml
16) T n-Octacosane (C28)	16.986	1775159	19.388 ug/ml
17) T n-Tricontane (C30)	17.874	1789949	19.470 ug/ml
18) T n-Dotriacontane (C32)	18.709	1790701	19.522 ug/ml
19) T n-Tetratriacontane (C34)	19.494	1754814	19.642 ug/ml
20) T n-Hexatriacontane (C36)	20.234	1766416	19.719 ug/ml
21) T n-Octatriacontane (C38)	21.013	1737168	19.648 ug/ml
22) T n-Tetracontane (C40)	21.995	1737661	19.678 ug/ml

(f)=RT Delta > 1/2 Window

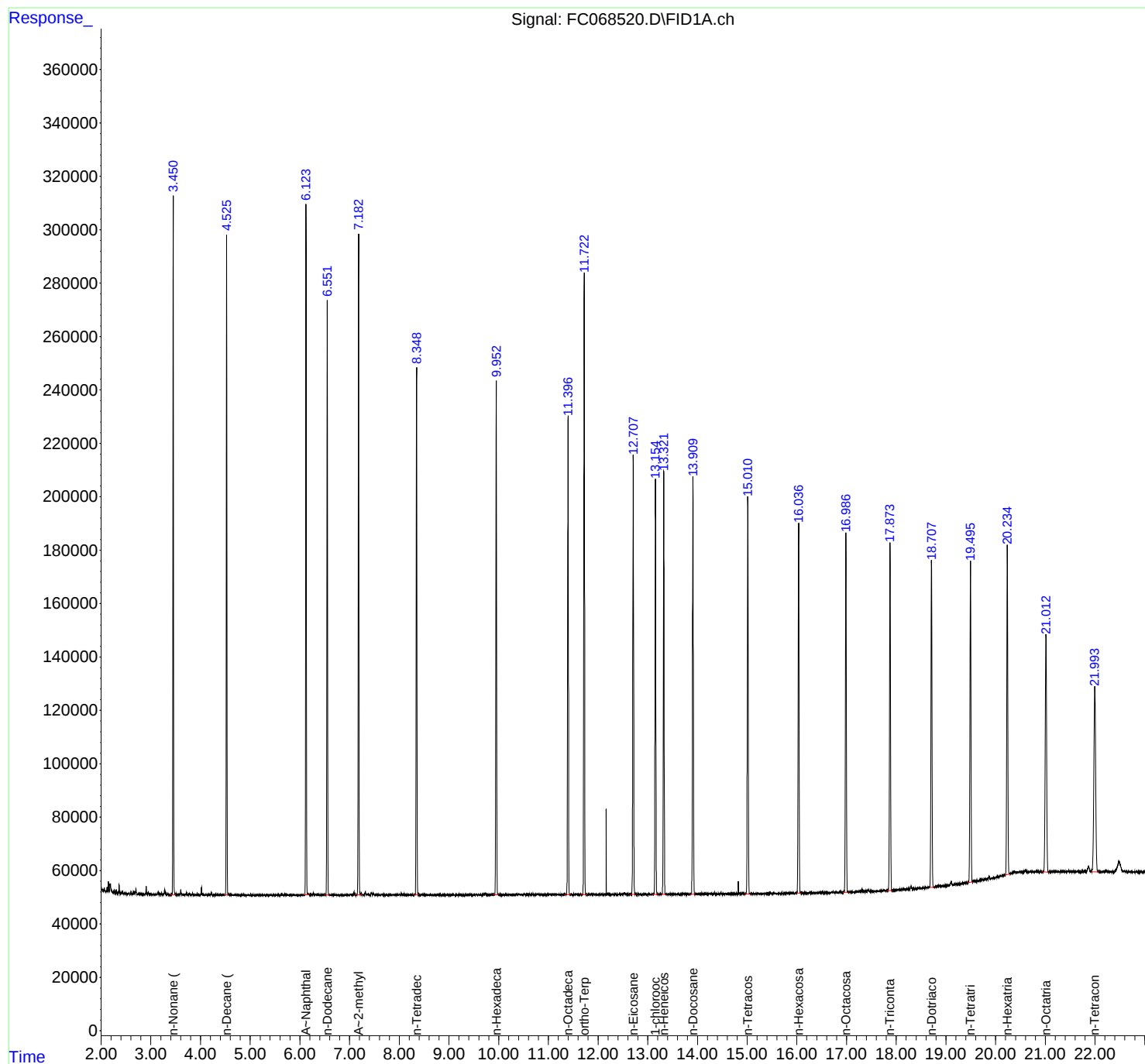
(m)=manual int.

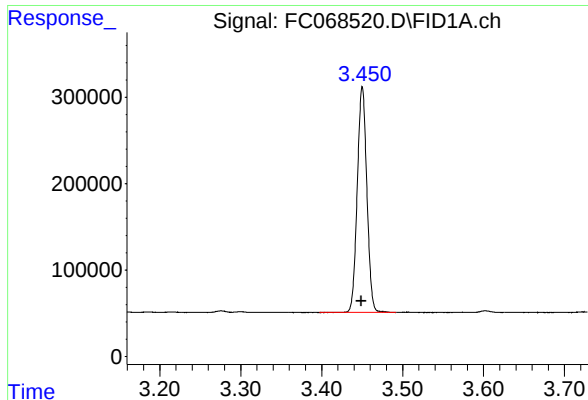
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
Data File : FC068520.D
Signal(s) : FID1A.ch
Acq On : 08 Apr 2025 17:26
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Apr 08 18:06:14 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Quant Title : GC Extractables
QLast Update : Tue Apr 08 17:31:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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





#1 n-Nonane (C9)

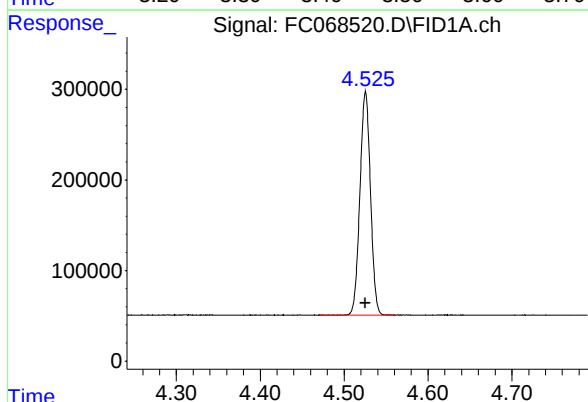
R.T.: 3.450 min
Delta R.T.: 0.001 min
Response: 2152986
Conc: 20.44 ug/ml

Instrument :

FID_C

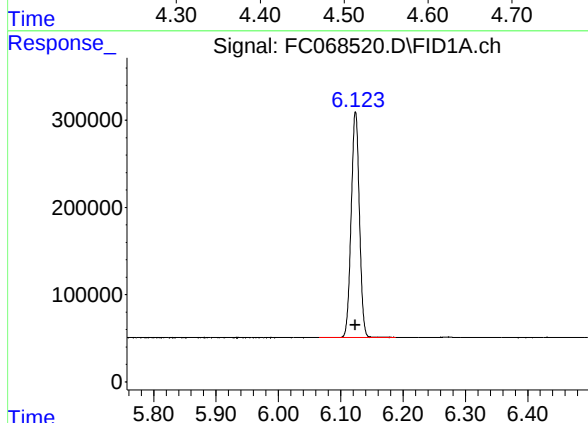
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



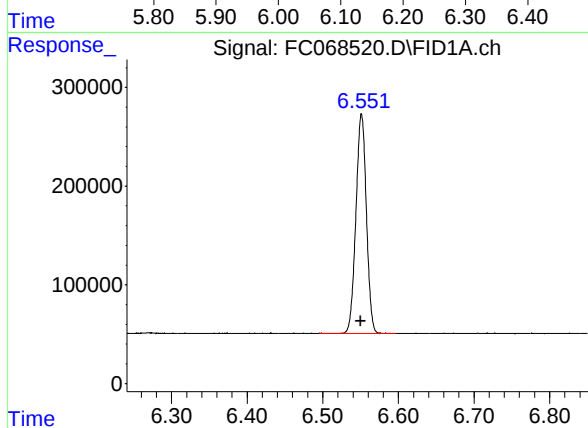
#2 n-Decane (C10)

R.T.: 4.526 min
Delta R.T.: 0.000 min
Response: 2151620
Conc: 20.42 ug/ml



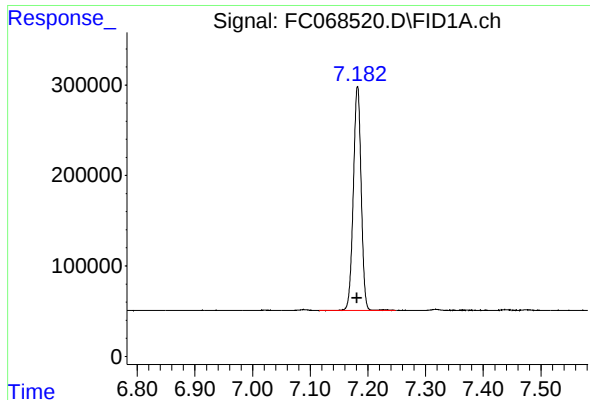
#3 A~Naphthalene (C11.7)

R.T.: 6.124 min
Delta R.T.: 0.000 min
Response: 2370053
Conc: 20.35 ug/ml



#4 n-Dodecane (C12)

R.T.: 6.551 min
Delta R.T.: 0.000 min
Response: 2138499
Conc: 20.34 ug/ml



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

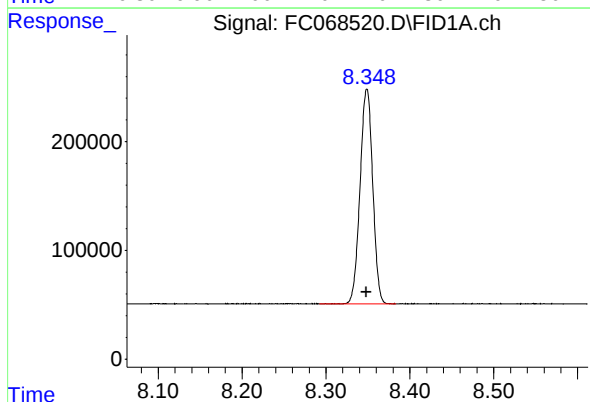
R.T.: 7.182 min
Delta R.T.: 0.001 min
Response: 2340318
Conc: 20.26 ug/ml

Instrument :

FID_C

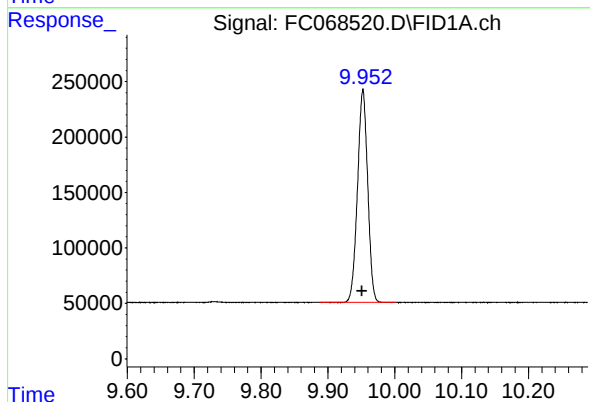
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



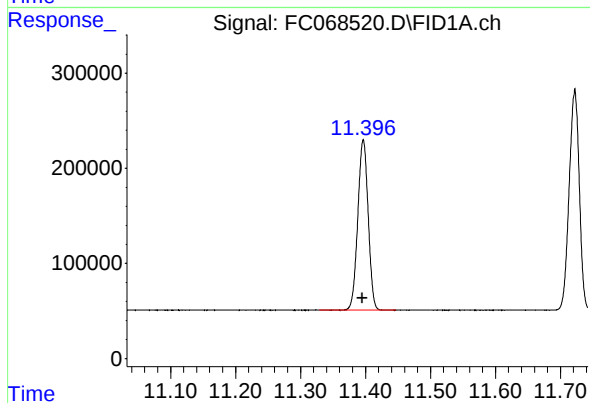
#6 n-Tetradecane (C14)

R.T.: 8.349 min
Delta R.T.: 0.000 min
Response: 2073539
Conc: 20.17 ug/ml



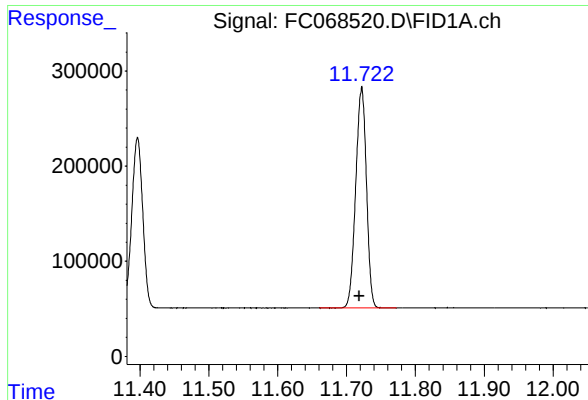
#7 n-Hexadecane (C16)

R.T.: 9.952 min
Delta R.T.: 0.001 min
Response: 2031391
Conc: 19.95 ug/ml



#8 n-Octadecane (C18)

R.T.: 11.397 min
Delta R.T.: 0.002 min
Response: 1983646
Conc: 19.71 ug/ml



#9 ortho-Terphenyl (SURR)

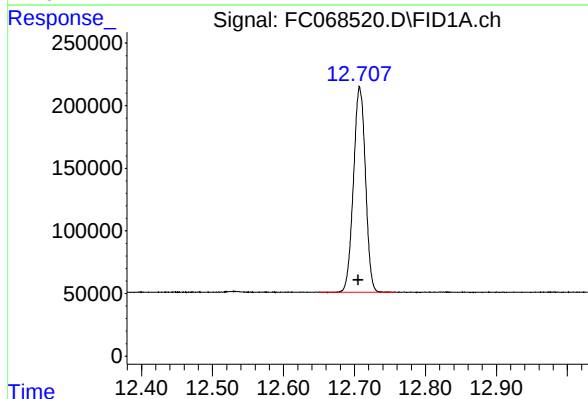
R.T.: 11.722 min
Delta R.T.: 0.003 min
Response: 2509889
Conc: 19.71 ug/ml

Instrument :

FID_C

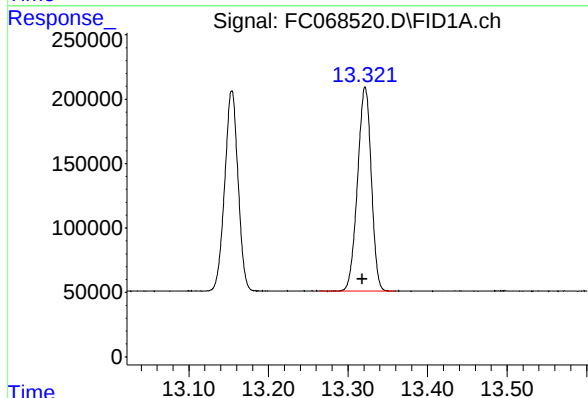
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



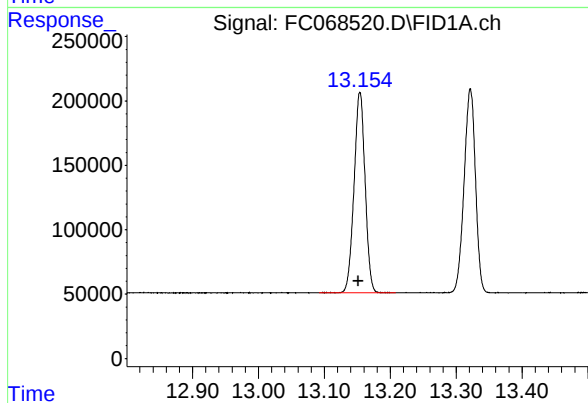
#10 n-Eicosane (C20)

R.T.: 12.708 min
Delta R.T.: 0.002 min
Response: 1924584
Conc: 19.57 ug/ml



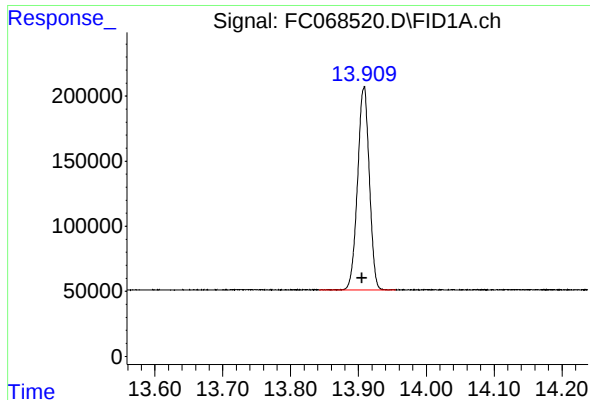
#11 n-Heneicosane (C21)

R.T.: 13.322 min
Delta R.T.: 0.004 min
Response: 1900069
Conc: 19.50 ug/ml



#12 1-chlorooctadecane (SURR)

R.T.: 13.154 min
Delta R.T.: 0.002 min
Response: 1813783
Conc: 19.53 ug/ml



#13 n-Docosane (C22)

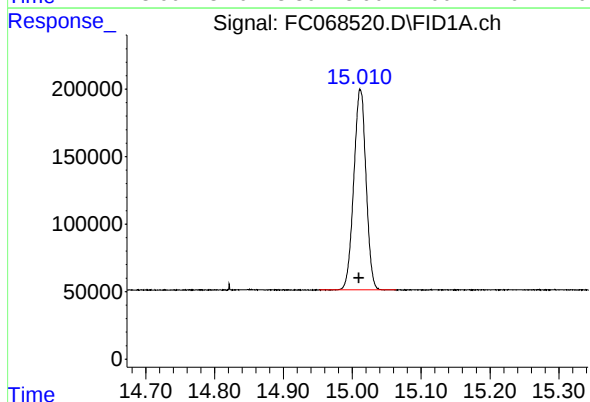
R.T.: 13.908 min
Delta R.T.: 0.003 min
Response: 1874678
Conc: 19.41 ug/ml

Instrument :

FID_C

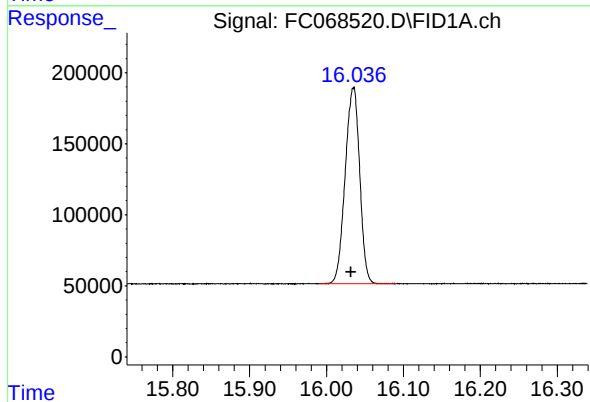
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



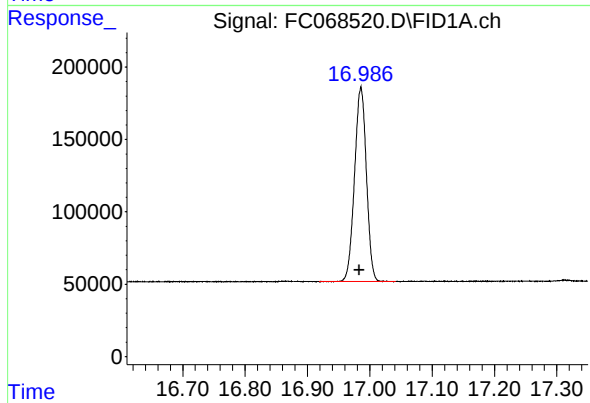
#14 n-Tetracosane (C24)

R.T.: 15.012 min
Delta R.T.: 0.002 min
Response: 1840193
Conc: 19.33 ug/ml



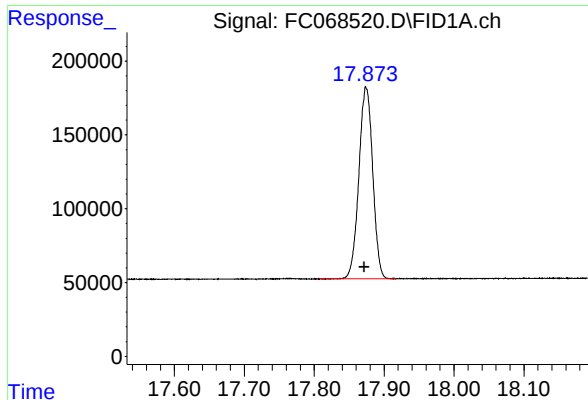
#15 n-Hexacosane (C26)

R.T.: 16.035 min
Delta R.T.: 0.003 min
Response: 1805920
Conc: 19.33 ug/ml



#16 n-Octacosane (C28)

R.T.: 16.986 min
Delta R.T.: 0.002 min
Response: 1775159
Conc: 19.39 ug/ml



#17 n-Tricontane (C30)

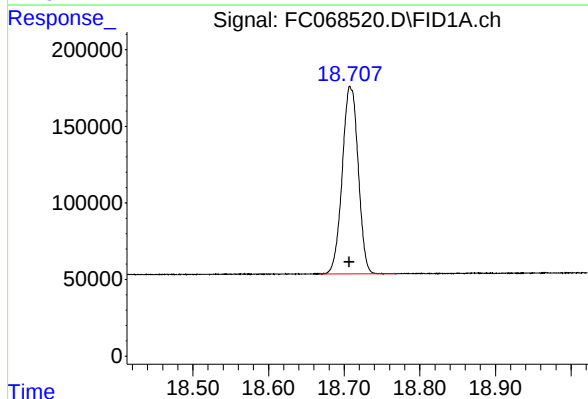
R.T.: 17.874 min
Delta R.T.: 0.003 min
Response: 1789949
Conc: 19.47 ug/ml

Instrument :

FID_C

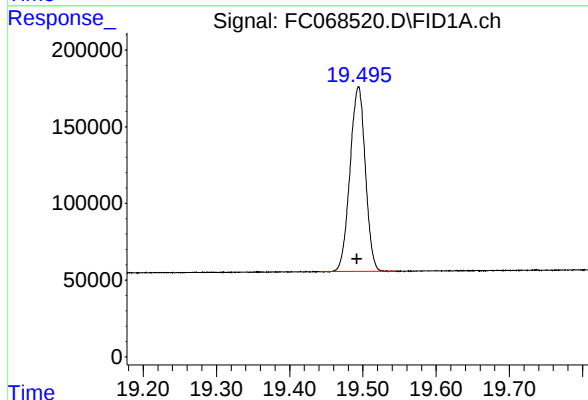
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



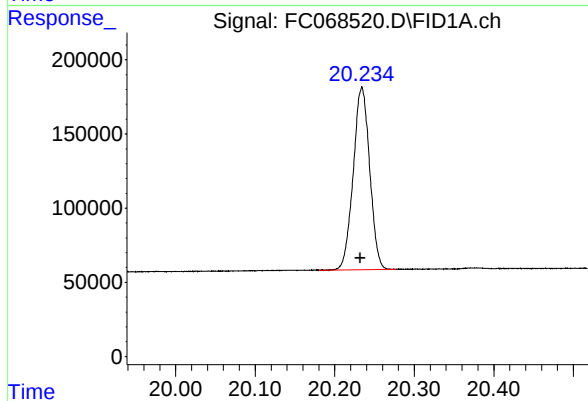
#18 n-Dotriacontane (C32)

R.T.: 18.709 min
Delta R.T.: 0.002 min
Response: 1790701
Conc: 19.52 ug/ml



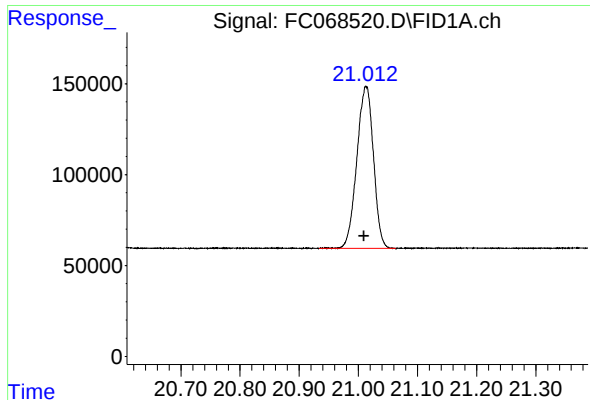
#19 n-Tetatriacontane (C34)

R.T.: 19.494 min
Delta R.T.: 0.002 min
Response: 1754814
Conc: 19.64 ug/ml



#20 n-Hexatriacontane (C36)

R.T.: 20.234 min
Delta R.T.: 0.002 min
Response: 1766416
Conc: 19.72 ug/ml



#21 n-Octatriacontane (C38)

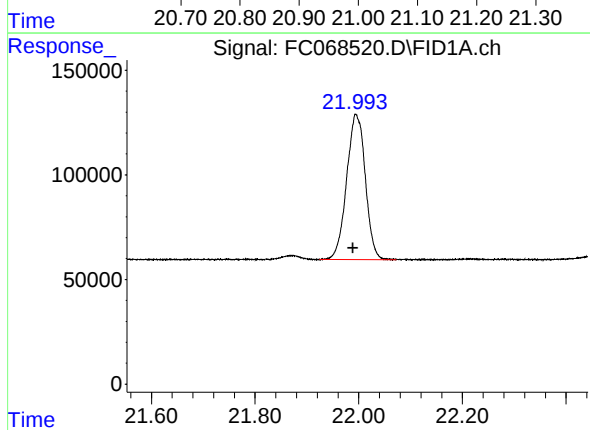
R.T.: 21.013 min
Delta R.T.: 0.004 min
Response: 1737168
Conc: 19.65 ug/ml

Instrument :

FID_C

ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



#22 n-Tetracontane (C40)

R.T.: 21.995 min
Delta R.T.: 0.006 min
Response: 1737661
Conc: 19.68 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040925AL\
 Data File : FC068520.D
 Signal(s) : FID1A.ch
 Acq On : 08 Apr 2025 17:26
 Sample : 20 PPM ALIPHATIC HC STD ICV
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.450	3.397	3.492	BV	261815	2152986	85.78%	4.977%
2	4.526	4.470	4.562	BB	246519	2151620	85.73%	4.973%
3	6.124	6.065	6.189	BB	259162	2370053	94.43%	5.478%
4	6.551	6.495	6.597	BB	221869	2138499	85.20%	4.943%
5	7.182	7.115	7.249	BB	248160	2340318	93.24%	5.410%
6	8.349	8.292	8.384	BB	197952	2073539	82.61%	4.793%
7	9.952	9.887	10.002	BB	191548	2031391	80.94%	4.695%
8	11.397	11.329	11.447	BB	179415	1983646	79.03%	4.585%
9	11.722	11.660	11.772	BB	230868	2509889	100.00%	5.801%
10	12.708	12.650	12.759	BB	163927	1924584	76.68%	4.449%
11	13.154	13.092	13.209	BB	155654	1813783	72.27%	4.192%
12	13.322	13.264	13.360	BB	158466	1900069	75.70%	4.392%
13	13.908	13.842	13.955	BB	156193	1874678	74.69%	4.333%
14	15.012	14.952	15.064	BB	148360	1840193	73.32%	4.254%
15	16.035	15.990	16.090	BB	138007	1805920	71.95%	4.174%
16	16.986	16.919	17.042	BB	133594	1775159	70.73%	4.103%
17	17.874	17.807	17.917	BB	130326	1789949	71.32%	4.137%
18	18.709	18.667	18.769	BB	121479	1790701	71.35%	4.139%
19	19.494	19.440	19.545	BB	120222	1754814	69.92%	4.056%
20	20.234	20.180	20.277	BB	122561	1766416	70.38%	4.083%
21	21.013	20.934	21.064	BB	88867	1737168	69.21%	4.015%
22	21.995	21.924	22.072	BB	69207	1737661	69.23%	4.017%
Sum of corrected areas:							43263036	

Aliphatic EPH 040925.M Wed Apr 09 02:04:39 2025

Initial Calibration Report for SequenceID : FE041725AL

AreaCount

Parameter Range	FE053387.D	FE053388.D	FE053389.D	FE053390.D	FE053391.D	
Aliphatic C9-C12	40273090.000	19897378.000	8360865.000	4326048.000	2135544.000	
Aliphatic C12-C16	27441716.000	13492815.000	5715907.000	2962308.000	1458806.000	
Aliphatic C16-C21	41381922.000	20604545.000	8806501.000	4584729.000	2278742.000	
Aliphatic C21-C28	52866206.000	26808218.000	11424282.000	6149304.000	2962608.000	
Aliphatic C28-C40	71474370.000	36798070.000	15512235.000	8329821.000	4060883.000	
Aliphatic EPH	233437304.000	117601026.000	49819790.000	26352210.000	12896583.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aliphatic C9-C12	138562.3539998	3.618				
Aliphatic C12-C16	141806.081	3.959				
Aliphatic C16-C21	145363.7646664	5.098				
Aliphatic C21-C28	142174.626	6.444				
Aliphatic C28-C40	129049.1849998	6.424				
Aliphatic EPH	137688.0073328	5.4				

Concentration

Parameter Range	FE053387.D	FE053388.D	FE053389.D	FE053390.D	FE053391.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	FE053387.D	FE053388.D	FE053389.D	FE053390.D	FE053391.D	
Aliphatic C9-C12	134243.633333	132649.186666	139347.750000	144201.600000	142369.600000	
Aliphatic C12-C16	137208.580000	134928.150000	142897.675000	148115.400000	145880.600000	
Aliphatic C16-C21	137939.740000	137363.633333	146775.016666	152824.300000	151916.133333	

Initial Calibration Report for SequenceID : FE041725AL

Aliphatic C21-C28	132165.515000	134041.090000	142803.525000	153732.600000	148130.400000	
Aliphatic C28-C40	119123.950000	122660.233333	129268.625000	138830.350000	135362.766666	
Aliphatic EPH	129687.391111	130667.806666	138388.305555	146401.166666	143295.366666	

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
 Data File : FE053387.D
 Signal(s) : FID1B.ch
 Acq On : 16 Apr 2025 15:35
 Operator : YP\AJ
 Sample : 100 PPM ALIPHATIC HC STD1
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
 Quant Time: Apr 16 17:31:16 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
 Quant Title : GC Extractables
 QLast Update : Wed Apr 16 17:29:00 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)	11.897	17254133	97.377 ug/ml
Spiked Amount 50.000		Recovery =	194.75%
12) S 1-chlorooctadecane (S...	13.340	12911819	97.103 ug/ml
Spiked Amount 50.000		Recovery =	194.21%
Target Compounds			
1) T n-Nonane (C9)	3.235	13201429	97.806 ug/ml
2) T n-Decane (C10)	4.496	13423214	98.275 ug/ml
3) T A~Naphthalene (C11.7)	6.209	14943300	98.978 ug/ml
4) T n-Dodecane (C12)	6.677	13648447	98.315 ug/ml
5) T A~2-methylnaphthalene...	7.313	14933440	99.120 ug/ml
6) T n-Tetradecane (C14)	8.514	13623353	98.225 ug/ml
7) T n-Hexadecane (C16)	10.129	13818363	97.718 ug/ml
8) T n-Octadecane (C18)	11.580	13916696	97.192 ug/ml
10) T n-Eicosane (C20)	12.893	13773973	96.784 ug/ml
11) T n-Heneicosane (C21)	13.509	13691253	96.712 ug/ml
13) T n-Docosane (C22)	14.097	13585495	96.579 ug/ml
14) T n-Tetracosane (C24)	15.203	13396031	96.279 ug/ml
15) T n-Hexacosane (C26)	16.227	13122804	96.079 ug/ml
16) T n-Octacosane (C28)	17.179	12761876	95.559 ug/ml
17) T n-Tricontane (C30)	18.070	12660425	95.282 ug/ml
18) T n-Dotriacontane (C32)	18.905	12453995	95.078 ug/ml
19) T n-Tetratriacontane (C34)	19.691	11958465	95.363 ug/ml
20) T n-Hexatriacontane (C36)	20.431	11785134	96.522 ug/ml
21) T n-Octatriacontane (C38)	21.171	11353126	96.357 ug/ml
22) T n-Tetracontane (C40)	22.087	11263225	97.099 ug/ml

(f)=RT Delta > 1/2 Window

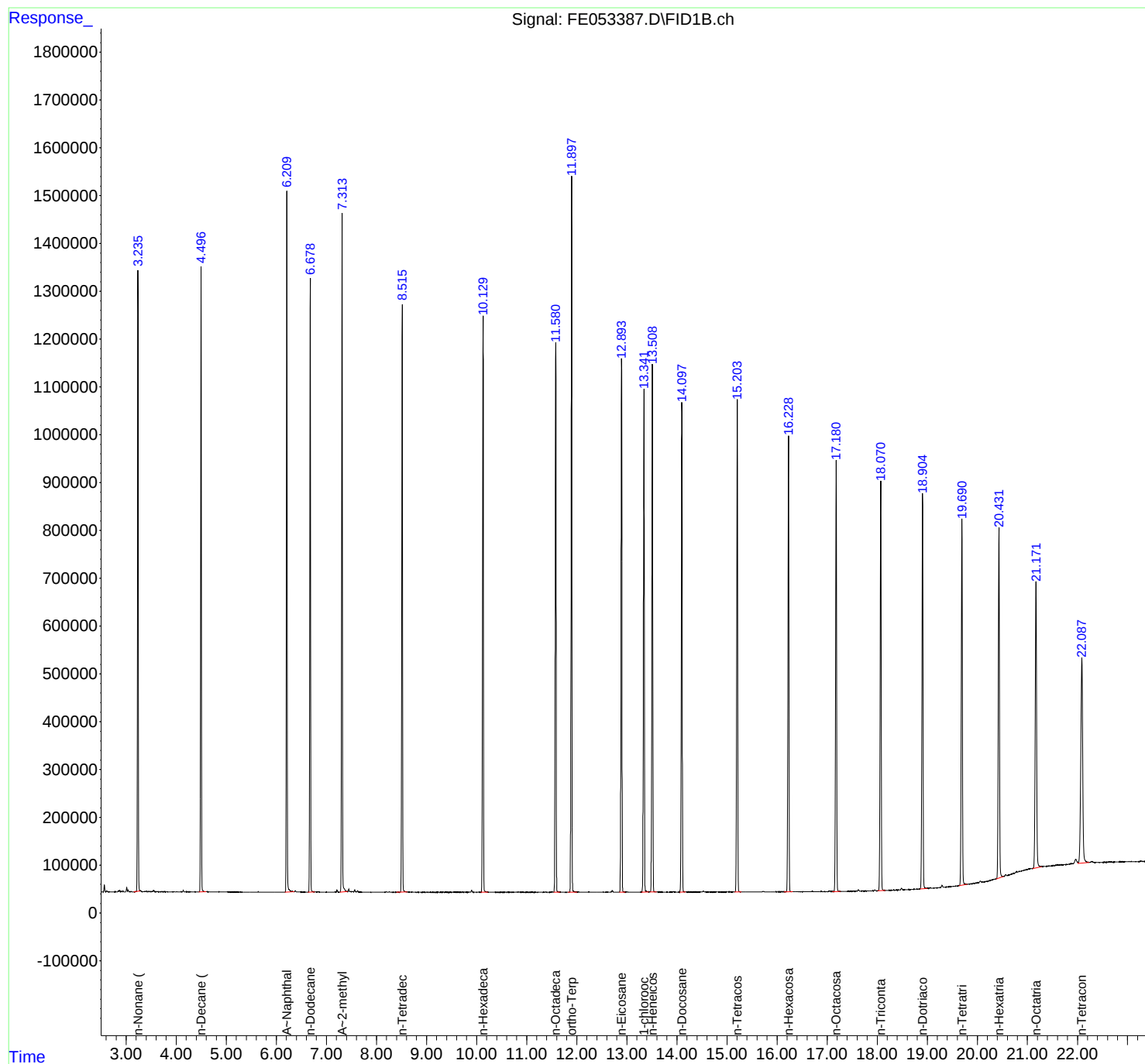
(m)=manual int.

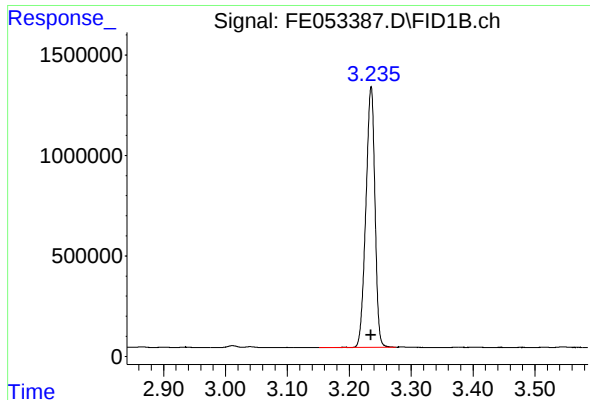
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
Data File : FE053387.D
Signal(s) : FID1B.ch
Acq On : 16 Apr 2025 15:35
Operator : YP\AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Apr 16 17:31:16 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
Quant Title : GC Extractables
QLast Update : Wed Apr 16 17:29:00 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)

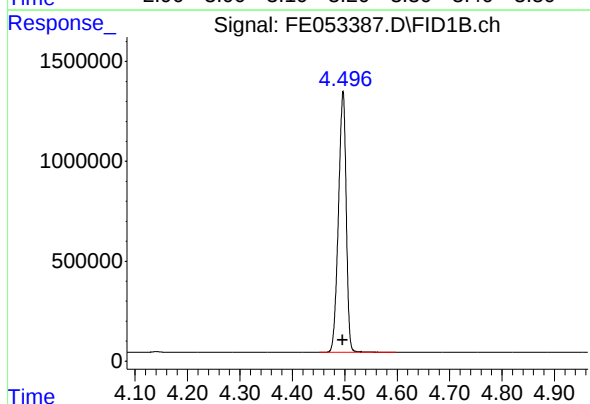
R.T.: 3.235 min
Delta R.T.: 0.000 min
Response: 13201429
Conc: 97.81 ug/ml

Instrument :

FID_E

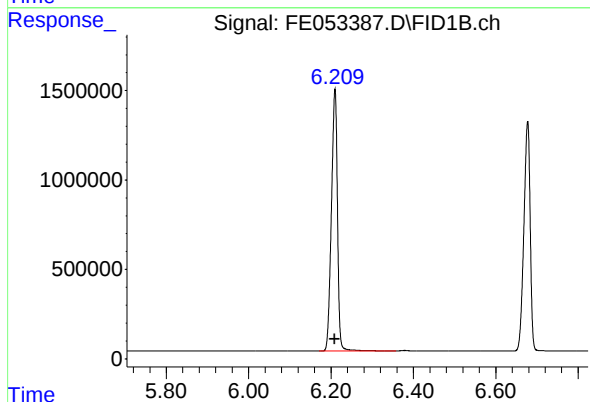
ClientSampleId :

100 PPM ALIPHATIC HC STD1



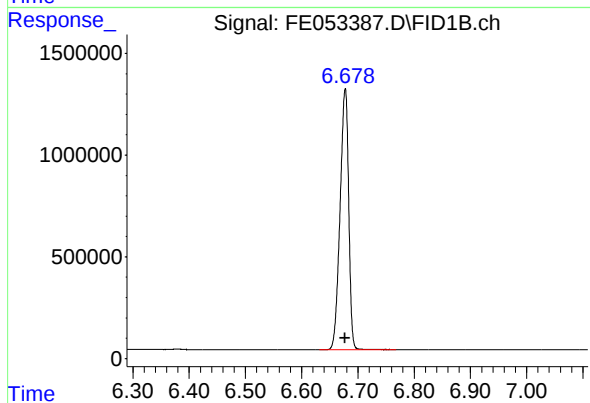
#2 n-Decane (C10)

R.T.: 4.496 min
Delta R.T.: 0.000 min
Response: 13423214
Conc: 98.27 ug/ml



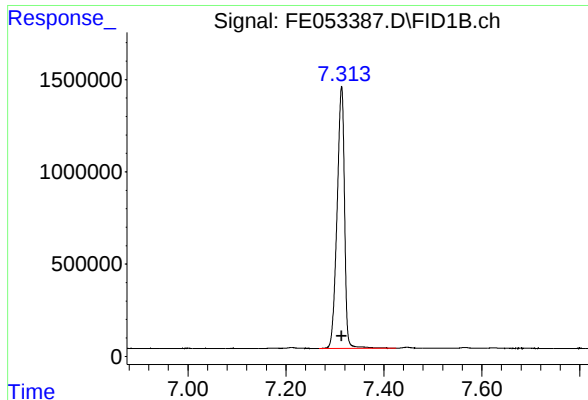
#3 A~Naphthalene (C11.7)

R.T.: 6.209 min
Delta R.T.: 0.000 min
Response: 14943300
Conc: 98.98 ug/ml



#4 n-Dodecane (C12)

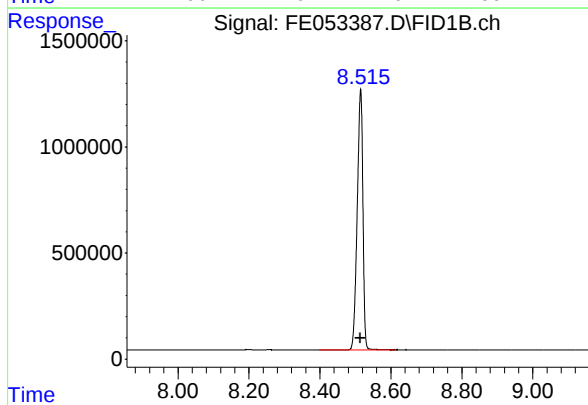
R.T.: 6.677 min
Delta R.T.: 0.000 min
Response: 13648447
Conc: 98.32 ug/ml



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

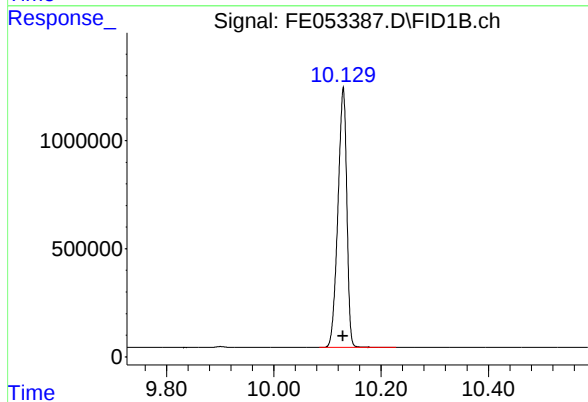
R.T.: 7.313 min
Delta R.T.: 0.000 min
Response: 14933440
Conc: 99.12 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



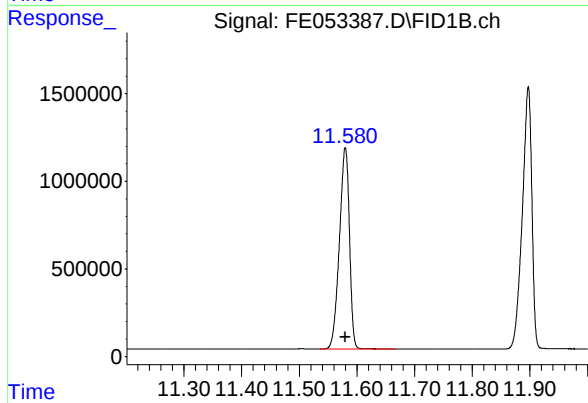
#6 n-Tetradecane (C14)

R.T.: 8.514 min
Delta R.T.: 0.000 min
Response: 13623353
Conc: 98.22 ug/ml



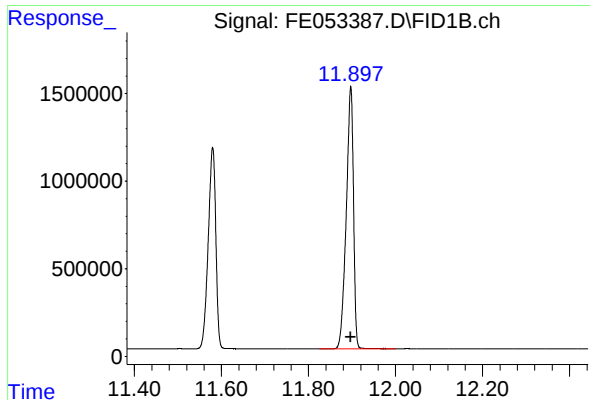
#7 n-Hexadecane (C16)

R.T.: 10.129 min
Delta R.T.: 0.000 min
Response: 13818363
Conc: 97.72 ug/ml



#8 n-Octadecane (C18)

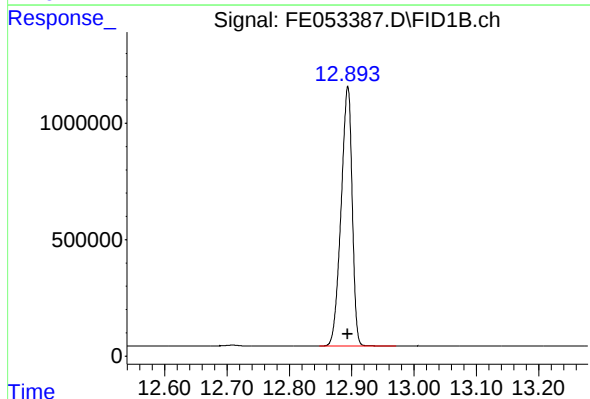
R.T.: 11.580 min
Delta R.T.: 0.000 min
Response: 13916696
Conc: 97.19 ug/ml



#9 ortho-Terphenyl (SURR)

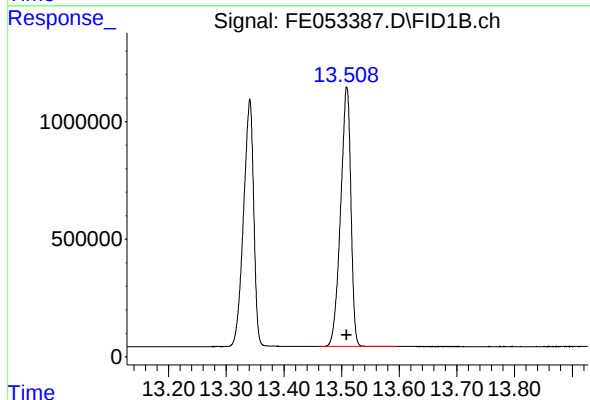
R.T.: 11.897 min
Delta R.T.: 0.000 min
Response: 17254133
Conc: 97.38 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



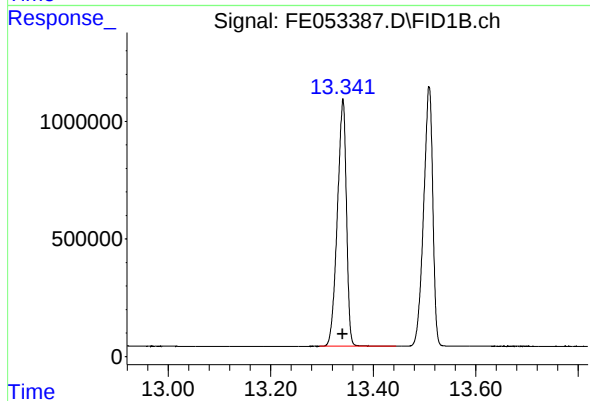
#10 n-Eicosane (C20)

R.T.: 12.893 min
Delta R.T.: 0.000 min
Response: 13773973
Conc: 96.78 ug/ml



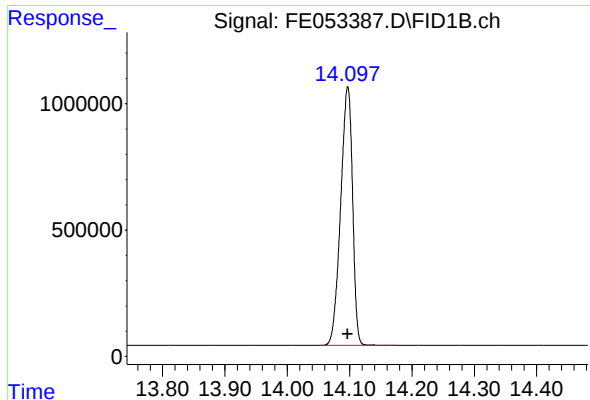
#11 n-Heneicosane (C21)

R.T.: 13.509 min
Delta R.T.: 0.000 min
Response: 13691253
Conc: 96.71 ug/ml



#12 1-chlorooctadecane (SURR)

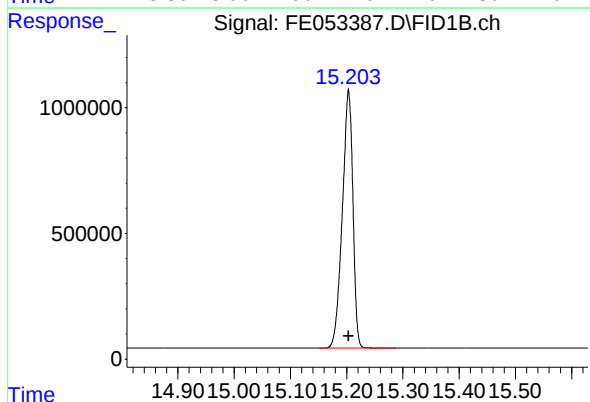
R.T.: 13.340 min
Delta R.T.: 0.000 min
Response: 12911819
Conc: 97.10 ug/ml



#13 n-Docosane (C22)

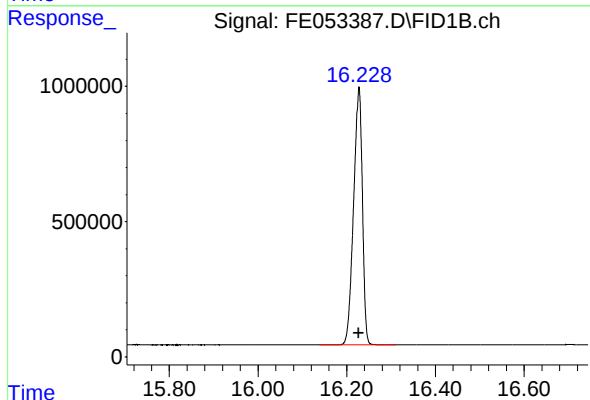
R.T.: 14.097 min
Delta R.T.: 0.000 min
Response: 13585495
Conc: 96.58 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



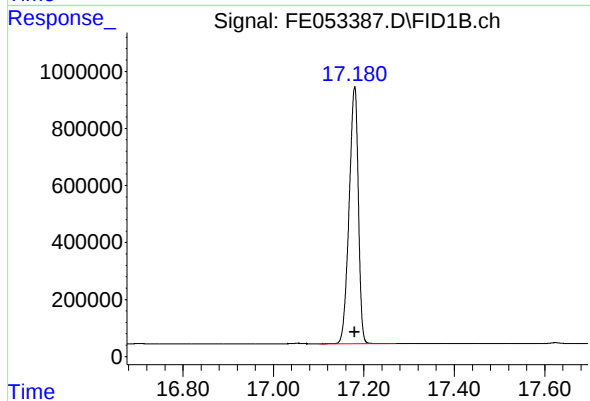
#14 n-Tetracosane (C24)

R.T.: 15.203 min
Delta R.T.: 0.000 min
Response: 13396031
Conc: 96.28 ug/ml



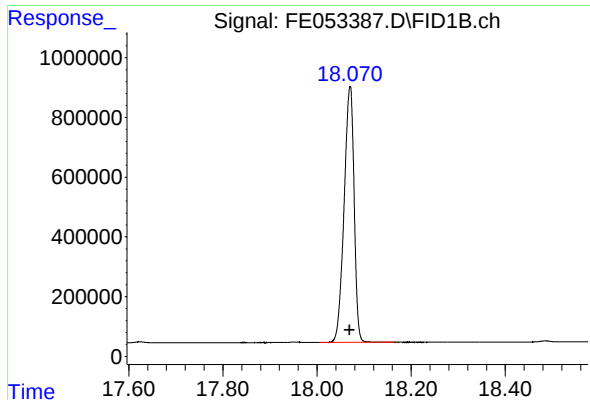
#15 n-Hexacosane (C26)

R.T.: 16.227 min
Delta R.T.: 0.000 min
Response: 13122804
Conc: 96.08 ug/ml



#16 n-Octacosane (C28)

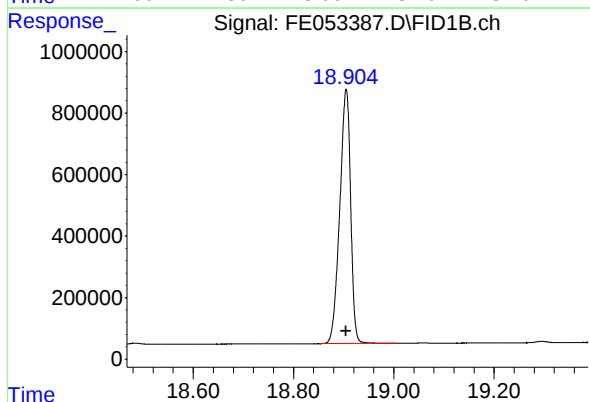
R.T.: 17.179 min
Delta R.T.: 0.000 min
Response: 12761876
Conc: 95.56 ug/ml



#17 n-Tricontane (C30)

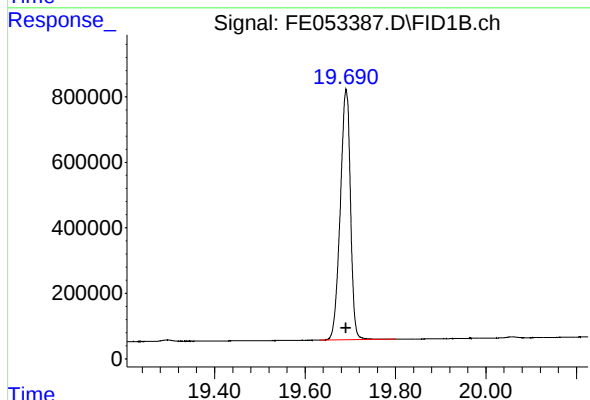
R.T.: 18.070 min
Delta R.T.: 0.000 min
Response: 12660425
Conc: 95.28 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



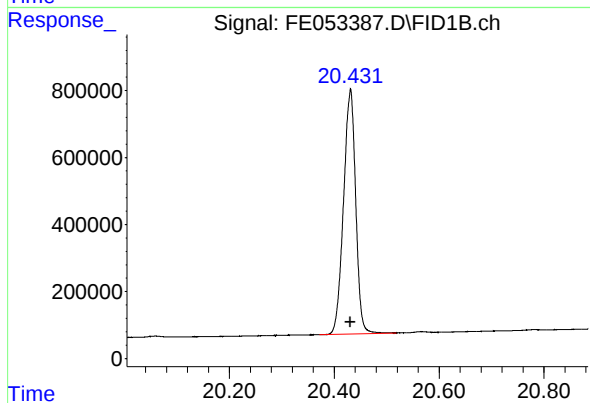
#18 n-Dotriacontane (C32)

R.T.: 18.905 min
Delta R.T.: 0.000 min
Response: 12453995
Conc: 95.08 ug/ml



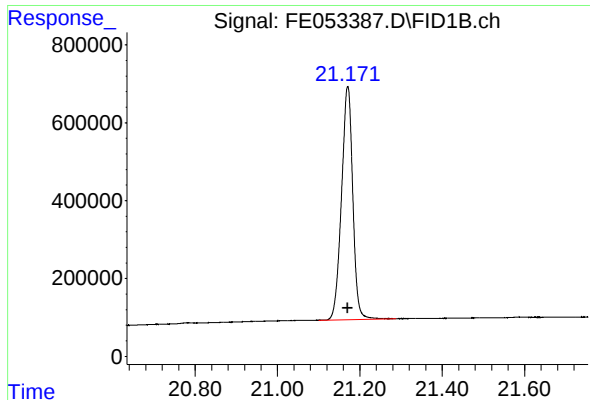
#19 n-Tetratriacontane (C34)

R.T.: 19.691 min
Delta R.T.: 0.000 min
Response: 11958465
Conc: 95.36 ug/ml



#20 n-Hexatriacontane (C36)

R.T.: 20.431 min
Delta R.T.: 0.000 min
Response: 11785134
Conc: 96.52 ug/ml



#21 n-Octatriacontane (C38)

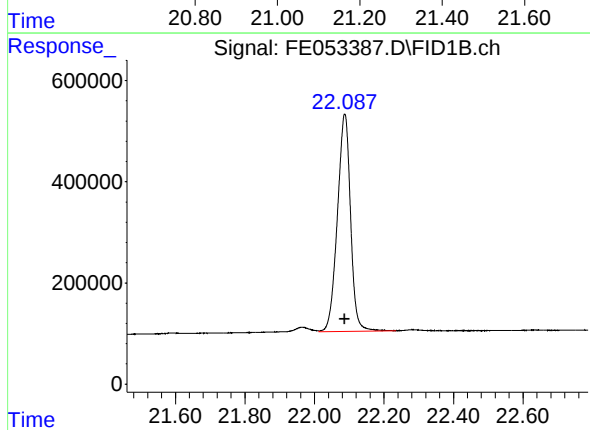
R.T.: 21.171 min
Delta R.T.: 0.000 min
Response: 11353126
Conc: 96.36 ug/ml

Instrument :

FID_E

ClientSampleId :

100 PPM ALIPHATIC HC STD1



#22 n-Tetracontane (C40)

R.T.: 22.087 min
Delta R.T.: 0.000 min
Response: 11263225
Conc: 97.10 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
 Data File : FE053387.D
 Signal(s) : FID1B.ch
 Acq On : 16 Apr 2025 15:35
 Sample : 100 PPM ALIPHATIC HC STD1
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.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	3.235	3.151	3.275	BV	1293097	13201429	76.51%	4.498%
2	4.496	4.451	4.598	BB	1319483	13423214	77.80%	4.574%
3	6.209	6.171	6.358	BV	1487035	14943300	86.61%	5.092%
4	6.677	6.631	6.768	BB	1292806	13648447	79.10%	4.651%
5	7.313	7.268	7.425	BV	1434572	14933440	86.55%	5.088%
6	8.514	8.398	8.614	BB	1226836	13623353	78.96%	4.642%
7	10.129	10.084	10.228	BB	1183838	13818363	80.09%	4.708%
8	11.580	11.534	11.668	BB	1155505	13916696	80.66%	4.742%
9	11.897	11.824	12.001	BB	1510414	17254133	100.00%	5.879%
10	12.893	12.848	12.971	BB	1122609	13773973	79.83%	4.693%
11	13.340	13.294	13.444	BB	1054518	12911819	74.83%	4.400%
12	13.509	13.461	13.594	BB	1104290	13691253	79.35%	4.665%
13	14.097	14.051	14.174	BB	1027855	13585495	78.74%	4.629%
14	15.203	15.151	15.288	BB	1022741	13396031	77.64%	4.565%
15	16.227	16.138	16.311	BB	954045	13122804	76.06%	4.471%
16	17.179	17.101	17.271	BB	910602	12761876	73.96%	4.348%
17	18.070	18.004	18.168	BB	866175	12660425	73.38%	4.314%
18	18.905	18.851	19.004	BB	829094	12453995	72.18%	4.244%
19	19.691	19.631	19.801	BB	764724	11958465	69.31%	4.075%
20	20.431	20.371	20.518	BV	730817	11785134	68.30%	4.016%
21	21.171	21.101	21.288	BB	599663	11353126	65.80%	3.868%
22	22.087	22.013	22.234	VV	429735	11263225	65.28%	3.838%
Sum of corrected areas:						293479995		

Aliphatic EPH 041725.M Thu Apr 17 04:25:52 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
 Data File : FE053388.D
 Signal(s) : FID1B.ch
 Acq On : 16 Apr 2025 16:35
 Operator : YP\AJ
 Sample : 50 PPM ALIPHATIC HC STD2
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
 Quant Time: Apr 16 17:33:06 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
 Quant Title : GC Extractables
 QLast Update : Wed Apr 16 17:29:00 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)	11.890	8499004	48.625 ug/ml
Spiked Amount 50.000		Recovery =	97.25%
12) S 1-chlorooctadecane (S...	13.334	6421755	48.850 ug/ml
Spiked Amount 50.000		Recovery =	97.70%
Target Compounds			
1) T n-Nonane (C9)	3.231	6562926	49.074 ug/ml
2) T n-Decane (C10)	4.492	6620620	48.970 ug/ml
3) T A~Naphthalene (C11.7)	6.205	7332105	49.034 ug/ml
4) T n-Dodecane (C12)	6.673	6713832	48.896 ug/ml
5) T A~2-methylnaphthalene...	7.308	7291791	48.921 ug/ml
6) T n-Tetradecane (C14)	8.510	6689138	48.805 ug/ml
7) T n-Hexadecane (C16)	10.125	6803677	48.726 ug/ml
8) T n-Octadecane (C18)	11.574	6892409	48.741 ug/ml
10) T n-Eicosane (C20)	12.888	6864559	48.809 ug/ml
11) T n-Heneicosane (C21)	13.502	6847577	48.901 ug/ml
13) T n-Docosane (C22)	14.090	6821686	48.987 ug/ml
14) T n-Tetracosane (C24)	15.197	6773377	49.113 ug/ml
15) T n-Hexacosane (C26)	16.221	6677317	49.253 ug/ml
16) T n-Octacosane (C28)	17.173	6535838	49.288 ug/ml
17) T n-Tricontane (C30)	18.063	6526749	49.410 ug/ml
18) T n-Dotriacontane (C32)	18.898	6438595	49.433 ug/ml
19) T n-Tetratriacontane (C34)	19.683	6170453	49.468 ug/ml
20) T n-Hexatriacontane (C36)	20.425	6039761	49.643 ug/ml
21) T n-Octatriacontane (C38)	21.162	5881041	49.943 ug/ml
22) T n-Tetracontane (C40)	22.075	5741471	49.663 ug/ml

(f)=RT Delta > 1/2 Window

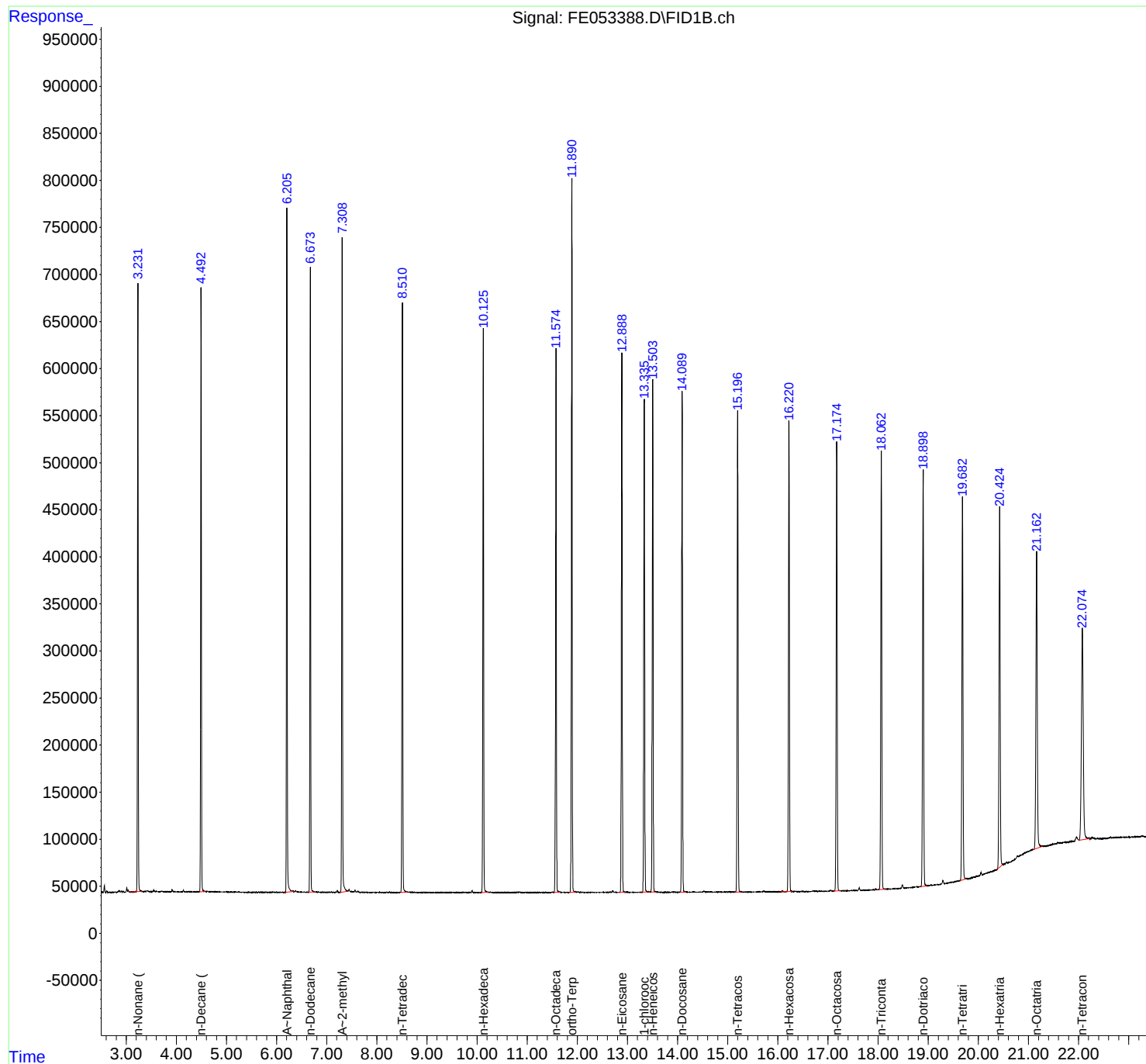
(m)=manual int.

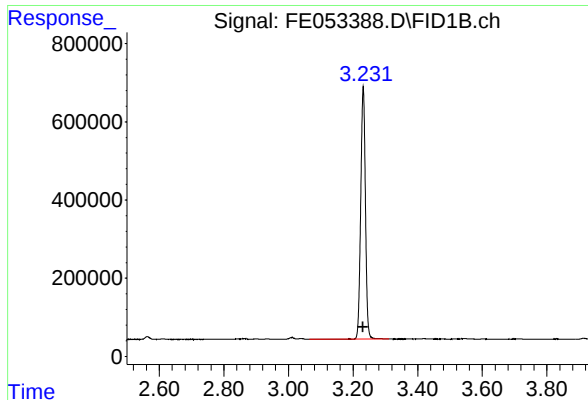
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
Data File : FE053388.D
Signal(s) : FID1B.ch
Acq On : 16 Apr 2025 16:35
Operator : YP\AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Apr 16 17:33:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
Quant Title : GC Extractables
QLast Update : Wed Apr 16 17:29:00 2025
Response via : Initial Calibration
Integrator: ChemStation

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

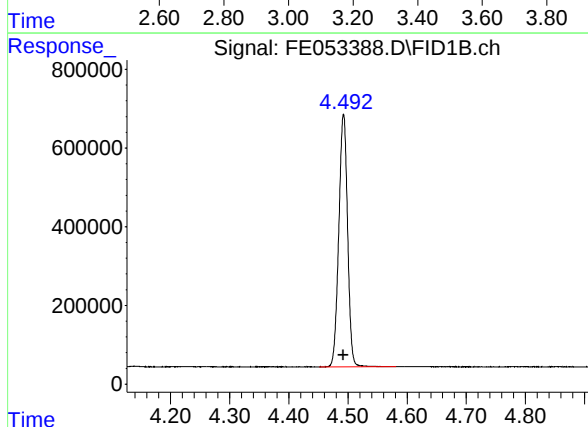




#1 n-Nonane (C9)

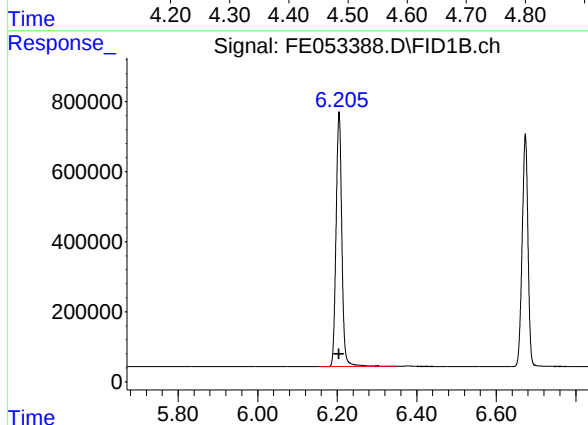
R.T.: 3.231 min
Delta R.T.: 0.000 min
Response: 6562926
Conc: 49.07 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



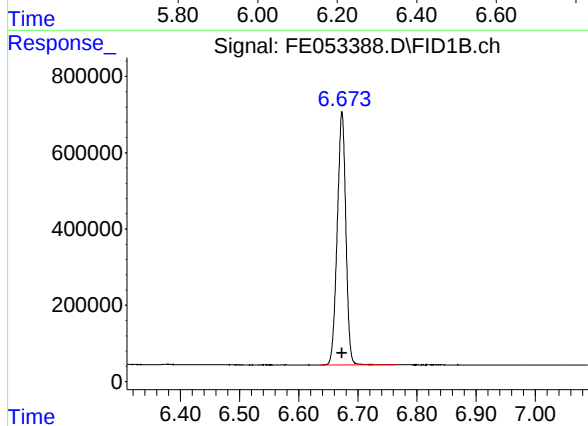
#2 n-Decane (C10)

R.T.: 4.492 min
Delta R.T.: 0.000 min
Response: 6620620
Conc: 48.97 ug/ml



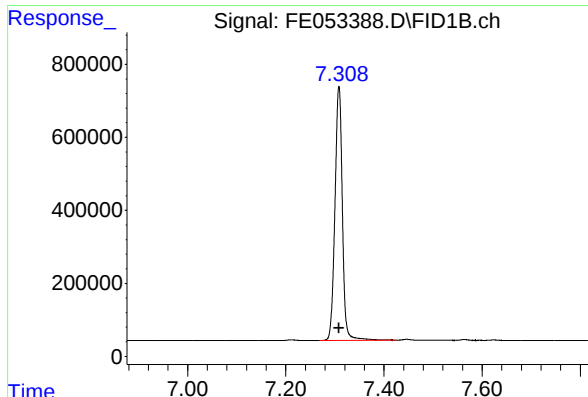
#3 A~Naphthalene (C11.7)

R.T.: 6.205 min
Delta R.T.: 0.000 min
Response: 7332105
Conc: 49.03 ug/ml



#4 n-Dodecane (C12)

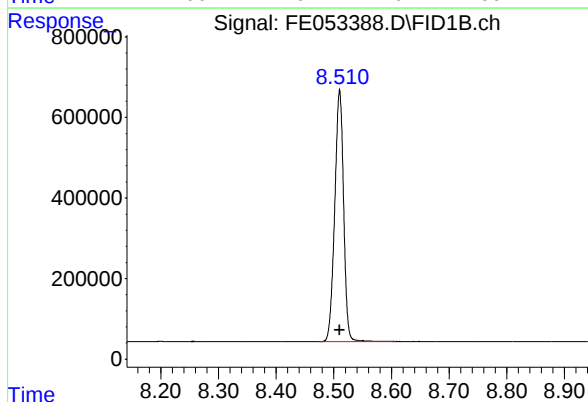
R.T.: 6.673 min
Delta R.T.: 0.000 min
Response: 6713832
Conc: 48.90 ug/ml



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

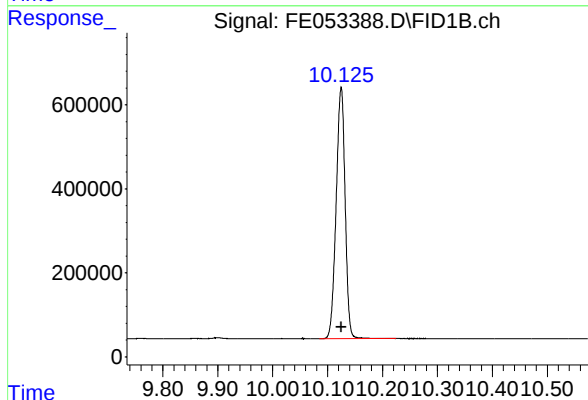
R.T.: 7.308 min
Delta R.T.: 0.000 min
Response: 7291791
Conc: 48.92 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



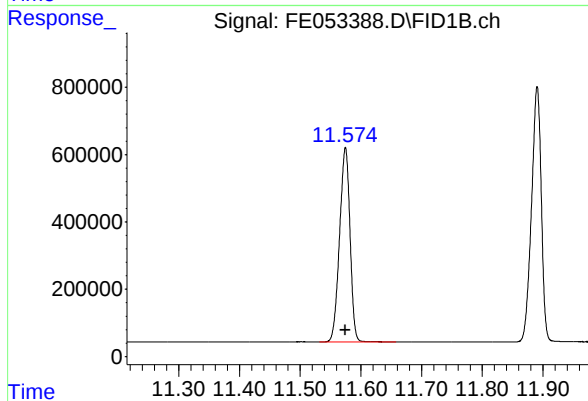
#6 n-Tetradecane (C14)

R.T.: 8.510 min
Delta R.T.: 0.000 min
Response: 6689138
Conc: 48.81 ug/ml



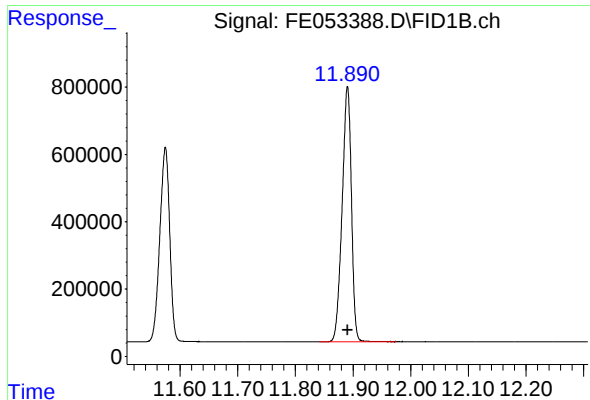
#7 n-Hexadecane (C16)

R.T.: 10.125 min
Delta R.T.: 0.000 min
Response: 6803677
Conc: 48.73 ug/ml



#8 n-Octadecane (C18)

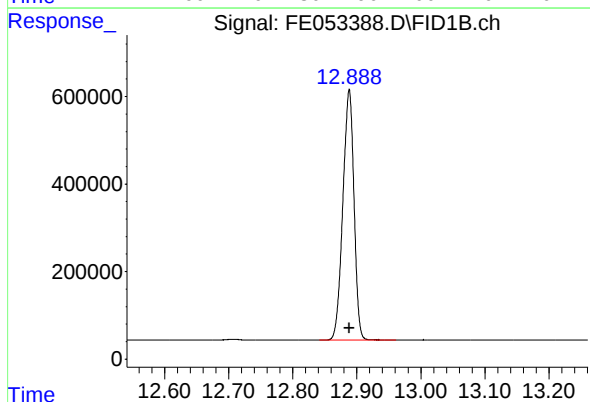
R.T.: 11.574 min
Delta R.T.: 0.000 min
Response: 6892409
Conc: 48.74 ug/ml



#9 ortho-Terphenyl (SURR)

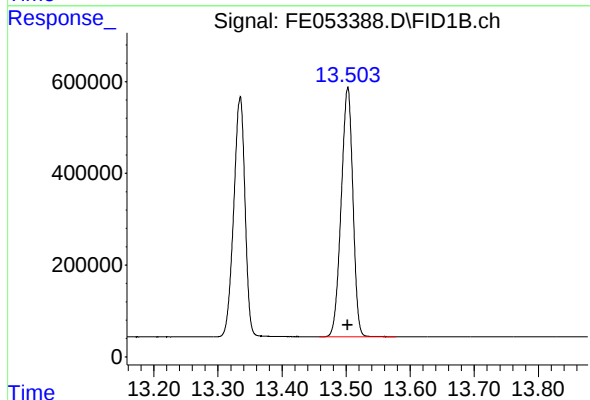
R.T.: 11.890 min
Delta R.T.: 0.000 min
Response: 8499004
Conc: 48.63 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



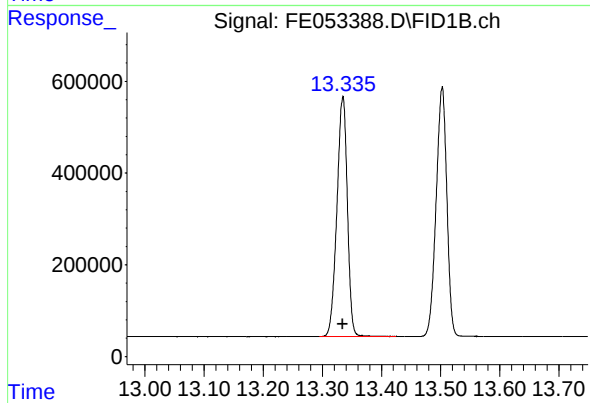
#10 n-Eicosane (C20)

R.T.: 12.888 min
Delta R.T.: 0.000 min
Response: 6864559
Conc: 48.81 ug/ml



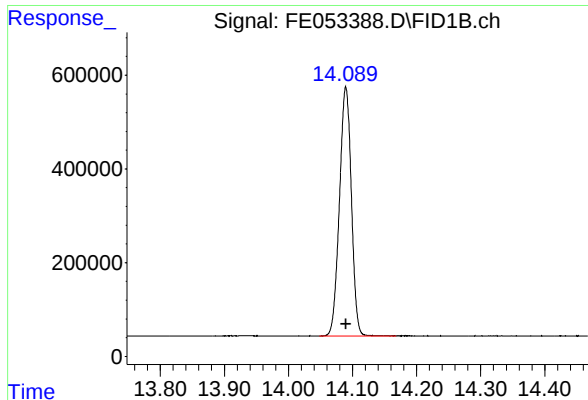
#11 n-Heneicosane (C21)

R.T.: 13.502 min
Delta R.T.: 0.000 min
Response: 6847577
Conc: 48.90 ug/ml



#12 1-chlorooctadecane (SURR)

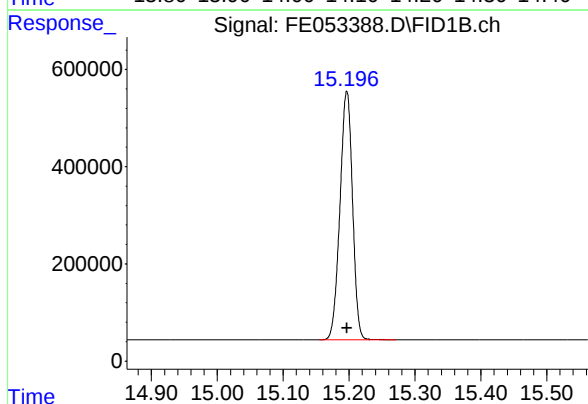
R.T.: 13.334 min
Delta R.T.: 0.000 min
Response: 6421755
Conc: 48.85 ug/ml



#13 n-Docosane (C22)

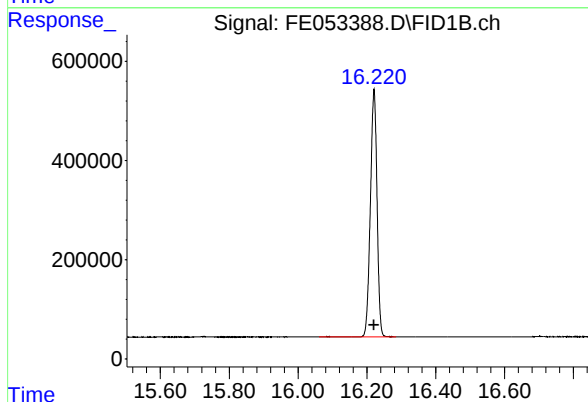
R.T.: 14.090 min
Delta R.T.: 0.000 min
Response: 6821686
Conc: 48.99 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



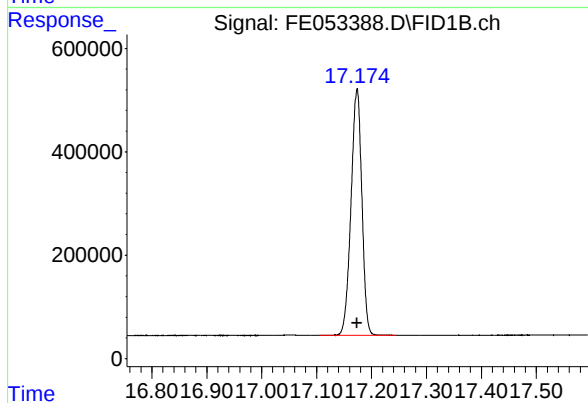
#14 n-Tetracosane (C24)

R.T.: 15.197 min
Delta R.T.: 0.000 min
Response: 6773377
Conc: 49.11 ug/ml



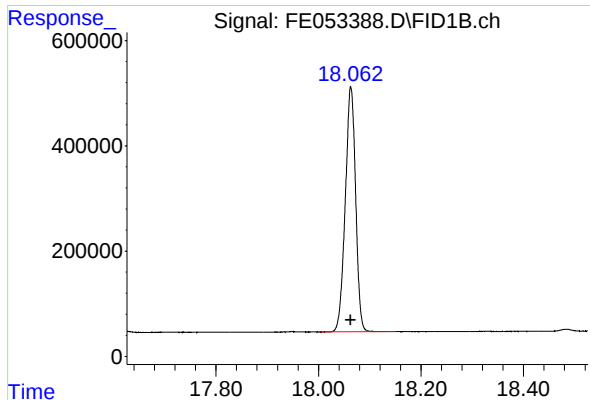
#15 n-Hexacosane (C26)

R.T.: 16.221 min
Delta R.T.: 0.000 min
Response: 6677317
Conc: 49.25 ug/ml



#16 n-Octacosane (C28)

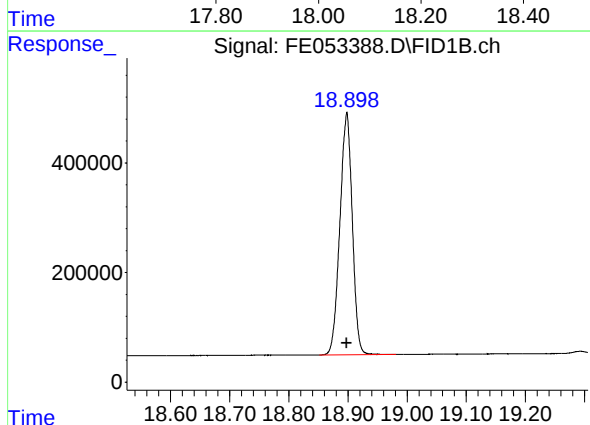
R.T.: 17.173 min
Delta R.T.: 0.000 min
Response: 6535838
Conc: 49.29 ug/ml



#17 n-Tricontane (C30)

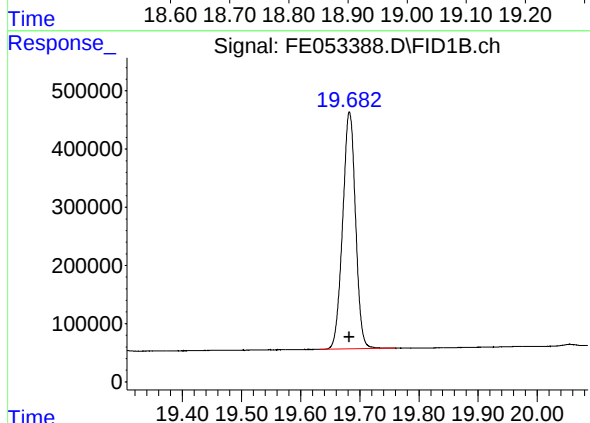
R.T.: 18.063 min
Delta R.T.: 0.000 min
Response: 6526749
Conc: 49.41 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



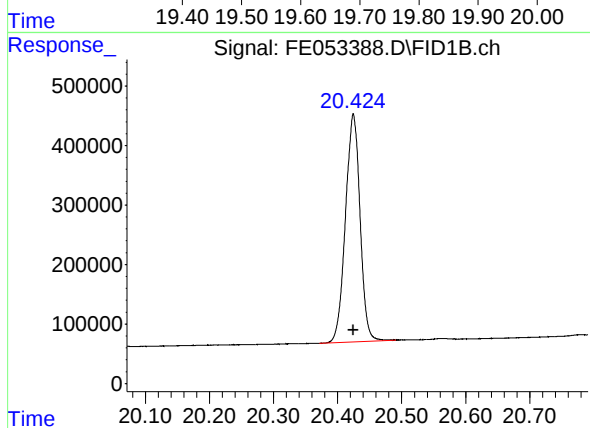
#18 n-Dotriacontane (C32)

R.T.: 18.898 min
Delta R.T.: 0.000 min
Response: 6438595
Conc: 49.43 ug/ml



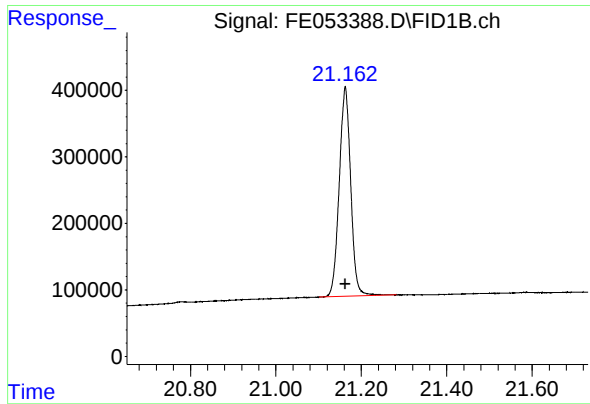
#19 n-Tetatriacontane (C34)

R.T.: 19.683 min
Delta R.T.: 0.000 min
Response: 6170453
Conc: 49.47 ug/ml



#20 n-Hexatriacontane (C36)

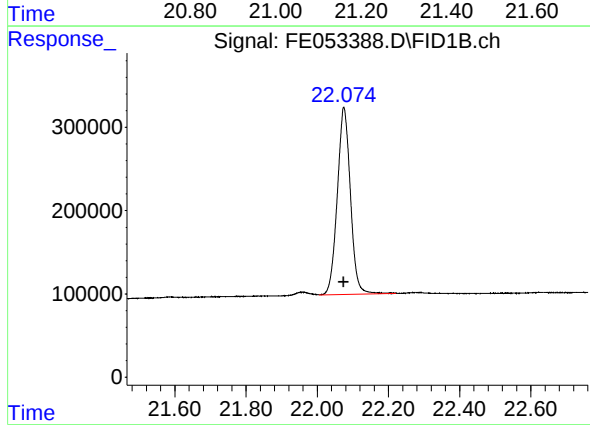
R.T.: 20.425 min
Delta R.T.: 0.000 min
Response: 6039761
Conc: 49.64 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.162 min
Delta R.T.: 0.000 min
Response: 5881041
Conc: 49.94 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



#22 n-Tetracontane (C40)

R.T.: 22.075 min
Delta R.T.: 0.000 min
Response: 5741471
Conc: 49.66 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
 Data File : FE053388.D
 Signal(s) : FID1B.ch
 Acq On : 16 Apr 2025 16:35
 Sample : 50 PPM ALIPHATIC HC STD2
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.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	3.231	3.065	3.311	BB	644246	6562926	77.22%	4.460%
2	4.492	4.451	4.581	BB	639740	6620620	77.90%	4.499%
3	6.205	6.155	6.348	BB	724713	7332105	86.27%	4.983%
4	6.673	6.635	6.765	BB	663649	6713832	79.00%	4.563%
5	7.308	7.268	7.425	BV	695510	7291791	85.80%	4.955%
6	8.510	8.475	8.608	BB	623330	6689138	78.70%	4.546%
7	10.125	10.085	10.225	BB	598353	6803677	80.05%	4.624%
8	11.574	11.531	11.658	BB	578076	6892409	81.10%	4.684%
9	11.890	11.841	11.975	BB	761929	8499004	100.00%	5.776%
10	12.888	12.841	12.961	BB	572047	6864559	80.77%	4.665%
11	13.334	13.295	13.425	BB	522152	6421755	75.56%	4.364%
12	13.502	13.458	13.578	BB	540370	6847577	80.57%	4.654%
13	14.090	14.048	14.168	BB	529648	6821686	80.26%	4.636%
14	15.197	15.155	15.271	BB	513772	6773377	79.70%	4.603%
15	16.221	16.061	16.285	BB	498805	6677317	78.57%	4.538%
16	17.173	17.105	17.245	BB	479074	6535838	76.90%	4.442%
17	18.063	18.001	18.151	BB	463690	6526749	76.79%	4.436%
18	18.898	18.851	18.981	BB	440326	6438595	75.76%	4.376%
19	19.683	19.631	19.761	BB	407622	6170453	72.60%	4.193%
20	20.425	20.371	20.491	BB	382777	6039761	71.06%	4.105%
21	21.162	21.101	21.281	BB	313577	5881041	69.20%	3.997%
22	22.075	22.005	22.221	VB	225074	5741471	67.55%	3.902%
Sum of corrected areas:						147145678		

Aliphatic EPH 041725.M Thu Apr 17 04:26:26 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
 Data File : FE053389.D
 Signal(s) : FID1B.ch
 Acq On : 16 Apr 2025 17:05
 Operator : YP\AJ
 Sample : 20 PPM ALIPHATIC HC STD3
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
 Quant Time: Apr 16 17:29:22 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
 Quant Title : GC Extractables
 QLast Update : Wed Apr 16 17:29:00 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)	11.886	3636748	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
12) S 1-chlorooctadecane (S...	13.330	2736436	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
Target Compounds			
1) T n-Nonane (C9)	3.230	2758721	20.000 ug/ml
2) T n-Decane (C10)	4.491	2778902	20.000 ug/ml
3) T A~Naphthalene (C11.7)	6.203	3050394	20.000 ug/ml
4) T n-Dodecane (C12)	6.671	2823242	20.000 ug/ml
5) T A~2-methylnaphthalene...	7.306	3039727	20.000 ug/ml
6) T n-Tetradecane (C14)	8.508	2823165	20.000 ug/ml
7) T n-Hexadecane (C16)	10.121	2892742	20.000 ug/ml
8) T n-Octadecane (C18)	11.571	2944162	20.000 ug/ml
10) T n-Eicosane (C20)	12.885	2937897	20.000 ug/ml
11) T n-Heneicosane (C21)	13.499	2924442	20.000 ug/ml
13) T n-Docosane (C22)	14.087	2909579	20.000 ug/ml
14) T n-Tetracosane (C24)	15.194	2886306	20.000 ug/ml
15) T n-Hexacosane (C26)	16.218	2838759	20.000 ug/ml
16) T n-Octacosane (C28)	17.170	2789638	20.000 ug/ml
17) T n-Tricontane (C30)	18.060	2782832	20.000 ug/ml
18) T n-Dotriacontane (C32)	18.893	2748709	20.000 ug/ml
19) T n-Tetratriacontane (C34)	19.680	2624272	20.000 ug/ml
20) T n-Hexatriacontane (C36)	20.422	2526868	20.000 ug/ml
21) T n-Octatriacontane (C38)	21.158	2442302	20.000 ug/ml
22) T n-Tetracontane (C40)	22.073	2387252	20.000 ug/ml

(f)=RT Delta > 1/2 Window

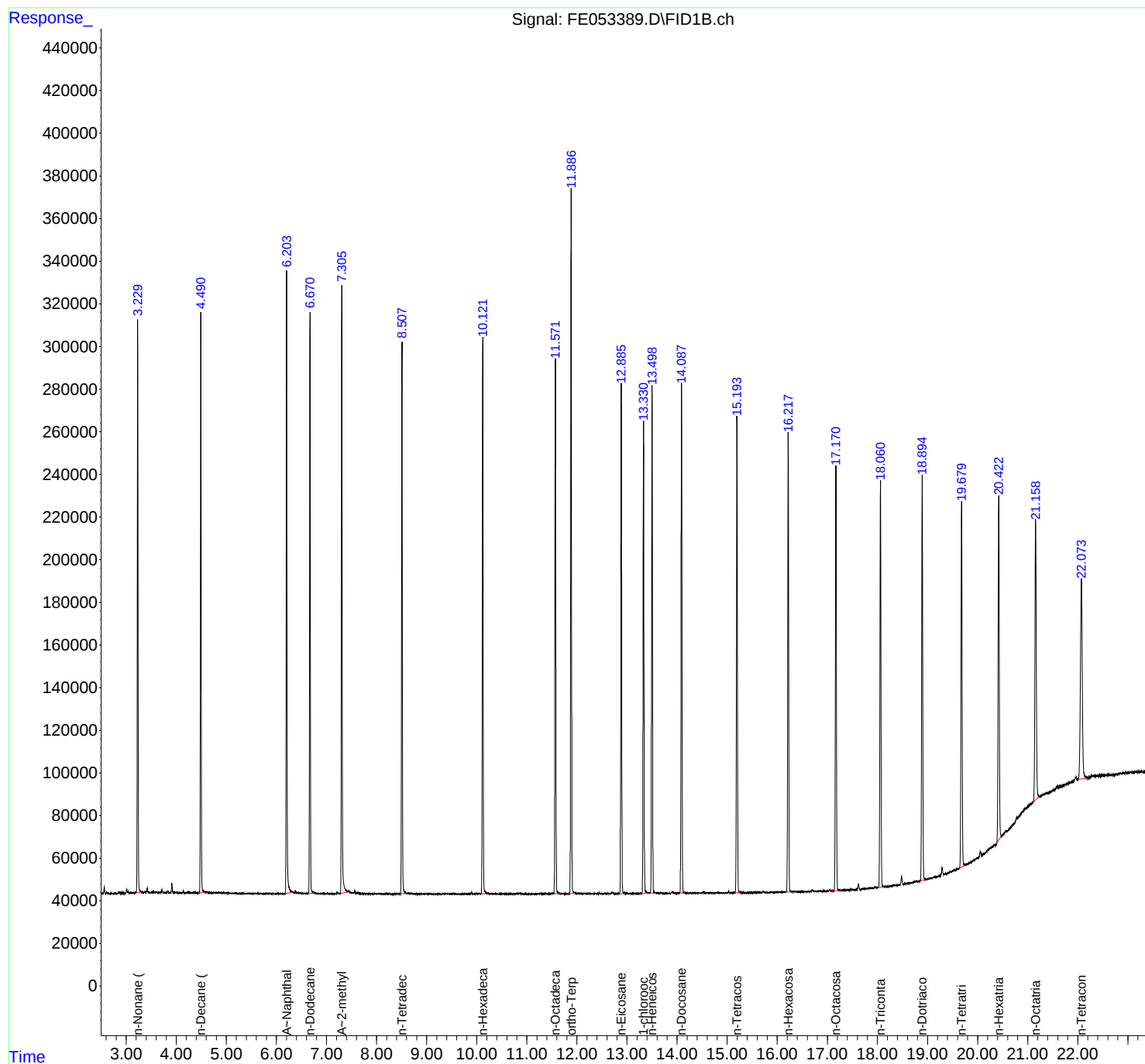
(m)=manual int.

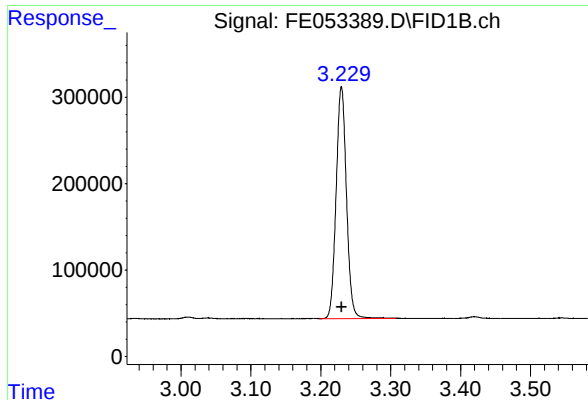
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
Data File : FE053389.D
Signal(s) : FID1B.ch
Acq On : 16 Apr 2025 17:05
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Apr 16 17:29:22 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
Quant Title : GC Extractables
QLast Update : Wed Apr 16 17:29:00 2025
Response via : Initial Calibration
Integrator: ChemStation

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

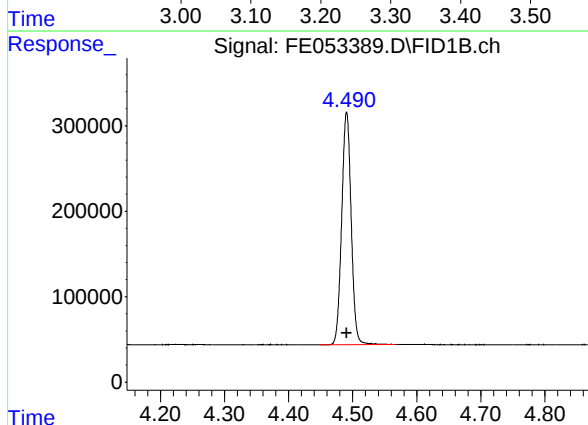




#1 n-Nonane (C9)

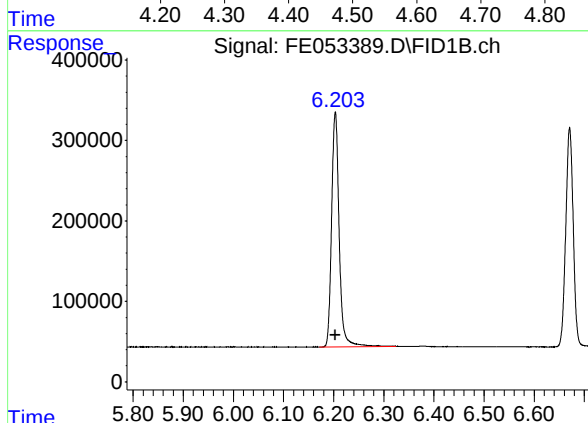
R.T.: 3.230 min
Delta R.T.: 0.000 min
Response: 2758721
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



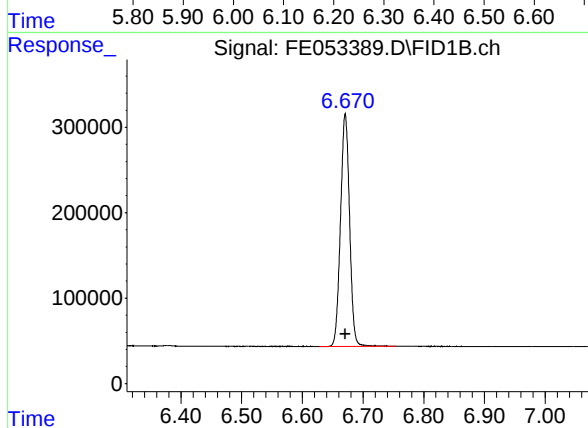
#2 n-Decane (C10)

R.T.: 4.491 min
Delta R.T.: 0.000 min
Response: 2778902
Conc: 20.00 ug/ml



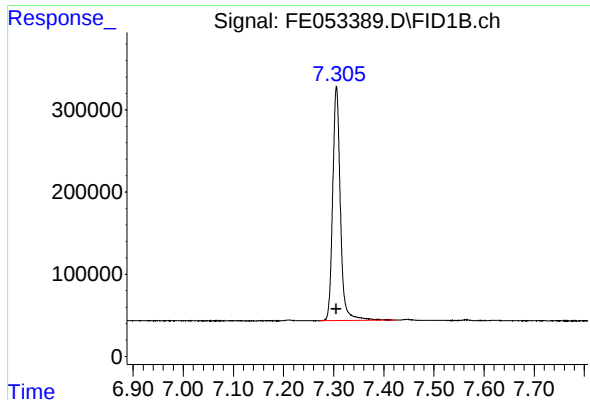
#3 A~Naphthalene (C11.7)

R.T.: 6.203 min
Delta R.T.: 0.000 min
Response: 3050394
Conc: 20.00 ug/ml



#4 n-Dodecane (C12)

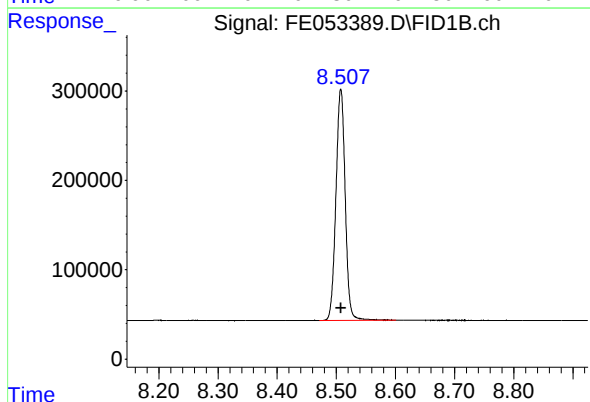
R.T.: 6.671 min
Delta R.T.: 0.000 min
Response: 2823242
Conc: 20.00 ug/ml



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

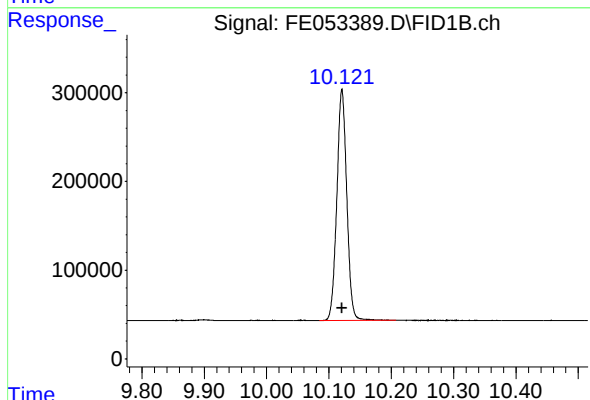
R.T.: 7.306 min
Delta R.T.: 0.000 min
Response: 3039727
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



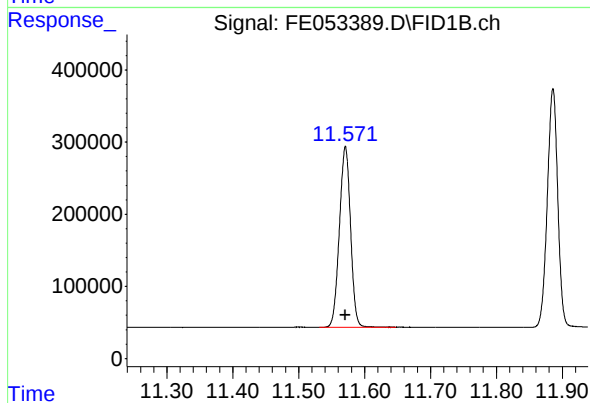
#6 n-Tetradecane (C14)

R.T.: 8.508 min
Delta R.T.: 0.000 min
Response: 2823165
Conc: 20.00 ug/ml



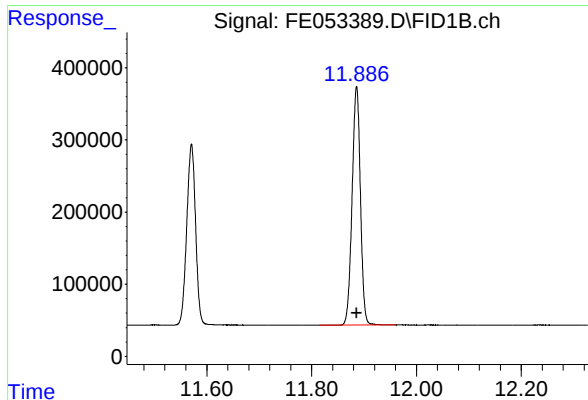
#7 n-Hexadecane (C16)

R.T.: 10.121 min
Delta R.T.: 0.000 min
Response: 2892742
Conc: 20.00 ug/ml



#8 n-Octadecane (C18)

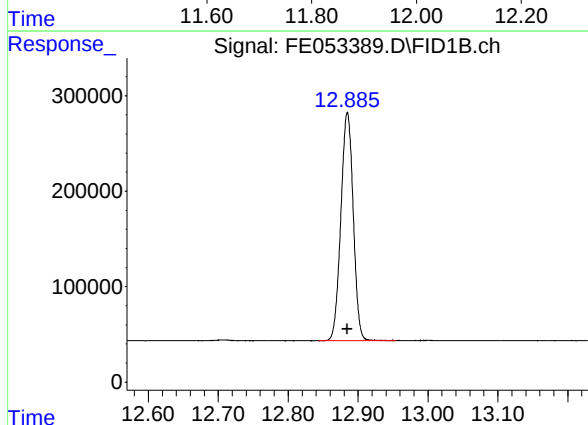
R.T.: 11.571 min
Delta R.T.: 0.000 min
Response: 2944162
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURR)

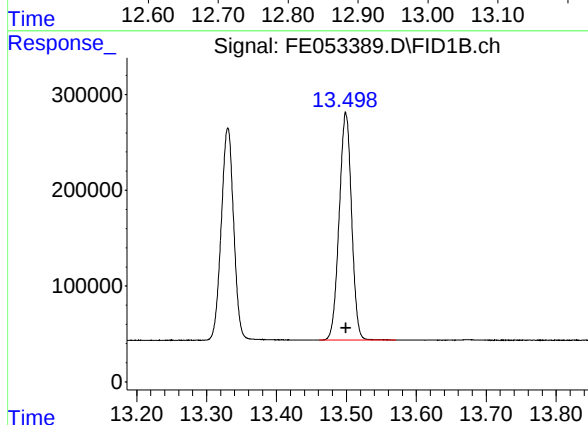
R.T.: 11.886 min
Delta R.T.: 0.000 min
Response: 3636748
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



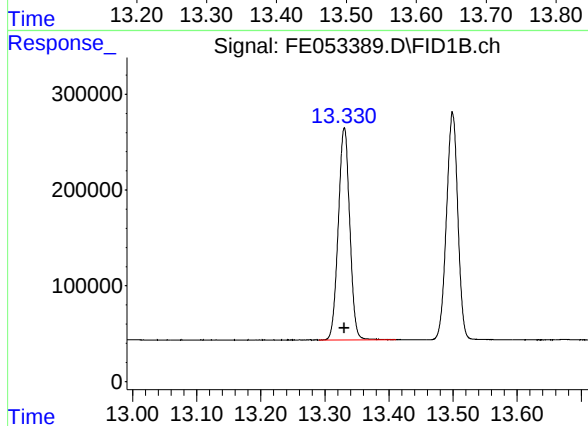
#10 n-Eicosane (C20)

R.T.: 12.885 min
Delta R.T.: 0.000 min
Response: 2937897
Conc: 20.00 ug/ml



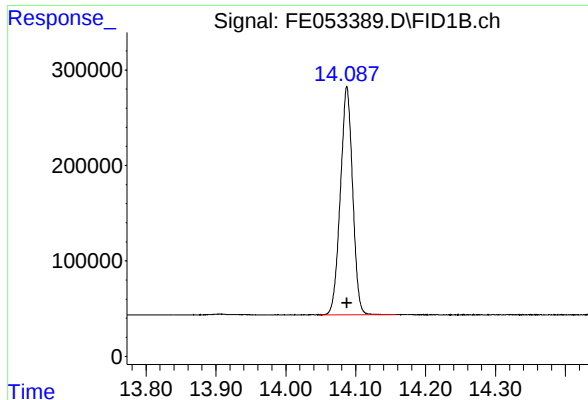
#11 n-Heneicosane (C21)

R.T.: 13.499 min
Delta R.T.: 0.000 min
Response: 2924442
Conc: 20.00 ug/ml



#12 1-chlorooctadecane (SURR)

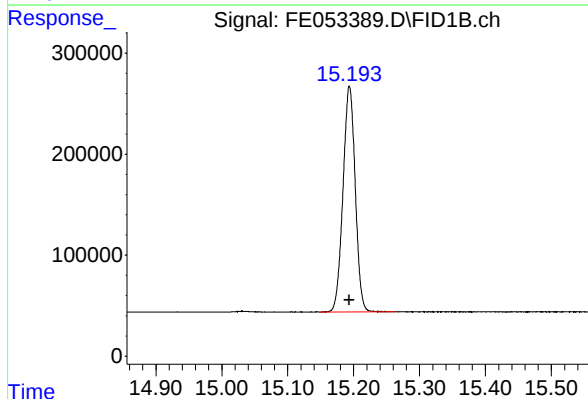
R.T.: 13.330 min
Delta R.T.: 0.000 min
Response: 2736436
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

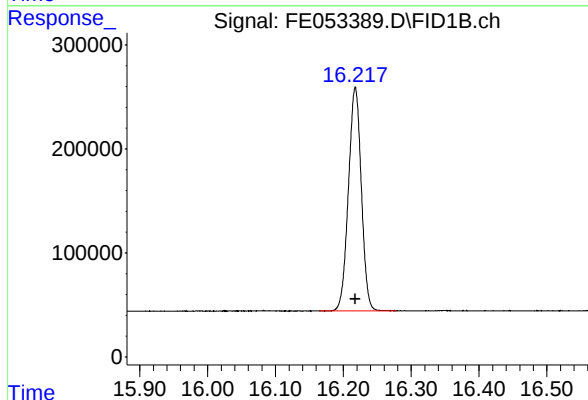
R.T.: 14.087 min
Delta R.T.: 0.000 min
Response: 2909579
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



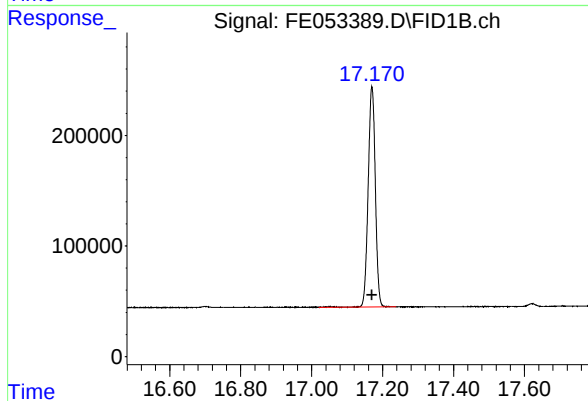
#14 n-Tetracosane (C24)

R.T.: 15.194 min
Delta R.T.: 0.000 min
Response: 2886306
Conc: 20.00 ug/ml



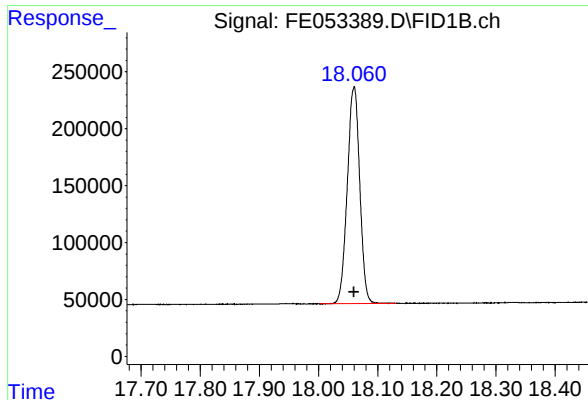
#15 n-Hexacosane (C26)

R.T.: 16.218 min
Delta R.T.: 0.000 min
Response: 2838759
Conc: 20.00 ug/ml



#16 n-Octacosane (C28)

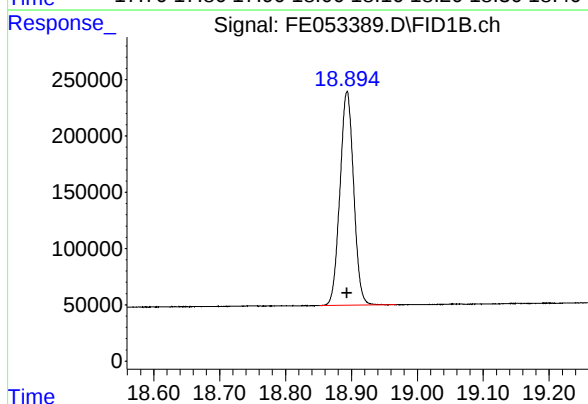
R.T.: 17.170 min
Delta R.T.: 0.000 min
Response: 2789638
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

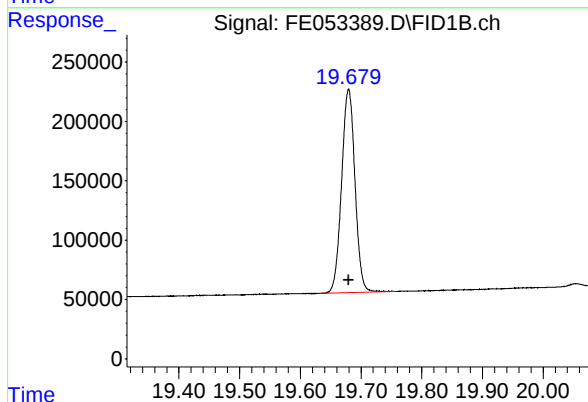
R.T.: 18.060 min
Delta R.T.: 0.000 min
Response: 2782832
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



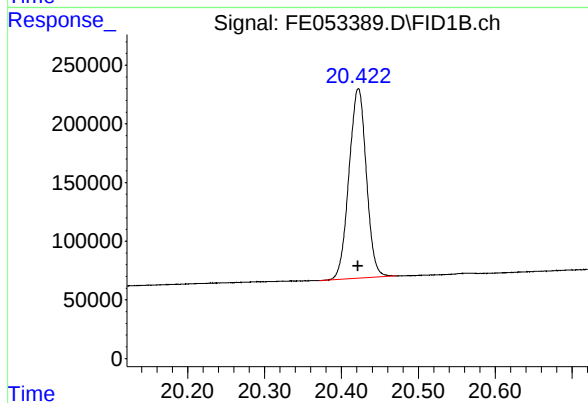
#18 n-Dotriacontane (C32)

R.T.: 18.893 min
Delta R.T.: 0.000 min
Response: 2748709
Conc: 20.00 ug/ml



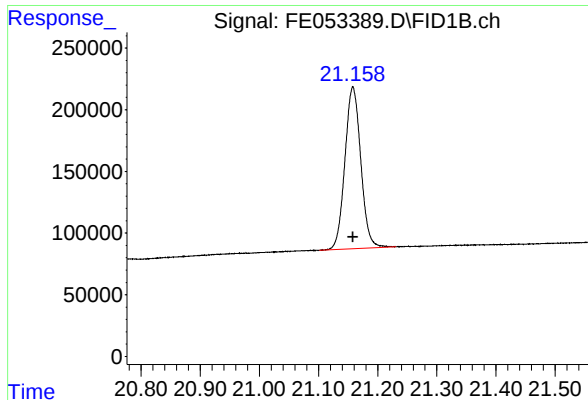
#19 n-Tetatriacontane (C34)

R.T.: 19.680 min
Delta R.T.: 0.000 min
Response: 2624272
Conc: 20.00 ug/ml



#20 n-Hexatriacontane (C36)

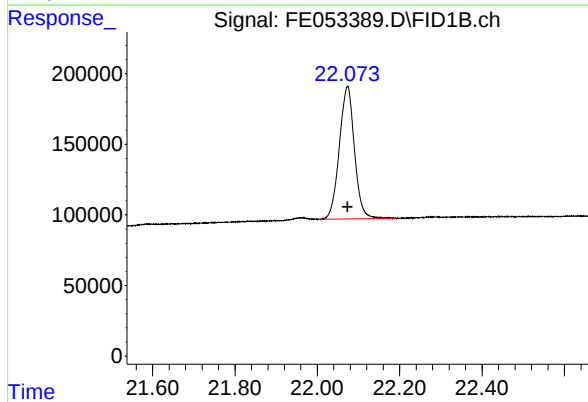
R.T.: 20.422 min
Delta R.T.: 0.000 min
Response: 2526868
Conc: 20.00 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.158 min
Delta R.T.: 0.000 min
Response: 2442302
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



#22 n-Tetracontane (C40)

R.T.: 22.073 min
Delta R.T.: 0.000 min
Response: 2387252
Conc: 20.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
Data File : FE053389.D
Signal(s) : FID1B.ch
Acq On : 16 Apr 2025 17:05
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.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	3.230	3.198	3.308	BB	267962	2758721	75.86%	4.429%
2	4.491	4.448	4.568	BB	272704	2778902	76.41%	4.462%
3	6.203	6.171	6.324	BB	292802	3050394	83.88%	4.898%
4	6.671	6.628	6.754	BB	271603	2823242	77.63%	4.533%
5	7.306	7.271	7.424	BV	282773	3039727	83.58%	4.881%
6	8.508	8.471	8.601	BB	259133	2823165	77.63%	4.533%
7	10.121	10.084	10.208	BB	260136	2892742	79.54%	4.645%
8	11.571	11.531	11.648	BB	250837	2944162	80.96%	4.727%
9	11.886	11.814	11.961	BB	328980	3636748	100.00%	5.839%
10	12.885	12.844	12.954	BB	239134	2937897	80.78%	4.717%
11	13.330	13.291	13.411	BB	221954	2736436	75.24%	4.394%
12	13.499	13.461	13.571	BB	236315	2924442	80.41%	4.695%
13	14.087	14.048	14.158	BB	238674	2909579	80.00%	4.672%
14	15.194	15.148	15.264	BB	223550	2886306	79.37%	4.634%
15	16.218	16.164	16.278	BB	214955	2838759	78.06%	4.558%
16	17.170	17.021	17.238	BB	198686	2789638	76.71%	4.479%
17	18.060	18.001	18.131	BB	191290	2782832	76.52%	4.468%
18	18.893	18.851	18.968	BB	190388	2748709	75.58%	4.413%
19	19.680	19.631	19.758	BB	171279	2624272	72.16%	4.213%
20	20.422	20.371	20.471	BV	161787	2526868	69.48%	4.057%
21	21.158	21.101	21.231	BB	131193	2442302	67.16%	3.921%
22	22.073	22.004	22.191	BB	94184	2387252	65.64%	3.833%
Sum of corrected areas:							62283095	

Aliphatic EPH 041725.M Thu Apr 17 04:26:43 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
 Data File : FE053390.D
 Signal(s) : FID1B.ch
 Acq On : 16 Apr 2025 17:36
 Operator : YP\AJ
 Sample : 10 PPM ALIPHATIC HC STD4
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
 Quant Time: Apr 16 17:59:42 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
 Quant Title : GC Extractables
 QLast Update : Wed Apr 16 17:59:32 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)	11.884	1893058	10.610 ug/ml
Spiked Amount 50.000		Recovery =	21.22%
12) S 1-chlorooctadecane (S...	13.330	1412249	10.547 ug/ml
Spiked Amount 50.000		Recovery =	21.09%
Target Compounds			
1) T n-Nonane (C9)	3.229	1427931	10.499 ug/ml
2) T n-Decane (C10)	4.490	1440599	10.484 ug/ml
3) T A~Naphthalene (C11.7)	6.204	1558579	10.314 ug/ml
4) T n-Dodecane (C12)	6.670	1457518	10.454 ug/ml
5) T A~2-methylnaphthalene...	7.306	1522133	10.158 ug/ml
6) T n-Tetradecane (C14)	8.507	1461405	10.489 ug/ml
7) T n-Hexadecane (C16)	10.121	1500903	10.551 ug/ml
8) T n-Octadecane (C18)	11.570	1528768	10.596 ug/ml
10) T n-Eicosane (C20)	12.884	1532713	10.659 ug/ml
11) T n-Heneicosane (C21)	13.498	1523248	10.644 ug/ml
13) T n-Docosane (C22)	14.086	1528369	10.714 ug/ml
14) T n-Tetracosane (C24)	15.193	1552378	10.913 ug/ml
15) T n-Hexacosane (C26)	16.217	1541972	10.996 ug/ml
16) T n-Octacosane (C28)	17.169	1526585	11.093 ug/ml
17) T n-Tricontane (C30)	18.058	1529997	11.142 ug/ml
18) T n-Dotriacontane (C32)	18.893	1499644	11.094 ug/ml
19) T n-Tetratriacontane (C34)	19.678	1400795	10.895 ug/ml
20) T n-Hexatriacontane (C36)	20.420	1333734	10.705 ug/ml
21) T n-Octatriacontane (C38)	21.157	1286878	10.680 ug/ml
22) T n-Tetracontane (C40)	22.070	1278773	10.775 ug/ml

(f)=RT Delta > 1/2 Window

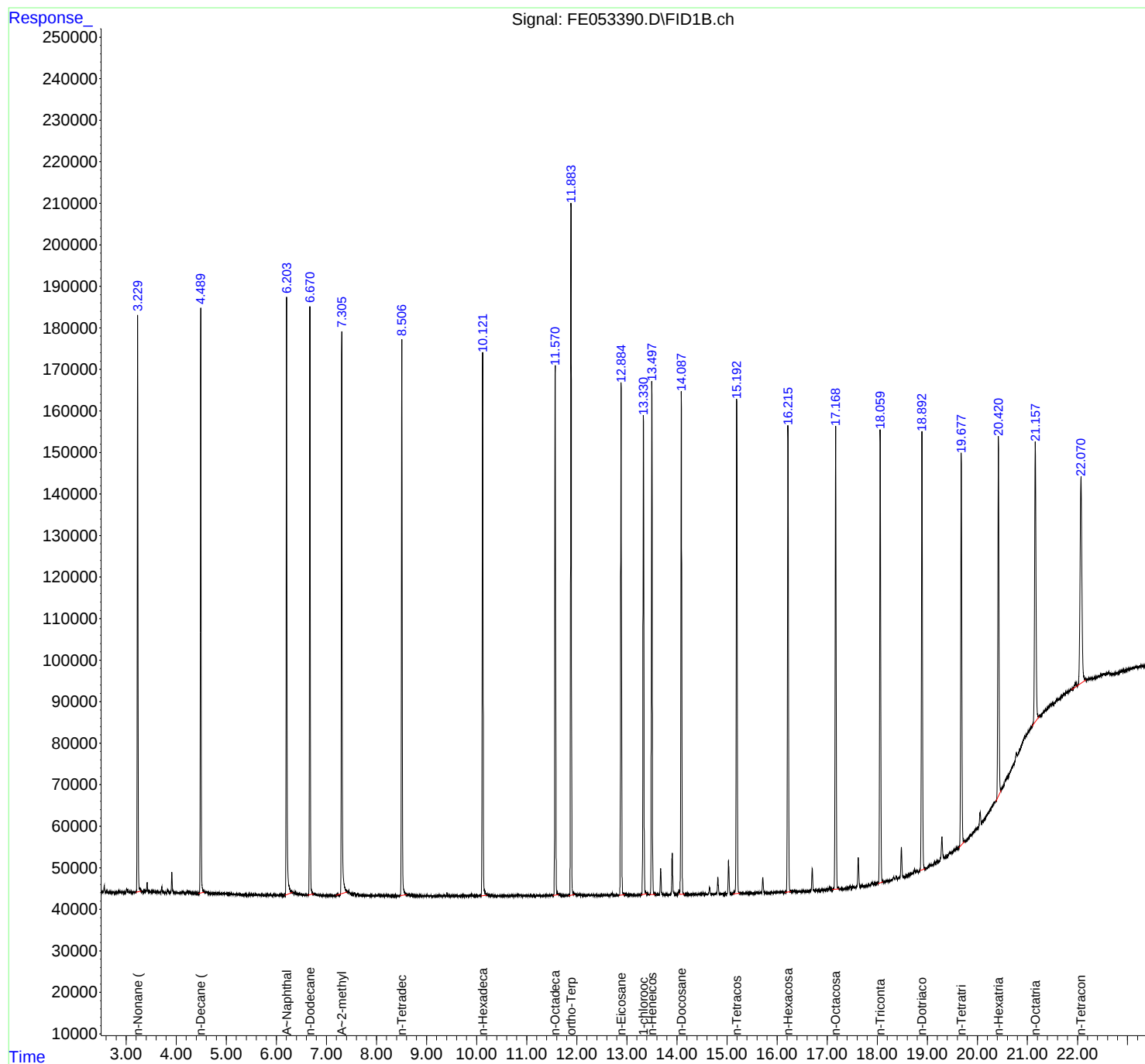
(m)=manual int.

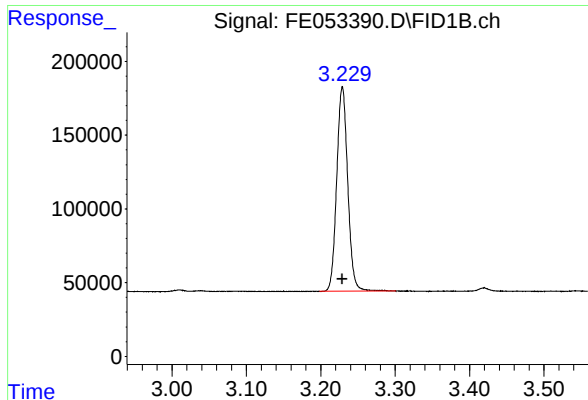
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
Data File : FE053390.D
Signal(s) : FID1B.ch
Acq On : 16 Apr 2025 17:36
Operator : YP\AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
Quant Time: Apr 16 17:59:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
Quant Title : GC Extractables
QLast Update : Wed Apr 16 17:59:32 2025
Response via : Initial Calibration
Integrator: ChemStation

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

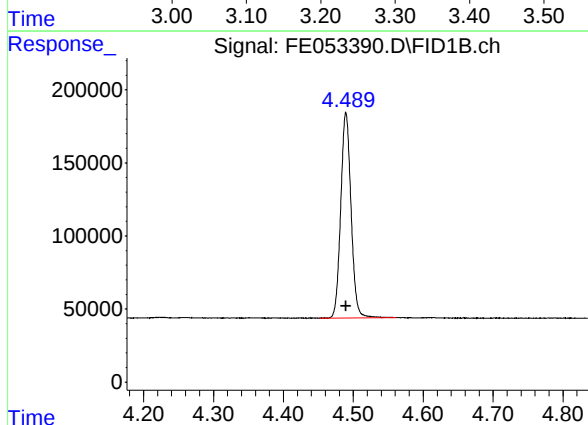




#1 n-Nonane (C9)

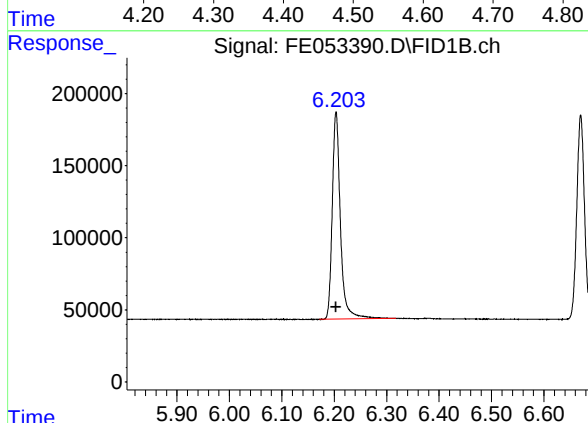
R.T.: 3.229 min
Delta R.T.: 0.000 min
Response: 1427931
Conc: 10.50 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



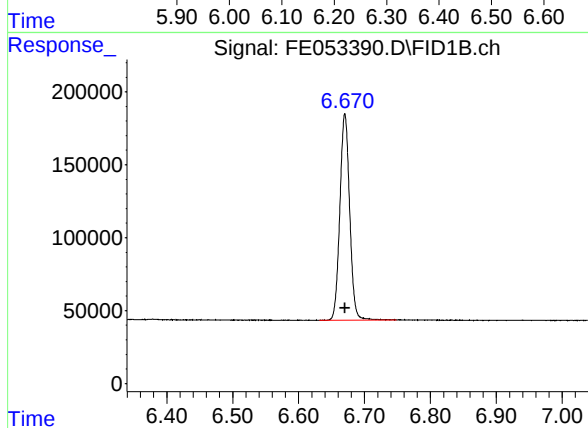
#2 n-Decane (C10)

R.T.: 4.490 min
Delta R.T.: 0.000 min
Response: 1440599
Conc: 10.48 ug/ml



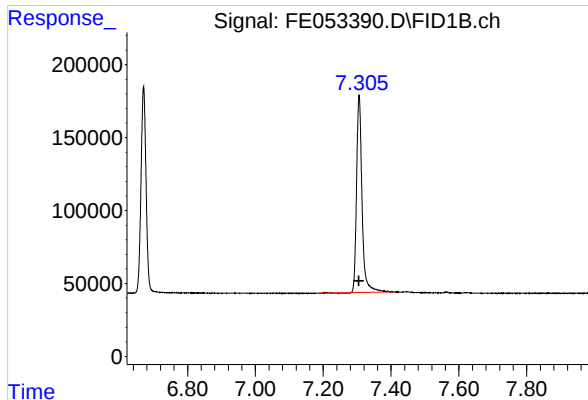
#3 A~Naphthalene (C11.7)

R.T.: 6.204 min
Delta R.T.: 0.000 min
Response: 1558579
Conc: 10.31 ug/ml



#4 n-Dodecane (C12)

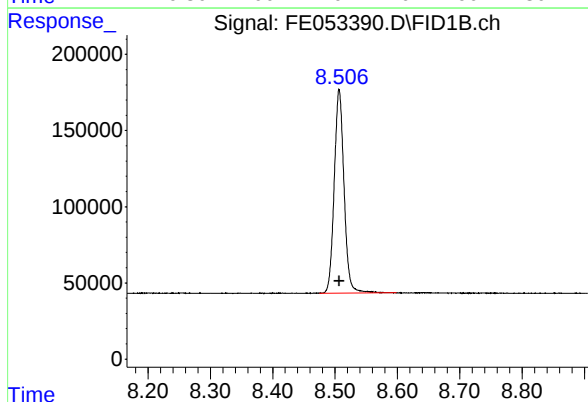
R.T.: 6.670 min
Delta R.T.: 0.000 min
Response: 1457518
Conc: 10.45 ug/ml



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

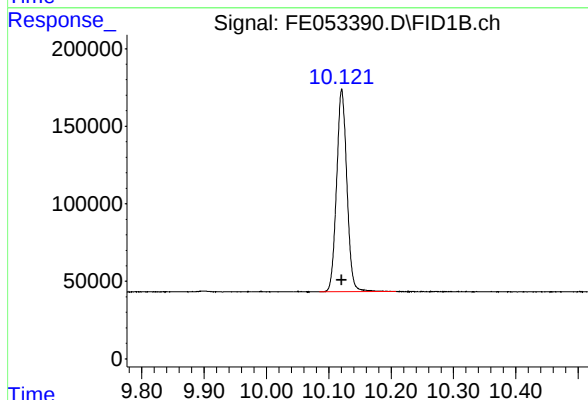
R.T.: 7.306 min
Delta R.T.: 0.000 min
Response: 1522133
Conc: 10.16 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



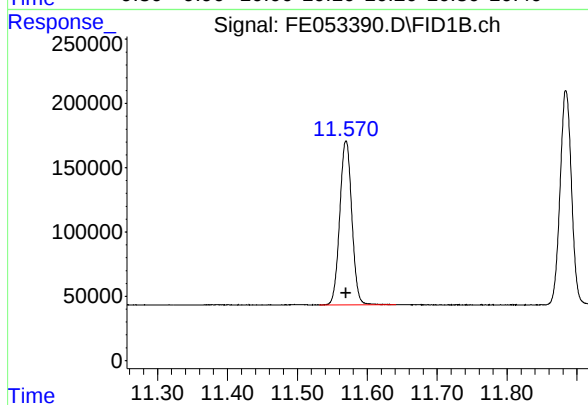
#6 n-Tetradecane (C14)

R.T.: 8.507 min
Delta R.T.: 0.000 min
Response: 1461405
Conc: 10.49 ug/ml



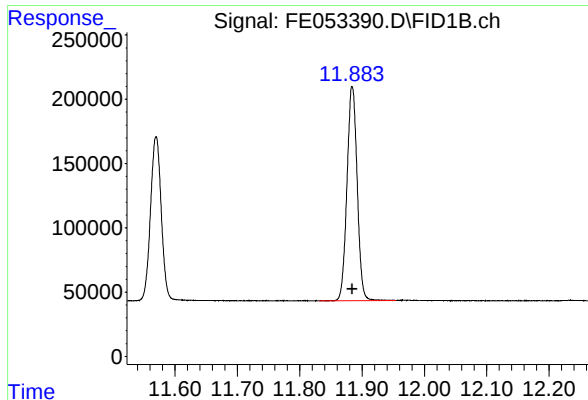
#7 n-Hexadecane (C16)

R.T.: 10.121 min
Delta R.T.: 0.000 min
Response: 1500903
Conc: 10.55 ug/ml



#8 n-Octadecane (C18)

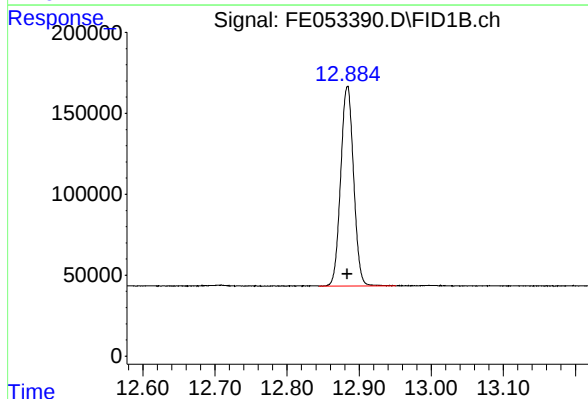
R.T.: 11.570 min
Delta R.T.: 0.000 min
Response: 1528768
Conc: 10.60 ug/ml



#9 ortho-Terphenyl (SURR)

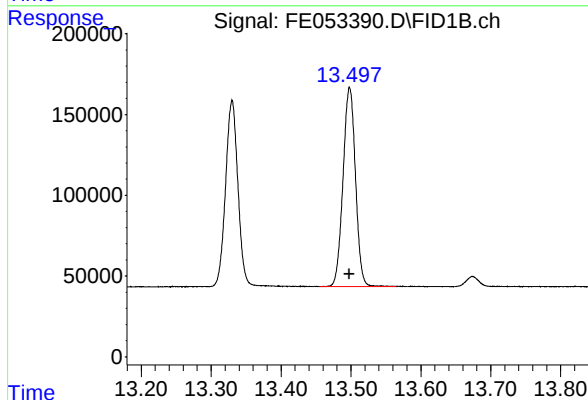
R.T.: 11.884 min
Delta R.T.: 0.000 min
Response: 1893058
Conc: 10.61 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



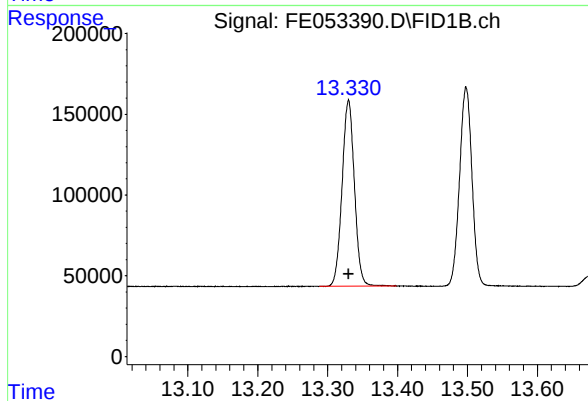
#10 n-Eicosane (C20)

R.T.: 12.884 min
Delta R.T.: 0.000 min
Response: 1532713
Conc: 10.66 ug/ml



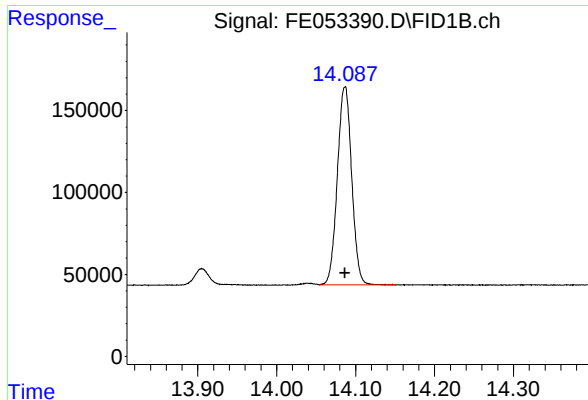
#11 n-Heneicosane (C21)

R.T.: 13.498 min
Delta R.T.: 0.000 min
Response: 1523248
Conc: 10.64 ug/ml



#12 1-chlorooctadecane (SURR)

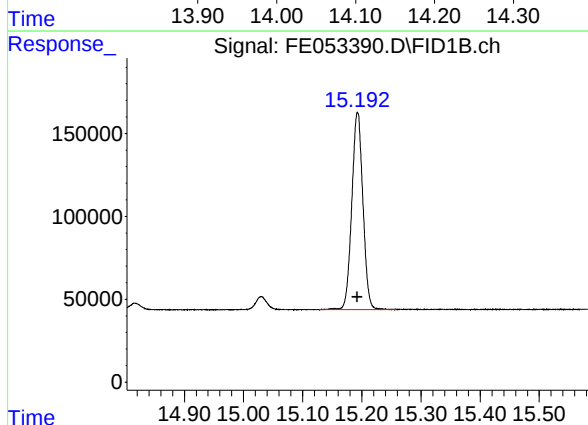
R.T.: 13.330 min
Delta R.T.: 0.000 min
Response: 1412249
Conc: 10.55 ug/ml



#13 n-Docosane (C22)

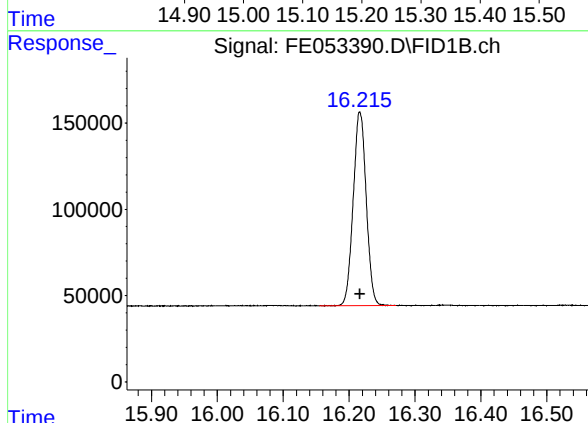
R.T.: 14.086 min
Delta R.T.: 0.000 min
Response: 1528369
Conc: 10.71 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



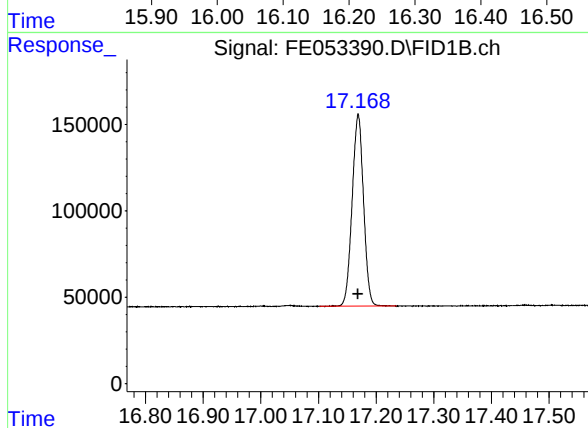
#14 n-Tetracosane (C24)

R.T.: 15.193 min
Delta R.T.: 0.000 min
Response: 1552378
Conc: 10.91 ug/ml



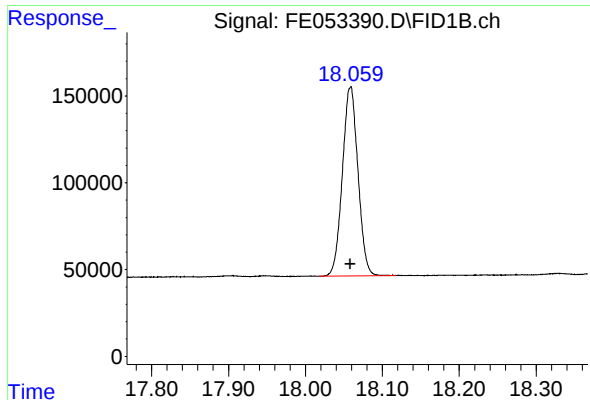
#15 n-Hexacosane (C26)

R.T.: 16.217 min
Delta R.T.: 0.000 min
Response: 1541972
Conc: 11.00 ug/ml



#16 n-Octacosane (C28)

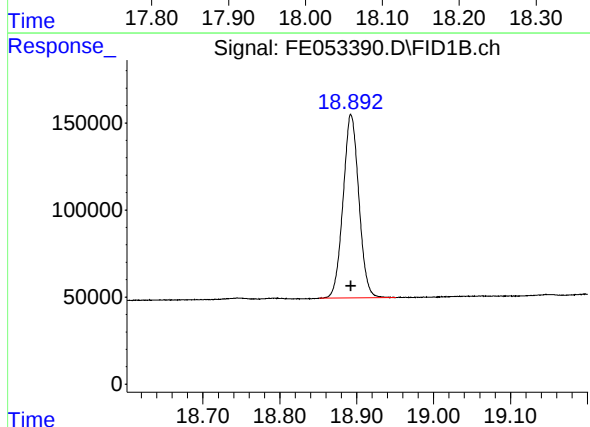
R.T.: 17.169 min
Delta R.T.: 0.000 min
Response: 1526585
Conc: 11.09 ug/ml



#17 n-Tricontane (C30)

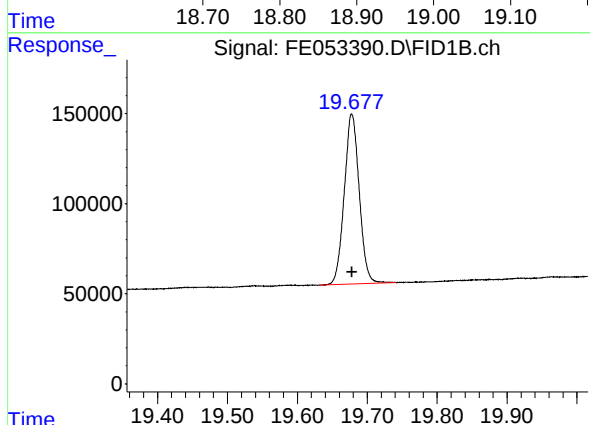
R.T.: 18.058 min
Delta R.T.: 0.000 min
Response: 1529997
Conc: 11.14 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



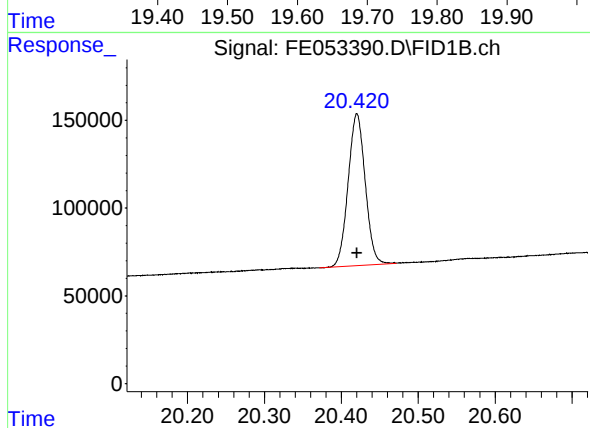
#18 n-Dotriacontane (C32)

R.T.: 18.893 min
Delta R.T.: 0.000 min
Response: 1499644
Conc: 11.09 ug/ml



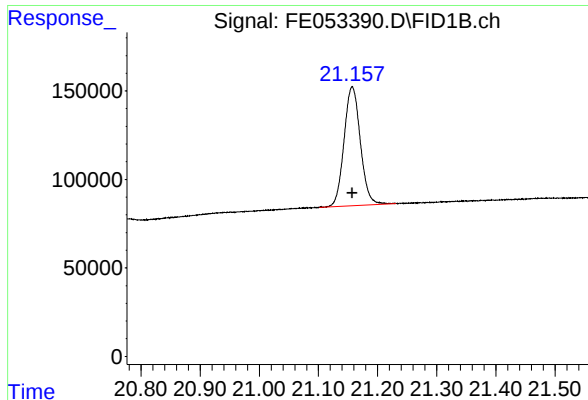
#19 n-Tetatriacontane (C34)

R.T.: 19.678 min
Delta R.T.: 0.000 min
Response: 1400795
Conc: 10.90 ug/ml



#20 n-Hexatriacontane (C36)

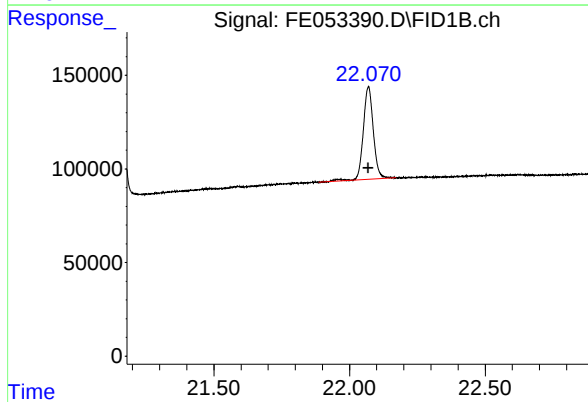
R.T.: 20.420 min
Delta R.T.: 0.000 min
Response: 1333734
Conc: 10.70 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.157 min
Delta R.T.: 0.000 min
Response: 1286878
Conc: 10.68 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



#22 n-Tetracontane (C40)

R.T.: 22.070 min
Delta R.T.: 0.000 min
Response: 1278773
Conc: 10.78 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
 Data File : FE053390.D
 Signal(s) : FID1B.ch
 Acq On : 16 Apr 2025 17:36
 Sample : 10 PPM ALIPHATIC HC STD4
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.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	3.229	3.198	3.301	BB	137884	1427931	75.43%	4.362%
2	4.490	4.451	4.561	BB	139495	1440599	76.10%	4.400%
3	6.204	6.171	6.318	BB	143453	1558579	82.33%	4.761%
4	6.670	6.631	6.748	BB	141302	1457518	76.99%	4.452%
5	7.306	7.188	7.414	BB	134615	1522133	80.41%	4.649%
6	8.507	8.474	8.598	BB	132750	1461405	77.20%	4.464%
7	10.121	10.084	10.208	BB	130075	1500903	79.28%	4.585%
8	11.570	11.531	11.641	BB	128104	1528768	80.76%	4.670%
9	11.884	11.831	11.954	BB	166955	1893058	100.00%	5.782%
10	12.884	12.844	12.951	BB	124033	1532713	80.96%	4.682%
11	13.330	13.288	13.398	BB	115435	1412249	74.60%	4.314%
12	13.498	13.454	13.564	BB	123197	1523248	80.46%	4.653%
13	14.086	14.054	14.151	VB	121695	1528369	80.74%	4.668%
14	15.193	15.128	15.258	BB	119946	1552378	82.00%	4.742%
15	16.217	16.154	16.271	BB	111897	1541972	81.45%	4.710%
16	17.169	17.101	17.234	BB	110581	1526585	80.64%	4.663%
17	18.058	18.018	18.118	BB	108996	1529997	80.82%	4.673%
18	18.893	18.851	18.951	BB	104570	1499644	79.22%	4.581%
19	19.678	19.631	19.741	BB	94427	1400795	74.00%	4.279%
20	20.420	20.371	20.471	BV	86600	1333734	70.45%	4.074%
21	21.157	21.101	21.231	BB	67282	1286878	67.98%	3.931%
22	22.070	21.888	22.171	BB	49964	1278773	67.55%	3.906%
Sum of corrected areas:							32738229	

Aliphatic EPH 041725.M Thu Apr 17 04:27:17 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
 Data File : FE053391.D
 Signal(s) : FID1B.ch
 Acq On : 16 Apr 2025 18:06
 Operator : YP\AJ
 Sample : 5 PPM ALIPHATIC HC STD5
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
 Quant Time: Apr 16 18:28:47 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
 Quant Title : GC Extractables
 QLast Update : Wed Apr 16 18:28:37 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)	11.883	940709	5.216 ug/ml
Spiked Amount 50.000		Recovery =	10.43%
12) S 1-chlorooctadecane (S...	13.329	701389	5.189 ug/ml
Spiked Amount 50.000		Recovery =	10.38%
Target Compounds			
1) T n-Nonane (C9)	3.230	707563	5.161 ug/ml
2) T n-Decane (C10)	4.490	710133	5.133 ug/ml
3) T A~Naphthalene (C11.7)	6.204	751368	4.978 ug/ml
4) T n-Dodecane (C12)	6.670	717848	5.118 ug/ml
5) T A~2-methylnaphthalene...	7.306	735745	4.928 ug/ml
6) T n-Tetradecane (C14)	8.506	720666	5.137 ug/ml
7) T n-Hexadecane (C16)	10.120	738140	5.150 ug/ml
8) T n-Octadecane (C18)	11.568	757847	5.200 ug/ml
10) T n-Eicosane (C20)	12.883	761828	5.235 ug/ml
11) T n-Heneicosane (C21)	13.497	759067	5.241 ug/ml
13) T n-Docosane (C22)	14.085	754554	5.229 ug/ml
14) T n-Tetracosane (C24)	15.191	746100	5.194 ug/ml
15) T n-Hexacosane (C26)	16.216	736181	5.198 ug/ml
16) T n-Octacosane (C28)	17.168	725773	5.217 ug/ml
17) T n-Tricontane (C30)	18.057	733475	5.269 ug/ml
18) T n-Dotriacontane (C32)	18.892	729142	5.310 ug/ml
19) T n-Tetratriacontane (C34)	19.677	685913	5.264 ug/ml
20) T n-Hexatriacontane (C36)	20.418	664340	5.262 ug/ml
21) T n-Octatriacontane (C38)	21.155	635999	5.220 ug/ml
22) T n-Tetracontane (C40)	22.069	612014	5.125 ug/ml

(f)=RT Delta > 1/2 Window

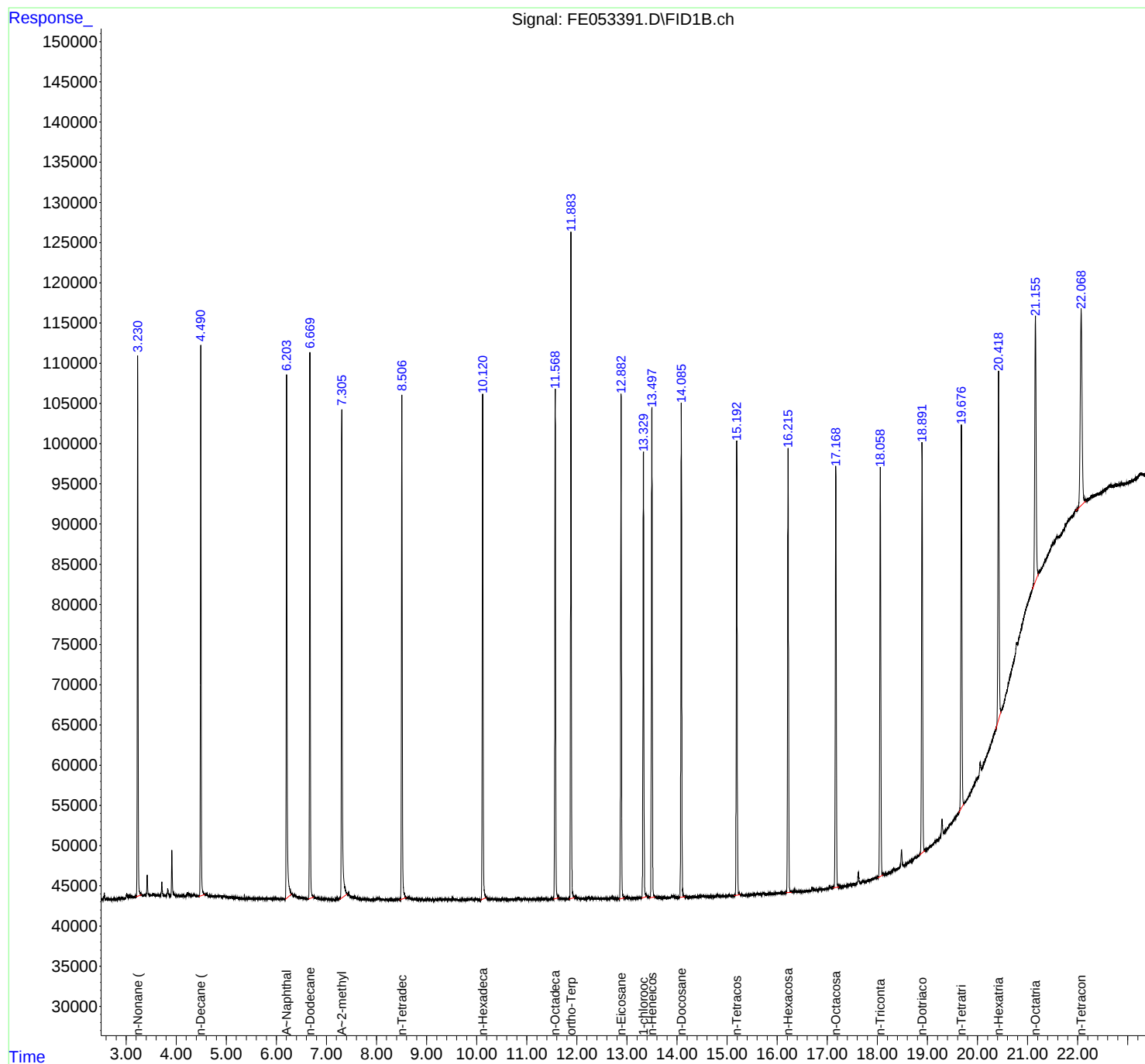
(m)=manual int.

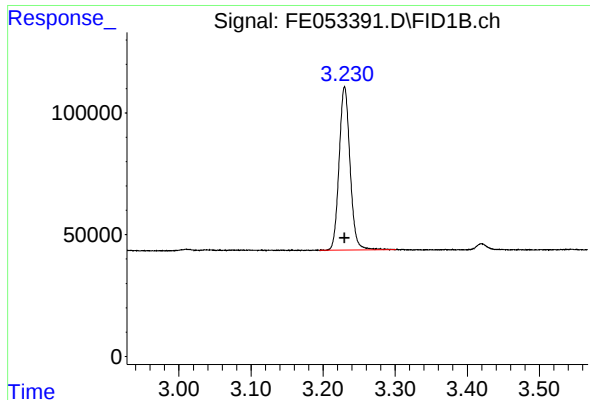
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
Data File : FE053391.D
Signal(s) : FID1B.ch
Acq On : 16 Apr 2025 18:06
Operator : YP\AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
Quant Time: Apr 16 18:28:47 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
Quant Title : GC Extractables
QLast Update : Wed Apr 16 18:28:37 2025
Response via : Initial Calibration
Integrator: ChemStation

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

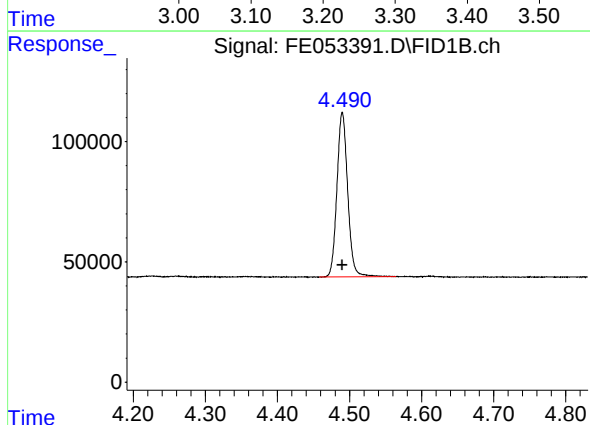




#1 n-Nonane (C9)

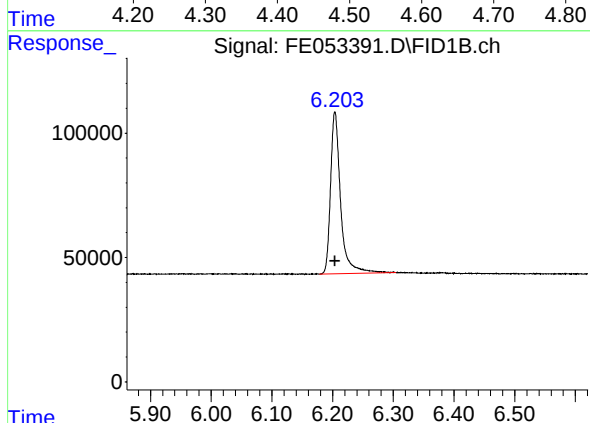
R.T.: 3.230 min
Delta R.T.: 0.000 min
Response: 707563
Conc: 5.16 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



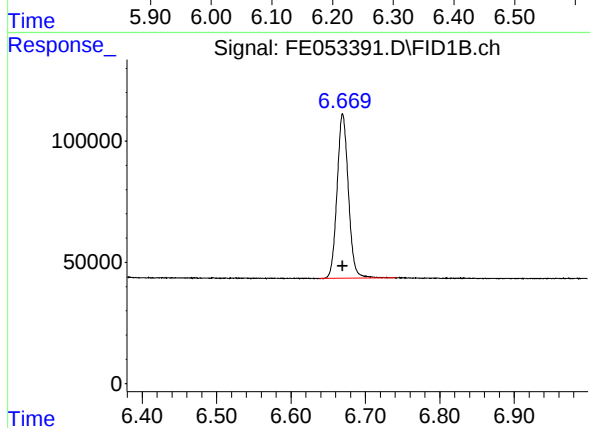
#2 n-Decane (C10)

R.T.: 4.490 min
Delta R.T.: 0.000 min
Response: 710133
Conc: 5.13 ug/ml



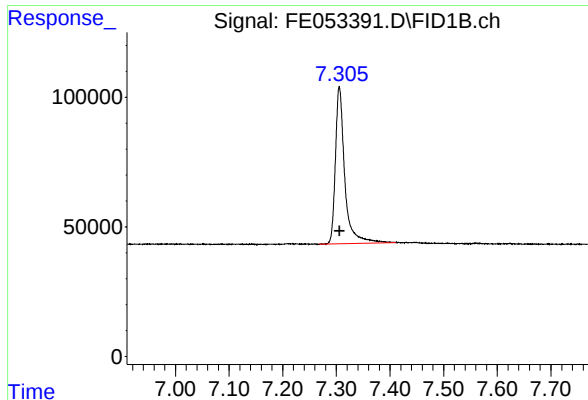
#3 A~Naphthalene (C11.7)

R.T.: 6.204 min
Delta R.T.: 0.000 min
Response: 751368
Conc: 4.98 ug/ml



#4 n-Dodecane (C12)

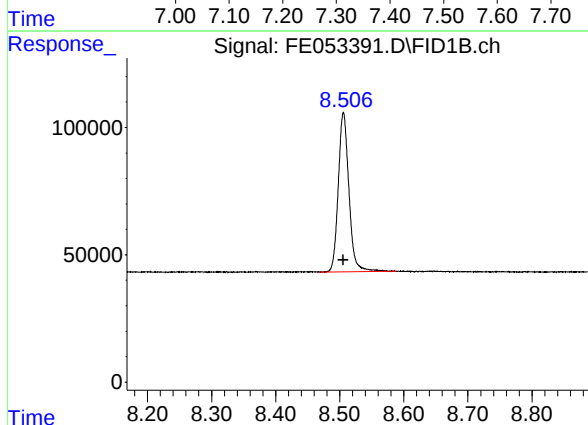
R.T.: 6.670 min
Delta R.T.: 0.000 min
Response: 717848
Conc: 5.12 ug/ml



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

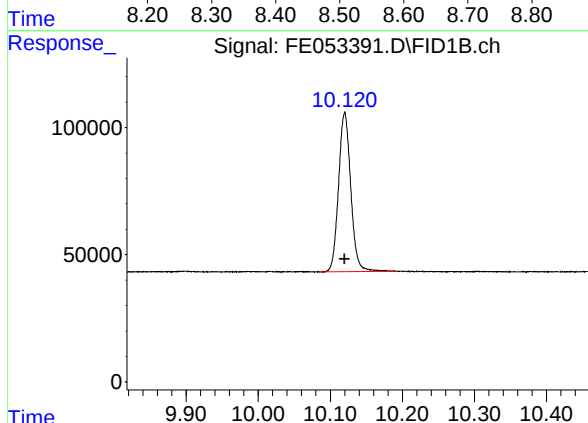
R.T.: 7.306 min
Delta R.T.: 0.000 min
Response: 735745
Conc: 4.93 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



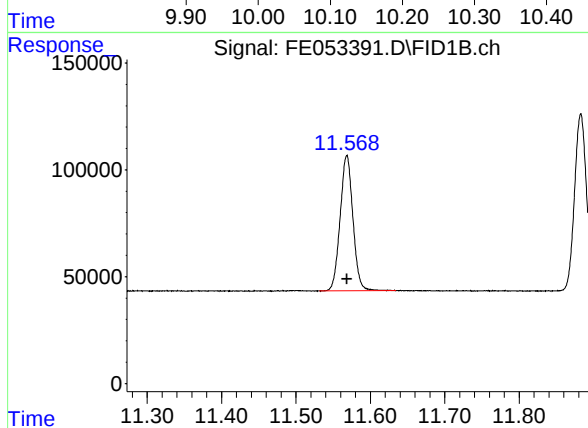
#6 n-Tetradecane (C14)

R.T.: 8.506 min
Delta R.T.: 0.000 min
Response: 720666
Conc: 5.14 ug/ml



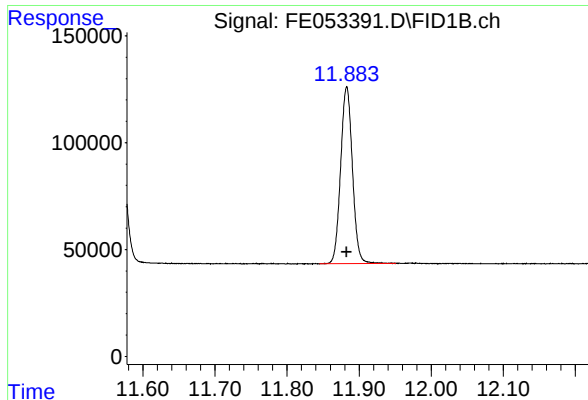
#7 n-Hexadecane (C16)

R.T.: 10.120 min
Delta R.T.: 0.000 min
Response: 738140
Conc: 5.15 ug/ml



#8 n-Octadecane (C18)

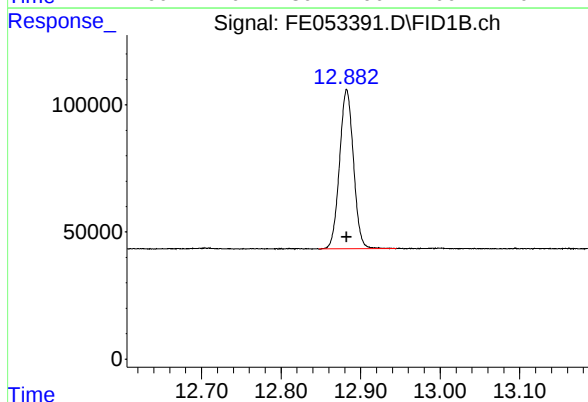
R.T.: 11.568 min
Delta R.T.: 0.000 min
Response: 757847
Conc: 5.20 ug/ml



#9 ortho-Terphenyl (SURR)

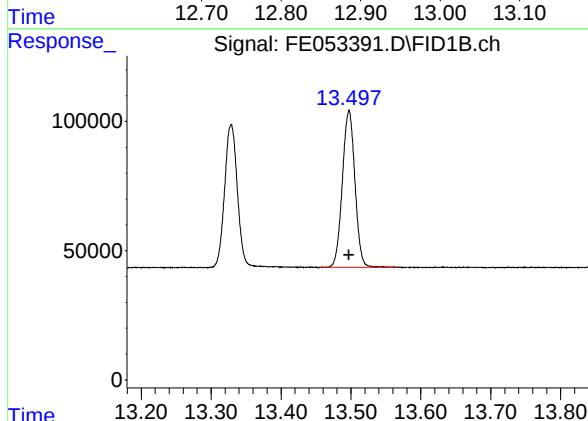
R.T.: 11.883 min
Delta R.T.: 0.000 min
Response: 940709
Conc: 5.22 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



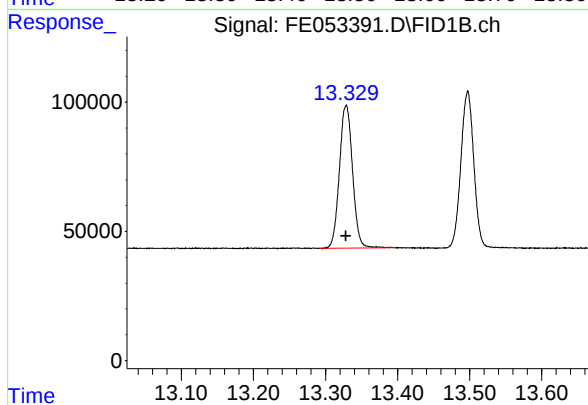
#10 n-Eicosane (C20)

R.T.: 12.883 min
Delta R.T.: 0.000 min
Response: 761828
Conc: 5.24 ug/ml



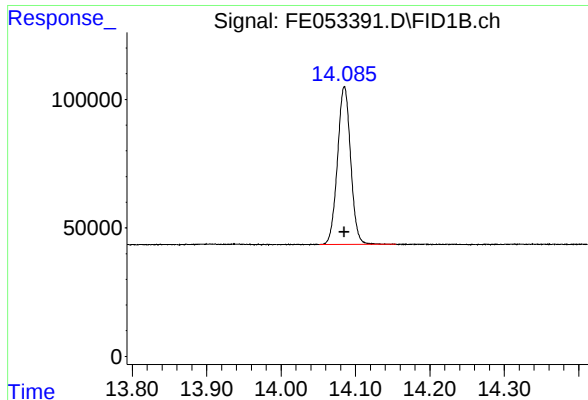
#11 n-Heneicosane (C21)

R.T.: 13.497 min
Delta R.T.: 0.000 min
Response: 759067
Conc: 5.24 ug/ml



#12 1-chlorooctadecane (SURR)

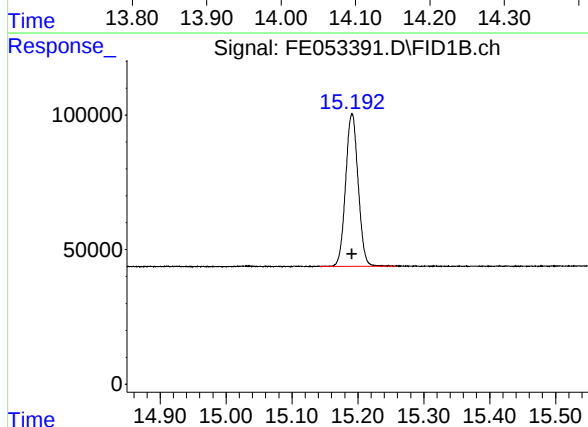
R.T.: 13.329 min
Delta R.T.: 0.000 min
Response: 701389
Conc: 5.19 ug/ml



#13 n-Docosane (C22)

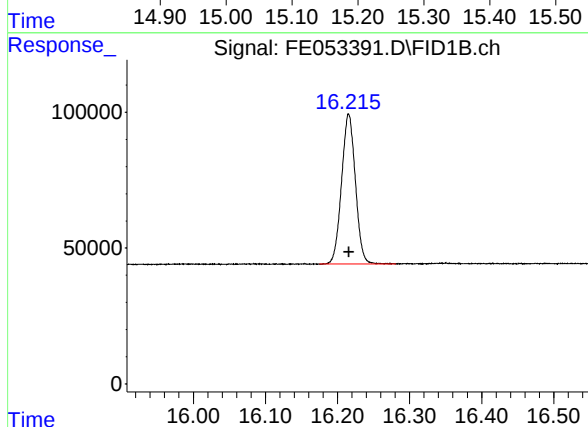
R.T.: 14.085 min
Delta R.T.: 0.000 min
Response: 754554
Conc: 5.23 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



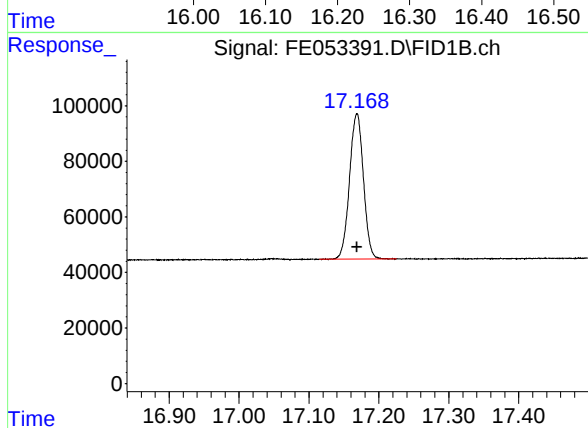
#14 n-Tetracosane (C24)

R.T.: 15.191 min
Delta R.T.: 0.000 min
Response: 746100
Conc: 5.19 ug/ml



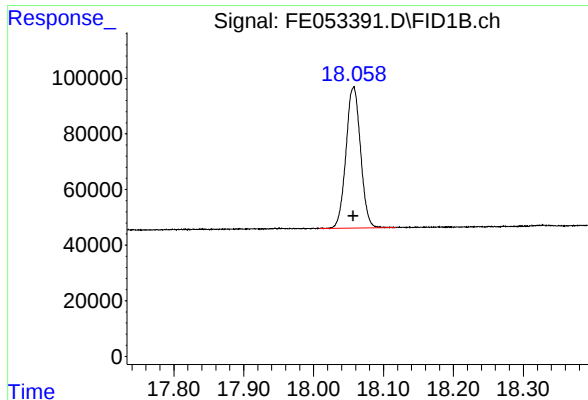
#15 n-Hexacosane (C26)

R.T.: 16.216 min
Delta R.T.: 0.000 min
Response: 736181
Conc: 5.20 ug/ml



#16 n-Octacosane (C28)

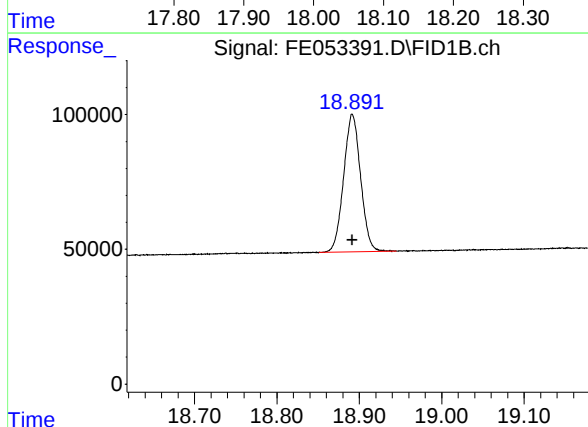
R.T.: 17.168 min
Delta R.T.: 0.000 min
Response: 725773
Conc: 5.22 ug/ml



#17 n-Tricontane (C30)

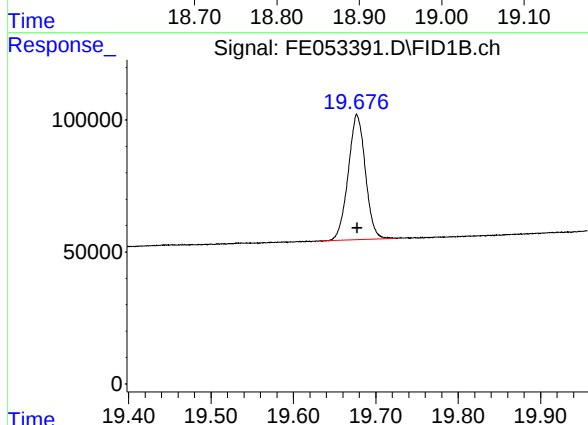
R.T.: 18.057 min
Delta R.T.: 0.000 min
Response: 733475
Conc: 5.27 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



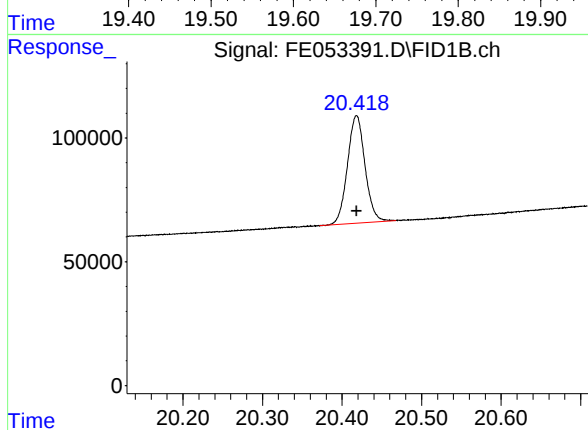
#18 n-Dotriacontane (C32)

R.T.: 18.892 min
Delta R.T.: 0.000 min
Response: 729142
Conc: 5.31 ug/ml



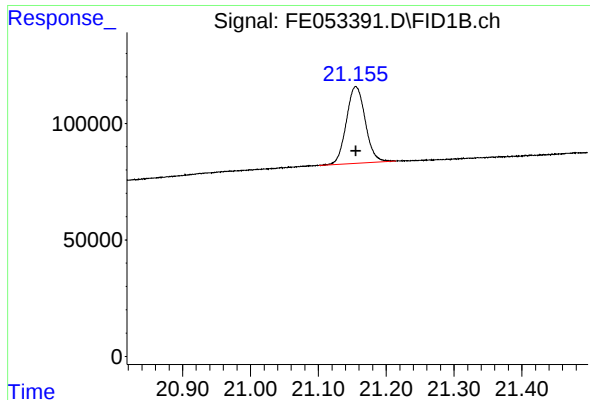
#19 n-Tetatriacontane (C34)

R.T.: 19.677 min
Delta R.T.: 0.000 min
Response: 685913
Conc: 5.26 ug/ml



#20 n-Hexatriacontane (C36)

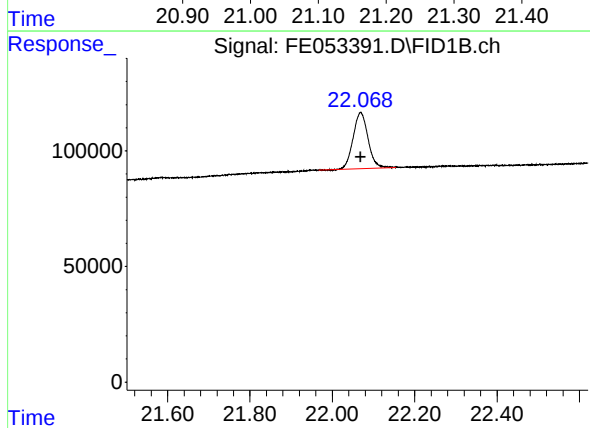
R.T.: 20.418 min
Delta R.T.: 0.000 min
Response: 664340
Conc: 5.26 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.155 min
Delta R.T.: 0.000 min
Response: 635999
Conc: 5.22 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



#22 n-Tetracontane (C40)

R.T.: 22.069 min
Delta R.T.: 0.000 min
Response: 612014
Conc: 5.12 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
 Data File : FE053391.D
 Signal(s) : FID1B.ch
 Acq On : 16 Apr 2025 18:06
 Sample : 5 PPM ALIPHATIC HC STD5
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.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	3.230	3.194	3.301	BB	66905	707563	75.22%	4.415%
2	4.490	4.458	4.564	BB	68084	710133	75.49%	4.431%
3	6.204	6.178	6.304	BB	64926	751368	79.87%	4.688%
4	6.670	6.638	6.741	BB	66816	717848	76.31%	4.479%
5	7.306	7.268	7.411	BB	60660	735745	78.21%	4.591%
6	8.506	8.468	8.588	BB	62390	720666	76.61%	4.497%
7	10.120	10.084	10.191	BB	62482	738140	78.47%	4.606%
8	11.568	11.531	11.634	BB	63215	757847	80.56%	4.729%
9	11.883	11.844	11.951	BB	82336	940709	100.00%	5.870%
10	12.883	12.848	12.944	BB	62339	761828	80.98%	4.754%
11	13.329	13.291	13.398	BB	55184	701389	74.56%	4.377%
12	13.497	13.454	13.564	BB	60842	759067	80.69%	4.737%
13	14.085	14.051	14.154	BB	61412	754554	80.21%	4.708%
14	15.191	15.141	15.258	BB	56621	746100	79.31%	4.656%
15	16.216	16.174	16.281	BB	55228	736181	78.26%	4.594%
16	17.168	17.114	17.224	BB	52307	725773	77.15%	4.529%
17	18.057	18.008	18.118	BB	50834	733475	77.97%	4.577%
18	18.892	18.851	18.944	BB	51161	729142	77.51%	4.550%
19	19.677	19.631	19.724	BB	47166	685913	72.91%	4.280%
20	20.418	20.371	20.468	BB	43445	664340	70.62%	4.145%
21	21.155	21.101	21.214	BB	32956	635999	67.61%	3.969%
22	22.069	21.968	22.154	BB	24342	612014	65.06%	3.819%
Sum of corrected areas:							16025793	

Aliphatic EPH 041725.M Thu Apr 17 04:27:35 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
 Data File : FE053392.D
 Signal(s) : FID1B.ch
 Acq On : 16 Apr 2025 18:36
 Operator : YP\AJ
 Sample : 20 PPM ALIPHATIC HC STD ICV
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
 Quant Time: Apr 16 19:24:24 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
 Quant Title : GC Extractables
 QLast Update : Wed Apr 16 18:29:18 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)	11.884	3592156	19.916 ug/ml
Spiked Amount 50.000		Recovery =	39.83%
12) S 1-chlorooctadecane (S...	13.329	2698440	19.962 ug/ml
Spiked Amount 50.000		Recovery =	39.92%
Target Compounds			
1) T n-Nonane (C9)	3.229	2729694	19.910 ug/ml
2) T n-Decane (C10)	4.490	2748010	19.865 ug/ml
3) T A~Naphthalene (C11.7)	6.202	3014099	19.968 ug/ml
4) T n-Dodecane (C12)	6.669	2785938	19.864 ug/ml
5) T A~2-methylnaphthalene...	7.304	2998640	20.084 ug/ml
6) T n-Tetradecane (C14)	8.506	2790709	19.892 ug/ml
7) T n-Hexadecane (C16)	10.120	2856402	19.930 ug/ml
8) T n-Octadecane (C18)	11.570	2904509	19.930 ug/ml
10) T n-Eicosane (C20)	12.884	2899926	19.929 ug/ml
11) T n-Heneicosane (C21)	13.497	2887388	19.934 ug/ml
13) T n-Docosane (C22)	14.085	2871168	19.897 ug/ml
14) T n-Tetracosane (C24)	15.192	2844489	19.803 ug/ml
15) T n-Hexacosane (C26)	16.216	2796796	19.747 ug/ml
16) T n-Octacosane (C28)	17.168	2737911	19.679 ug/ml
17) T n-Tricontane (C30)	18.058	2734044	19.642 ug/ml
18) T n-Dotriacontane (C32)	18.892	2693828	19.619 ug/ml
19) T n-Tetratriacontane (C34)	19.677	2567446	19.705 ug/ml
20) T n-Hexatriacontane (C36)	20.418	2523463	19.988 ug/ml
21) T n-Octatriacontane (C38)	21.155	2409665	19.779 ug/ml
22) T n-Tetracontane (C40)	22.067	2357865	19.744 ug/ml

(f)=RT Delta > 1/2 Window

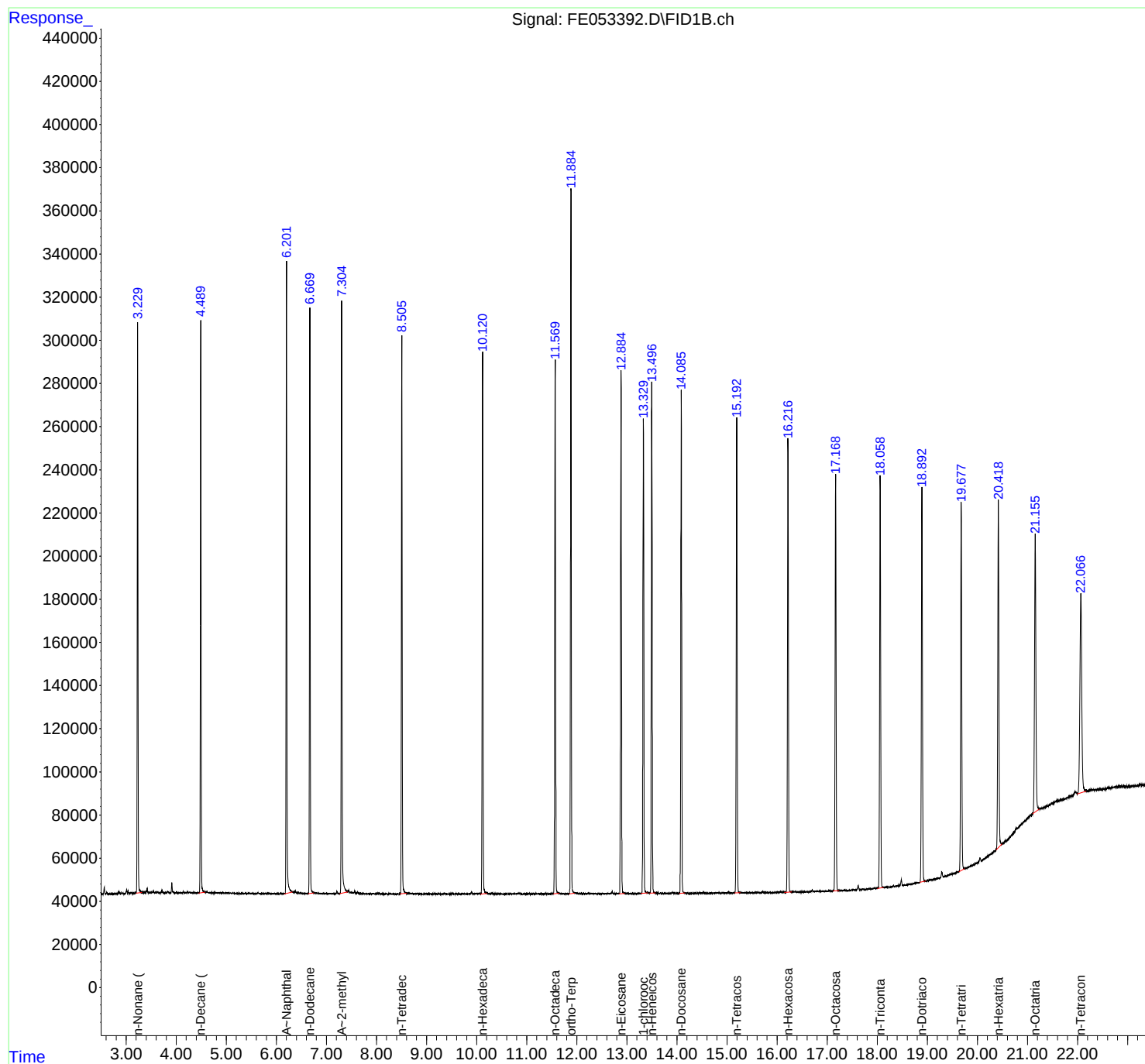
(m)=manual int.

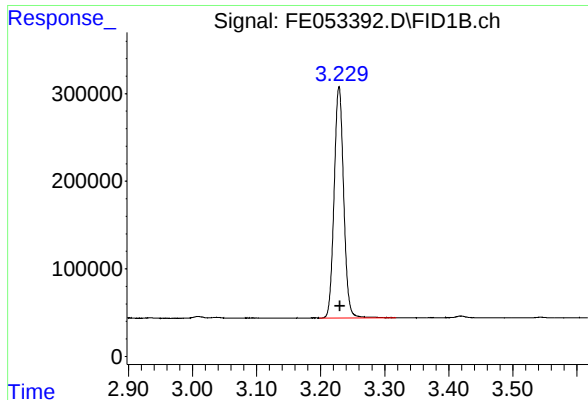
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
Data File : FE053392.D
Signal(s) : FID1B.ch
Acq On : 16 Apr 2025 18:36
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Apr 16 19:24:24 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
Quant Title : GC Extractables
QLast Update : Wed Apr 16 18:29:18 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)

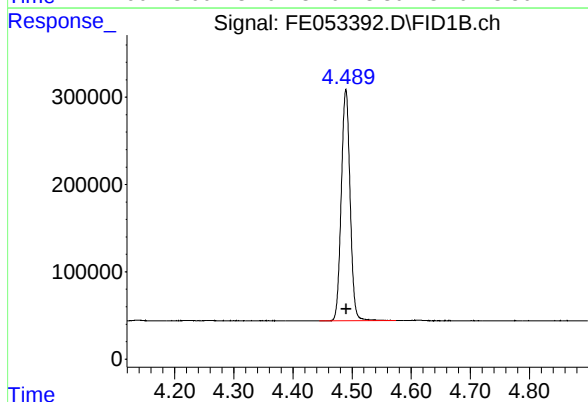
R.T.: 3.229 min
Delta R.T.: -0.001 min
Response: 2729694
Conc: 19.91 ug/ml

Instrument :

FID_E

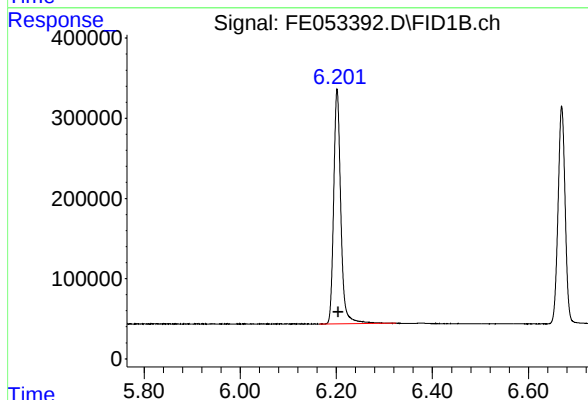
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



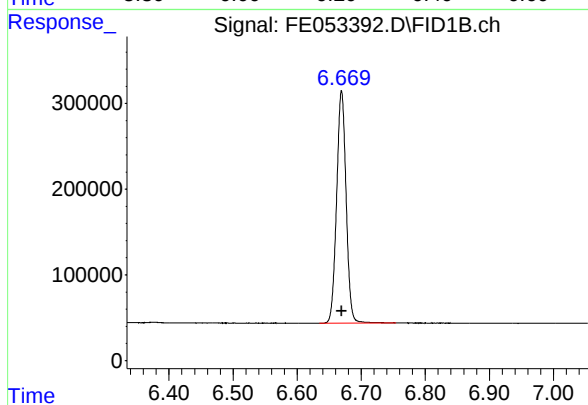
#2 n-Decane (C10)

R.T.: 4.490 min
Delta R.T.: 0.000 min
Response: 2748010
Conc: 19.86 ug/ml



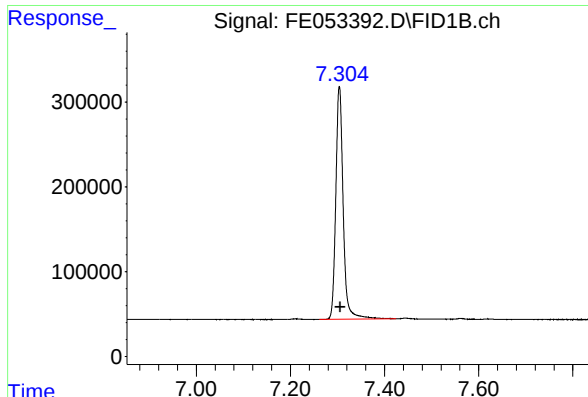
#3 A~Naphthalene (C11.7)

R.T.: 6.202 min
Delta R.T.: -0.002 min
Response: 3014099
Conc: 19.97 ug/ml



#4 n-Dodecane (C12)

R.T.: 6.669 min
Delta R.T.: 0.000 min
Response: 2785938
Conc: 19.86 ug/ml



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

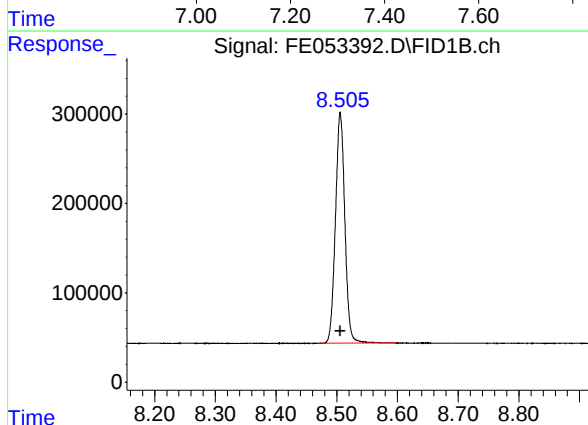
R.T.: 7.304 min
Delta R.T.: -0.002 min
Response: 2998640
Conc: 20.08 ug/ml

Instrument :

FID_E

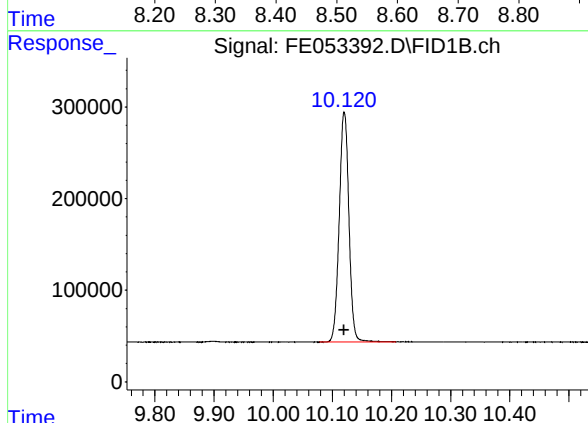
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



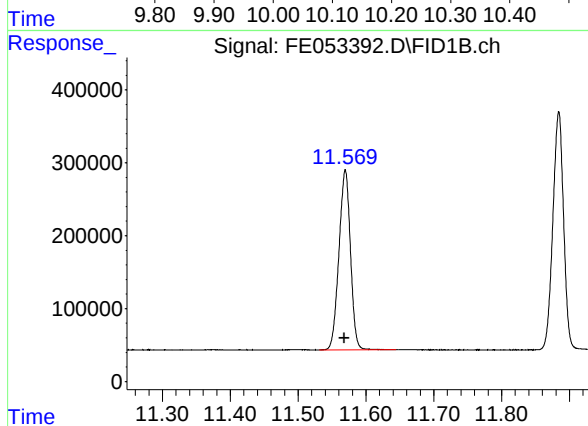
#6 n-Tetradecane (C14)

R.T.: 8.506 min
Delta R.T.: 0.000 min
Response: 2790709
Conc: 19.89 ug/ml



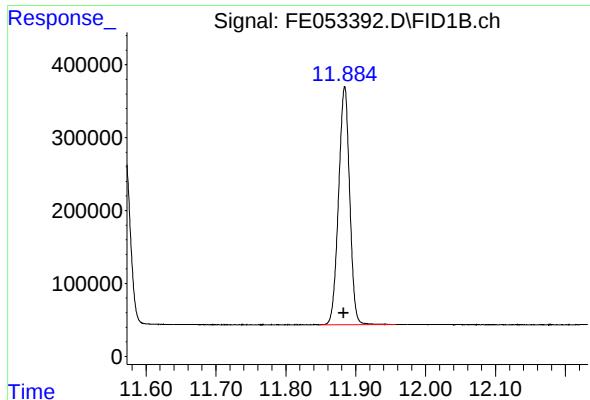
#7 n-Hexadecane (C16)

R.T.: 10.120 min
Delta R.T.: 0.000 min
Response: 2856402
Conc: 19.93 ug/ml



#8 n-Octadecane (C18)

R.T.: 11.570 min
Delta R.T.: 0.001 min
Response: 2904509
Conc: 19.93 ug/ml



#9 ortho-Terphenyl (SURR)

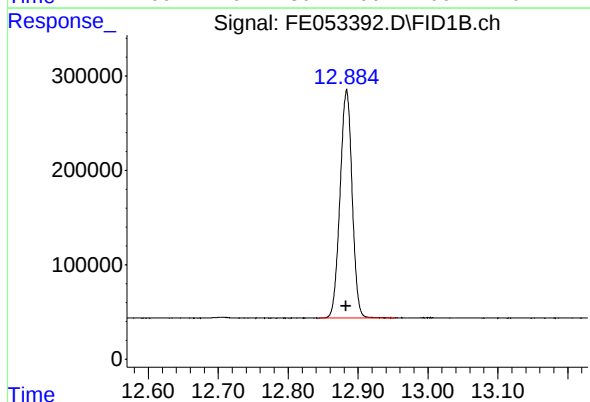
R.T.: 11.884 min
Delta R.T.: 0.001 min
Response: 3592156
Conc: 19.92 ug/ml

Instrument :

FID_E

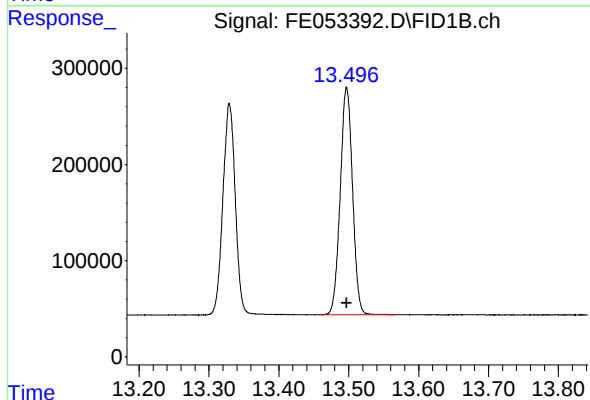
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



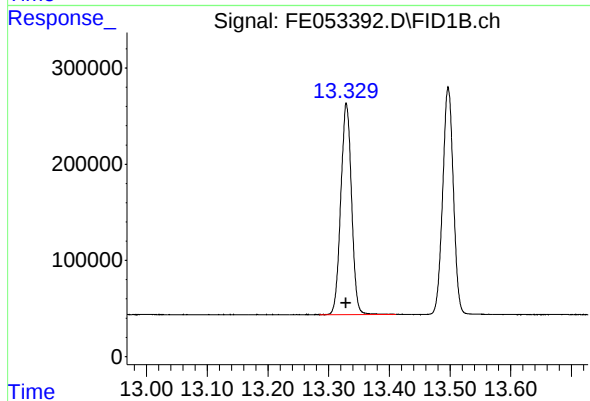
#10 n-Eicosane (C20)

R.T.: 12.884 min
Delta R.T.: 0.001 min
Response: 2899926
Conc: 19.93 ug/ml



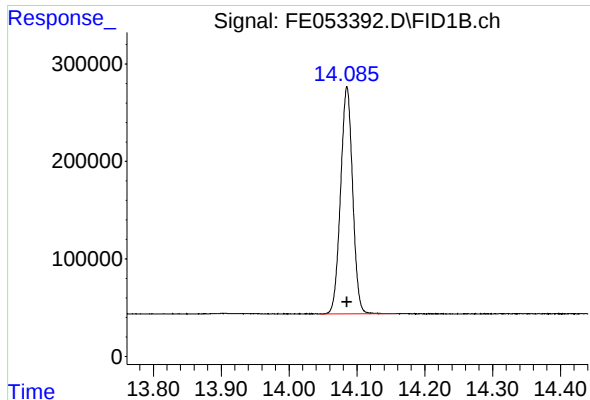
#11 n-Heneicosane (C21)

R.T.: 13.497 min
Delta R.T.: 0.000 min
Response: 2887388
Conc: 19.93 ug/ml



#12 1-chlorooctadecane (SURR)

R.T.: 13.329 min
Delta R.T.: 0.000 min
Response: 2698440
Conc: 19.96 ug/ml



#13 n-Docosane (C22)

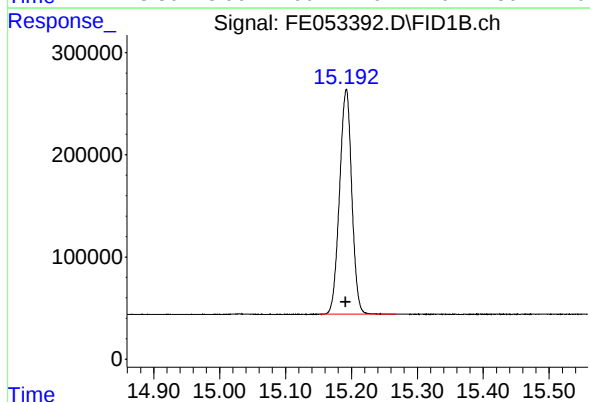
R.T.: 14.085 min
Delta R.T.: 0.000 min
Response: 2871168
Conc: 19.90 ug/ml

Instrument :

FID_E

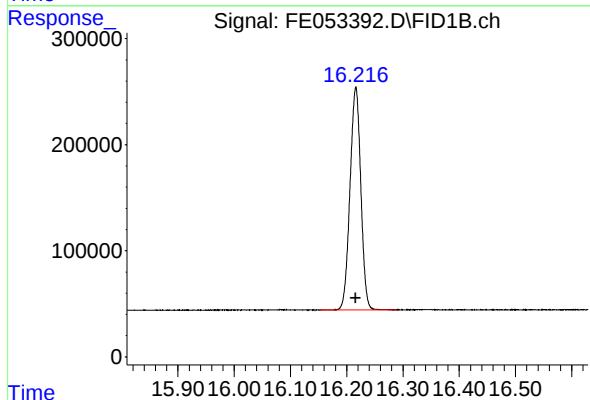
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



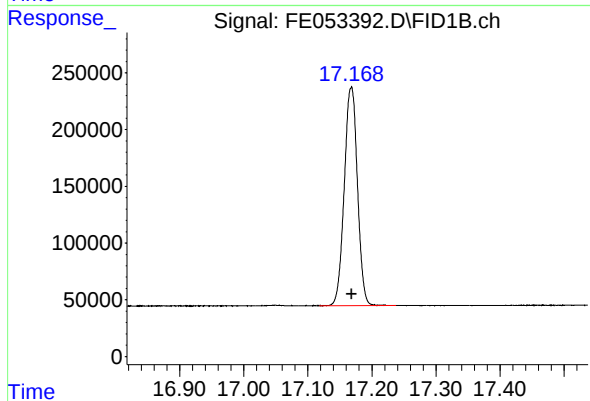
#14 n-Tetracosane (C24)

R.T.: 15.192 min
Delta R.T.: 0.000 min
Response: 2844489
Conc: 19.80 ug/ml



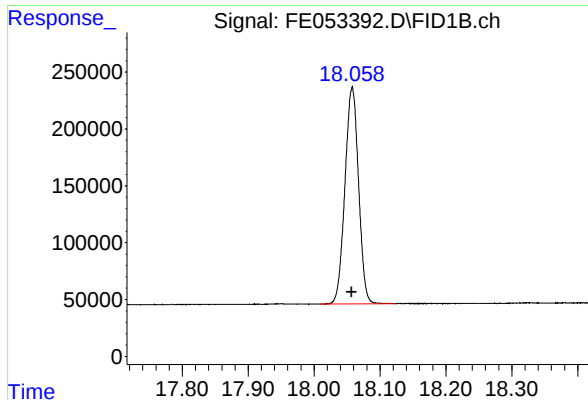
#15 n-Hexacosane (C26)

R.T.: 16.216 min
Delta R.T.: 0.000 min
Response: 2796796
Conc: 19.75 ug/ml



#16 n-Octacosane (C28)

R.T.: 17.168 min
Delta R.T.: 0.000 min
Response: 2737911
Conc: 19.68 ug/ml



#17 n-Tricontane (C30)

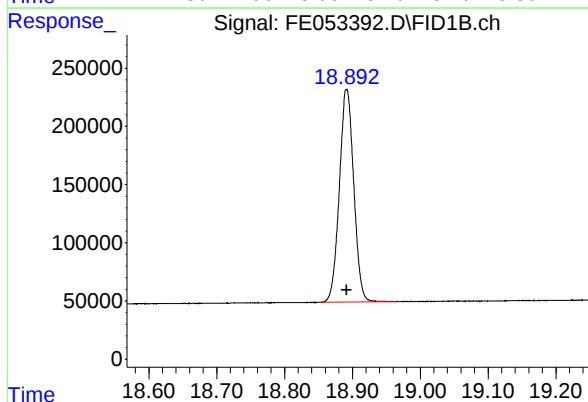
R.T.: 18.058 min
Delta R.T.: 0.000 min
Response: 2734044
Conc: 19.64 ug/ml

Instrument :

FID_E

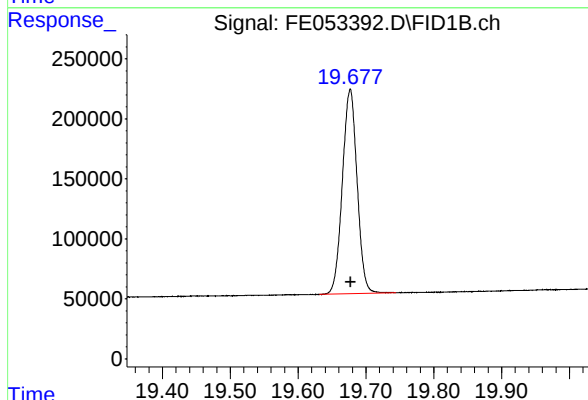
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



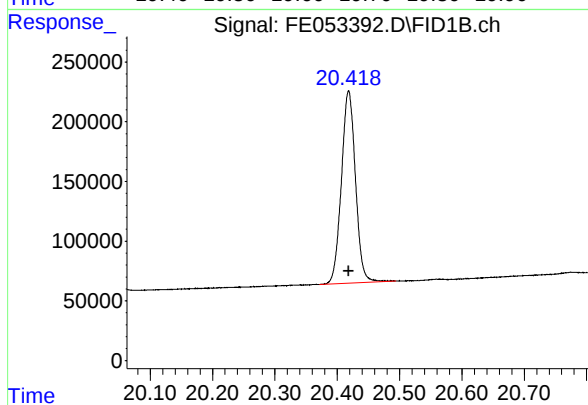
#18 n-Dotriacontane (C32)

R.T.: 18.892 min
Delta R.T.: 0.000 min
Response: 2693828
Conc: 19.62 ug/ml



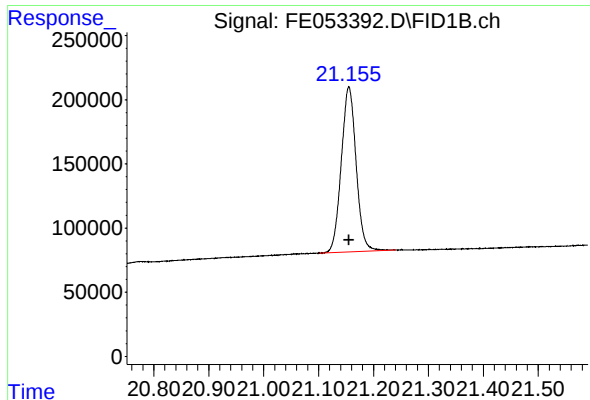
#19 n-Tetatriacontane (C34)

R.T.: 19.677 min
Delta R.T.: 0.000 min
Response: 2567446
Conc: 19.71 ug/ml



#20 n-Hexatriacontane (C36)

R.T.: 20.418 min
Delta R.T.: 0.000 min
Response: 2523463
Conc: 19.99 ug/ml



#21 n-Octatriacontane (C38)

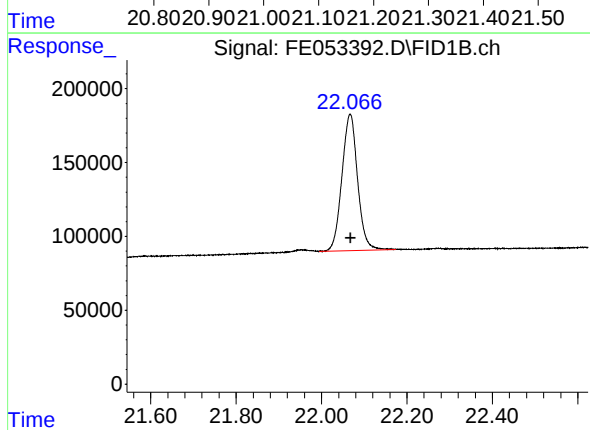
R.T.: 21.155 min
Delta R.T.: 0.000 min
Response: 2409665
Conc: 19.78 ug/ml

Instrument :

FID_E

ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



#22 n-Tetracontane (C40)

R.T.: 22.067 min
Delta R.T.: -0.002 min
Response: 2357865
Conc: 19.74 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE041725AL\
 Data File : FE053392.D
 Signal(s) : FID1B.ch
 Acq On : 16 Apr 2025 18:36
 Sample : 20 PPM ALIPHATIC HC STD ICV
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.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	3.229	3.198	3.318	BB	263521	2729694	75.99%	4.443%
2	4.490	4.444	4.574	BB	265180	2748010	76.50%	4.472%
3	6.202	6.164	6.324	BB	291196	3014099	83.91%	4.906%
4	6.669	6.634	6.754	BB	269490	2785938	77.56%	4.534%
5	7.304	7.261	7.424	BV	275117	2998640	83.48%	4.880%
6	8.506	8.471	8.598	BB	254552	2790709	77.69%	4.542%
7	10.120	10.078	10.208	BB	250998	2856402	79.52%	4.649%
8	11.570	11.531	11.644	BB	247517	2904509	80.86%	4.727%
9	11.884	11.848	11.958	BB	327117	3592156	100.00%	5.846%
10	12.884	12.844	12.954	BB	241267	2899926	80.73%	4.720%
11	13.329	13.284	13.411	BB	217408	2698440	75.12%	4.392%
12	13.497	13.458	13.568	BB	235681	2887388	80.38%	4.699%
13	14.085	14.044	14.158	BB	231989	2871168	79.93%	4.673%
14	15.192	15.151	15.268	BB	218527	2844489	79.19%	4.630%
15	16.216	16.151	16.288	BB	210624	2796796	77.86%	4.552%
16	17.168	17.118	17.238	BB	192634	2737911	76.22%	4.456%
17	18.058	18.008	18.124	BB	190258	2734044	76.11%	4.450%
18	18.892	18.851	18.964	BB	183755	2693828	74.99%	4.384%
19	19.677	19.631	19.744	BB	170916	2567446	71.47%	4.179%
20	20.418	20.371	20.494	BB	160885	2523463	70.25%	4.107%
21	21.155	21.101	21.241	BB	128552	2409665	67.08%	3.922%
22	22.067	21.994	22.174	VB	92395	2357865	65.64%	3.838%
Sum of corrected areas:							61442583	

Aliphatic EPH 041725.M Thu Apr 17 04:27:52 2025

Continuing Calibration Report for SequenceID : FC050525AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FC068766.D

Aliphatic C9-C12	6034329.000	60.000	3.342	6.643	100572.150	105282.003	4.474
Aliphatic C12-C16	3891947.000	40.000	6.644	10.043	97298.675	102322.575	4.910
Aliphatic C16-C21	5644445.000	60.000	10.044	13.410	94074.083	98816.539	4.799
Aliphatic C21-C28	7443449.000	80.000	13.411	17.073	93043.113	94185.337	1.213
Aliphatic C28-C40	12269931.000	120.000	17.074	22.072	102249.425	89882.835	-13.759
Aliphatic EPH	35284101.000	360.000	3.342	22.072	98011.392	96276.618	-1.802

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	05 May 2025 13:13
Client Sample ID:		Operator:	YP/AJ
Data file:	FC068766.D	Misc:	
Instrument:	FID_C	ALS Vial:	2
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.342	6.643	6034329.000	60.000	ug/ml
Aliphatic C12-C16	6.644	10.043	3891947.000	40.000	ug/ml
Aliphatic C16-C21	10.044	13.410	5644445.000	60.000	ug/ml
Aliphatic C21-C28	13.411	17.073	7443449.000	80.000	ug/ml
Aliphatic C28-C40	17.074	22.072	12269931.000	120.000	ug/ml
Aliphatic EPH	3.342	22.072	35284101.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
 Data File : FC068766.D
 Signal(s) : FID1A.ch
 Acq On : 05 May 2025 13:13
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
 Quant Time: May 06 03:50:20 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 08 17:31:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.711	2406831	18.901 ug/ml
Spiked Amount 50.000		Recovery =	37.80%
12) S 1-chlorooctadecane (S...	13.143	1749097	18.829 ug/ml
Spiked Amount 50.000		Recovery =	37.66%
Target Compounds			
1) T n-Nonane (C9)	3.442	2002032	19.008 ug/ml
2) T n-Decane (C10)	4.518	2024433	19.214 ug/ml
3) T A~Naphthalene (C11.7)	6.115	2220556	19.067 ug/ml
4) T n-Dodecane (C12)	6.543	2007864	19.093 ug/ml
5) T A~2-methylnaphthalene...	7.173	2187030	18.936 ug/ml
6) T n-Tetradecane (C14)	8.341	1955403	19.021 ug/ml
7) T n-Hexadecane (C16)	9.943	1936544	19.015 ug/ml
8) T n-Octadecane (C18)	11.386	1914119	19.021 ug/ml
10) T n-Eicosane (C20)	12.697	1872246	19.035 ug/ml
11) T n-Heneicosane (C21)	13.309	1858080	19.066 ug/ml
13) T n-Docosane (C22)	13.895	1857071	19.225 ug/ml
14) T n-Tetracosane (C24)	15.001	1847725	19.412 ug/ml
15) T n-Hexacosane (C26)	16.022	1836669	19.664 ug/ml
16) T n-Octacosane (C28)	16.973	1901984	20.774 ug/ml
17) T n-Tricontane (C30)	17.862	2074976	22.571 ug/ml
18) T n-Dotriacontane (C32)	18.695	2156300	23.507 ug/ml
19) T n-Tetratriacontane (C34)	19.479	2072411	23.197 ug/ml
20) T n-Hexatriacontane (C36)	20.221	2048309	22.866 ug/ml
21) T n-Octatriacontane (C38)	20.996	1983361	22.433 ug/ml
22) T n-Tetracontane (C40)	21.973	1934574	21.908 ug/ml

(f)=RT Delta > 1/2 Window

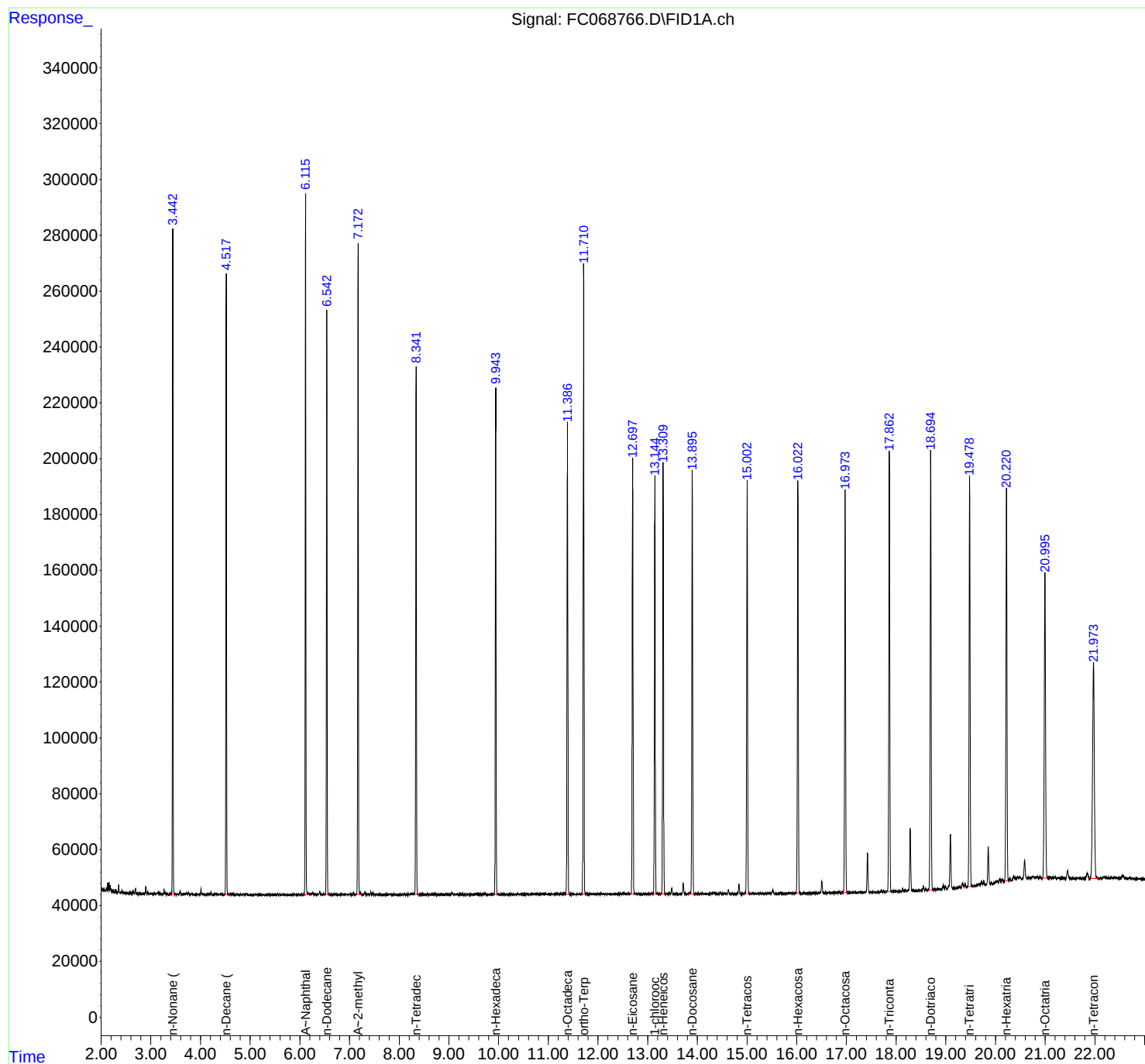
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
Data File : FC068766.D
Signal(s) : FID1A.ch
Acq On : 05 May 2025 13:13
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: May 06 03:50:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Quant Title : GC Extractables
QLast Update : Tue Apr 08 17:31:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
Data File : FC068766.D
Signal(s) : FID1A.ch
Acq On : 05 May 2025 13:13
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.442	3.392	3.507	BB	238537	2002032	83.18%	4.566%
2	4.518	4.460	4.559	BB	222292	2024433	84.11%	4.617%
3	6.115	6.057	6.179	BB	250785	2220556	92.26%	5.064%
4	6.543	6.479	6.590	BB	207705	2007864	83.42%	4.579%
5	7.173	7.119	7.242	BB	233757	2187030	90.87%	4.988%
6	8.341	8.279	8.389	BB	188811	1955403	81.24%	4.460%
7	9.943	9.882	9.994	BB	181546	1936544	80.46%	4.417%
8	11.386	11.340	11.430	BB	169353	1914119	79.53%	4.365%
9	11.711	11.652	11.757	BB	225209	2406831	100.00%	5.489%
10	12.697	12.635	12.747	BB	155878	1872246	77.79%	4.270%
11	13.143	13.082	13.189	BB	150334	1749097	72.67%	3.989%
12	13.309	13.249	13.354	BB	154159	1858080	77.20%	4.238%
13	13.895	13.800	13.934	BB	151237	1857071	77.16%	4.235%
14	15.001	14.922	15.042	BB	146615	1847725	76.77%	4.214%
15	16.022	15.990	16.064	BB	147121	1836669	76.31%	4.189%
16	16.973	16.912	17.027	BB	144173	1901984	79.02%	4.338%
17	17.862	17.797	17.902	BB	157735	2074976	86.21%	4.732%
18	18.696	18.637	18.750	BB	155414	2156300	89.59%	4.918%
19	19.479	19.440	19.519	BB	146343	2072411	86.11%	4.726%
20	20.221	20.180	20.260	BV	140610	2048309	85.10%	4.671%
21	20.996	20.922	21.064	BB	109101	1983361	82.41%	4.523%
22	21.973	21.899	22.069	BB	77295	1934574	80.38%	4.412%
Sum of corrected areas:							43847616	

Aliphatic EPH 040925.M Tue May 06 04:08:37 2025

Continuing Calibration Report for SequenceID : FC050525AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FC068778.D

Aliphatic C9-C12	5615722.000	60.000	3.342	6.643	93595.367	105282.003	11.100
Aliphatic C12-C16	3574468.000	40.000	6.644	10.043	89361.700	102322.575	12.667
Aliphatic C16-C21	5074442.000	60.000	10.044	13.410	84574.033	98816.539	14.413
Aliphatic C21-C28	6517473.000	80.000	13.411	17.073	81468.413	94185.337	13.502
Aliphatic C28-C40	10931622.000	120.000	17.074	22.072	91096.850	89882.835	-1.351
Aliphatic EPH	31713727.000	360.000	3.342	22.072	88093.686	96276.618	8.499

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	05 May 2025 21:06
Client Sample ID:		Operator:	YP/AJ
Data file:	FC068778.D	Misc:	
Instrument:	FID_C	ALS Vial:	2
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.342	6.643	5615722.000	60.000	ug/ml
Aliphatic C12-C16	6.644	10.043	3574468.000	40.000	ug/ml
Aliphatic C16-C21	10.044	13.410	5074442.000	60.000	ug/ml
Aliphatic C21-C28	13.411	17.073	6517473.000	80.000	ug/ml
Aliphatic C28-C40	17.074	22.072	10931622.000	120.000	ug/ml
Aliphatic EPH	3.342	22.072	31713727.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
 Data File : FC068778.D
 Signal(s) : FID1A.ch
 Acq On : 05 May 2025 21:06
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 05/06/2025
 Supervised By :mohammad ahmed 05/07/2025

Integration File: autoint1.e
 Quant Time: May 06 04:03:26 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 08 17:31:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.709	2169447	17.037 ug/ml
Spiked Amount 50.000		Recovery =	34.07%
12) S 1-chlorooctadecane (S...	13.142	1571020	16.912 ug/ml
Spiked Amount 50.000		Recovery =	33.82%
Target Compounds			
1) T n-Nonane (C9)	3.442	1865519	17.712 ug/ml
2) T n-Decane (C10)	4.517	1887859	17.918 ug/ml
3) T A~Naphthalene (C11.7)	6.114	2050855	17.610 ug/ml
4) T n-Dodecane (C12)	6.542	1862344	17.709 ug/ml
5) T A~2-methylnaphthalene...	7.172	2008836	17.393 ug/ml
6) T n-Tetradecane (C14)	8.339	1801662	17.525 ug/ml
7) T n-Hexadecane (C16)	9.942	1772806	17.408 ug/ml
8) T n-Octadecane (C18)	11.385	1739358	17.284 ug/mlm
10) T n-Eicosane (C20)	12.696	1678695	17.067 ug/ml
11) T n-Heneicosane (C21)	13.309	1656389	16.996 ug/ml
13) T n-Docosane (C22)	13.895	1643358	17.013 ug/ml
14) T n-Tetracosane (C24)	14.999	1616589	16.984 ug/ml
15) T n-Hexacosane (C26)	16.022	1597584	17.104 ug/ml
16) T n-Octacosane (C28)	16.971	1659942	18.130 ug/ml
17) T n-Tricontane (C30)	17.860	1829072	19.896 ug/ml
18) T n-Dotriacontane (C32)	18.694	1910548	20.828 ug/ml
19) T n-Tetratriacontane (C34)	19.478	1837127	20.563 ug/ml
20) T n-Hexatriacontane (C36)	20.218	1817226	20.286 ug/ml
21) T n-Octatriacontane (C38)	20.993	1778264	20.113 ug/ml
22) T n-Tetracontane (C40)	21.968	1759385	19.924 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
Data File : FC068778.D
Signal(s) : FID1A.ch
Acq On : 05 May 2025 21:06
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

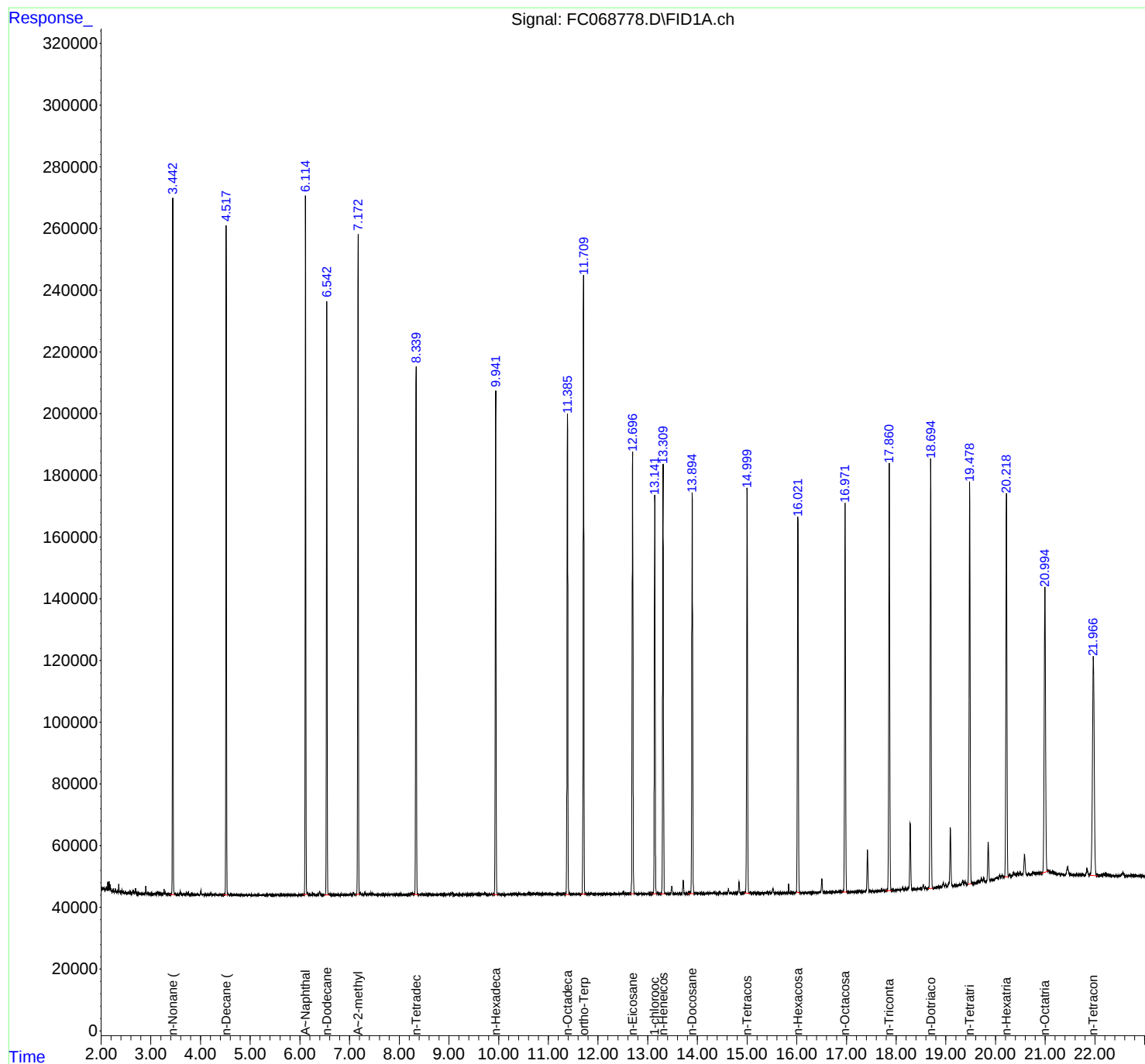
Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 05/06/2025
Supervised By :mohammad ahmed 05/07/2025

Integration File: autoint1.e
Quant Time: May 06 04:03:26 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Quant Title : GC Extractables
QLast Update : Tue Apr 08 17:31:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC05052
Data File : FC068778.D
Signal(s) : FID1A.ch
Acq On : 05 May 2025 21:06
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 05/06/2025
Supervised By :mohammad ahmed 05/07/2025

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.442	3.394	3.487	BB	225593	1865519	85.99%	4.721%
2	4.517	4.462	4.555	BB	216635	1887859	87.02%	4.777%
3	6.114	6.064	6.150	BB	226398	2050855	94.53%	5.190%
4	6.542	6.490	6.589	BB	191953	1862344	85.84%	4.713%
5	7.172	7.117	7.200	BB	214018	2008836	92.60%	5.083%
6	8.339	8.279	8.389	BB	170083	1801662	83.05%	4.559%
7	9.942	9.879	9.987	BB	163126	1772806	81.72%	4.486%
8	11.385	11.275	11.417	BB	155583	1742563	80.32%	4.410%
9	11.709	11.647	11.759	BB	199895	2169447	100.00%	5.490%
10	12.696	12.639	12.735	BB	141937	1678695	77.38%	4.248%
11	13.142	13.080	13.182	BB	128614	1571020	72.42%	3.976%
12	13.309	13.247	13.355	BB	138498	1656389	76.35%	4.192%
13	13.895	13.799	13.939	BB	129943	1643358	75.75%	4.159%
14	14.999	14.935	15.054	BB	131157	1616589	74.52%	4.091%
15	16.022	15.990	16.069	BB	121684	1597584	73.64%	4.043%
16	16.971	16.912	17.010	BB	126511	1659942	76.51%	4.201%
17	17.860	17.792	17.912	BB	138105	1829072	84.31%	4.629%
18	18.694	18.637	18.739	BB	139639	1910548	88.07%	4.835%
19	19.478	19.440	19.515	BB	130115	1837127	84.68%	4.649%
20	20.218	20.180	20.262	BV	124229	1817226	83.76%	4.599%
21	20.993	20.919	21.064	BB	92205	1778264	81.97%	4.500%
22	21.968	21.895	22.060	BB	70366	1759385	81.10%	4.452%
Sum of corrected areas:						39517089		

Aliphatic EPH 040925.M Tue May 06 04:12:26 2025

Continuing Calibration Report for SequenceID : FE050525AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FE053640.D

Aliphatic C9-C12	9038765.000	60.000	3.112	6.755	150646.083	138562.354	-8.721
Aliphatic C12-C16	6131080.000	40.000	6.756	10.204	153277.000	141806.081	-8.089
Aliphatic C16-C21	9075695.000	60.000	10.205	13.579	151261.583	145363.765	-4.057
Aliphatic C21-C28	11352728.000	80.000	13.580	17.249	141909.100	142174.626	0.187
Aliphatic C28-C40	14676919.000	120.000	17.250	22.140	122307.658	129049.185	5.224
Aliphatic EPH	50275187.000	360.000	3.112	22.140	139653.297	137688.007	-1.427

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	05 May 2025 13:44
Client Sample ID:		Operator:	YP\AJ
Data file:	FE053640.D	Misc:	
Instrument:	FID_E	ALS Vial:	4
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.112	6.755	9038765.000	60.000	ug/ml
Aliphatic C12-C16	6.756	10.204	6131080.000	40.000	ug/ml
Aliphatic C16-C21	10.205	13.579	9075695.000	60.000	ug/ml
Aliphatic C21-C28	13.580	17.249	11352728.000	80.000	ug/ml
Aliphatic C28-C40	17.250	22.140	14676919.000	120.000	ug/ml
Aliphatic EPH	3.112	22.140	50275187.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
 Data File : FE053640.D
 Signal(s) : FID1B.ch
 Acq On : 05 May 2025 13:44
 Operator : YP\AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Integration File: sample.E
 Quant Time: May 06 04:18:00 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 29 06:49:03 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)	11.864	3739461	20.733 ug/ml
Spiked Amount 50.000		Recovery =	41.47%
12) S 1-chlorooctadecane (S...	13.309	2714904	20.084 ug/ml
Spiked Amount 50.000		Recovery =	40.17%
Target Compounds			
1) T n-Nonane (C9)	3.211	2969480	21.659 ug/ml
2) T n-Decane (C10)	4.473	3007670	21.742 ug/ml
3) T A~Naphthalene (C11.7)	6.185	3315808	21.967 ug/ml
4) T n-Dodecane (C12)	6.654	3061615	21.830 ug/ml
5) T A~2-methylnaphthalene...	7.288	3283584	21.993 ug/ml
6) T n-Tetradecane (C14)	8.489	3052934	21.762 ug/ml
7) T n-Hexadecane (C16)	10.102	3078146	21.477 ug/ml
8) T n-Octadecane (C18)	11.550	3077942	21.120 ug/ml
10) T n-Eicosane (C20)	12.864	3016435	20.730 ug/ml
11) T n-Heneicosane (C21)	13.477	2981318	20.583 ug/ml
13) T n-Docosane (C22)	14.065	2941830	20.386 ug/ml
14) T n-Tetracosane (C24)	15.170	2871675	19.992 ug/ml
15) T n-Hexacosane (C26)	16.194	2799096	19.764 ug/ml
16) T n-Octacosane (C28)	17.146	2740127	19.695 ug/ml
17) T n-Tricontane (C30)	18.036	2739707	19.682 ug/ml
18) T n-Dotriacontane (C32)	18.871	2722959	19.831 ug/ml
19) T n-Tetratriacontane (C34)	19.658	2547099	19.549 ug/ml
20) T n-Hexatriacontane (C36)	20.399	2395564	18.975 ug/ml
21) T n-Octatriacontane (C38)	21.132	2248621	18.457 ug/ml
22) T n-Tetracontane (C40)	22.036	2022969	16.940 ug/ml

(f)=RT Delta > 1/2 Window

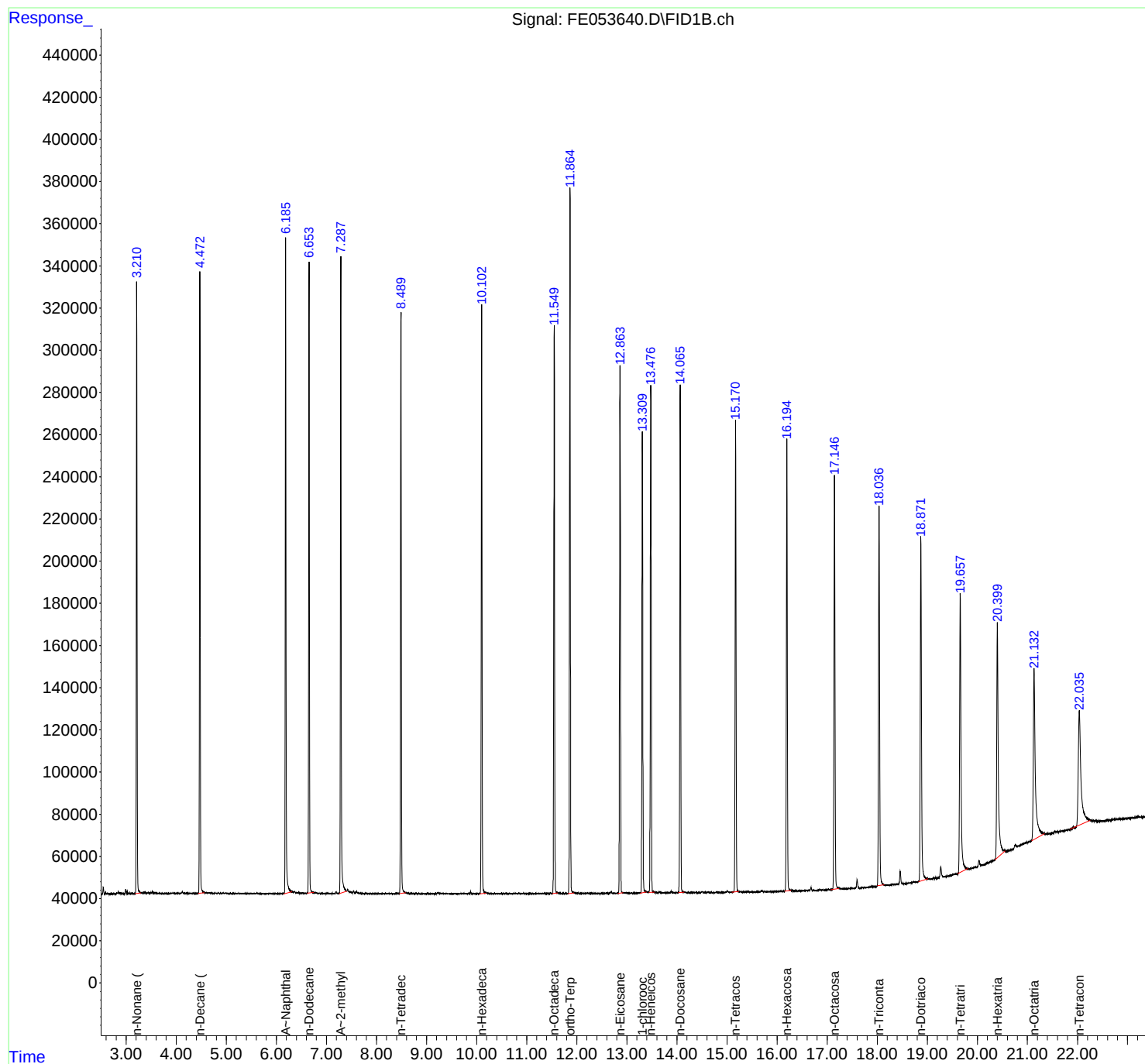
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
Data File : FE053640.D
Signal(s) : FID1B.ch
Acq On : 05 May 2025 13:44
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: sample.E
Quant Time: May 06 04:18:00 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
Quant Title : GC Extractables
QLast Update : Tue Apr 29 06:49:03 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\FE050525AL\
Data File : FE053640.D
Signal(s) : FID1B.ch
Acq On : 05 May 2025 13:44
Sample : 20 PPM ALIPAHTIC HC STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.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	3.211	3.181	3.298	BB	289594	2969480	79.41%	4.689%
2	4.473	4.438	4.565	BB	292276	3007670	80.43%	4.749%
3	6.185	6.148	6.315	BB	310925	3315808	88.67%	5.236%
4	6.654	6.615	6.741	BB	298209	3061615	81.87%	4.834%
5	7.288	7.251	7.408	BV	300630	3283584	87.81%	5.185%
6	8.489	8.455	8.585	BB	275462	3052934	81.64%	4.821%
7	10.102	10.058	10.188	BB	277854	3078146	82.32%	4.861%
8	11.550	11.508	11.621	BB	267204	3077942	82.31%	4.860%
9	11.864	11.825	11.945	BB	333473	3739461	100.00%	5.905%
10	12.864	12.818	12.928	BB	247801	3016435	80.66%	4.763%
11	13.309	13.268	13.395	BB	218692	2714904	72.60%	4.287%
12	13.477	13.438	13.545	BB	240309	2981318	79.73%	4.708%
13	14.065	14.025	14.141	BB	237851	2941830	78.67%	4.645%
14	15.170	15.101	15.241	BB	221537	2871675	76.79%	4.535%
15	16.194	16.151	16.275	BB	213363	2799096	74.85%	4.420%
16	17.146	17.075	17.241	BB	195590	2740127	73.28%	4.327%
17	18.036	18.001	18.141	BB	179570	2739707	73.26%	4.326%
18	18.871	18.821	19.005	BB	163521	2722959	72.82%	4.300%
19	19.658	19.601	19.805	BB	132337	2547099	68.11%	4.022%
20	20.399	20.351	20.555	BB	111689	2395564	64.06%	3.783%
21	21.132	21.081	21.338	BB	81226	2248621	60.13%	3.551%
22	22.036	21.851	22.255	BB	54319	2022969	54.10%	3.194%
Sum of corrected areas:							63328946	

Aliphatic EPH 041725.M Tue May 06 04:39:26 2025

Continuing Calibration Report for SequenceID : FE050525AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FE053658.D

Aliphatic C9-C12	9022819.000	60.000	3.112	6.755	150380.317	138562.354	-8.529
Aliphatic C12-C16	6073214.000	40.000	6.756	10.204	151830.350	141806.081	-7.069
Aliphatic C16-C21	8999157.000	60.000	10.205	13.579	149985.950	145363.765	-3.180
Aliphatic C21-C28	11349355.000	80.000	13.580	17.249	141866.938	142174.626	0.216
Aliphatic C28-C40	15997342.000	120.000	17.250	22.140	133311.183	129049.185	-3.303
Aliphatic EPH	51441887.000	360.000	3.112	22.140	142894.131	137688.007	-3.781

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	05 May 2025 23:18
Client Sample ID:		Operator:	YP\AJ
Data file:	FE053658.D	Misc:	
Instrument:	FID_E	ALS Vial:	4
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.112	6.755	9022819.000	60.000	ug/ml
Aliphatic C12-C16	6.756	10.204	6073214.000	40.000	ug/ml
Aliphatic C16-C21	10.205	13.579	8999157.000	60.000	ug/ml
Aliphatic C21-C28	13.580	17.249	11349355.000	80.000	ug/ml
Aliphatic C28-C40	17.250	22.140	15997342.000	120.000	ug/ml
Aliphatic EPH	3.112	22.140	51441887.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
 Data File : FE053658.D
 Signal(s) : FID1B.ch
 Acq On : 05 May 2025 23:18
 Operator : YP\AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 05/06/2025
 Supervised By :mohammad ahmed 05/07/2025

Integration File: sample.E
 Quant Time: May 06 04:20:30 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 29 06:49:03 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)	11.863	3702947	20.531 ug/ml
Spiked Amount 50.000		Recovery =	41.06%
12) S 1-chlorooctadecane (S...	13.307	2726277	20.168 ug/ml
Spiked Amount 50.000		Recovery =	40.34%
Target Compounds			
1) T n-Nonane (C9)	3.210	2970245	21.664 ug/ml
2) T n-Decane (C10)	4.472	3002502	21.705 ug/ml
3) T A~Naphthalene (C11.7)	6.184	3294652	21.827 ug/ml
4) T n-Dodecane (C12)	6.653	3050072	21.748 ug/ml
5) T A~2-methylnaphthalene...	7.287	3248702	21.759 ug/ml
6) T n-Tetradecane (C14)	8.488	3027246	21.579 ug/ml
7) T n-Hexadecane (C16)	10.101	3045968	21.253 ug/ml
8) T n-Octadecane (C18)	11.548	3046683	20.906 ug/ml
10) T n-Eicosane (C20)	12.862	2991223	20.556 ug/ml
11) T n-Heneicosane (C21)	13.475	2961251	20.444 ug/ml
13) T n-Docosane (C22)	14.063	2919536	20.232 ug/ml
14) T n-Tetracosane (C24)	15.169	2870161	19.982 ug/ml
15) T n-Hexacosane (C26)	16.192	2807416	19.822 ug/ml
16) T n-Octacosane (C28)	17.144	2752242	19.782 ug/ml
17) T n-Tricontane (C30)	18.034	2759201	19.823 ug/ml
18) T n-Dotriacontane (C32)	18.867	2791091	20.327 ug/ml
19) T n-Tetratriacontane (C34)	19.652	2685311	20.610 ug/ml
20) T n-Hexatriacontane (C36)	20.394	2661336	21.081 ug/ml
21) T n-Octatriacontane (C38)	21.127	2561869	21.028 ug/ml
22) T n-Tetracontane (C40)	22.028	2538534	21.257 ug/mlm

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE050525AL\
Data File : FE053658.D
Signal(s) : FID1B.ch
Acq On : 05 May 2025 23:18
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

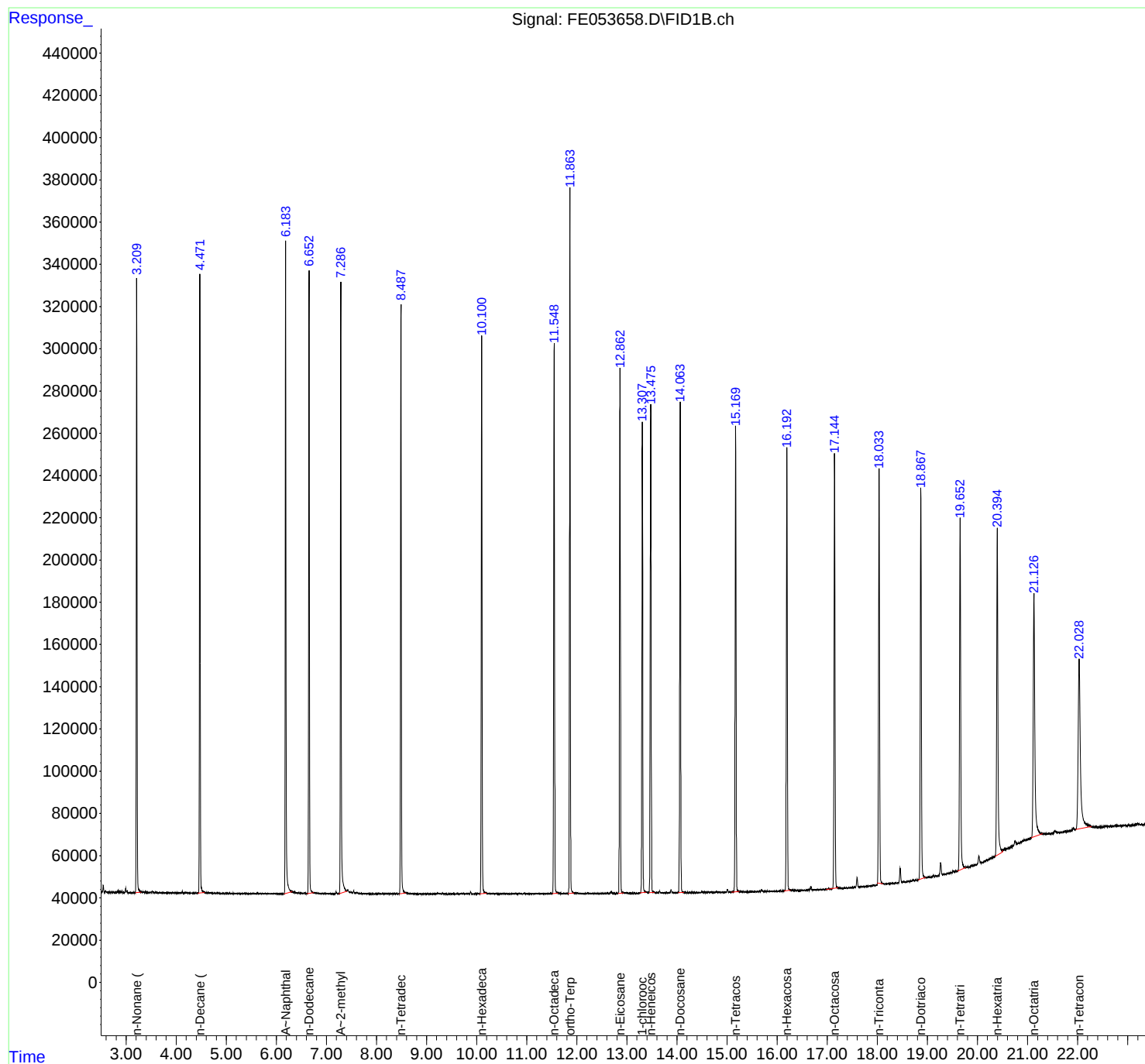
Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 05/06/2025
Supervised By :mohammad ahmed 05/07/2025

Integration File: sample.E
Quant Time: May 06 04:20:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.
Quant Title : GC Extractables
QLast Update : Tue Apr 29 06:49:03 2025
Response via : Initial Calibration
Integrator: ChemStation

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



nteres

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE05052
Data File : FE053658.D
Signal(s) : FID1B.ch
Acq On : 05 May 2025 23:18
Sample : 20 PPM ALIPAHTIC HC STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 05/06/2025
Supervised By :mohammad ahmed 05/07/2025

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 041725.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	3.210	3.181	3.301	BB	289499	2970245	80.21%	4.615%
2	4.472	4.438	4.568	BB	292130	3002502	81.08%	4.665%
3	6.184	6.155	6.311	BB	308530	3294652	88.97%	5.119%
4	6.653	6.615	6.741	BB	293184	3050072	82.37%	4.739%
5	7.287	7.245	7.411	BV	288962	3248702	87.73%	5.048%
6	8.488	8.455	8.585	BB	278265	3027246	81.75%	4.704%
7	10.101	10.061	10.191	BB	264114	3045968	82.26%	4.733%
8	11.548	11.508	11.621	BB	260562	3046683	82.28%	4.734%
9	11.863	11.821	11.945	BB	331449	3702947	100.00%	5.754%
10	12.862	12.825	12.938	BB	246590	2991223	80.78%	4.648%
11	13.307	13.258	13.388	BB	222851	2726277	73.62%	4.236%
12	13.475	13.438	13.551	BB	230234	2961251	79.97%	4.601%
13	14.063	14.025	14.135	BB	232307	2919536	78.84%	4.537%
14	15.169	15.095	15.248	BB	219669	2870161	77.51%	4.460%
15	16.192	16.131	16.268	BB	208896	2807416	75.82%	4.362%
16	17.144	16.985	17.215	BB	205259	2752242	74.33%	4.277%
17	18.034	18.001	18.111	BB	195062	2759201	74.51%	4.287%
18	18.867	18.821	18.965	BB	185032	2791091	75.37%	4.337%
19	19.652	19.601	19.765	BB	166262	2685311	72.52%	4.173%
20	20.394	20.351	20.501	BV	154655	2661336	71.87%	4.135%
21	21.127	21.081	21.298	BB	115033	2561869	69.18%	3.981%
22	22.029	21.851	22.228	BB	80225	2479959	66.97%	3.854%
Sum of corrected areas:						64355888		

Aliphatic EPH 041725.M Tue May 06 04:40:01 2025



QC SAMPLE DATA

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	
Project:	Stan Hope	Date Received:	
Client Sample ID:	PB167855BL	SDG No.:	Q1938
Lab Sample ID:	PB167855BL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
05/05/25 09:05	05/05/25 13:49	PB167855

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C28-C40	Aliphatic C28-C40	1.18	U	1	1.18	2.00	mg/kg	FC068767.D
Aliphatic C9-C28	Aliphatic C9-C28	0.91	U	1	0.91	3.99	mg/kg	FC068767.D
Total AliphaticEPH	Total AliphaticEPH	2.09	U		2.09	5.99	mg/kg	
Total EPH	Total EPH	2.09	U		2.09	5.99	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	
Project:	Stan Hope	Date Received:	
Client Sample ID:	PB167855BL	SDG No.:	Q1938
Lab Sample ID:	PB167855BL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068767.D	1	05/05/25	05/05/25	PB167855

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)	33.8		40 - 140	68%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	33.0		40 - 140	66%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB167855BL	Acq On:	05 May 2025 13:49
Client Sample ID:	PB167855BL	Operator:	YP/AJ
Data file:	FC068767.D	Misc:	
Instrument:	FID_C	ALS Vial:	11
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.342	6.643	0	0	300	ug/ml
Aliphatic C12-C16	6.644	10.043	0	0	200	ug/ml
Aliphatic C16-C21	10.044	13.410	0	0	300	ug/ml
Aliphatic C21-C28	13.411	17.073	0	0	400	ug/ml
Aliphatic C28-C40	17.074	22.072	0	0	600	ug/ml
Aliphatic EPH	3.342	22.072	0	0		ug/ml
ortho-Terphenyl (SURR)	11.712	11.712	4202996	33.01		ug/ml
1-chlorooctadecane (SURR)	13.145	13.145	3141763	33.82		ug/ml
Aliphatic C9-C28	3.342	17.073	0	0	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
Data File : FC068767.D
Signal(s) : FID1A.ch
Acq On : 05 May 2025 13:49
Operator : YP/AJ
Sample : PB167855BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB167855BL

Integration File: autoint1.e
Quant Time: May 06 03:50:33 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Quant Title : GC Extractables
QLast Update : Tue Apr 08 17:31:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.712	4202996	33.007 ug/ml
Spiked Amount	50.000	Recovery	= 66.01%
12) S 1-chlorooctadecane (S...	13.145	3141763	33.821 ug/ml
Spiked Amount	50.000	Recovery	= 67.64%

Target Compounds

(f)=RT Delta > 1/2 Window

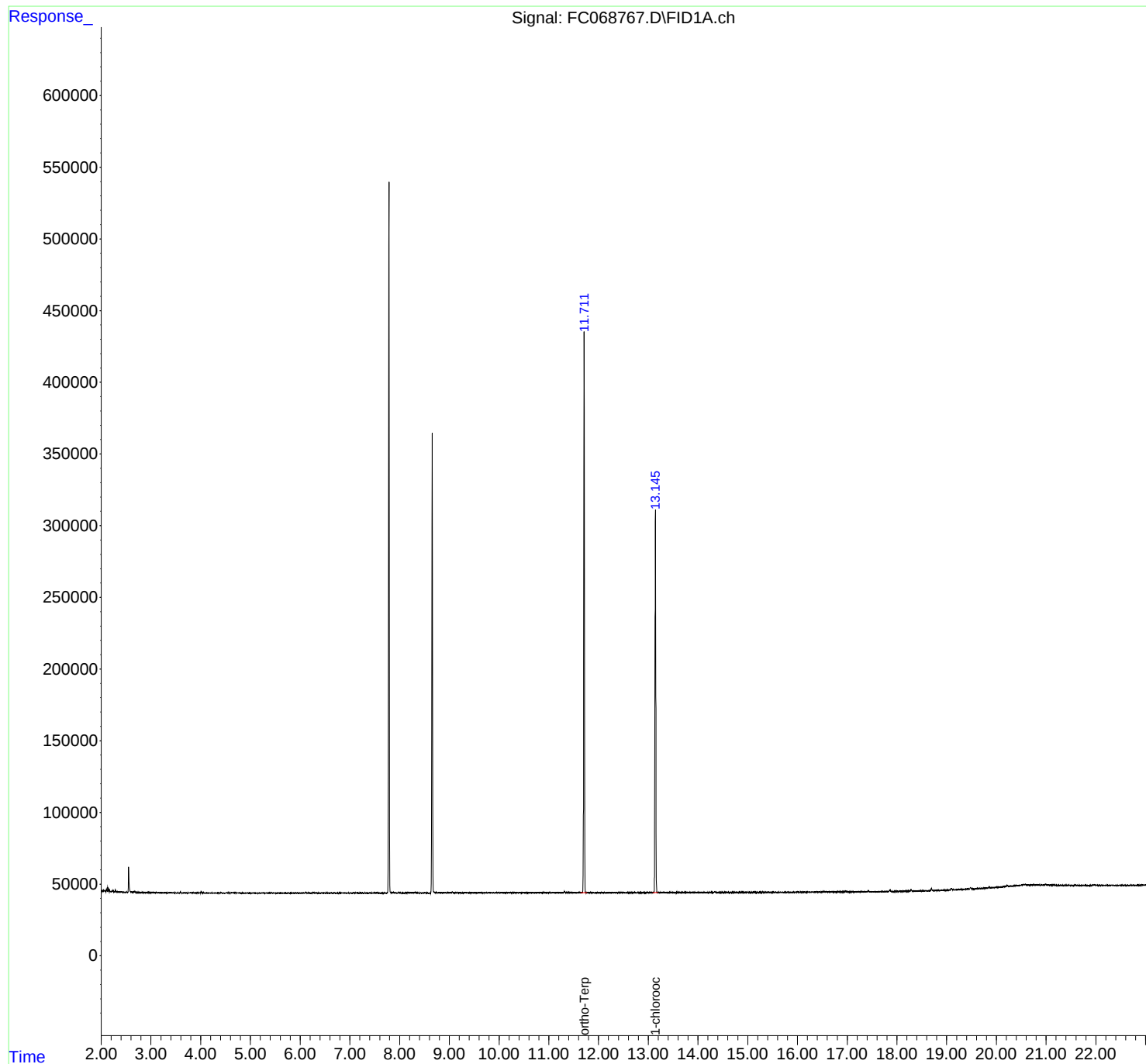
(m)=manual int.

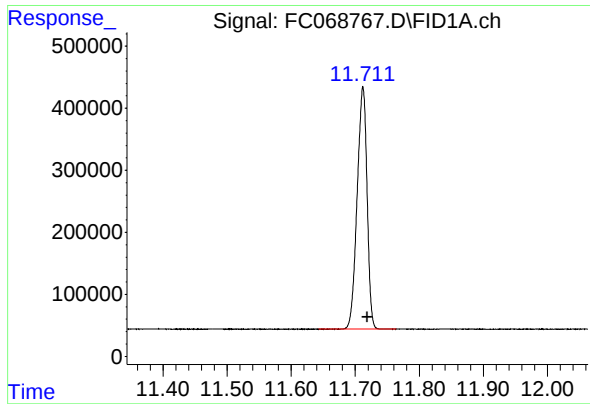
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
Data File : FC068767.D
Signal(s) : FID1A.ch
Acq On : 05 May 2025 13:49
Operator : YP/AJ
Sample : PB167855BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB167855BL

Integration File: autoint1.e
Quant Time: May 06 03:50:33 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Quant Title : GC Extractables
QLast Update : Tue Apr 08 17:31:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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

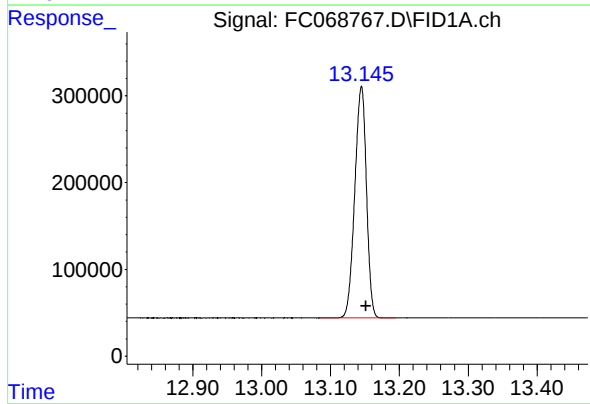




#9 ortho-Terphenyl (SURR)

R.T.: 11.712 min
Delta R.T.: -0.007 min
Response: 4202996
Conc: 33.01 ug/ml

Instrument :
FID_C
ClientSampleId :
PB167855BL



#12 1-chlorooctadecane (SURR)

R.T.: 13.145 min
Delta R.T.: -0.007 min
Response: 3141763
Conc: 33.82 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
Data File : FC068767.D
Signal(s) : FID1A.ch
Acq On : 05 May 2025 13:49
Sample : PB167855BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	11.712	11.643	11.763	BB	391775	4202996	100.00%	57.224%
2	13.145	13.083	13.195	BB	267664	3141763	74.75%	42.776%
Sum of corrected areas:							7344759	

Aliphatic EPH 040925.M Tue May 06 04:08:55 2025

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	
Project:	Stan Hope	Date Received:	
Client Sample ID:	PB167855BS	SDG No.:	Q1938
Lab Sample ID:	PB167855BS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
05/05/25 09:05	05/05/25 14:26	PB167855

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C28-C40	Aliphatic C28-C40	29.8		1	1.18	2.00	mg/kg	FC068768.D
Aliphatic C9-C28	Aliphatic C9-C28	86.6	E	1	0.91	3.99	mg/kg	FC068768.D
Total AliphaticEPH	Total AliphaticEPH	116			2.09	5.99	mg/kg	
Total EPH	Total EPH	116			2.09	5.99	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	
Project:	Stan Hope	Date Received:	
Client Sample ID:	PB167855BS	SDG No.:	Q1938
Lab Sample ID:	PB167855BS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068768.D	1	05/05/25	05/05/25	PB167855

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	86.6	E	0.91	3.99	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	29.8		1.18	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	37.8		40 - 140	76%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	35.9		40 - 140	72%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB167855BS	Acq On:	05 May 2025 14:26
Client Sample ID:	PB167855BS	Operator:	YP/AJ
Data file:	FC068768.D	Misc:	
Instrument:	FID_C	ALS Vial:	12
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.342	6.643	24416713	231.917	300	ug/ml
Aliphatic C12-C16	6.644	10.043	29832946	291.558	200	ug/ml
Aliphatic C16-C21	10.044	13.410	33094765	334.911	300	ug/ml
Aliphatic C21-C28	13.411	17.073	41655421	442.271	400	ug/ml
Aliphatic C28-C40	17.074	22.072	40264379	447.965	600	ug/ml
Aliphatic EPH	3.342	22.072	169264224	1750		ug/ml
ortho-Terphenyl (SURR)	11.712	11.712	4569976	35.89		ug/ml
1-chlorooctadecane (SURR)	13.144	13.144	3507294	37.76		ug/ml
Aliphatic C9-C28	3.342	17.073	128999845	1300	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
 Data File : FC068768.D
 Signal(s) : FID1A.ch
 Acq On : 05 May 2025 14:26
 Operator : YP/AJ
 Sample : PB167855BS
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 PB167855BS

Integration File: autoint1.e
 Quant Time: May 06 03:50:43 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 08 17:31:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.712	4569976	35.889 ug/ml
Spiked Amount 50.000		Recovery =	71.78%
12) S 1-chlorooctadecane (S...	13.144	3507294	37.756 ug/ml
Spiked Amount 50.000		Recovery =	75.51%
Target Compounds			
1) T n-Nonane (C9)	3.452	4528074	42.992 ug/ml
2) T n-Decane (C10)	4.524	4694526	44.557 ug/ml
3) T A~Naphthalene (C11.7)	6.117	5386780	46.254 ug/ml
4) T n-Dodecane (C12)	6.545	4667790	44.386 ug/ml
5) T A~2-methylnaphthalene...	7.175	4857243	42.055 ug/ml
6) T n-Tetradecane (C14)	8.344	4617666	44.917 ug/ml
7) T n-Hexadecane (C16)	9.945	4505114	44.237 ug/ml
8) T n-Octadecane (C18)	11.389	4437340	44.094 ug/ml
10) T n-Eicosane (C20)	12.699	4516965	45.923 ug/ml
11) T n-Heneicosane (C21)	13.311	4321060	44.338 ug/ml
13) T n-Docosane (C22)	13.898	4298247	44.498 ug/ml
14) T n-Tetracosane (C24)	14.996	9039345	94.967 ug/ml
15) T n-Hexacosane (C26)	16.025	4235996	45.351 ug/ml
16) T n-Octacosane (C28)	16.975	4324688	47.235 ug/ml
17) T n-Tricontane (C30)	17.866	4325608	47.052 ug/ml
18) T n-Dotriacontane (C32)	18.697	4329407	47.198 ug/ml
19) T n-Tetratriacontane (C34)	19.482	4385750	49.091 ug/ml
20) T n-Hexatriacontane (C36)	20.223	4229904	47.220 ug/ml
21) T n-Octatriacontane (C38)	20.996	4190767	47.400 ug/ml
22) T n-Tetracontane (C40)	21.974	4110347	46.547 ug/ml

(f)=RT Delta > 1/2 Window

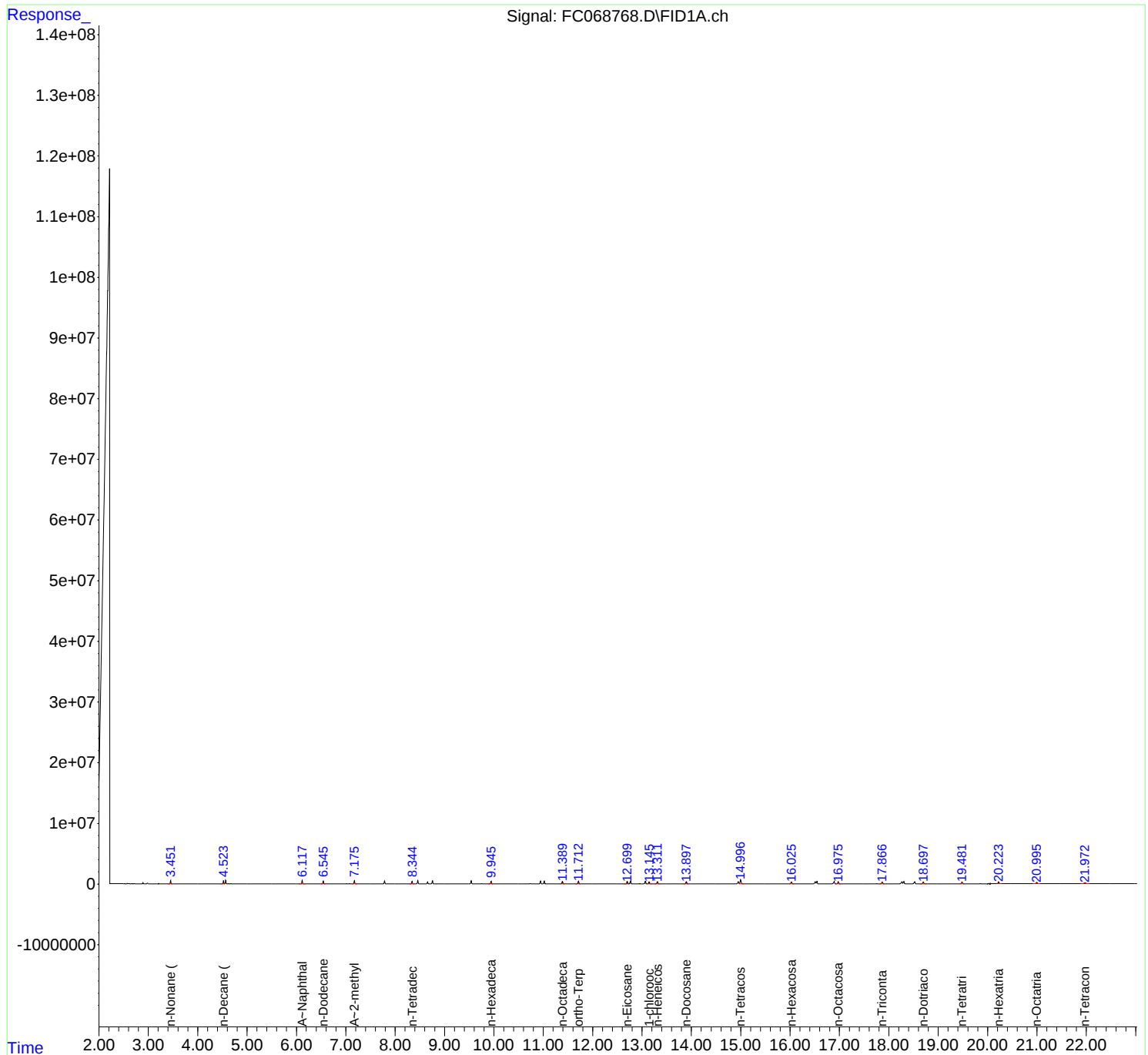
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
Data File : FC068768.D
Signal(s) : FID1A.ch
Acq On : 05 May 2025 14:26
Operator : YP/AJ
Sample : PB167855BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB167855BS

Integration File: autoint1.e
Quant Time: May 06 03:50:43 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Quant Title : GC Extractables
QLast Update : Tue Apr 08 17:31:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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



Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
 Data File : FC068768.D
 Signal(s) : FID1A.ch
 Acq On : 05 May 2025 14:26
 Sample : PB167855BS
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.452	3.399	3.490	BB	541659	4528074	50.09%	2.553%
2	4.524	4.465	4.545	BV	528385	4694526	51.93%	2.647%
3	4.568	4.545	4.612	VV	588609	5139543	56.86%	2.898%
4	6.117	6.054	6.180	BB	593437	5386780	59.59%	3.038%
5	6.545	6.490	6.587	BB	487646	4667790	51.64%	2.632%
6	7.175	7.125	7.232	BB	510332	4857243	53.73%	2.739%
7	8.344	8.287	8.385	BB	443821	4617666	51.08%	2.604%
8	8.460	8.392	8.510	BB	545679	5292579	58.55%	2.984%
9	8.758	8.710	8.797	BB	520072	5287213	58.49%	2.981%
10	9.542	9.475	9.600	BB	498458	5273131	58.34%	2.973%
11	9.945	9.877	9.987	BB	422603	4505114	49.84%	2.540%
12	10.947	10.869	10.984	BV	466282	5036218	55.71%	2.840%
13	11.022	10.984	11.050	PBA	458716	4899416	54.20%	2.763%
14	11.389	11.340	11.430	BB	395891	4437340	49.09%	2.502%
15	11.712	11.654	11.752	BB	417274	4569976	50.56%	2.577%
16	12.699	12.629	12.732	BV	371012	4516965	49.97%	2.547%
17	12.769	12.732	12.822	VB	439635	4987037	55.17%	2.812%
18	13.069	12.995	13.097	BV	441492	4896729	54.17%	2.761%
19	13.144	13.097	13.199	VB	308095	3507294	38.80%	1.978%
20	13.311	13.242	13.364	BB	358611	4321060	47.80%	2.437%
21	13.898	13.835	13.942	BB	338622	4298247	47.55%	2.424%
22	14.949	14.879	14.969	BV	356886	4826773	53.40%	2.722%
23	14.996	14.969	15.060	VB	673335	9039345	100.00%	5.097%
24	16.025	15.990	16.080	BB	325920	4235996	46.86%	2.389%
25	16.509	16.435	16.524	BV	347392	5027280	55.62%	2.835%
26	16.544	16.524	16.577	VV	424540	5035387	55.71%	2.839%
27	16.891	16.817	16.922	BV	368087	4867705	53.85%	2.745%
28	16.975	16.922	17.032	VB	331684	4324688	47.84%	2.439%
29	17.866	17.799	17.917	BB	322759	4325608	47.85%	2.439%
30	18.265	18.219	18.277	M	357459	5037663	55.73%	2.841%
31	18.303	18.278	18.340	M	364047	4741106	52.45%	2.673%
32	18.524	18.442	18.589	BB	341977	4913827	54.36%	2.771%
33	18.697	18.629	18.747	BB	313843	4329407	47.90%	2.441%
34	19.482	19.440	19.524	BB	309117	4385750	48.52%	2.473%
35	20.223	20.180	20.282	BB	285185	4229904	46.79%	2.385%
36	20.996	20.914	21.065	BB	229398	4190767	46.36%	2.363%

rters
37 21.974 21.882 22.065 BB 157117 4110347 45.47% 2.318%
Sum of corrected areas: 177341492

Aliphatic EPH 040925.M Tue May 06 04:10:49 2025

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	
Project:	Stan Hope	Date Received:	
Client Sample ID:	PB167855BSD	SDG No.:	Q1938
Lab Sample ID:	PB167855BSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
05/05/25 09:05	05/05/25 15:02	PB167855

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C28-C40	Aliphatic C28-C40	24.4		1	1.18	2.00	mg/kg	FC068769.D
Aliphatic C9-C28	Aliphatic C9-C28	80.0	E	1	0.91	3.99	mg/kg	FC068769.D
Total AliphaticEPH	Total AliphaticEPH	104			2.09	5.99	mg/kg	
Total EPH	Total EPH	104			2.09	5.99	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	
Project:	Stan Hope	Date Received:	
Client Sample ID:	PB167855BSD	SDG No.:	Q1938
Lab Sample ID:	PB167855BSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068769.D	1	05/05/25	05/05/25	PB167855

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	80.0	E	0.91	3.99	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	24.4		1.18	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	34.4		40 - 140	69%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	33.1		40 - 140	66%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB167855BSD	Acq On:	05 May 2025 15:02
Client Sample ID:	PB167855BSD	Operator:	YP/AJ
Data file:	FC068769.D	Misc:	
Instrument:	FID_C	ALS Vial:	13
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.342	6.643	22845757	216.996	300	ug/ml
Aliphatic C12-C16	6.644	10.043	27708652	270.797	200	ug/ml
Aliphatic C16-C21	10.044	13.410	30459450	308.242	300	ug/ml
Aliphatic C21-C28	13.411	17.073	38148077	405.032	400	ug/ml
Aliphatic C28-C40	17.074	22.072	32892914	365.953	600	ug/ml
Aliphatic EPH	3.342	22.072	152054850	1570		ug/ml
ortho-Terphenyl (SURR)	11.712	11.712	4212856	33.08		ug/ml
1-chlorooctadecane (SURR)	13.144	13.144	3195733	34.4		ug/ml
Aliphatic C9-C28	3.342	17.073	119161936	1200	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
 Data File : FC068769.D
 Signal(s) : FID1A.ch
 Acq On : 05 May 2025 15:02
 Operator : YP/AJ
 Sample : PB167855BSD
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 PB167855BSD

Integration File: autoint1.e
 Quant Time: May 06 03:50:56 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 08 17:31:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.712	4212856	33.084 ug/ml
Spiked Amount 50.000		Recovery =	66.17%
12) S 1-chlorooctadecane (S...	13.144	3195733	34.402 ug/ml
Spiked Amount 50.000		Recovery =	68.80%
Target Compounds			
1) T n-Nonane (C9)	3.451	4245925	40.313 ug/ml
2) T n-Decane (C10)	4.523	4395562	41.720 ug/ml
3) T A~Naphthalene (C11.7)	6.117	5039674	43.274 ug/ml
4) T n-Dodecane (C12)	6.544	4351144	41.375 ug/ml
5) T A~2-methylnaphthalene...	7.174	4529698	39.219 ug/ml
6) T n-Tetradecane (C14)	8.343	4282077	41.653 ug/ml
7) T n-Hexadecane (C16)	9.944	4160107	40.849 ug/ml
8) T n-Octadecane (C18)	11.388	4075079	40.495 ug/ml
10) T n-Eicosane (C20)	12.699	4119427	41.881 ug/ml
11) T n-Heneicosane (C21)	13.311	3932503	40.351 ug/ml
13) T n-Docosane (C22)	13.898	3900087	40.376 ug/ml
14) T n-Tetracosane (C24)	14.995	8275980	86.947 ug/ml
15) T n-Hexacosane (C26)	16.026	3824813	40.949 ug/ml
16) T n-Octacosane (C28)	16.975	3901705	42.615 ug/ml
17) T n-Tricontane (C30)	17.864	3900919	42.433 ug/ml
18) T n-Dotriacontane (C32)	18.697	3904641	42.567 ug/ml
19) T n-Tetratriacontane (C34)	19.482	3964538	44.376 ug/ml
20) T n-Hexatriacontane (C36)	20.223	3820606	42.651 ug/ml
21) T n-Octatriacontane (C38)	20.996	3801920	43.002 ug/ml
22) T n-Tetracontane (C40)	21.977	3742578	42.382 ug/ml

(f)=RT Delta > 1/2 Window

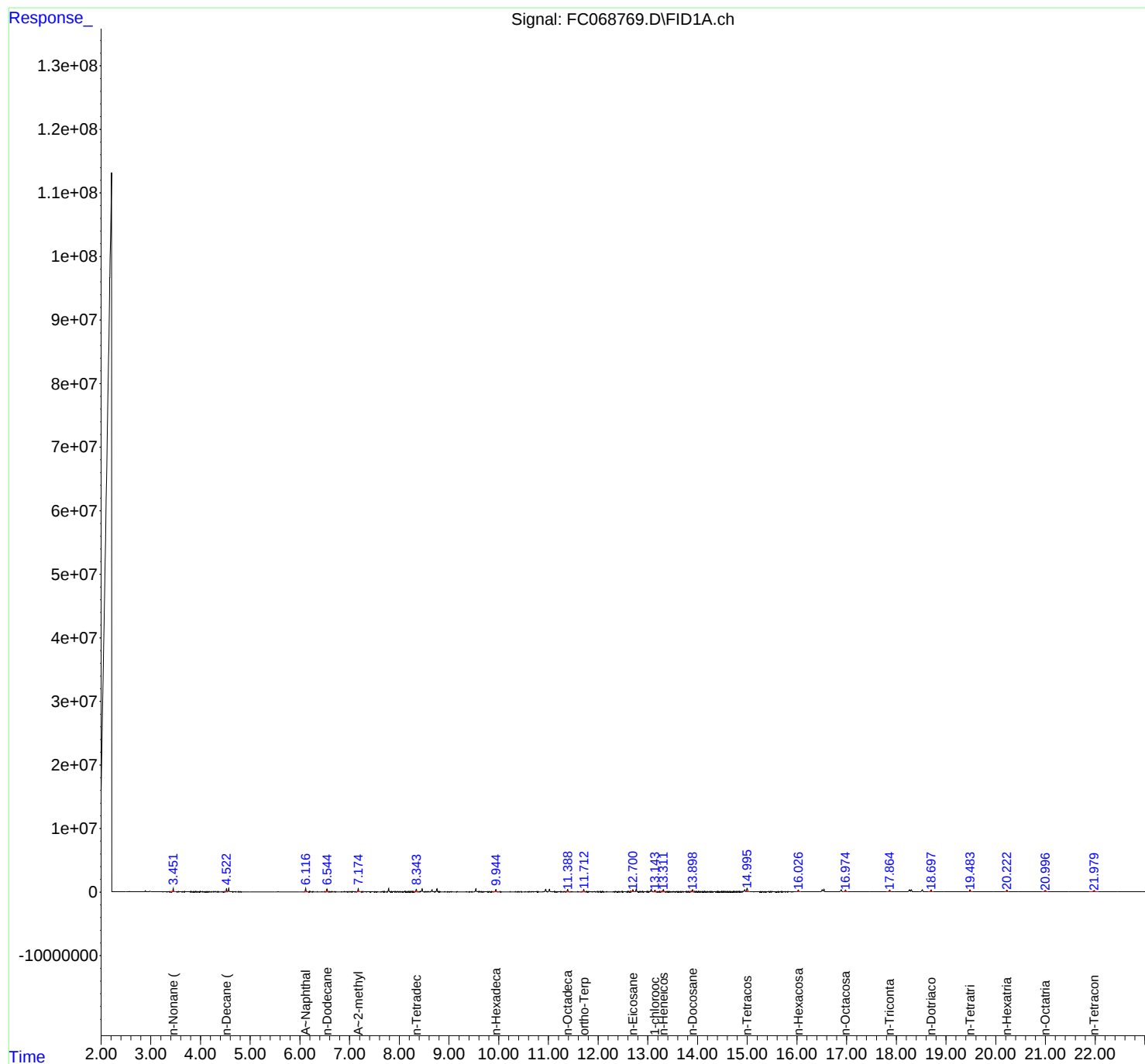
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
Data File : FC068769.D
Signal(s) : FID1A.ch
Acq On : 05 May 2025 15:02
Operator : YP/AJ
Sample : PB167855BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB167855BSD

Integration File: autoint1.e
Quant Time: May 06 03:50:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Quant Title : GC Extractables
QLast Update : Tue Apr 08 17:31:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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



Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
 Data File : FC068769.D
 Signal(s) : FID1A.ch
 Acq On : 05 May 2025 15:02
 Sample : PB167855BSD
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.451	3.392	3.497	BB	515038	4245925	51.30%	2.663%
2	4.523	4.464	4.545	BV	498401	4395562	53.11%	2.756%
3	4.568	4.546	4.612	M	554054	4813452	58.16%	3.019%
4	6.117	6.064	6.182	BB	566033	5039674	60.90%	3.160%
5	6.544	6.490	6.584	BB	438532	4351144	52.58%	2.729%
6	7.174	7.125	7.225	BB	478487	4529698	54.73%	2.841%
7	8.343	8.284	8.389	BB	419561	4282077	51.74%	2.685%
8	8.460	8.394	8.507	BB	499638	4923382	59.49%	3.087%
9	8.757	8.717	8.792	BB	487132	4918168	59.43%	3.084%
10	9.541	9.479	9.602	BB	474285	4895220	59.15%	3.070%
11	9.944	9.877	9.992	BB	378500	4160107	50.27%	2.609%
12	10.946	10.860	10.985	BV	431369	4665522	56.37%	2.926%
13	11.021	10.985	11.050	PBA	434264	4556645	55.06%	2.857%
14	11.388	11.340	11.442	BB	359666	4075079	49.24%	2.555%
15	11.712	11.642	11.744	BB	390912	4212856	50.90%	2.642%
16	12.699	12.642	12.730	BV	345966	4119427	49.78%	2.583%
17	12.768	12.730	12.802	VB	416960	4596133	55.54%	2.882%
18	13.068	12.995	13.097	BV	408040	4514141	54.55%	2.831%
19	13.144	13.097	13.187	VB	275793	3195733	38.61%	2.004%
20	13.311	13.240	13.357	BB	331607	3932503	47.52%	2.466%
21	13.898	13.834	13.947	BB	322330	3900087	47.13%	2.446%
22	14.948	14.875	14.967	BV	347750	4476492	54.09%	2.807%
23	14.995	14.967	15.055	VB	582704	8275980	100.00%	5.190%
24	16.026	15.990	16.082	BB	301253	3824813	46.22%	2.399%
25	16.508	16.429	16.523	BV	322482	4646711	56.15%	2.914%
26	16.542	16.523	16.595	VBA	389371	4626197	55.90%	2.901%
27	16.890	16.814	16.922	BV	344970	4496092	54.33%	2.820%
28	16.975	16.922	17.027	VB	289475	3901705	47.14%	2.447%
29	17.864	17.797	17.904	BB	286240	3900919	47.14%	2.446%
30	18.263	18.182	18.279	BV	279318	2984653	36.06%	1.872%
31	18.301	18.279	18.310	PBA	208314	2216999	26.79%	1.390%
32	18.522	18.442	18.592	BB	323665	4556060	55.05%	2.857%
33	18.697	18.632	18.749	BB	281305	3904641	47.18%	2.449%
34	19.482	19.440	19.539	BB	277972	3964538	47.90%	2.486%
35	20.223	20.180	20.267	BB	269479	3820606	46.16%	2.396%
36	20.996	20.922	21.055	BB	207388	3801920	45.94%	2.384%

rters
37 21.977 21.877 22.070 BB 150760 3742578 45.22% 2.347%
Sum of corrected areas: 159463437

Aliphatic EPH 040925.M Tue May 06 04:11:47 2025

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	
Project:	Stan Hope	Date Received:	
Client Sample ID:	LARGE-PILE-AMS	SDG No.:	Q1938
Lab Sample ID:	Q1937-02MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.2
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
05/05/25 09:05	05/05/25 16:51	PB167855

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C28-C40	Aliphatic C28-C40	31.6		1	1.25	2.12	mg/kg	FC068772.D
Aliphatic C9-C28	Aliphatic C9-C28	73.3		1	0.97	4.24	mg/kg	FC068772.D
Total AliphaticEPH	Total AliphaticEPH	105			2.21	6.36	mg/kg	
Total EPH	Total EPH	105			2.21	6.36	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	
Project:	Stan Hope	Date Received:	
Client Sample ID:	LARGE-PILE-AMS	SDG No.:	Q1938
Lab Sample ID:	Q1937-02MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.2
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068772.D	1	05/05/25	05/05/25	PB167855

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	73.3		0.97	4.24	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	31.6		1.25	2.12	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	37.4		40 - 140	75%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	35.9		40 - 140	72%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1937-02MS	Acq On:	05 May 2025 16:51
Client Sample ID:	LARGE-PILE-AMS	Operator:	YP/AJ
Data file:	FC068772.D	Misc:	
Instrument:	FID_C	ALS Vial:	16
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.342	6.643	17494241	166.166	300	ug/ml
Aliphatic C12-C16	6.644	10.043	23652562	231.157	200	ug/ml
Aliphatic C16-C21	10.044	13.410	27137421	274.624	300	ug/ml
Aliphatic C21-C28	13.411	17.073	34568715	367.029	400	ug/ml
Aliphatic C28-C40	17.074	22.072	40225849	447.536	600	ug/ml
Aliphatic EPH	3.342	22.072	143078788	1490		ug/ml
ortho-Terphenyl (SURR)	11.712	11.712	4565538	35.85		ug/ml
1-chlorooctadecane (SURR)	13.145	13.145	3469749	37.35		ug/ml
Aliphatic C9-C28	3.342	17.073	102852939	1040	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
 Data File : FC068772.D
 Signal(s) : FID1A.ch
 Acq On : 05 May 2025 16:51
 Operator : YP/AJ
 Sample : Q1937-02MS
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 LARGE-PILE-AMS

Integration File: autoint1.e
 Quant Time: May 06 03:51:30 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 08 17:31:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.712	4565538	35.854 ug/ml
Spiked Amount 50.000		Recovery =	71.71%
12) S 1-chlorooctadecane (S...	13.145	3469749	37.352 ug/ml
Spiked Amount 50.000		Recovery =	74.70%
Target Compounds			
1) T n-Nonane (C9)	3.442	2922323	27.746 ug/ml
2) T n-Decane (C10)	4.520	3304907	31.368 ug/ml
3) T A~Naphthalene (C11.7)	6.116	3946432	33.886 ug/ml
4) T n-Dodecane (C12)	6.544	3441090	32.721 ug/ml
5) T A~2-methylnaphthalene...	7.174	3650886	31.610 ug/ml
6) T n-Tetradecane (C14)	8.343	3467173	33.726 ug/ml
7) T n-Hexadecane (C16)	9.944	3440703	33.785 ug/ml
8) T n-Octadecane (C18)	11.388	3424191	34.027 ug/ml
10) T n-Eicosane (C20)	12.698	3504538	35.630 ug/ml
11) T n-Heneicosane (C21)	13.310	3369019	34.569 ug/ml
13) T n-Docosane (C22)	13.898	3360007	34.784 ug/ml
14) T n-Tetracosane (C24)	14.994	7236149	76.022 ug/ml
15) T n-Hexacosane (C26)	16.025	3350131	35.867 ug/ml
16) T n-Octacosane (C28)	16.974	3418658	37.339 ug/ml
17) T n-Tricontane (C30)	17.864	3433943	37.353 ug/ml
18) T n-Dotriacontane (C32)	18.697	3411794	37.194 ug/ml
19) T n-Tetratriacontane (C34)	19.482	3386424	37.905 ug/ml
20) T n-Hexatriacontane (C36)	20.222	3234443	36.107 ug/ml
21) T n-Octatriacontane (C38)	20.997	3198240	36.174 ug/ml
22) T n-Tetracontane (C40)	21.974	3172662	35.928 ug/ml

(f)=RT Delta > 1/2 Window

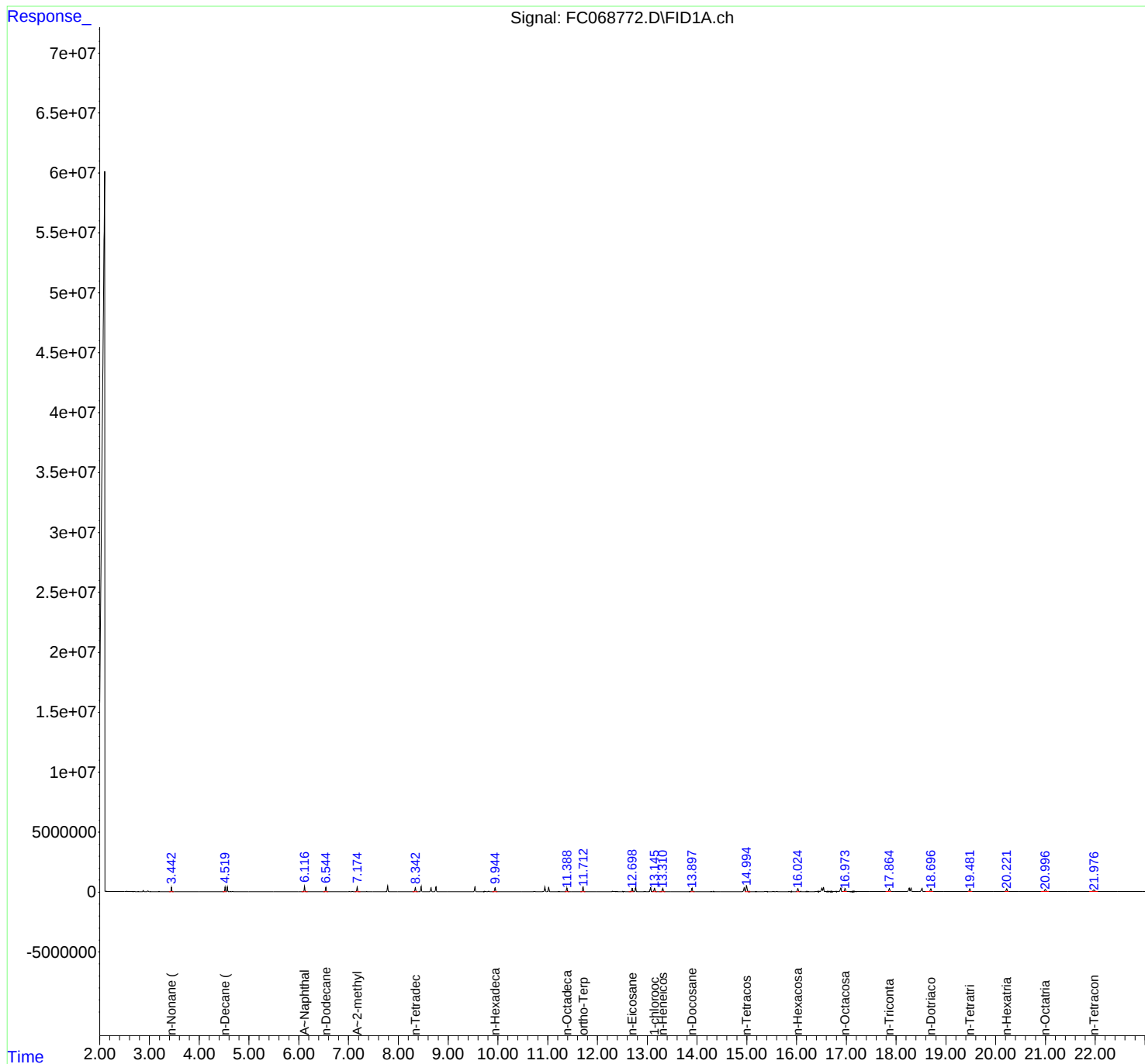
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
Data File : FC068772.D
Signal(s) : FID1A.ch
Acq On : 05 May 2025 16:51
Operator : YP/AJ
Sample : Q1937-02MS
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
LARGE-PILE-AMS

Integration File: autoint1.e
Quant Time: May 06 03:51:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Quant Title : GC Extractables
QLast Update : Tue Apr 08 17:31:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
 Data File : FC068772.D
 Signal(s) : FID1A.ch
 Acq On : 05 May 2025 16:51
 Sample : Q1937-02MS
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.255	3.204	3.310	BV	95	1608	0.02%	0.001%
2	3.331	3.310	3.411	PV	305	7575	0.10%	0.005%
3	3.442	3.411	3.484	VV	353379	2924164	40.40%	1.933%
4	3.494	3.484	3.524	VV	174	1488	0.02%	0.001%
5	3.593	3.524	3.614	VV	631	8523	0.12%	0.006%
6	3.628	3.614	3.675	VV	331	5701	0.08%	0.004%
7	3.690	3.675	3.714	PV	373	5563	0.08%	0.004%
8	3.739	3.714	3.801	VV	879	16037	0.22%	0.011%
9	3.830	3.801	3.884	VV	803	10355	0.14%	0.007%
10	3.896	3.884	3.905	VV	95	799	0.01%	0.001%
11	3.928	3.905	3.981	PV	544	9008	0.12%	0.006%
12	4.011	3.981	4.056	VV	1020	12392	0.17%	0.008%
13	4.092	4.056	4.105	PV	362	3645	0.05%	0.002%
14	4.119	4.105	4.138	VV	175	2461	0.03%	0.002%
15	4.182	4.138	4.202	VV	172	3000	0.04%	0.002%
16	4.214	4.202	4.248	VV	129	1633	0.02%	0.001%
17	4.285	4.248	4.311	VV	480	6493	0.09%	0.004%
18	4.324	4.311	4.337	VV	147	2191	0.03%	0.001%
19	4.351	4.337	4.372	VV	135	2190	0.03%	0.001%
20	4.388	4.372	4.408	VV	107	1744	0.02%	0.001%
21	4.421	4.408	4.457	VV	121	2310	0.03%	0.002%
22	4.476	4.457	4.484	VV	117	1287	0.02%	0.001%
23	4.520	4.484	4.542	VV	373660	3307598	45.70%	2.186%
24	4.564	4.542	4.608	VV	412520	3544704	48.98%	2.343%
25	4.626	4.608	4.648	VV	3758	35287	0.49%	0.023%
26	4.673	4.648	4.748	VV	6212	61987	0.86%	0.041%
27	4.775	4.748	4.791	VV	247	3483	0.05%	0.002%
28	4.810	4.791	4.835	VV	166	2920	0.04%	0.002%
29	4.862	4.835	4.888	VV	140	2711	0.04%	0.002%
30	4.899	4.888	4.927	VV	130	1623	0.02%	0.001%
31	4.940	4.927	4.951	VV	109	1180	0.02%	0.001%
32	4.959	4.951	4.974	VV	129	1020	0.01%	0.001%
33	4.997	4.974	5.034	VV	160	2789	0.04%	0.002%
34	5.050	5.034	5.081	PV	92	1467	0.02%	0.001%
35	5.085	5.081	5.098	VV	109	756	0.01%	0.000%
36	5.113	5.098	5.154	VV	124	2795	0.04%	0.002%

					rteres			
37	5.166	5.154	5.188	VV	133	1313	0.02%	0.001%
38	5.197	5.188	5.207	VV	107	526	0.01%	0.000%
39	5.245	5.207	5.337	PV	160	4457	0.06%	0.003%
40	5.348	5.337	5.368	PV	86	735	0.01%	0.000%
41	5.380	5.368	5.395	VV	290	2606	0.04%	0.002%
42	5.407	5.395	5.446	VV	135	1914	0.03%	0.001%
43	5.465	5.446	5.514	VV	75	1989	0.03%	0.001%
44	5.523	5.514	5.534	VV	68	426	0.01%	0.000%
45	5.559	5.534	5.575	PV	1113	11316	0.16%	0.007%
46	5.588	5.575	5.624	VV	1015	11014	0.15%	0.007%
47	5.630	5.624	5.689	VV	136	2835	0.04%	0.002%
48	5.696	5.689	5.714	VV	103	608	0.01%	0.000%
49	5.738	5.714	5.790	VV	130	2219	0.03%	0.001%
50	5.801	5.790	5.840	VV	138	2033	0.03%	0.001%
51	5.873	5.840	5.885	VV	176	1880	0.03%	0.001%
52	5.911	5.885	5.941	PV	154	2077	0.03%	0.001%
53	5.961	5.941	6.009	VV	124	2369	0.03%	0.002%
54	6.019	6.009	6.035	VV	82	751	0.01%	0.000%
55	6.116	6.035	6.182	PV	436445	3958600	54.70%	2.616%
56	6.201	6.182	6.234	VV	359	7756	0.11%	0.005%
57	6.261	6.234	6.349	VV	327	11932	0.16%	0.008%
58	6.389	6.349	6.434	VV	407	9181	0.13%	0.006%
59	6.444	6.434	6.456	VV	180	2086	0.03%	0.001%
60	6.464	6.456	6.510	VV	199	4229	0.06%	0.003%
61	6.544	6.510	6.597	VV	364297	3446864	47.63%	2.278%
62	6.615	6.597	6.676	VV	760	11221	0.16%	0.007%
63	6.692	6.676	6.732	VV	295	4678	0.06%	0.003%
64	6.766	6.732	6.788	VV	182	3206	0.04%	0.002%
65	6.797	6.788	6.850	VV	120	4332	0.06%	0.003%
66	6.866	6.850	6.919	VV	141	3780	0.05%	0.002%
67	6.939	6.919	6.954	VV	330	4014	0.06%	0.003%
68	6.962	6.954	6.987	VV	287	3741	0.05%	0.002%
69	7.014	6.987	7.051	VV	4185	40581	0.56%	0.027%
70	7.080	7.051	7.127	VV	10047	98229	1.36%	0.065%
71	7.174	7.127	7.263	VV	387402	3663665	50.62%	2.421%
72	7.273	7.263	7.290	VV	230	3203	0.04%	0.002%
73	7.311	7.290	7.344	VV	1309	19151	0.26%	0.013%
74	7.364	7.344	7.379	VV	1973	23467	0.32%	0.016%
75	7.390	7.379	7.411	VV	939	11302	0.16%	0.007%
76	7.440	7.411	7.453	VV	913	12270	0.17%	0.008%
77	7.467	7.453	7.488	VV	1047	12907	0.18%	0.009%
78	7.514	7.488	7.549	VV	399	10362	0.14%	0.007%
79	7.565	7.549	7.582	VV	336	5083	0.07%	0.003%
80	7.647	7.582	7.691	VV	538	14295	0.20%	0.009%
81	7.696	7.691	7.735	VV	266	4674	0.06%	0.003%
82	7.880	7.848	7.914	VV	551	14895	0.21%	0.010%
83	7.925	7.914	7.970	VV	579	9850	0.14%	0.007%
84	8.036	7.970	8.072	VV	481	13370	0.18%	0.009%
85	8.091	8.072	8.133	VV	377	7910	0.11%	0.005%
86	8.202	8.133	8.211	VV	251	8268	0.11%	0.005%
87	8.257	8.211	8.269	VV	368	10729	0.15%	0.007%
88	8.343	8.269	8.391	VV	333509	3484683	48.15%	2.303%
89	8.402	8.391	8.424	VV	219	3057	0.04%	0.002%

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90	8.459	8.424	8.515	VV	422680	4058701	56.08%	2.682%
91	8.525	8.515	8.531	VV	226	1826	0.03%	0.001%
92	8.539	8.531	8.548	VV	247	2125	0.03%	0.001%
93	8.571	8.548	8.582	VV	301	4829	0.07%	0.003%
94	8.757	8.722	8.792	VV	412805	4075033	56.30%	2.693%
95	8.810	8.792	8.858	VV	392	9011	0.12%	0.006%
96	8.874	8.858	8.888	VV	183	2429	0.03%	0.002%
97	8.896	8.888	8.921	VV	172	2003	0.03%	0.001%
98	8.967	8.921	9.008	VV	266	6806	0.09%	0.004%
99	9.025	9.008	9.044	VV	678	7957	0.11%	0.005%
100	9.061	9.044	9.108	VV	650	12329	0.17%	0.008%
101	9.114	9.108	9.128	VV	136	1138	0.02%	0.001%
102	9.162	9.128	9.182	VV	479	6445	0.09%	0.004%
103	9.192	9.182	9.208	VV	143	1395	0.02%	0.001%
104	9.223	9.208	9.240	VV	167	1944	0.03%	0.001%
105	9.281	9.240	9.301	VV	277	4112	0.06%	0.003%
106	9.318	9.301	9.334	VV	111	1693	0.02%	0.001%
107	9.360	9.334	9.380	VV	533	6667	0.09%	0.004%
108	9.404	9.380	9.413	VV	201	2796	0.04%	0.002%
109	9.422	9.413	9.444	VV	186	2114	0.03%	0.001%
110	9.459	9.444	9.497	VV	231	4056	0.06%	0.003%
111	9.540	9.497	9.571	VV	412098	4113107	56.83%	2.718%
112	9.581	9.571	9.605	VV	556	7059	0.10%	0.005%
113	9.624	9.605	9.650	VV	262	4767	0.07%	0.003%
114	9.682	9.650	9.696	VV	386	6339	0.09%	0.004%
115	9.719	9.696	9.733	VV	1547	20601	0.28%	0.014%
116	9.752	9.733	9.787	VV	6044	68295	0.94%	0.045%
117	9.814	9.787	9.857	VV	24486	257482	3.56%	0.170%
118	9.878	9.857	9.904	VV	467	7179	0.10%	0.005%
119	9.944	9.904	10.017	VV	322006	3450829	47.68%	2.281%
120	10.037	10.017	10.094	VV	276	5793	0.08%	0.004%
121	10.098	10.094	10.144	VV	122	1564	0.02%	0.001%
122	10.165	10.144	10.186	VV	85	1529	0.02%	0.001%
123	10.223	10.186	10.258	VV	152	3303	0.05%	0.002%
124	10.289	10.258	10.311	PV	271	3708	0.05%	0.002%
125	10.331	10.311	10.354	VV	145	2797	0.04%	0.002%
126	10.378	10.354	10.402	VV	205	4203	0.06%	0.003%
127	10.411	10.402	10.419	VV	144	1095	0.02%	0.001%
128	10.461	10.419	10.501	VV	222	4894	0.07%	0.003%
129	10.585	10.501	10.624	VV	194	8060	0.11%	0.005%
130	10.638	10.624	10.651	VV	259	3137	0.04%	0.002%
131	10.678	10.651	10.701	VV	654	8986	0.12%	0.006%
132	10.733	10.701	10.769	VV	8093	114801	1.59%	0.076%
133	10.784	10.769	10.861	VV	346	7413	0.10%	0.005%
134	10.872	10.861	10.883	VV	148	1151	0.02%	0.001%
135	10.946	10.883	10.983	VV	374287	4011140	55.42%	2.651%
136	11.020	10.983	11.078	VV	367033	3938215	54.41%	2.603%
137	11.094	11.078	11.147	VV	725	12963	0.18%	0.009%
138	11.190	11.147	11.204	VV	782	10737	0.15%	0.007%
139	11.224	11.204	11.295	VV	2759	31457	0.43%	0.021%
140	11.315	11.295	11.339	VV	476	6140	0.08%	0.004%
141	11.388	11.339	11.430	VV	298501	3426484	47.34%	2.265%

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142	11.463	11.430	11.498	VV	293	6241	0.09%	0.004%
143	11.519	11.498	11.534	VV	310	3362	0.05%	0.002%
144	11.544	11.534	11.564	VV	166	2218	0.03%	0.001%
145	11.577	11.564	11.608	VV	172	2740	0.04%	0.002%
146	11.631	11.608	11.663	PV	289	4397	0.06%	0.003%
147	11.712	11.663	11.757	VV	424766	4567268	63.11%	3.018%
148	11.802	11.757	11.824	VV	509	10049	0.14%	0.007%
149	11.840	11.824	11.858	VV	713	8718	0.12%	0.006%
150	11.871	11.858	11.908	VV	775	13054	0.18%	0.009%
151	11.919	11.908	11.954	VV	344	4850	0.07%	0.003%
152	11.962	11.954	11.970	VV	37	418	0.01%	0.000%
153	11.987	11.970	12.031	VV	212	3397	0.05%	0.002%
154	12.051	12.031	12.081	VV	249	4601	0.06%	0.003%
155	12.095	12.081	12.129	VV	208	4100	0.06%	0.003%
156	12.146	12.129	12.188	VV	281	4561	0.06%	0.003%
157	12.192	12.188	12.201	VV	121	484	0.01%	0.000%
158	12.303	12.201	12.462	VV	27096	403312	5.57%	0.267%
159	12.486	12.462	12.493	VV	651	11342	0.16%	0.007%
160	12.538	12.493	12.609	VV	1975	55337	0.76%	0.037%
161	12.635	12.609	12.660	VV	512	12777	0.18%	0.008%
162	12.698	12.660	12.730	VV	300515	3522031	48.66%	2.328%
163	12.767	12.730	12.850	VV	376762	4039895	55.82%	2.670%
164	12.861	12.850	12.888	VV	237	4400	0.06%	0.003%
165	12.900	12.888	12.918	VV	252	3922	0.05%	0.003%
166	12.949	12.918	12.996	VV	4399	55069	0.76%	0.036%
167	13.067	12.996	13.096	VV	340349	3959385	54.71%	2.617%
168	13.145	13.096	13.214	VV	290900	3479284	48.07%	2.299%
169	13.258	13.214	13.274	VV	368	9102	0.13%	0.006%
170	13.310	13.274	13.394	VV	268326	3381463	46.72%	2.235%
171	13.403	13.394	13.414	VV	224	2419	0.03%	0.002%
172	13.431	13.414	13.470	VV	340	7276	0.10%	0.005%
173	13.514	13.470	13.567	VV	889	29857	0.41%	0.020%
174	13.581	13.567	13.606	VV	608	13941	0.19%	0.009%
175	13.610	13.606	13.638	VV	640	10157	0.14%	0.007%
176	13.652	13.638	13.674	VV	549	11243	0.16%	0.007%
177	13.687	13.674	13.714	VV	729	13103	0.18%	0.009%
178	13.738	13.714	13.815	VV	817	25596	0.35%	0.017%
179	13.847	13.815	13.862	VV	1027	16150	0.22%	0.011%
180	13.898	13.862	14.008	VV	282510	3380862	46.71%	2.234%
181	14.026	14.008	14.050	VV	293	5170	0.07%	0.003%
182	14.073	14.050	14.114	VV	585	10343	0.14%	0.007%
183	14.127	14.114	14.156	VV	183	3196	0.04%	0.002%
184	14.164	14.156	14.201	VV	134	2349	0.03%	0.002%
185	14.286	14.201	14.314	VV	1011	21065	0.29%	0.014%
186	14.334	14.314	14.365	VV	872	13524	0.19%	0.009%
187	14.373	14.365	14.436	VV	235	6276	0.09%	0.004%
188	14.462	14.436	14.511	VV	444	10329	0.14%	0.007%
189	14.535	14.511	14.546	VV	274	3616	0.05%	0.002%
190	14.561	14.546	14.615	VV	282	7626	0.11%	0.005%
191	14.621	14.615	14.655	VV	167	2379	0.03%	0.002%
192	14.679	14.655	14.724	VV	379	6896	0.10%	0.005%
193	14.745	14.724	14.751	PV	146	1442	0.02%	0.001%
194	14.761	14.751	14.774	VV	123	1102	0.02%	0.001%

					rteres			
195	14.801	14.774	14.820	VV	278	4482	0.06%	0.003%
196	14.843	14.820	14.875	VV	441	7840	0.11%	0.005%
197	14.947	14.875	14.967	VV	319353	3956558	54.67%	2.615%
198	14.994	14.967	15.034	VV	500641	7237484	100.00%	4.783%
199	15.044	15.034	15.151	VV	960	22804	0.32%	0.015%
200	15.179	15.151	15.234	VV	1265	22776	0.31%	0.015%
201	15.257	15.234	15.274	VV	225	4122	0.06%	0.003%
202	15.282	15.274	15.304	VV	153	2021	0.03%	0.001%
203	15.320	15.304	15.334	VV	134	1815	0.03%	0.001%
204	15.376	15.334	15.458	VV	20640	280987	3.88%	0.186%
205	15.475	15.458	15.494	VV	377	5938	0.08%	0.004%
206	15.523	15.494	15.561	VV	1054	25736	0.36%	0.017%
207	15.601	15.561	15.631	VV	1658	27551	0.38%	0.018%
208	15.649	15.631	15.687	VV	247	4655	0.06%	0.003%
209	15.793	15.687	15.811	VV	234	8494	0.12%	0.006%
210	15.854	15.811	15.874	PV	887	12297	0.17%	0.008%
211	15.898	15.874	15.957	VV	687	15354	0.21%	0.010%
212	16.025	15.957	16.064	VV	263777	3365538	46.50%	2.224%
213	16.085	16.064	16.144	VV	616	10841	0.15%	0.007%
214	16.195	16.144	16.204	VV	354	5716	0.08%	0.004%
215	16.230	16.204	16.258	VV	713	11316	0.16%	0.007%
216	16.329	16.258	16.345	VV	296	7480	0.10%	0.005%
217	16.392	16.345	16.447	VV	4532	75367	1.04%	0.050%
218	16.507	16.447	16.522	VV	300645	4146914	57.30%	2.741%
219	16.540	16.522	16.569	VV	355722	4103457	56.70%	2.712%
220	16.587	16.569	16.619	VV	1587	30198	0.42%	0.020%
221	16.637	16.619	16.658	VV	477	8976	0.12%	0.006%
222	16.697	16.658	16.722	VV	349	12218	0.17%	0.008%
223	16.751	16.722	16.798	VV	2737	44036	0.61%	0.029%
224	16.822	16.798	16.836	VV	555	9644	0.13%	0.006%
225	16.888	16.836	16.921	VV	304936	3984099	55.05%	2.633%
226	16.974	16.921	17.010	VV	254411	3450075	47.67%	2.280%
227	17.049	17.010	17.156	VV	2100	58428	0.81%	0.039%
228	17.188	17.156	17.198	VV	295	6239	0.09%	0.004%
229	17.245	17.198	17.273	VV	331	13081	0.18%	0.009%
230	17.284	17.273	17.294	VV	287	3755	0.05%	0.002%
231	17.335	17.294	17.390	VV	3093	64488	0.89%	0.043%
232	17.423	17.390	17.464	VV	4859	82629	1.14%	0.055%
233	17.469	17.464	17.478	VV	459	2978	0.04%	0.002%
234	17.509	17.478	17.538	VV	986	20709	0.29%	0.014%
235	17.544	17.538	17.634	VV	452	22365	0.31%	0.015%
236	17.656	17.634	17.683	VV	511	11792	0.16%	0.008%
237	17.706	17.683	17.723	VV	503	10569	0.15%	0.007%
238	17.754	17.723	17.781	VV	3238	53962	0.75%	0.036%
239	17.864	17.781	17.921	VV	251621	3487218	48.18%	2.305%
240	17.952	17.921	18.004	VV	3641	70686	0.98%	0.047%
241	18.029	18.004	18.037	VV	692	12491	0.17%	0.008%
242	18.067	18.037	18.081	VV	728	18290	0.25%	0.012%
243	18.102	18.081	18.159	VV	1182	39542	0.55%	0.026%
244	18.262	18.159	18.278	VV	290553	4470689	61.77%	2.955%
245	18.300	18.278	18.354	VV	304481	3905612	53.96%	2.581%
246	18.381	18.354	18.465	VV	1962	94696	1.31%	0.063%

rteres								
247	18.520	18.465	18.612	VV	284990	4110756	56.80%	2.717%
248	18.638	18.612	18.653	VV	1870	40827	0.56%	0.027%
249	18.697	18.653	18.748	VV	236589	3477804	48.05%	2.298%
250	18.794	18.748	18.838	VV	4576	129869	1.79%	0.086%
251	18.857	18.838	18.896	VV	1768	55274	0.76%	0.037%
252	18.902	18.896	18.928	VV	1514	27944	0.39%	0.018%
253	18.971	18.928	19.011	VV	1777	80651	1.11%	0.053%
254	19.047	19.011	19.078	VV	12032	254343	3.51%	0.168%
255	19.096	19.078	19.151	VV	4869	144889	2.00%	0.096%
256	19.185	19.151	19.215	VV	2709	90170	1.25%	0.060%
257	19.235	19.215	19.270	VV	2646	75972	1.05%	0.050%
258	19.287	19.270	19.310	VV	2301	52042	0.72%	0.034%
259	19.342	19.310	19.375	VV	3133	97723	1.35%	0.065%
260	19.393	19.375	19.418	VV	2360	57881	0.80%	0.038%
261	19.482	19.418	19.528	VV	240563	3541171	48.93%	2.340%
262	19.551	19.528	19.565	VV	3542	68112	0.94%	0.045%
263	19.585	19.565	19.619	VV	3927	103581	1.43%	0.068%
264	19.657	19.619	19.704	VV	3319	145925	2.02%	0.096%
265	19.725	19.704	19.736	VV	2812	51396	0.71%	0.034%
266	19.768	19.736	19.793	VV	3184	101349	1.40%	0.067%
267	19.842	19.793	19.884	VV	5243	230772	3.19%	0.153%
268	19.892	19.884	19.917	VV	3515	64678	0.89%	0.043%
269	19.955	19.917	19.971	VV	3378	107808	1.49%	0.071%
270	20.014	19.971	20.048	VV	3874	168905	2.33%	0.112%
271	20.079	20.048	20.098	VV	4537	121869	1.68%	0.081%
272	20.124	20.098	20.164	VV	4698	168378	2.33%	0.111%
273	20.222	20.164	20.284	VV	241585	3529052	48.76%	2.332%
274	20.359	20.284	20.431	VV	6194	409433	5.66%	0.271%
275	20.462	20.431	20.498	VV	4599	175447	2.42%	0.116%
276	20.501	20.498	20.509	VV	4361	29678	0.41%	0.020%
277	20.584	20.509	20.615	VV	5267	298768	4.13%	0.197%
278	20.651	20.615	20.665	VV	4557	137398	1.90%	0.091%
279	20.685	20.665	20.725	VV	4535	160400	2.22%	0.106%
280	20.742	20.725	20.754	VV	4384	76663	1.06%	0.051%
281	20.776	20.754	20.829	VV	4477	193852	2.68%	0.128%
282	20.897	20.829	20.937	VV	4357	277246	3.83%	0.183%
283	20.997	20.937	21.134	VV	179069	3697647	51.09%	2.444%
284	21.147	21.134	21.182	VV	4095	114559	1.58%	0.076%
285	21.196	21.182	21.211	VV	3978	68832	0.95%	0.045%
286	21.216	21.211	21.231	VV	3959	46826	0.65%	0.031%
287	21.247	21.231	21.288	VV	3910	129436	1.79%	0.086%
288	21.313	21.288	21.371	VV	3911	188580	2.61%	0.125%
289	21.393	21.371	21.417	VV	3769	102420	1.42%	0.068%
290	21.449	21.417	21.491	VV	4154	175401	2.42%	0.116%
291	21.501	21.491	21.508	VV	3681	37257	0.51%	0.025%
292	21.530	21.508	21.561	VV	3769	116321	1.61%	0.077%
293	21.586	21.561	21.642	VV	3643	172411	2.38%	0.114%
294	21.652	21.642	21.671	VV	3549	62715	0.87%	0.041%
295	21.692	21.671	21.701	VV	3563	63736	0.88%	0.042%
296	21.714	21.701	21.774	VV	3591	153120	2.12%	0.101%
297	21.809	21.774	21.858	VV	3484	170829	2.36%	0.113%
298	21.869	21.858	21.887	VV	3369	57884	0.80%	0.038%
299	21.974	21.887	22.116	VV	127747	3618058	49.99%	2.391%

						rteres		
300	22.125	22.116	22.151	VV	3240	66159	0.91%	0.044%
301	22.191	22.151	22.201	VBA	3674	111582	1.54%	0.074%
				Sum of corrected areas:		151312266		

Aliphatic EPH 040925.M Tue May 06 04:14:43 2025

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	
Project:	Stan Hope	Date Received:	
Client Sample ID:	LARGE-PILE-AMSD	SDG No.:	Q1938
Lab Sample ID:	Q1937-02MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.2
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
05/05/25 09:05	05/05/25 17:27	PB167855

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C28-C40	Aliphatic C28-C40	26.9		1	1.25	2.12	mg/kg	FC068773.D
Aliphatic C9-C28	Aliphatic C9-C28	69.8		1	0.97	4.24	mg/kg	FC068773.D
Total AliphaticEPH	Total AliphaticEPH	96.7			2.22	6.36	mg/kg	
Total EPH	Total EPH	96.7			2.22	6.36	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	
Project:	Stan Hope	Date Received:	
Client Sample ID:	LARGE-PILE-AMSD	SDG No.:	Q1938
Lab Sample ID:	Q1937-02MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.2
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068773.D	1	05/05/25	05/05/25	PB167855

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	69.8		0.97	4.24	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	26.9		1.25	2.12	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	35.3		40 - 140	71%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	33.9		40 - 140	68%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1937-02MSD	Acq On:	05 May 2025 17:27
Client Sample ID:	LARGE-PILE-AMSD	Operator:	YP/AJ
Data file:	FC068773.D	Misc:	
Instrument:	FID_C	ALS Vial:	17
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.342	6.643	16558470	157.277	300	ug/ml
Aliphatic C12-C16	6.644	10.043	22438365	219.29	200	ug/ml
Aliphatic C16-C21	10.044	13.410	25782171	260.909	300	ug/ml
Aliphatic C21-C28	13.411	17.073	32866033	348.951	400	ug/ml
Aliphatic C28-C40	17.074	22.072	34143857	379.871	600	ug/ml
Aliphatic EPH	3.342	22.072	131788896	1370		ug/ml
ortho-Terphenyl (SURR)	11.712	11.712	4320219	33.93		ug/ml
1-chlorooctadecane (SURR)	13.144	13.144	3278022	35.29		ug/ml
Aliphatic C9-C28	3.342	17.073	97645039	986.427	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
 Data File : FC068773.D
 Signal(s) : FID1A.ch
 Acq On : 05 May 2025 17:27
 Operator : YP/AJ
 Sample : Q1937-02MSD
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 LARGE-PILE-AMSD

Integration File: autoint1.e
 Quant Time: May 06 03:51:43 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Quant Title : GC Extractables
 QLast Update : Tue Apr 08 17:31:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.712	4320219	33.927 ug/ml
Spiked Amount 50.000		Recovery =	67.85%
12) S 1-chlorooctadecane (S...	13.144	3278022	35.288 ug/ml
Spiked Amount 50.000		Recovery =	70.58%
Target Compounds			
1) T n-Nonane (C9)	3.442	2758560	26.191 ug/ml
2) T n-Decane (C10)	4.519	3120230	29.615 ug/ml
3) T A~Naphthalene (C11.7)	6.116	3729692	32.025 ug/ml
4) T n-Dodecane (C12)	6.544	3253903	30.942 ug/ml
5) T A~2-methylnaphthalene...	7.174	3449754	29.869 ug/ml
6) T n-Tetradecane (C14)	8.342	3293916	32.041 ug/ml
7) T n-Hexadecane (C16)	9.944	3269565	32.105 ug/ml
8) T n-Octadecane (C18)	11.388	3252842	32.324 ug/ml
10) T n-Eicosane (C20)	12.697	3320870	33.762 ug/ml
11) T n-Heneicosane (C21)	13.310	3189583	32.728 ug/ml
13) T n-Docosane (C22)	13.898	3190257	33.027 ug/ml
14) T n-Tetracosane (C24)	14.993	6897816	72.468 ug/ml
15) T n-Hexacosane (C26)	16.025	3174179	33.983 ug/ml
16) T n-Octacosane (C28)	16.974	3249478	35.491 ug/ml
17) T n-Tricontane (C30)	17.864	3259861	35.460 ug/ml
18) T n-Dotriacontane (C32)	18.696	3235824	35.276 ug/ml
19) T n-Tetratriacontane (C34)	19.481	3210098	35.932 ug/ml
20) T n-Hexatriacontane (C36)	20.222	3059959	34.159 ug/ml
21) T n-Octatriacontane (C38)	20.995	3029567	34.266 ug/ml
22) T n-Tetracontane (C40)	21.974	3008764	34.072 ug/ml

(f)=RT Delta > 1/2 Window

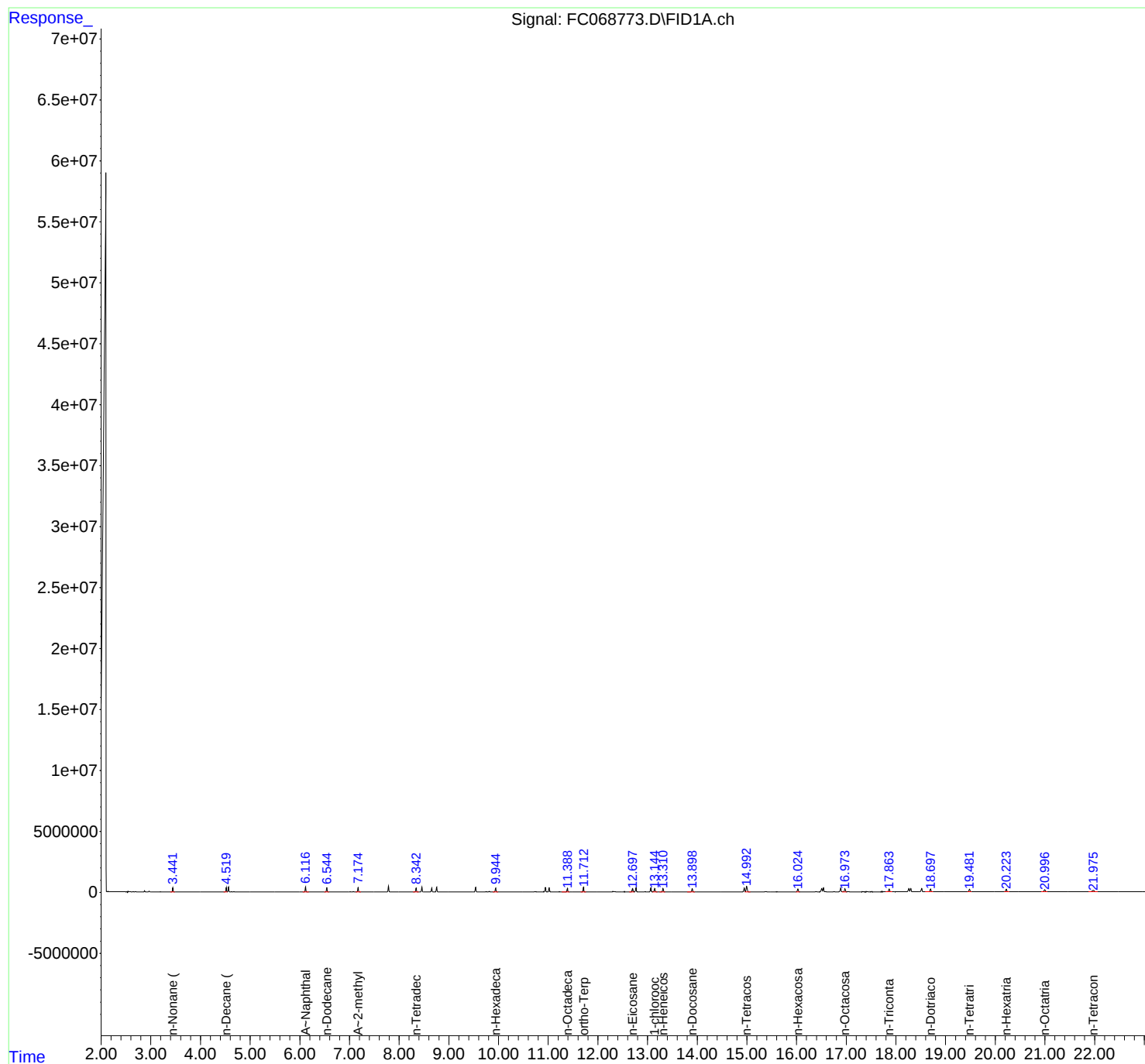
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
Data File : FC068773.D
Signal(s) : FID1A.ch
Acq On : 05 May 2025 17:27
Operator : YP/AJ
Sample : Q1937-02MSD
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
LARGE-PILE-AMSD

Integration File: autoint1.e
Quant Time: May 06 03:51:43 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
Quant Title : GC Extractables
QLast Update : Tue Apr 08 17:31:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC050525AL\
 Data File : FC068773.D
 Signal(s) : FID1A.ch
 Acq On : 05 May 2025 17:27
 Sample : Q1937-02MSD
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040925.M
 Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.270	3.204	3.313	BV	101	325	0.00%	0.000%
2	3.333	3.313	3.403	PV	204	4843	0.07%	0.003%
3	3.442	3.403	3.509	PV	333631	2761342	40.03%	1.981%
4	3.544	3.509	3.553	PV	152	2081	0.03%	0.001%
5	3.593	3.553	3.614	VV	621	8112	0.12%	0.006%
6	3.629	3.614	3.641	VV	170	2354	0.03%	0.002%
7	3.649	3.641	3.674	VV	221	2509	0.04%	0.002%
8	3.689	3.674	3.703	VV	354	3446	0.05%	0.002%
9	3.714	3.703	3.728	VV	253	3680	0.05%	0.003%
10	3.739	3.728	3.793	VV	902	15153	0.22%	0.011%
11	3.829	3.793	3.914	VV	767	14104	0.20%	0.010%
12	3.929	3.914	3.984	VV	429	8041	0.12%	0.006%
13	4.010	3.984	4.051	PV	945	11083	0.16%	0.008%
14	4.059	4.051	4.069	VV	47	603	0.01%	0.000%
15	4.091	4.069	4.108	VV	418	3873	0.06%	0.003%
16	4.120	4.108	4.165	VV	240	3804	0.06%	0.003%
17	4.214	4.165	4.261	VV	174	4725	0.07%	0.003%
18	4.285	4.261	4.308	VV	475	5933	0.09%	0.004%
19	4.320	4.308	4.377	VV	165	4959	0.07%	0.004%
20	4.414	4.377	4.424	VV	140	2682	0.04%	0.002%
21	4.441	4.424	4.455	VV	140	1917	0.03%	0.001%
22	4.478	4.455	4.489	PV	203	2615	0.04%	0.002%
23	4.519	4.489	4.542	VV	355398	3123637	45.29%	2.241%
24	4.564	4.542	4.611	VV	389211	3347713	48.54%	2.401%
25	4.626	4.611	4.651	VV	3471	33316	0.48%	0.024%
26	4.672	4.651	4.748	VV	5902	58529	0.85%	0.042%
27	4.775	4.748	4.793	VV	223	3921	0.06%	0.003%
28	4.806	4.793	4.834	VV	158	2376	0.03%	0.002%
29	4.843	4.834	4.892	VV	181	3619	0.05%	0.003%
30	4.901	4.892	4.928	VV	141	1344	0.02%	0.001%
31	4.945	4.928	4.968	VV	115	1807	0.03%	0.001%
32	4.975	4.968	4.986	VV	143	958	0.01%	0.001%
33	5.000	4.986	5.021	VV	182	1687	0.02%	0.001%
34	5.028	5.021	5.041	VV	75	800	0.01%	0.001%
35	5.050	5.041	5.089	VV	119	1905	0.03%	0.001%
36	5.113	5.089	5.176	VV	110	3914	0.06%	0.003%

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37	5.189	5.176	5.211	VV	105	1515	0.02%	0.001%
38	5.222	5.211	5.234	VV	127	1064	0.02%	0.001%
39	5.240	5.234	5.278	VV	141	1850	0.03%	0.001%
40	5.294	5.278	5.332	VV	125	1835	0.03%	0.001%
41	5.348	5.332	5.360	VV	104	993	0.01%	0.001%
42	5.381	5.360	5.404	VV	276	3776	0.05%	0.003%
43	5.409	5.404	5.462	VV	147	2737	0.04%	0.002%
44	5.469	5.462	5.477	PV	48	281	0.00%	0.000%
45	5.559	5.477	5.575	VV	1084	13344	0.19%	0.010%
46	5.588	5.575	5.645	VV	974	11829	0.17%	0.008%
47	5.672	5.645	5.701	VV	132	3049	0.04%	0.002%
48	5.715	5.701	5.732	VV	98	1635	0.02%	0.001%
49	5.746	5.732	5.762	VV	136	1525	0.02%	0.001%
50	5.805	5.762	5.841	VV	144	3770	0.05%	0.003%
51	5.877	5.841	5.887	VV	149	2143	0.03%	0.002%
52	5.906	5.887	5.922	VV	129	2063	0.03%	0.001%
53	5.931	5.922	6.010	VV	125	3203	0.05%	0.002%
54	6.020	6.010	6.059	VV	129	2680	0.04%	0.002%
55	6.116	6.059	6.188	VV	403349	3741439	54.24%	2.684%
56	6.198	6.188	6.235	VV	349	6743	0.10%	0.005%
57	6.259	6.235	6.284	VV	402	6741	0.10%	0.005%
58	6.290	6.284	6.332	VV	181	4576	0.07%	0.003%
59	6.345	6.332	6.368	VV	198	3149	0.05%	0.002%
60	6.390	6.368	6.410	VV	407	6314	0.09%	0.005%
61	6.435	6.410	6.456	VV	245	5928	0.09%	0.004%
62	6.464	6.456	6.510	VV	202	4905	0.07%	0.004%
63	6.544	6.510	6.598	VV	340725	3260423	47.27%	2.339%
64	6.614	6.598	6.655	VV	794	10418	0.15%	0.007%
65	6.692	6.655	6.744	VV	396	8691	0.13%	0.006%
66	6.768	6.744	6.802	VV	154	3601	0.05%	0.003%
67	6.834	6.802	6.850	VV	222	3357	0.05%	0.002%
68	6.868	6.850	6.924	VV	157	4840	0.07%	0.003%
69	6.939	6.924	6.949	VV	326	3319	0.05%	0.002%
70	6.959	6.949	6.986	VV	322	4744	0.07%	0.003%
71	7.014	6.986	7.043	VV	3894	39192	0.57%	0.028%
72	7.080	7.043	7.127	VV	9592	95787	1.39%	0.069%
73	7.174	7.127	7.274	VV	360968	3469261	50.30%	2.489%
74	7.278	7.274	7.291	VV	211	1678	0.02%	0.001%
75	7.311	7.291	7.343	VV	1239	17805	0.26%	0.013%
76	7.363	7.343	7.379	VV	1838	21640	0.31%	0.016%
77	7.389	7.379	7.409	VV	942	10986	0.16%	0.008%
78	7.439	7.409	7.453	VV	831	11766	0.17%	0.008%
79	7.467	7.453	7.494	VV	999	11730	0.17%	0.008%
80	7.514	7.494	7.551	VV	372	8465	0.12%	0.006%
81	7.563	7.551	7.602	VV	324	4882	0.07%	0.004%
82	7.648	7.602	7.674	VV	510	8268	0.12%	0.006%
83	7.693	7.674	7.738	VV	240	5122	0.07%	0.004%
84	7.879	7.858	7.908	VV	485	11183	0.16%	0.008%
85	7.924	7.908	7.944	VV	511	7539	0.11%	0.005%
86	7.953	7.944	7.965	VV	230	2269	0.03%	0.002%
87	7.972	7.965	8.010	VV	178	3033	0.04%	0.002%
88	8.036	8.010	8.076	VV	405	8343	0.12%	0.006%
89	8.091	8.076	8.141	VV	376	6792	0.10%	0.005%

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90	8.170	8.141	8.181	VV	195	3568	0.05%	0.003%
91	8.199	8.181	8.210	VV	210	2971	0.04%	0.002%
92	8.255	8.210	8.264	VV	364	8450	0.12%	0.006%
93	8.342	8.264	8.421	VV	316895	3312086	48.02%	2.376%
94	8.459	8.421	8.539	VV	398671	3850412	55.82%	2.762%
95	8.570	8.539	8.588	VV	251	4995	0.07%	0.004%
96	8.756	8.724	8.797	VV	399177	3867187	56.07%	2.774%
97	8.811	8.797	8.845	VV	357	6784	0.10%	0.005%
98	8.850	8.845	8.896	VV	210	3723	0.05%	0.003%
99	8.937	8.896	8.954	VV	175	4087	0.06%	0.003%
100	8.965	8.954	8.979	VV	267	2797	0.04%	0.002%
101	9.025	8.979	9.042	VV	664	10011	0.15%	0.007%
102	9.061	9.042	9.135	VV	656	13700	0.20%	0.010%
103	9.163	9.135	9.260	VV	487	11195	0.16%	0.008%
104	9.283	9.260	9.324	VV	248	4017	0.06%	0.003%
105	9.361	9.324	9.386	VV	500	7021	0.10%	0.005%
106	9.418	9.386	9.448	PV	166	3396	0.05%	0.002%
107	9.462	9.448	9.484	VV	277	2923	0.04%	0.002%
108	9.494	9.484	9.504	VV	139	967	0.01%	0.001%
109	9.540	9.504	9.571	VV	389100	3906398	56.64%	2.802%
110	9.583	9.571	9.648	VV	531	11061	0.16%	0.008%
111	9.682	9.648	9.698	VV	378	6545	0.09%	0.005%
112	9.720	9.698	9.734	VV	1534	20240	0.29%	0.015%
113	9.752	9.734	9.787	VV	5912	64968	0.94%	0.047%
114	9.814	9.787	9.868	VV	24096	246816	3.58%	0.177%
115	9.878	9.868	9.898	VV	404	4445	0.06%	0.003%
116	9.944	9.898	10.014	VV	305735	3277879	47.52%	2.351%
117	10.036	10.014	10.092	VV	255	5430	0.08%	0.004%
118	10.101	10.092	10.148	VV	112	1674	0.02%	0.001%
119	10.175	10.148	10.214	VV	105	2456	0.04%	0.002%
120	10.228	10.214	10.256	VV	168	1598	0.02%	0.001%
121	10.287	10.256	10.313	VV	282	4136	0.06%	0.003%
122	10.386	10.313	10.415	VV	234	6855	0.10%	0.005%
123	10.425	10.415	10.444	VV	130	1653	0.02%	0.001%
124	10.462	10.444	10.529	VV	208	4543	0.07%	0.003%
125	10.586	10.529	10.620	PV	262	6506	0.09%	0.005%
126	10.639	10.620	10.660	VV	270	5024	0.07%	0.004%
127	10.676	10.660	10.699	VV	624	7957	0.12%	0.006%
128	10.734	10.699	10.810	VV	7965	114768	1.66%	0.082%
129	10.820	10.810	10.847	VV	122	1747	0.03%	0.001%
130	10.945	10.847	10.984	PV	360928	3816103	55.33%	2.737%
131	11.020	10.984	11.071	VV	349689	3751436	54.39%	2.691%
132	11.094	11.071	11.171	VV	787	16102	0.23%	0.012%
133	11.189	11.171	11.208	VV	701	8929	0.13%	0.006%
134	11.225	11.208	11.292	VV	2639	30344	0.44%	0.022%
135	11.316	11.292	11.344	VV	487	7498	0.11%	0.005%
136	11.387	11.344	11.425	VV	288903	3250209	47.12%	2.331%
137	11.433	11.425	11.444	VV	72	743	0.01%	0.001%
138	11.463	11.444	11.501	VV	259	5301	0.08%	0.004%
139	11.517	11.501	11.534	PV	212	2394	0.03%	0.002%
140	11.545	11.534	11.563	VV	184	2064	0.03%	0.001%
141	11.580	11.563	11.606	VV	227	2876	0.04%	0.002%

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142	11.631	11.606	11.674	VV	262	5241	0.08%	0.004%
143	11.712	11.674	11.769	VV	399429	4321922	62.66%	3.100%
144	11.801	11.769	11.821	VV	522	8015	0.12%	0.006%
145	11.840	11.821	11.856	VV	745	8995	0.13%	0.006%
146	11.871	11.856	11.904	VV	852	13714	0.20%	0.010%
147	11.920	11.904	11.961	VV	474	7049	0.10%	0.005%
148	11.990	11.961	12.031	VV	257	4864	0.07%	0.003%
149	12.056	12.031	12.084	VV	227	4773	0.07%	0.003%
150	12.103	12.084	12.133	VV	264	4503	0.07%	0.003%
151	12.149	12.133	12.169	VV	304	3724	0.05%	0.003%
152	12.302	12.169	12.374	VV	24720	332580	4.82%	0.239%
153	12.388	12.374	12.461	VV	1309	49069	0.71%	0.035%
154	12.482	12.461	12.498	VV	670	13543	0.20%	0.010%
155	12.538	12.498	12.610	VV	1925	53403	0.77%	0.038%
156	12.637	12.610	12.660	VV	502	12452	0.18%	0.009%
157	12.697	12.660	12.730	VV	282302	3337997	48.39%	2.394%
158	12.766	12.730	12.874	VV	329148	3841482	55.69%	2.756%
159	12.950	12.874	13.015	VV	3984	59779	0.87%	0.043%
160	13.066	13.015	13.096	VV	342736	3758916	54.50%	2.696%
161	13.144	13.096	13.221	VV	269286	3289202	47.69%	2.359%
162	13.251	13.221	13.274	VV	489	7319	0.11%	0.005%
163	13.310	13.274	13.390	VV	268605	3201837	46.42%	2.297%
164	13.412	13.390	13.468	VV	258	9534	0.14%	0.007%
165	13.513	13.468	13.534	VV	887	18576	0.27%	0.013%
166	13.548	13.534	13.566	VV	533	9390	0.14%	0.007%
167	13.583	13.566	13.636	VV	585	22191	0.32%	0.016%
168	13.649	13.636	13.670	VV	508	9492	0.14%	0.007%
169	13.688	13.670	13.716	VV	644	13881	0.20%	0.010%
170	13.740	13.716	13.824	VV	738	26258	0.38%	0.019%
171	13.847	13.824	13.861	VV	896	13089	0.19%	0.009%
172	13.898	13.861	13.978	VV	268803	3197153	46.35%	2.293%
173	13.986	13.978	14.004	VV	170	2392	0.03%	0.002%
174	14.028	14.004	14.051	VV	246	4304	0.06%	0.003%
175	14.072	14.051	14.108	VV	461	6743	0.10%	0.005%
176	14.139	14.108	14.218	VV	164	7511	0.11%	0.005%
177	14.226	14.218	14.234	VV	129	940	0.01%	0.001%
178	14.252	14.234	14.263	VV	233	2865	0.04%	0.002%
179	14.287	14.263	14.314	VV	920	15318	0.22%	0.011%
180	14.333	14.314	14.362	VV	794	12334	0.18%	0.009%
181	14.373	14.362	14.401	VV	167	3008	0.04%	0.002%
182	14.410	14.401	14.432	VV	165	1842	0.03%	0.001%
183	14.461	14.432	14.508	VV	404	9431	0.14%	0.007%
184	14.530	14.508	14.547	VV	252	4071	0.06%	0.003%
185	14.565	14.547	14.601	VV	261	5675	0.08%	0.004%
186	14.620	14.601	14.644	VV	173	2900	0.04%	0.002%
187	14.678	14.644	14.701	PV	327	5024	0.07%	0.004%
188	14.712	14.701	14.724	VV	89	873	0.01%	0.001%
189	14.735	14.724	14.742	VV	122	831	0.01%	0.001%
190	14.747	14.742	14.764	VV	89	716	0.01%	0.001%
191	14.772	14.764	14.780	VV	71	575	0.01%	0.000%
192	14.797	14.780	14.819	VV	233	3795	0.06%	0.003%
193	14.841	14.819	14.901	VV	418	8650	0.13%	0.006%
194	14.946	14.901	14.966	VV	309819	3783270	54.85%	2.714%

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195	14.993	14.966	15.036	VV	462557	6897427	100.00%	4.948%
196	15.044	15.036	15.084	VV	795	12983	0.19%	0.009%
197	15.092	15.084	15.097	VV	238	1741	0.03%	0.001%
198	15.105	15.097	15.128	VV	245	3536	0.05%	0.003%
199	15.139	15.128	15.149	VV	132	1488	0.02%	0.001%
200	15.180	15.149	15.239	VV	1108	22208	0.32%	0.016%
201	15.258	15.239	15.304	VV	132	3951	0.06%	0.003%
202	15.316	15.304	15.329	VV	138	1392	0.02%	0.001%
203	15.376	15.329	15.454	VV	19713	264992	3.84%	0.190%
204	15.474	15.454	15.492	VV	269	4630	0.07%	0.003%
205	15.522	15.492	15.558	VV	967	23057	0.33%	0.017%
206	15.600	15.558	15.634	VV	1479	25385	0.37%	0.018%
207	15.649	15.634	15.685	VV	237	3244	0.05%	0.002%
208	15.711	15.685	15.734	PV	154	1939	0.03%	0.001%
209	15.751	15.734	15.768	PV	163	2426	0.04%	0.002%
210	15.782	15.768	15.821	VV	211	3223	0.05%	0.002%
211	15.854	15.821	15.874	VV	767	10779	0.16%	0.008%
212	15.897	15.874	15.960	VV	547	14156	0.21%	0.010%
213	16.025	15.960	16.064	VV	245632	3189429	46.24%	2.288%
214	16.084	16.064	16.121	VV	540	8363	0.12%	0.006%
215	16.142	16.121	16.171	PV	111	1559	0.02%	0.001%
216	16.195	16.171	16.208	VV	327	4345	0.06%	0.003%
217	16.229	16.208	16.258	VV	682	9910	0.14%	0.007%
218	16.265	16.258	16.290	VV	142	1236	0.02%	0.001%
219	16.391	16.290	16.438	PV	4128	73436	1.06%	0.053%
220	16.505	16.438	16.521	VV	277675	3952378	57.30%	2.835%
221	16.540	16.521	16.569	VV	336020	3927632	56.94%	2.817%
222	16.585	16.569	16.614	VV	1553	25737	0.37%	0.018%
223	16.636	16.614	16.658	VV	382	8403	0.12%	0.006%
224	16.695	16.658	16.724	VV	313	9970	0.14%	0.007%
225	16.751	16.724	16.801	VV	2556	39239	0.57%	0.028%
226	16.823	16.801	16.841	VV	396	6051	0.09%	0.004%
227	16.888	16.841	16.921	VV	310324	3803151	55.14%	2.728%
228	16.974	16.921	17.009	VV	250454	3265370	47.34%	2.342%
229	17.049	17.009	17.111	VV	1709	38635	0.56%	0.028%
230	17.235	17.111	17.280	VV	177	5595	0.08%	0.004%
231	17.335	17.280	17.382	PV	2789	48081	0.70%	0.034%
232	17.423	17.382	17.466	VV	4459	66510	0.96%	0.048%
233	17.508	17.466	17.574	VV	662	14764	0.21%	0.011%
234	17.587	17.574	17.626	VV	204	3437	0.05%	0.002%
235	17.660	17.626	17.683	PV	192	2959	0.04%	0.002%
236	17.703	17.683	17.715	PV	167	2100	0.03%	0.002%
237	17.752	17.715	17.778	VV	2700	41027	0.59%	0.029%
238	17.864	17.778	17.924	VV	230095	3279564	47.55%	2.353%
239	17.951	17.924	17.986	VV	2869	44791	0.65%	0.032%
240	18.004	17.986	18.018	VV	168	2317	0.03%	0.002%
241	18.045	18.018	18.065	VV	170	4163	0.06%	0.003%
242	18.103	18.065	18.168	VV	648	15042	0.22%	0.011%
243	18.260	18.168	18.277	VV	280228	4229343	61.32%	3.034%
244	18.299	18.277	18.358	VV	274935	3775859	54.74%	2.709%
245	18.378	18.358	18.408	VV	1360	27933	0.40%	0.020%
246	18.418	18.408	18.463	VV	575	14914	0.22%	0.011%

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247	18.519	18.463	18.614	VV	284960	3864953	56.03%	2.772%
248	18.641	18.614	18.652	VV	990	16393	0.24%	0.012%
249	18.696	18.652	18.749	VV	232819	3248391	47.10%	2.330%
250	18.793	18.749	18.838	VV	3331	70099	1.02%	0.050%
251	18.857	18.838	18.894	VV	675	15783	0.23%	0.011%
252	18.914	18.894	18.927	VV	426	6794	0.10%	0.005%
253	18.976	18.927	19.002	VV	660	19897	0.29%	0.014%
254	19.046	19.002	19.079	VV	10426	202340	2.93%	0.145%
255	19.097	19.079	19.148	VV	3106	79502	1.15%	0.057%
256	19.185	19.148	19.218	VV	1444	45032	0.65%	0.032%
257	19.234	19.218	19.271	VV	1323	30470	0.44%	0.022%
258	19.291	19.271	19.309	VV	848	17066	0.25%	0.012%
259	19.342	19.309	19.374	VV	1664	42262	0.61%	0.030%
260	19.394	19.374	19.421	VV	1007	23387	0.34%	0.017%
261	19.481	19.421	19.523	VV	217722	3266192	47.35%	2.343%
262	19.548	19.523	19.565	VV	1895	36919	0.54%	0.026%
263	19.586	19.565	19.616	VV	2328	50817	0.74%	0.036%
264	19.656	19.616	19.688	VV	1617	52933	0.77%	0.038%
265	19.769	19.688	19.794	VV	1484	75921	1.10%	0.054%
266	19.831	19.794	19.878	VV	3441	124743	1.81%	0.089%
267	19.888	19.878	19.918	VV	1774	39235	0.57%	0.028%
268	19.954	19.918	19.969	VV	1691	48058	0.70%	0.034%
269	20.015	19.969	20.028	VV	2035	62860	0.91%	0.045%
270	20.032	20.028	20.044	VV	1960	18837	0.27%	0.014%
271	20.078	20.044	20.100	VV	2683	75309	1.09%	0.054%
272	20.124	20.100	20.161	VV	2832	87180	1.26%	0.063%
273	20.222	20.161	20.283	VV	214203	3226346	46.78%	2.314%
274	20.359	20.283	20.418	VV	4035	215551	3.13%	0.155%
275	20.557	20.418	20.732	VV	5336	578625	8.39%	0.415%
276	20.738	20.732	20.744	VV	2121	15246	0.22%	0.011%
277	20.767	20.744	20.792	VV	2187	60685	0.88%	0.044%
278	20.803	20.792	20.831	VV	2050	45719	0.66%	0.033%
279	20.843	20.831	20.854	VV	1941	26706	0.39%	0.019%
280	20.880	20.854	20.911	VV	1960	64313	0.93%	0.046%
281	20.922	20.911	20.938	VV	1901	29477	0.43%	0.021%
282	20.995	20.938	21.048	VV	166312	3156361	45.76%	2.264%
283	21.061	21.048	21.245	VV	2030	187068	2.71%	0.134%
284	21.255	21.245	21.281	VV	1259	26260	0.38%	0.019%
285	21.307	21.281	21.371	VV	1206	59162	0.86%	0.042%
286	21.391	21.371	21.401	VV	1030	17881	0.26%	0.013%
287	21.453	21.401	21.591	VV	1400	107242	1.55%	0.077%
288	21.624	21.591	21.635	VV	713	17696	0.26%	0.013%
289	21.663	21.635	21.676	VV	683	16004	0.23%	0.011%
290	21.705	21.676	21.744	VV	649	24404	0.35%	0.018%
291	21.752	21.744	21.780	VV	536	10502	0.15%	0.008%
292	21.801	21.780	21.874	VV	520	22866	0.33%	0.016%
293	21.974	21.874	22.089	VV	117823	3035971	44.02%	2.178%
294	22.100	22.089	22.121	VV	145	1300	0.02%	0.001%
					Sum of corrected areas:		139406490	



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

Manual Integration Report

Sequence:

FC040925AL

Instrument

FID_c

Sample ID

File ID

Parameter

Review By

Review On

Supervised
By

Supervised On

Reason

Manual Integration Report

Sequence:

FC050525AL

Instrument

FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1937-02	FC068770.D	1-chlorooctadecane (SURR)	yogesh	5/6/2025 9:19:48 AM	mohammad	5/7/2025 6:08:25	Peak Integrated by Software
20 PPM ALIPHATIC HC	FC068778.D	n-Octadecane (C18)	yogesh	5/6/2025 9:19:50 AM	mohammad	5/7/2025 6:08:25	Peak Integrated by Software



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

Manual Integration Report

Sequence:

FE041725AL

Instrument

FID_e

Sample ID

File ID

Parameter

Review By

Review On

Supervised
By

Supervised On

Reason

Manual Integration Report

Sequence:

FE050525AL

Instrument

FID_e

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM ALIPHATIC HC	FE053636.D	n-Octatriacontane (C38)	yogesh	5/6/2025 8:03:06 AM	mohammad	5/7/2025 6:08:32	Peak Integrated by Software
20 PPM ALIPHATIC HC	FE053636.D	n-Tetracontane (C40)	yogesh	5/6/2025 8:03:06 AM	mohammad	5/7/2025 6:08:32	Peak Integrated by Software
Q1932-03DL	FE053638.D	ortho-Terphenyl (SURR)	yogesh	5/6/2025 8:03:08 AM	mohammad	5/7/2025 6:08:32	Peak Integrated by Software
20 PPM ALIPHATIC HC	FE053658.D	n-Tetracontane (C40)	yogesh	5/6/2025 8:03:10 AM	mohammad	5/7/2025 6:08:32	Peak Integrated by Software

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC040925AL

Review By	yogesh	Review On	4/8/2025 3:04:36 PM
Supervise By	mohammad	Supervise On	4/10/2025 5:31:03 AM
SubDirectory	FC040925AL	HP Acquire Method	HP Processing Method FC040925AL
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	Data File Name	Date-Time	Operator	Status
1	MECL2	FC068513.D	08 Apr 2025 13:05	YP/AJ	Ok
2	I.BLK	FC068514.D	08 Apr 2025 13:42	YP/AJ	Ok
3	100 PPM ALIPHATIC HC STD1	FC068515.D	08 Apr 2025 14:19	YP/AJ	Ok
4	50 PPM ALIPHATIC HC STD2	FC068516.D	08 Apr 2025 14:56	YP/AJ	Ok
5	20 PPM ALIPHATIC HC STD3	FC068517.D	08 Apr 2025 15:34	YP/AJ	Ok
6	10 PPM ALIPHATIC HC STD4	FC068518.D	08 Apr 2025 16:12	YP/AJ	Ok
7	5 PPM ALIPHATIC HC STD5	FC068519.D	08 Apr 2025 16:48	YP/AJ	Ok
8	20 PPM ALIPHATIC HC STD ICV	FC068520.D	08 Apr 2025 17:26	YP/AJ	Ok
9	I.BLK	FC068521.D	08 Apr 2025 18:41	YP/AJ	Ok
10	20 PPM ALIPHATIC HC STD	FC068522.D	08 Apr 2025 19:18	YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC050525AL

Review By	yogesh	Review On	5/5/2025 11:42:23 AM
Supervise By	mohammad	Supervise On	5/7/2025 6:08:25 AM
SubDirectory	FC050525AL	HP Acquire Method	HP Processing Method FC040925AL
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	FC068759.D	05 May 2025 08:59	YP/AJ	Ok
2	I.BLK	FC068760.D	05 May 2025 09:35	YP/AJ	Ok
3	20 PPM ALIPHATIC HC STD	FC068761.D	05 May 2025 10:11	YP/AJ	Ok
4	Q1935-02	FC068762.D	05 May 2025 10:48	YP/AJ	Ok
5	Q1928-02	FC068763.D	05 May 2025 11:24	YP/AJ	Ok
6	Q1939-01	FC068764.D	05 May 2025 12:00	YP/AJ	Ok
7	I.BLK	FC068765.D	05 May 2025 12:36	YP/AJ	Ok
8	20 PPM ALIPHATIC HC STD	FC068766.D	05 May 2025 13:13	YP/AJ	Ok
9	PB167855BL	FC068767.D	05 May 2025 13:49	YP/AJ	Ok
10	PB167855BS	FC068768.D	05 May 2025 14:26	YP/AJ	Ok
11	PB167855BSD	FC068769.D	05 May 2025 15:02	YP/AJ	Ok
12	Q1937-02	FC068770.D	05 May 2025 15:38	YP/AJ	Ok,M
13	Q1937-02D	FC068771.D	05 May 2025 16:15	YP/AJ	Ok
14	Q1937-02MS	FC068772.D	05 May 2025 16:51	YP/AJ	Ok
15	Q1937-02MSD	FC068773.D	05 May 2025 17:27	YP/AJ	Ok
16	Q1937-04	FC068774.D	05 May 2025 18:04	YP/AJ	Ok
17	Q1937-06	FC068775.D	05 May 2025 18:40	YP/AJ	Ok
18	Q1937-08	FC068776.D	05 May 2025 19:17	YP/AJ	Ok
19	I.BLK	FC068777.D	05 May 2025 20:30	YP/AJ	Ok
20	20 PPM ALIPHATIC HC STD	FC068778.D	05 May 2025 21:06	YP/AJ	Ok,M

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE041725AL

Review By	yogesh	Review On	4/16/2025 2:56:14 PM
Supervise By	mohammad	Supervise On	4/18/2025 1:20:00 AM
SubDirectory	FE041725AL	HP Acquire Method	HP Processing Method FE041725AL
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	Data File Name	Date-Time	Operator	Status
1	MECL2	FE053385.D	16 Apr 2025 14:34	YP\AJ	Ok
2	I.BLK	FE053386.D	16 Apr 2025 15:04	YP\AJ	Ok
3	100 PPM ALIPHATIC HC STD1	FE053387.D	16 Apr 2025 15:35	YP\AJ	Ok
4	50 PPM ALIPHATIC HC STD2	FE053388.D	16 Apr 2025 16:35	YP\AJ	Ok
5	20 PPM ALIPHATIC HC STD3	FE053389.D	16 Apr 2025 17:05	YP\AJ	Ok
6	10 PPM ALIPHATIC HC STD4	FE053390.D	16 Apr 2025 17:36	YP\AJ	Ok
7	5 PPM ALIPHATIC HC STD5	FE053391.D	16 Apr 2025 18:06	YP\AJ	Ok
8	20 PPM ALIPHATIC HC STD ICV	FE053392.D	16 Apr 2025 18:36	YP\AJ	Ok
9	I.BLK	FE053393.D	16 Apr 2025 19:36	YP\AJ	Ok
10	20 PPM ALIPHATIC HC STD	FE053394.D	16 Apr 2025 20:06	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE050525AL

Review By	yogesh	Review On	5/5/2025 11:43:54 AM
Supervise By	mohammad	Supervise On	5/7/2025 6:08:32 AM
SubDirectory	FE050525AL	HP Acquire Method	HP Processing Method FE041725AL
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	FE053634.D	05 May 2025 09:10	YP\AJ	Ok
2	I.BLK	FE053635.D	05 May 2025 09:40	YP\AJ	Ok
3	20 PPM ALIPHATIC HC STD	FE053636.D	05 May 2025 11:14	YP\AJ	Ok,M
4	Q1939-05	FE053637.D	05 May 2025 11:44	YP\AJ	Ok
5	Q1932-03DL	FE053638.D	05 May 2025 12:14	YP\AJ	Not Ok
6	I.BLK	FE053639.D	05 May 2025 13:14	YP\AJ	Ok
7	20 PPM ALIPHATIC HC STD	FE053640.D	05 May 2025 13:44	YP\AJ	Ok
8	Q1936-02	FE053641.D	05 May 2025 14:14	YP\AJ	Ok
9	Q1936-04	FE053642.D	05 May 2025 14:45	YP\AJ	Ok
10	Q1936-06	FE053643.D	05 May 2025 15:14	YP\AJ	Ok
11	Q1936-08	FE053644.D	05 May 2025 15:45	YP\AJ	Ok
12	Q1937-10	FE053645.D	05 May 2025 16:15	YP\AJ	Ok
13	Q1937-12	FE053646.D	05 May 2025 16:45	YP\AJ	Ok
14	Q1938-02	FE053647.D	05 May 2025 17:16	YP\AJ	Ok
15	Q1938-04	FE053648.D	05 May 2025 17:46	YP\AJ	Ok
16	Q1938-06	FE053649.D	05 May 2025 18:16	YP\AJ	Ok
17	Q1938-08	FE053650.D	05 May 2025 18:46	YP\AJ	Ok
18	Q1946-01	FE053651.D	05 May 2025 19:16	YP\AJ	Ok
19	Q1946-02	FE053652.D	05 May 2025 19:46	YP\AJ	Ok
20	Q1947-01	FE053653.D	05 May 2025 20:16	YP\AJ	Ok
21	Q1947-02	FE053654.D	05 May 2025 20:47	YP\AJ	Ok

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE050525AL

Review By	yogesh	Review On	5/5/2025 11:43:54 AM
Supervise By	mohammad	Supervise On	5/7/2025 6:08:32 AM
SubDirectory	FE050525AL	HP Acquire Method	HP Processing Method FE041725AL
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	Q1947-05	FE053655.D	05 May 2025 21:17	YP\AJ	Ok
23	Q1947-06	FE053656.D	05 May 2025 21:47	YP\AJ	Ok
24	I.BLK	FE053657.D	05 May 2025 22:47	YP\AJ	Ok
25	20 PPM ALIPHATIC HC STD	FE053658.D	05 May 2025 23:18	YP\AJ	Ok,M

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC040925AL

Review By	yogesh	Review On	4/8/2025 3:04:36 PM
Supervise By	mohammad	Supervise On	4/10/2025 5:31:03 AM
SubDirectory	FC040925AL	HP Acquire Method	HP Processing Method FC040925AL

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	FC068513.D	08 Apr 2025 13:05		YP/AJ	Ok
2	I.BLK	I.BLK	FC068514.D	08 Apr 2025 13:42		YP/AJ	Ok
3	100 PPM ALIPHATIC HC	100 PPM ALIPHATIC HC	FC068515.D	08 Apr 2025 14:19		YP/AJ	Ok
4	50 PPM ALIPHATIC HC	50 PPM ALIPHATIC HC	FC068516.D	08 Apr 2025 14:56		YP/AJ	Ok
5	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068517.D	08 Apr 2025 15:34		YP/AJ	Ok
6	10 PPM ALIPHATIC HC	10 PPM ALIPHATIC HC	FC068518.D	08 Apr 2025 16:12		YP/AJ	Ok
7	5 PPM ALIPHATIC HC	5 PPM ALIPHATIC HC	FC068519.D	08 Apr 2025 16:48		YP/AJ	Ok
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068520.D	08 Apr 2025 17:26		YP/AJ	Ok
9	I.BLK	I.BLK	FC068521.D	08 Apr 2025 18:41		YP/AJ	Ok
10	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068522.D	08 Apr 2025 19:18		YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC050525AL

Review By	yogesh	Review On	5/5/2025 11:42:23 AM
Supervise By	mohammad	Supervise On	5/7/2025 6:08:25 AM
SubDirectory	FC050525AL	HP Acquire Method	HP Processing Method FC040925AL
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	FC068759.D	05 May 2025 08:59		YP/AJ	Ok
2	I.BLK	I.BLK	FC068760.D	05 May 2025 09:35		YP/AJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068761.D	05 May 2025 10:11		YP/AJ	Ok
4	Q1935-02	MH-NN-EPH	FC068762.D	05 May 2025 10:48		YP/AJ	Ok
5	Q1928-02	MH-Q-EPH	FC068763.D	05 May 2025 11:24		YP/AJ	Ok
6	Q1939-01	GB1	FC068764.D	05 May 2025 12:00		YP/AJ	Ok
7	I.BLK	I.BLK	FC068765.D	05 May 2025 12:36		YP/AJ	Ok
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068766.D	05 May 2025 13:13		YP/AJ	Ok
9	PB167855BL	PB167855BL	FC068767.D	05 May 2025 13:49		YP/AJ	Ok
10	PB167855BS	PB167855BS	FC068768.D	05 May 2025 14:26		YP/AJ	Ok
11	PB167855BSD	PB167855BSD	FC068769.D	05 May 2025 15:02		YP/AJ	Ok
12	Q1937-02	LARGE-PILE-A	FC068770.D	05 May 2025 15:38		YP/AJ	Ok,M
13	Q1937-02D	Q1937-02D	FC068771.D	05 May 2025 16:15		YP/AJ	Ok
14	Q1937-02MS	LARGE-PILE-AMS	FC068772.D	05 May 2025 16:51	FC068770.D	YP/AJ	Ok
15	Q1937-02MSD	LARGE-PILE-AMSD	FC068773.D	05 May 2025 17:27	FC068770.D!FC068772.D	YP/AJ	Ok
16	Q1937-04	LARGE-PILE-B	FC068774.D	05 May 2025 18:04		YP/AJ	Ok
17	Q1937-06	LARGE-PILE-C	FC068775.D	05 May 2025 18:40		YP/AJ	Ok
18	Q1937-08	LARGE-PILE-D	FC068776.D	05 May 2025 19:17		YP/AJ	Ok

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC050525AL

Review By	yogesh	Review On	5/5/2025 11:42:23 AM
Supervise By	mohammad	Supervise On	5/7/2025 6:08:25 AM
SubDirectory	FC050525AL	HP Acquire Method	HP Processing Method FC040925AL

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

19	I.BLK	I.BLK	FC068777.D	05 May 2025 20:30		YP/AJ	Ok
20	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068778.D	05 May 2025 21:06		YP/AJ	Ok,M

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE041725AL

Review By	yogesh	Review On	4/16/2025 2:56:14 PM
Supervise By	mohammad	Supervise On	4/18/2025 1:20:00 AM
SubDirectory	FE041725AL	HP Acquire Method	HP Processing Method FE041725AL

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	FE053385.D	16 Apr 2025 14:34		YP\AJ	Ok
2	I.BLK	I.BLK	FE053386.D	16 Apr 2025 15:04		YP\AJ	Ok
3	100 PPM ALIPHATIC HC	100 PPM ALIPHATIC HC	FE053387.D	16 Apr 2025 15:35		YP\AJ	Ok
4	50 PPM ALIPHATIC HC	50 PPM ALIPHATIC HC	FE053388.D	16 Apr 2025 16:35		YP\AJ	Ok
5	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE053389.D	16 Apr 2025 17:05		YP\AJ	Ok
6	10 PPM ALIPHATIC HC	10 PPM ALIPHATIC HC	FE053390.D	16 Apr 2025 17:36		YP\AJ	Ok
7	5 PPM ALIPHATIC HC	5 PPM ALIPHATIC HC	FE053391.D	16 Apr 2025 18:06		YP\AJ	Ok
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE053392.D	16 Apr 2025 18:36		YP\AJ	Ok
9	I.BLK	I.BLK	FE053393.D	16 Apr 2025 19:36		YP\AJ	Ok
10	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE053394.D	16 Apr 2025 20:06		YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE050525AL

Review By	yogesh	Review On	5/5/2025 11:43:54 AM
Supervise By	mohammad	Supervise On	5/7/2025 6:08:32 AM
SubDirectory	FE050525AL	HP Acquire Method	HP Processing Method FE041725AL

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	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FE053634.D	05 May 2025 09:10		YP\AJ	Ok
2	I.BLK	I.BLK	FE053635.D	05 May 2025 09:40		YP\AJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE053636.D	05 May 2025 11:14		YP\AJ	Ok,M
4	Q1939-05	GB3	FE053637.D	05 May 2025 11:44		YP\AJ	Ok
5	Q1932-03DL	COMP-5DL	FE053638.D	05 May 2025 12:14	Look like original	YP\AJ	Not Ok
6	I.BLK	I.BLK	FE053639.D	05 May 2025 13:14		YP\AJ	Ok
7	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE053640.D	05 May 2025 13:44		YP\AJ	Ok
8	Q1936-02	SMALL-PILE-A	FE053641.D	05 May 2025 14:14		YP\AJ	Ok
9	Q1936-04	SMALL-PILE-B	FE053642.D	05 May 2025 14:45		YP\AJ	Ok
10	Q1936-06	SMALL-PILE-C	FE053643.D	05 May 2025 15:14		YP\AJ	Ok
11	Q1936-08	SMALL-PILE-D	FE053644.D	05 May 2025 15:45		YP\AJ	Ok
12	Q1937-10	LARGE-PILE-E	FE053645.D	05 May 2025 16:15		YP\AJ	Ok
13	Q1937-12	LARGE-PILE-F	FE053646.D	05 May 2025 16:45		YP\AJ	Ok
14	Q1938-02	LOWER-WALL-PILE-A	FE053647.D	05 May 2025 17:16		YP\AJ	Ok
15	Q1938-04	LOWER-WALL-PILE-B	FE053648.D	05 May 2025 17:46		YP\AJ	Ok
16	Q1938-06	LOWER-WALL-PILE-C	FE053649.D	05 May 2025 18:16		YP\AJ	Ok
17	Q1938-08	LOWER-WALL-PILE-D	FE053650.D	05 May 2025 18:46		YP\AJ	Ok
18	Q1946-01	BB-CONCRETE	FE053651.D	05 May 2025 19:16		YP\AJ	Ok

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE050525AL

Review By	yogesh	Review On	5/5/2025 11:43:54 AM
Supervise By	mohammad	Supervise On	5/7/2025 6:08:32 AM
SubDirectory	FE050525AL	HP Acquire Method	HP Processing Method FE041725AL
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		

19	Q1946-02	BB-CONCRETE	FE053652.D	05 May 2025 19:46		YP\AJ	Ok
20	Q1947-01	MH-P	FE053653.D	05 May 2025 20:16		YP\AJ	Ok
21	Q1947-02	MH-P-EPH	FE053654.D	05 May 2025 20:47		YP\AJ	Ok
22	Q1947-05	MH-O	FE053655.D	05 May 2025 21:17		YP\AJ	Ok
23	Q1947-06	MH-O-EPH	FE053656.D	05 May 2025 21:47		YP\AJ	Ok
24	I.BLK	I.BLK	FE053657.D	05 May 2025 22:47		YP\AJ	Ok
25	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE053658.D	05 May 2025 23:18		YP\AJ	Ok,M

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 5/5/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 05/02/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:25
Out Date: 05/03/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135646

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
Q1913-01	WC-12-S-202504	1	1.18	10.32	11.5	9.49	80.5	
Q1913-03	WC-13-S-202504	2	1.19	10.37	11.56	9.83	83.3	
Q1936-01	SMALL-PILE-A	33	1.15	9.94	11.09	10.18	90.8	
Q1936-02	SMALL-PILE-A	34	1.17	9.94	11.11	10.22	91.0	
Q1936-03	SMALL-PILE-B	35	1.18	10.39	11.57	10.93	93.8	
Q1936-04	SMALL-PILE-B	36	1.18	9.88	11.06	10.44	93.7	
Q1936-05	SMALL-PILE-C	37	1.15	10.03	11.18	10.9	97.2	
Q1936-06	SMALL-PILE-C	38	1.15	10.25	11.4	11.01	96.2	
Q1936-07	SMALL-PILE-D	39	1.16	10.41	11.57	10.97	94.2	
Q1936-08	SMALL-PILE-D	40	1.18	9.96	11.14	10.55	94.1	
Q1937-01	LARGE-PILE-A	41	1.15	10.13	11.28	10.7	94.3	
Q1937-02	LARGE-PILE-A	42	1.18	9.58	10.76	10.2	94.2	
Q1937-03	LARGE-PILE-B	43	1.15	10.03	11.18	10.82	96.4	
Q1937-04	LARGE-PILE-B	44	1.17	10.04	11.21	10.72	95.1	
Q1937-05	LARGE-PILE-C	45	1.16	10.19	11.35	10.83	94.9	
Q1937-06	LARGE-PILE-C	46	1.19	10.06	11.25	10.63	93.8	
Q1937-07	LARGE-PILE-D	47	1.18	10.33	11.51	10.95	94.6	
Q1937-08	LARGE-PILE-D	48	1.17	9.75	10.92	10.33	93.9	
Q1937-09	LARGE-PILE-E	49	1.16	10.14	11.3	10.52	92.3	
Q1937-10	LARGE-PILE-E	50	1.18	10.30	11.48	10.76	93.0	
Q1937-11	LARGE-PILE-F	51	1.18	10.48	11.66	10.58	89.7	
Q1937-12	LARGE-PILE-F	52	1.18	10.25	11.43	10.44	90.3	
Q1938-01	LOWER-WALL-PILE-A	53	1.15	10.33	11.48	10.77	93.1	
Q1938-02	LOWER-WALL-PILE-A	54	1.17	10.50	11.67	10.71	90.9	
Q1938-03	LOWER-WALL-PILE-B	55	1.14	10.15	11.29	10.94	96.6	
Q1938-04	LOWER-WALL-PILE-B	56	1.18	9.90	11.08	10.68	96.0	
Q1938-05	LOWER-WALL-PILE-C	57	1.17	10.23	11.4	11.07	96.8	
Q1938-06	LOWER-WALL-PILE-C	58	1.12	9.82	10.94	10.7	97.6	



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 5/5/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 05/02/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:25
Out Date: 05/03/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135646

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
Q1938-07	LOWER-WALL-PILE-D	59	1.19	10.01	11.2	10.7	95.0	
Q1938-08	LOWER-WALL-PILE-D	60	1.17	10.23	11.4	10.86	94.7	
Q1942-05	SVOC-GPC-BLANK	3	1.00	1.00	2.00	2.00	100.0	
Q1942-06	PEST-GPC-BLANK	4	1.00	1.00	2.00	2.00	100.0	
Q1942-07	PEST-GPC-BLANK-SPIKE	5	1.00	1.00	2.00	2.00	100.0	
Q1942-08	PCB-GPC-BLANK	6	1.00	1.00	2.00	2.00	100.0	
Q1942-09	PCB-GPC-BLANK-SPIKE	7	1.00	1.00	2.00	2.00	100.0	
Q1942-10	SVOC-GPC2-BLANK	8	1.00	1.00	2.00	2.00	100.0	
Q1942-11	PEST-GPC2-BLANK	9	1.00	1.00	2.00	2.00	100.0	
Q1942-12	PEST-GPC2-BLANK-SPIKE	10	1.00	1.00	2.00	2.00	100.0	
Q1942-13	PCB-GPC2-BLANK	11	1.00	1.00	2.00	2.00	100.0	
Q1942-14	PCB-GPC2-BLANK-SPIKE	12	1.00	1.00	2.00	2.00	100.0	
Q1944-01	MELTED-RUBBER-SAMPLE	13	1.00	1.00	2.00	2.00	100.0	MELTED-RUBBER-SAMPLE
Q1946-01	BB-CONCRETE	14	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
Q1946-02	BB-CONCRETE	15	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
Q1947-01	MH-P	16	1.18	10.19	11.37	9.28	79.5	
Q1947-02	MH-P-EPH	17	1.15	10.84	11.99	10.64	87.5	
Q1947-03	MH-P-VOC	18	1.16	10.71	11.87	10.5	87.2	
Q1947-05	MH-O	19	1.14	10.59	11.73	10.52	88.6	
Q1947-06	MH-O-EPH	20	1.12	10.00	11.12	9.91	87.9	
Q1947-07	MH-O-VOC	21	1.17	10.00	11.17	9.95	87.8	
Q1951-01	MH-KK	22	1.18	10.40	11.58	10.01	84.9	
Q1951-02	MH-KK-EPH	23	1.16	10.29	11.45	9.91	85.0	
Q1951-03	MH-KK-VOC	24	1.17	10.25	11.42	9.86	84.8	
Q1952-01	CLEAN-FILL	25	1.18	10.49	11.67	8.98	74.4	
Q1952-02	CLEAN-FILL-E2	26	1.13	10.10	11.23	8.47	72.7	
Q1953-01	AUD-25-0075	27	1.00	1.00	2.00	2.00	100.0	pile
Q1953-02	AUD-25-0076	28	1.00	1.00	2.00	2.00	100.0	pile



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 5/5/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 05/02/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:25
Out Date: 05/03/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135646

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
Q1953-03	AUD-25-0077	29	1.00	1.00	2.00	2.00	100.0	oilc
Q1954-01	BC260874-1-1	30	1.00	1.00	2.00	2.00	100.0	oilc
Q1954-02	BC260874-1-2	31	1.00	1.00	2.00	2.00	100.0	oilc
Q1955-01	LAW-25-0066	32	1.00	1.00	2.00	2.00	100.0	stone sample, 100 % solids

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

WORKLIST(Hardcopy Internal Chain)

173546

WorkList Name : %1-050225

WorkList ID : 189289

Department : Wet-Chemistry

Date : 05-02-2025 14:36:21

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1913-01	WC-12-S-202504	Solid	Percent Solids	Cool 4 deg C	AECO02	L21	04/29/2025	Chemtech -SO
Q1913-03	WC-13-S-202504	Solid	Percent Solids	Cool 4 deg C	AECO02	L21	04/29/2025	Chemtech -SO
Q1936-01	SMALL-PILE-A	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1936-02	SMALL-PILE-A	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1936-03	SMALL-PILE-B	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1936-04	SMALL-PILE-B	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1936-05	SMALL-PILE-C	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1936-06	SMALL-PILE-C	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1936-07	SMALL-PILE-D	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1936-08	SMALL-PILE-D	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1937-01	LARGE-PILE-A	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-02	LARGE-PILE-A	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-03	LARGE-PILE-B	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-04	LARGE-PILE-B	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-05	LARGE-PILE-C	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-06	LARGE-PILE-C	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-07	LARGE-PILE-D	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-08	LARGE-PILE-D	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-09	LARGE-PILE-E	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-10	LARGE-PILE-E	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-11	LARGE-PILE-F	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO

Date/Time 05/02/25 15:10

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 05/02/25 17:10

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

WORKLIST(Hardcopy Internal Chain)

172546

WorkList Name : %1-050225

WorkList ID : 189289

Department : Wet-Chemistry

Date : 05-02-2025 14:36:21

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1937-12	LARGE-PILE-F	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-01	LOWER-WALL-PILE-A	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-02	LOWER-WALL-PILE-A	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-03	LOWER-WALL-PILE-B	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-04	LOWER-WALL-PILE-B	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-05	LOWER-WALL-PILE-C	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-06	LOWER-WALL-PILE-C	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-07	LOWER-WALL-PILE-D	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-08	LOWER-WALL-PILE-D	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1942-05	SVOC-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	05/01/2025	Chemtech -SO
Q1942-06	PEST-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-07	PEST-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-08	PCB-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-09	PCB-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-10	SVOC-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-11	PEST-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-12	PEST-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-13	PCB-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-14	PCB-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1944-01	MELTED-RUBBER-SAMPLE	Solid	Percent Solids	Cool 4 deg C	METE01	L41	05/02/2025	Chemtech -SO
Q1946-01	BB-CONCRETE	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO

Date/Time 05/02/25 15:10

Raw Sample Received by: *Se Lee*

Raw Sample Relinquished by: *Se Lee*

Date/Time 05/02/25

Raw Sample Received by: *Se Lee*

Raw Sample Relinquished by: *Se Lee*

WORKLIST(Hardcopy Internal Chain)

8/23/25

WorkList Name : %1-050225

WorkList ID : 189289

Department : Wet-Chemistry

Date : 05-02-2025 14:36:21

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1946-02	BB-CONCRETE	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1947-01	MH-P	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1947-02	MH-P-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1947-03	MH-P-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1947-05	MH-O	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1947-06	MH-O-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1947-07	MH-O-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1951-01	MH-KK	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1951-02	MH-KK-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/02/2025	Chemtech -SO
Q1951-03	MH-KK-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/02/2025	Chemtech -SO
Q1952-01	CLEAN-FILL	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/02/2025	Chemtech -SO
Q1952-02	CLEAN-FILL-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	05/02/2025	Chemtech -SO
Q1953-01	AUD-25-0075	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	05/02/2025	Chemtech -SO
Q1953-02	AUD-25-0076	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1953-03	AUD-25-0077	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1954-01	BC260874-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1954-02	BC260874-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1955-01	LAW-25-0066	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO

Date/Time 05/02/25 15:10

Raw Sample Received by: 88 WOC,

Raw Sample Relinquished by: 88 WOC,

Date/Time 05/02/25

Raw Sample Received by: 88 WOC,

Raw Sample Relinquished by: 88 WOC,

SOP ID:	MNJDEP-EPH-7		
Clean Up SOP #:	N/A	Extraction Start Date :	05/05/2025
Matrix :	Solid	Extraction Start Time :	09:05
Weigh By:	EH	Extraction By:	RJ
Balance check:	RJ	Filter By:	RJ
Balance ID:	EX-SC-2	Extraction End Date :	05/05/2025
pH Strip Lot#:	N/A	Extraction End Time :	13:10
		Concentration By:	EH
		Supervisor By :	RUPESH
Extraction Method:	☐ Separatory Funnel ☐ Continuous Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☒ Soxhlet		

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	100 PPM	PP24462
Surrogate	1.0ML	100 PPM	PP24491
Fractionation Surrogate	1.0ML	100 PPM	PP24465
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	EP2600
Baked Na2SO4	N/A	EP2607
Sand	N/A	E2865
Hexane	N/A	E3928
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
5/5/25	RS (Bld Lab)	Y.P. Pestip CB.
13:15	Preparation Group	Analysis Group

Analytical Method: MNJDEP-EPH-7

Concentration Date: 05/05/2025

Sample ID	Client Sample ID	Test	g mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB167855BL	PB167855BL	EPH_NF	30.02	N/A	ritesh	Evelyn	2			U1-1
PB167855BS	PB167855BS	EPH_NF	30.03	N/A	ritesh	Evelyn	2			2
PB167855BSD	PB167855BSD	EPH_NF	30.02	N/A	ritesh	Evelyn	2			3
Q1936-02	SMALL-PILE-A	EPH_NF	30.06	N/A	ritesh	Evelyn	2	E		4
Q1936-04	SMALL-PILE-B	EPH_NF	30.01	N/A	ritesh	Evelyn	2	E		5
Q1936-06	SMALL-PILE-C	EPH_NF	30.05	N/A	ritesh	Evelyn	2	E		6
Q1936-08	SMALL-PILE-D	EPH_NF	30.08	N/A	ritesh	Evelyn	2	E		U2-1
Q1937-02	LARGE-PILE-A	EPH_NF	30.02	N/A	ritesh	Evelyn	2	E		2
Q1937-02DUP	LARGE-PILE-ADUP	EPH_NF	30.03	N/A	ritesh	Evelyn	2	E		3
Q1937-02MS	LARGE-PILE-AMS	EPH_NF	30.05	N/A	ritesh	Evelyn	2	E		4
Q1937-02MSD	LARGE-PILE-AMSD	EPH_NF	30.01	N/A	ritesh	Evelyn	2	E		5
Q1937-04	LARGE-PILE-B	EPH_NF	30.08	N/A	ritesh	Evelyn	2	E		6
Q1937-06	LARGE-PILE-C	EPH_NF	30.03	N/A	ritesh	Evelyn	2	E		U3-1
Q1937-08	LARGE-PILE-D	EPH_NF	30.07	N/A	ritesh	Evelyn	2	E		2
Q1937-10	LARGE-PILE-E	EPH_NF	30.02	N/A	ritesh	Evelyn	2	E		3
Q1937-12	LARGE-PILE-F	EPH_NF	30.01	N/A	ritesh	Evelyn	2	E		4
Q1938-02	LOWER-WALL-PILE-A	EPH_NF	30.05	N/A	ritesh	Evelyn	2	E		5
Q1938-04	LOWER-WALL-PILE-B	EPH_NF	30.08	N/A	ritesh	Evelyn	2	E		6
Q1938-06	LOWER-WALL-PILE-C	EPH_NF	30.06	N/A	ritesh	Evelyn	2	E		U6-1
Q1938-08	LOWER-WALL-PILE-D	EPH_NF	30.02	N/A	ritesh	Evelyn	2	E		2
Q1946-01	BB-CONCRETE	EPH_NF	30.04	N/A	ritesh	Evelyn	2	E	Concrete	3
Q1946-02	BB-CONCRETE	EPH_NF	30.05	N/A	ritesh	Evelyn	2		Concrete	4
Q1947-01	MH-P	EPH_NF	30.03	N/A	ritesh	Evelyn	2	E		5
Q1947-02	MH-P-EPH	EPH_NF	30.01	N/A	ritesh	Evelyn	2			6
Q1947-05	MH-O	EPH_NF	30.03	N/A	ritesh	Evelyn	2	E		U7-1
Q1947-06	MH-O-EPH	EPH_NF	30.06	N/A	ritesh	Evelyn	2			2

* Extracts relinquished on the same date as received.



178535
05/05/25

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1946 WorkList ID : 189301 Department : Extraction Date : 05-05-2025 08:40:02

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1936-02	SMALL-PILE-A	Solid	EPH_NF	Cool 4 deg C	SAXT01	L51	05/01/2025	NJEPH
Q1936-04	SMALL-PILE-B	Solid	EPH_NF	Cool 4 deg C	SAXT01	L51	05/01/2025	NJEPH
Q1936-06	SMALL-PILE-C	Solid	EPH_NF	Cool 4 deg C	SAXT01	L51	05/01/2025	NJEPH
Q1936-08	SMALL-PILE-D	Solid	EPH_NF	Cool 4 deg C	SAXT01	L51	05/01/2025	NJEPH
Q1937-02	LARGE-PILE-A	Solid	EPH_NF	Cool 4 deg C	SAXT01	L41	05/01/2025	NJEPH
Q1937-04	LARGE-PILE-B	Solid	EPH_NF	Cool 4 deg C	SAXT01	L41	05/01/2025	NJEPH
Q1937-06	LARGE-PILE-C	Solid	EPH_NF	Cool 4 deg C	SAXT01	L41	05/01/2025	NJEPH
Q1937-08	LARGE-PILE-D	Solid	EPH_NF	Cool 4 deg C	SAXT01	L41	05/01/2025	NJEPH
Q1937-10	LARGE-PILE-E	Solid	EPH_NF	Cool 4 deg C	SAXT01	L41	05/01/2025	NJEPH
Q1937-12	LARGE-PILE-F	Solid	EPH_NF	Cool 4 deg C	SAXT01	L41	05/01/2025	NJEPH
Q1938-02	LOWER-WALL-PILE-A	Solid	EPH_NF	Cool 4 deg C	SAXT01	L41	05/01/2025	NJEPH
Q1938-04	LOWER-WALL-PILE-B	Solid	EPH_NF	Cool 4 deg C	SAXT01	L41	05/01/2025	NJEPH
Q1938-06	LOWER-WALL-PILE-C	Solid	EPH_NF	Cool 4 deg C	SAXT01	L41	05/01/2025	NJEPH
Q1938-08	LOWER-WALL-PILE-D	Solid	EPH_NF	Cool 4 deg C	SAXT01	L41	05/01/2025	NJEPH
Q1946-01	BB-CONCRETE	Solid	EPH_NF	Cool 4 deg C	PSEG03	L41	05/02/2025	NJEPH
Q1946-02	BB-CONCRETE	Solid	EPH_NF	Cool 4 deg C	PSEG03	L41	05/02/2025	NJEPH
Q1947-01	MH-P	Solid	EPH_NF	Cool 4 deg C	PSEG03	L41	05/02/2025	NJEPH
Q1947-02	MH-P-EPH	Solid	EPH_NF	Cool 4 deg C	PSEG03	L41	05/02/2025	NJEPH
Q1947-05	MH-O	Solid	EPH_NF	Cool 4 deg C	PSEG03	L41	05/02/2025	NJEPH
Q1947-06	MH-O-EPH	Solid	EPH_NF	Cool 4 deg C	PSEG03	L41	05/02/2025	NJEPH

Date/Time 05/05/25 9:00 Date/Time 05/05/25 9:30
Raw Sample Received by: RS GET-10261 Raw Sample Received by: RS GET-10261
Raw Sample Relinquished by: RS GET-10261 Raw Sample Relinquished by: RS GET-10261

Prep Standard - Chemical Standard Summary

Order ID : Q1938

Test : EPH_NF

Prepbatch ID : PB167855,

Sequence ID/Qc Batch ID: FC050525AL,FE050525AL,

Standard ID :

EP2600,EP2607,PP24170,PP24174,PP24175,PP24176,PP24177,PP24178,PP24179,PP24462,PP24465,PP24491,

Chemical ID :

E2865,E3551,E3904,E3916,E3917,E3928,E3929,P12363,P12981,P12983,P12989,P12990,P13050,P13279,P13596,P13650,P13660,P13662,P13664,P13667,P13671,P13709,P13762,P13764,P13865,P13896,P13897,P13898,P13899,P13900,P13901,P13903,P13905,P13906,P13912,P13919,P13920,P13921,P13923,P13926,P13927,P13928,P13931,P13947,P13948,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	EP2600	04/07/2025	10/03/2025	Rajesh Parikh	None	None	Riteshkumar Patel
								04/07/2025

FROM 8000.00000ml of E3904 + 8000.00000ml of E3917 = 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	EP2607	04/25/2025	07/01/2025	RUPESEKUMA R SHAH	Extraction_SC ALE_2 (EX-SC-2)	None	Riteshkumar Patel
								04/25/2025

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	PP24462	04/15/2025	10/15/2025	Yogesh Patel	None	None	Abdul Mirza
								04/21/2025

FROM 5.00000ml of P13709 + 5.00000ml of P13865 + 5.00000ml of P13896 + 5.00000ml of P13897 + 5.00000ml of P13898 + 5.00000ml of P13899 + 5.00000ml of P13900 + 5.00000ml of P13901 + 5.00000ml of P13903 + 5.00000ml of P13905 + 5.00000ml of P13906 + 5.00000ml of P13912 + 5.00000ml of P13919 + 5.00000ml of P13920 + 5.00000ml of P13921 + 5.00000ml of P13923 + 5.00000ml of P13926 + 5.00000ml of P13927 + 5.00000ml of P13928 + 5.00000ml of P13931 = Final Quantity: 100.000 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>
1331	100 PPM NJEPH Fractionating Surrogate	PP24465	04/18/2025	10/03/2025	Abdul Mirza	None	None	Yogesh Patel 05/03/2025
<u>FROM</u> 1.25000ml of P13762 + 1.25000ml of P13764 + 1.25000ml of P13947 + 1.25000ml of P13948 + 195.00000ml of E3916 = Final Quantity: 200.000 ml								

[illegible]

CHEMICAL RECEIPT LOG BOOK

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24K1762005	01/07/2026	03/13/2025 /	12/27/2024 / RUPESH	E3904

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	243570	10/03/2025	04/03/2025 / Rajesh	03/31/2025 / Rajesh	E3916

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	10/03/2025	04/03/2025 / Rajesh	03/31/2025 / Rajesh	E3917

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	25C0362005	10/22/2025	04/18/2025 / RUPESH	04/16/2025 / RUPESH	E3928

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	04/18/2027	04/18/2025 / RUPESH	04/16/2025 / RUPESH	E3929

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

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0204989	10/25/2025	04/25/2025 / Abdul	12/20/2023 / Yogesh	P12989

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0204989	10/25/2025	04/25/2025 / Abdul	12/20/2023 / Yogesh	P12990

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	A0200707	10/25/2025	04/25/2025 / Abdul	12/26/2023 / Yogesh	P13050

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	10/25/2025	04/25/2025 / Abdul	10/16/2024 / yogesh	P13596

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	10/25/2025	04/25/2025 / Abdul	10/16/2024 / yogesh	P13660

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	10/25/2025	04/25/2025 / Abdul	10/16/2024 / yogesh	P13662

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	10/25/2025	04/25/2025 / Abdul	10/16/2024 / yogesh	P13664

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	10/25/2025	04/25/2025 / Abdul	10/16/2024 / yogesh	P13667

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	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0211254	10/15/2025	04/15/2025 / yogesh	10/24/2024 / yogesh	P13709

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	10/18/2025	04/18/2025 / Abdul	11/01/2024 / yogesh	P13762

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	10/18/2025	04/18/2025 / Abdul	11/01/2024 / yogesh	P13764

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	A0220580	10/15/2025	04/15/2025 / yogesh	01/08/2025 / yogesh	P13865

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13896

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13897

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13898

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13899

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13900

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13901

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13903

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13905

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13906

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13912

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13919

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	A022580	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13920

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13921

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13923

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13926

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13927

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	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13928

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	A022580	10/15/2025	04/15/2025 / yogesh	03/06/2025 / yogesh	P13931

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0219106	10/31/2030	04/18/2025 / Abdul	03/10/2025 / yogesh	P13947

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0219106	10/18/2025	04/18/2025 / Abdul	03/10/2025 / yogesh	P13948

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

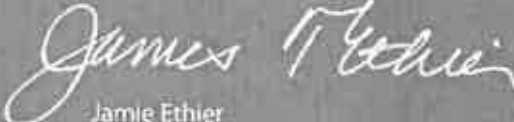
Certificate of Analysis

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

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

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

Certificate of Analysis

1 Reagent Lane
 Fair Lawn, NJ 07410
 201.796.7100 tel
 201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System
 Standard ISO9001:2015 by SAI Global Certificate Number CERT - 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	H303	Quality Test / Release Date	11/07/2024
Lot Number	243570		
Description	HEXANES - OPTIMA		
Country of Origin	United States	Suggested Retest Date	Nov/2029
Chemical Origin	Organic - non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A

Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid
ASSAY (N-HEXANE)	%	>= 60	69
ASSAY (SUM C6 HYDROCARBONS)	%	>= 99.9	>99.9
COLOR	APHA	<= 5	<5
DENSITY AT 25 DEGREES C	GM/ML	Inclusive Between 0.653 - 0.673	0.669
EVAPORATION RESIDUE	ppm	<= 1	<1
FLUORESCENCE BACKGROUND	ppb	<= 1	<1
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
OPTICAL ABS AT 195 NM	ABS. UNITS	<= 1	0.74
OPTICAL ABS AT 210 NM	ABS. UNITS	<= 0.25	0.17
OPTICAL ABS AT 220 NM	ABS. UNITS	<= 0.07	0.05
OPTICAL ABS AT 254 NM	ABS. UNITS	<= 0.005	0.001
PESTICIDE RESIDUE ANALYSIS	NG/L	<= 10	<10
REFRACTIVE INDEX @ 25 DEG C		Inclusive Between 1.375 - 1.385	1.379
SUITABILITY FOR GC/MS		= PASS TEST	PASS TEST
SULFUR COMPOUNDS	%	<= 0.005	<0.005
THIOPHENE	PASS/FAIL	= PASS TEST	PASS TEST
WATER (H2O)	%	<= 0.01	<0.01
WATER-SOLUBLE TITRABLE ACID	MEQ/G	<= 0.0003	0.0001

Harout Sahagian

Harout Sahagian - Quality Control Manager - Fair Lawn

Recd by RP on 3/31/25

E 3946

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
 If there are any questions with this certificate, please call at (800) 227-6701.
 *Based on suggested storage condition.

Acetone

BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 24H2762008

Manufactured Date: 2024-04-18

Expiration Date: 2027-04-18

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (µeq/g)	<= 0.3	0.2
Titration Base (µeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	<0.1 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

Recd by RP on 03/31/25

E3917

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

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

 **avantors[™]**



Material No.: 9262-03

Batch No.: 25C0362005

Manufactured Date: 2025-01-29

Expiration Date: 2026-04-30

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	6
ECD-Sensitive Impurities (as EthyleneDibromide) - Single Impurity Peak (ng/mL)	≤ 5	5
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	$\geq 99.5 \%$	100.0 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	100 %
Color (APHA)	≤ 10	10
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	$\leq 0.05 \%$	$< 0.01 \%$

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

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

E3928



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 U.S.

Acetone

BAKER RESI-ANALYZED® Reagent

For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 24H2762008

Manufactured Date: 2024-04-18

Expiration Date: 2027-04-18

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (µeq/g)	<= 0.3	0.2
Titration Base (µeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	<0.1 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3929

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



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)

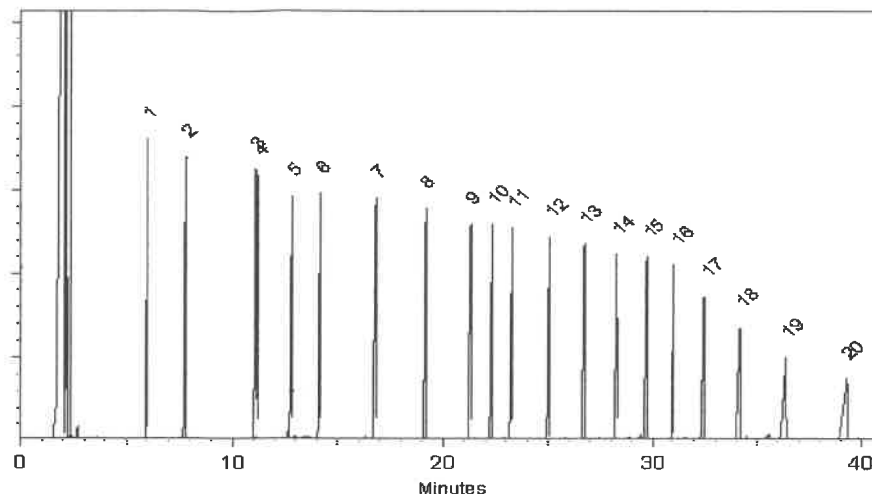
Carrier Gas:
hydrogen-constant pressure 10 psi.

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:

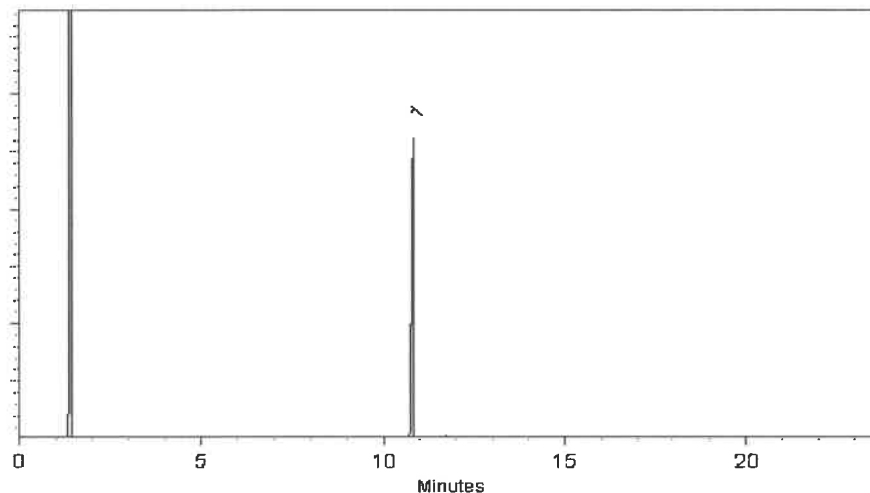
FID

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.



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:

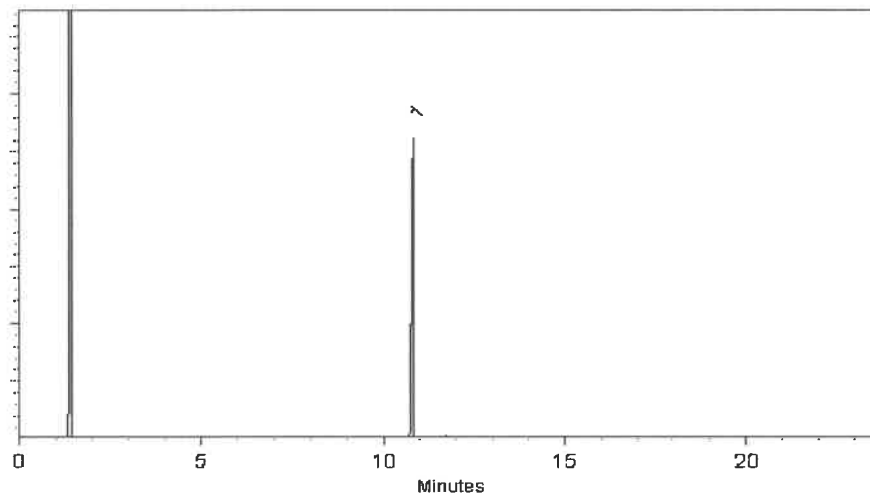
FID

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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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

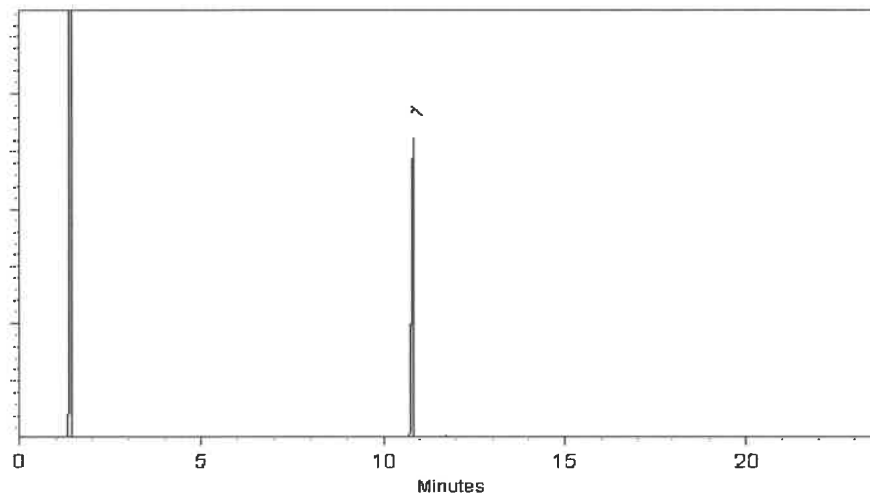
FID

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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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:

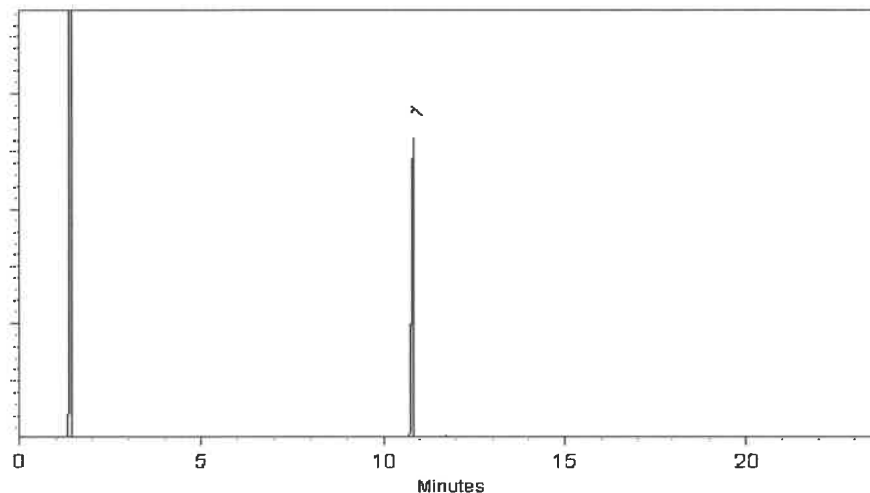
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Peter Robbins - Operations Technician I

Date Mixed: 02-Dec-2023

Balance Serial # B345965662

Christie Mills - Operations Lead Tech - ARM QC

Date Passed: 08-Dec-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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. : 31098 **Lot No.:** A0200707

Description : 1-Chlorooctadecane Standard

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

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

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

Ship: Ambient

P130hh
↓
P13051 } Y.B.
12/26/23

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	E230426RSRB	99%	10,018.0 µg/mL	+/- 562.8106

* 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:

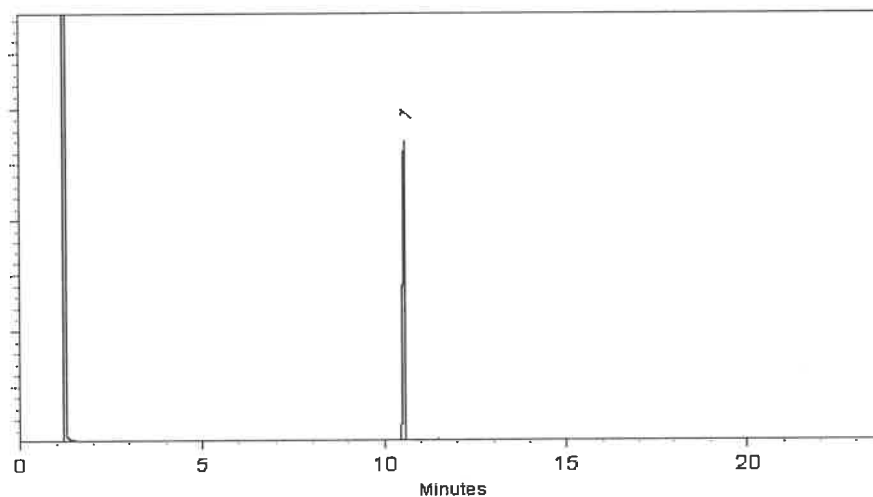
FID

Split Vent:

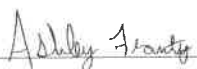
10 ml/min.

Inj. Vol

1µl



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Ashley Frantz - Quoting Technician

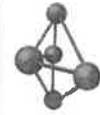
Date Mixed: 07-Aug-2023

Balance Serial # 1128360905


Dillan Murphy - Operations Technician I

Date Passed: 10-Aug-2023

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



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
Y.P.
P13287
04/11/24

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By:	Anthony Mahoney	040524	DATE
Reviewed By:	Pedro L. Rentas	040524	DATE

Compound		Part Number	(RM#)	Lot Number	DIL Factor	Initial Vol. (mL)	Initial Conc (µg/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Pipette	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)		
																CAS#	OSHA PEL (TWA)	LD50
1.	2-Methylnaphthalene	(0214)	MKBF3783V	NA	NA	NA	NA	1000	97	0.2	NA	0.02579	0.02594	1005.7	5.7	91-57-6	N/A	or-rat 1630mg/kg
2.	Naphthalene	(0222)	MKB28680V	NA	NA	NA	NA	1000	100	0.2	NA	0.02502	0.02511	1003.7	5.7	91-20-3	10 ppm (50mg/m ³ /8H)	or-rat 490mg/kg
3.	n-Nonane	95708	120222	1.00	25.00	1000.7	1000	1000	NA	0.013	NA	NA	NA	1000.0	4.2	111-84-2	200 ppm (1050mg/m ³ /8H)	ivn-mus 218mg/kg
4.	n-Decane	95708	120222	1.00	25.00	1000.9	1000	1000	NA	0.013	NA	NA	NA	1000.2	4.2	124-18-5	N/A	N/A
5.	n-Dodecane	95708	120222	1.00	25.00	1000.7	1000	1000	NA	0.013	NA	NA	NA	1000.0	4.2	112-40-3	N/A	ivn-mus 3494mg/kg
6.	n-Tetradecane	95708	120222	1.00	25.00	1002.1	1000	1000	NA	0.013	NA	NA	NA	1001.3	4.2	629-59-4	N/A	N/A
7.	n-Hexadecane	95708	120222	1.00	25.00	1000.5	1000	1000	NA	0.013	NA	NA	NA	999.7	4.2	544-76-3	N/A	N/A
8.	n-Octadecane	95708	120222	1.00	25.00	1001.0	1000	1000	NA	0.013	NA	NA	NA	1000.3	4.1	583-45-3	N/A	N/A
9.	n-Eicosane	95708	120222	1.00	25.00	1001.0	1000	1000	NA	0.013	NA	NA	NA	1000.3	4.2	112-95-8	N/A	N/A
10.	n-Henicosane	95708	120222	1.00	25.00	1002.4	1000	1000	NA	0.013	NA	NA	NA	1001.6	4.2	629-94-7	N/A	N/A
11.	n-Docosane	95708	120222	1.00	25.00	1001.9	1000	1000	NA	0.013	NA	NA	NA	1001.2	4.2	629-97-0	N/A	N/A
12.	n-Tetracosane	95708	120222	1.00	25.00	1000.8	1000	1000	NA	0.013	NA	NA	NA	1000.1	4.2	646-31-1	N/A	N/A
13.	n-Hexacosane	95708	120222	1.00	25.00	1001.2	1000	1000	NA	0.013	NA	NA	NA	1000.4	4.2	630-01-3	N/A	N/A
14.	n-Octacosane	95708	120222	1.00	25.00	1000.5	1000	1000	NA	0.013	NA	NA	NA	999.8	4.2	630-02-4	N/A	N/A
15.	n-Triacontane	95708	120222	1.00	25.00	1000.5	1000	1000	NA	0.013	NA	NA	NA	999.8	4.2	638-68-6	N/A	N/A
16.	n-Dotriacontane	95708	120222	1.00	25.00	1000.5	1000	1000	NA	0.013	NA	NA	NA	999.8	4.3	544-85-4	N/A	ivn-mus 100mg/kg
17.	n-Tetracontane	95708	120222	1.00	25.00	1000.4	1000	1000	NA	0.013	NA	NA	NA	999.7	4.2	14167-59-0	N/A	N/A
18.	n-Hexatriacontane	95708	120222	1.00	25.00	1001.5	1000	1000	NA	0.013	NA	NA	NA	1000.8	4.2	630-08-8	N/A	N/A
19.	n-Octatriacontane	95708	120222	1.00	25.00	1000.3	1000	1000	NA	0.013	NA	NA	NA	999.6	4.3	7184-86-6	N/A	N/A
20.	n-Tetracontane	95708	120222	1.00	25.00	1000.6	1000	1000	NA	0.013	NA	NA	NA	999.9	4.3	4181-95-7	N/A	N/A

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



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 1-Chlorooctadecane Standard

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

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

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

Ship: Ambient

P13595
↓
P13624 } Y.P.
10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

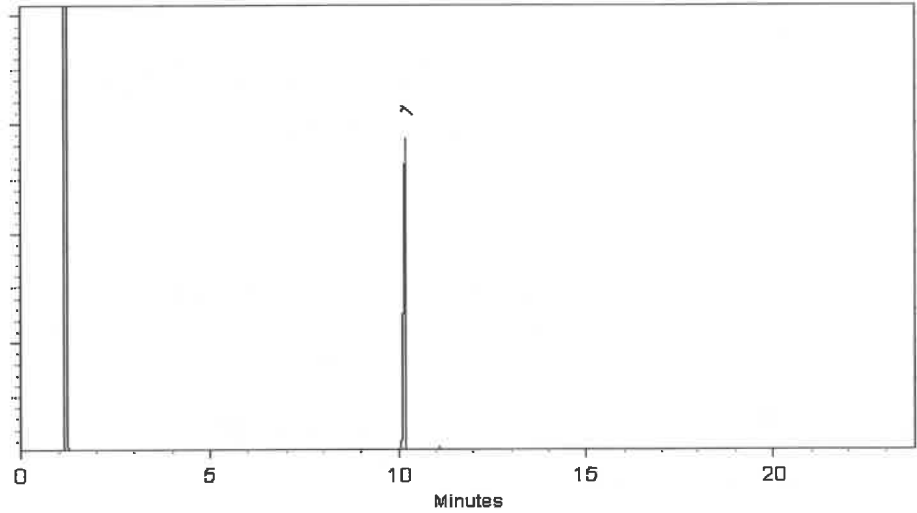
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Stacey Wanner - Operations Technician I

Date Mixed: 28-Jun-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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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. : 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:

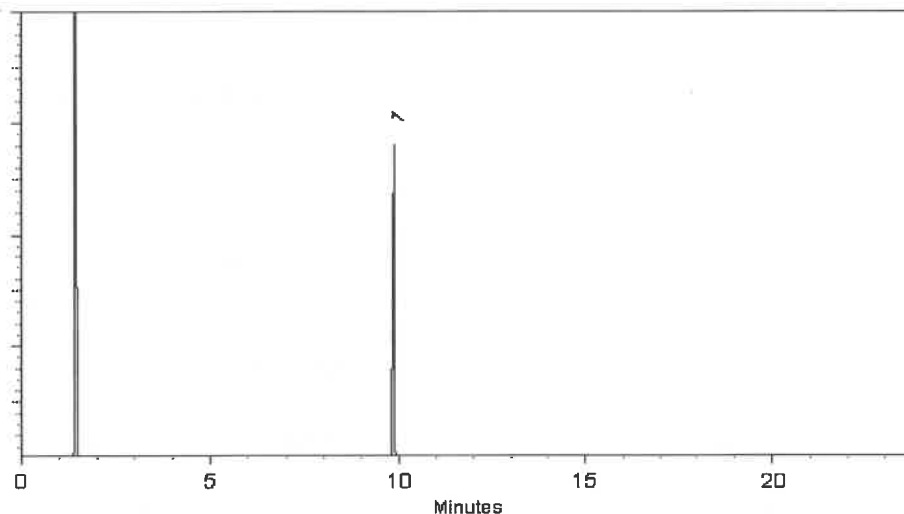
FID

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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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. : 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:

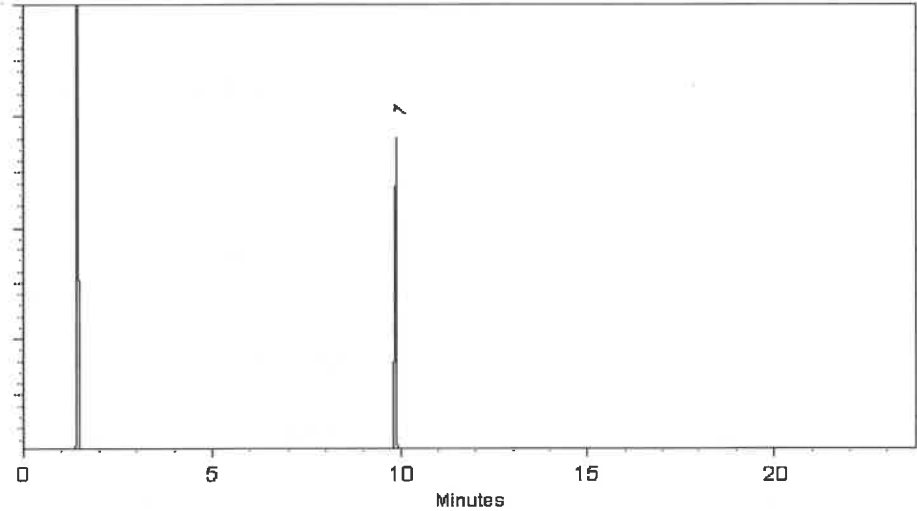
FID

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

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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:

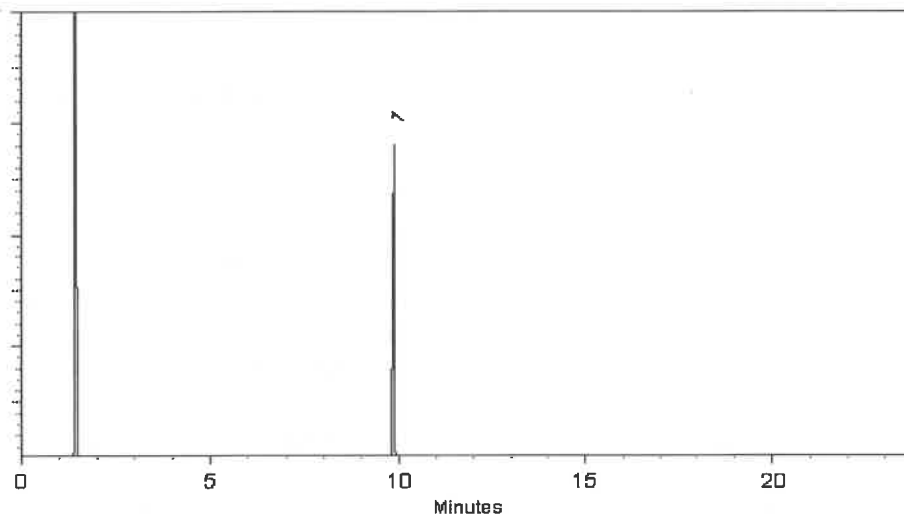
FID

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

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Expiration Date : April 30, 2028 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

P13645 } Y.P.
↓
P13694 } 10/16/24

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Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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* Expanded Uncertainty displayed in same units as Grav. Conc.

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

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Rtx-5 (cat.#10223)

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Det. Temp:

330°C

Det. Type:

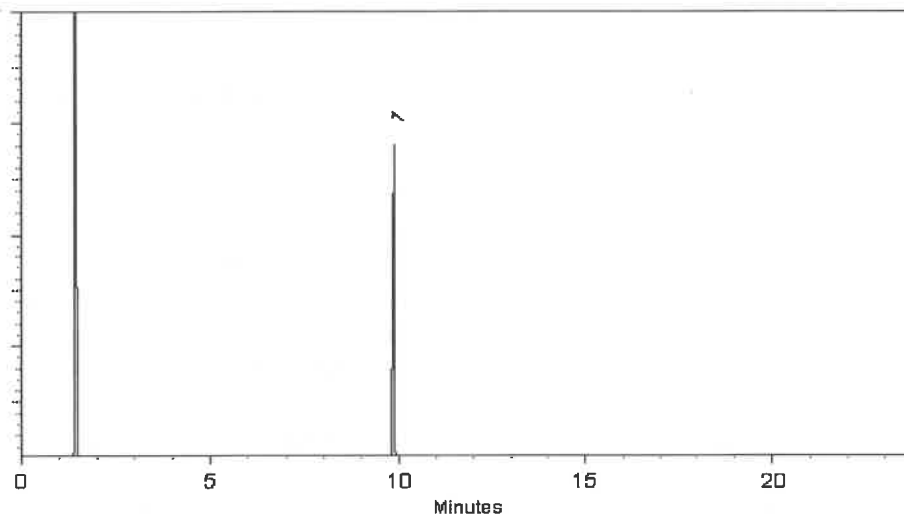
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

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Expiration Date : April 30, 2028 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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CAS # 75-09-2
Purity 99%

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Det. Temp:

330°C

Det. Type:

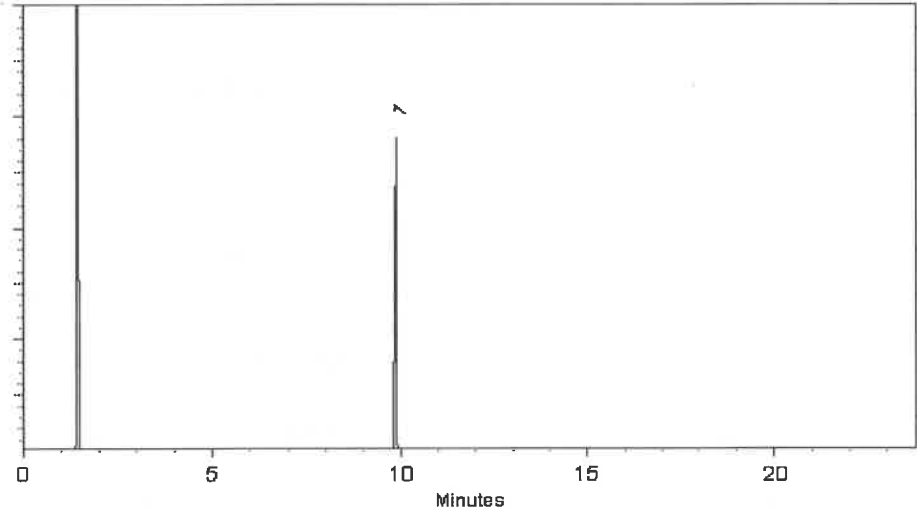
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

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chromatographic plus



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Catalog No. : 30543

Lot No.: A0211254

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : April 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13408
↓
P13716 } Y.P.
10/26/24

CERTIFIED VALUES

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

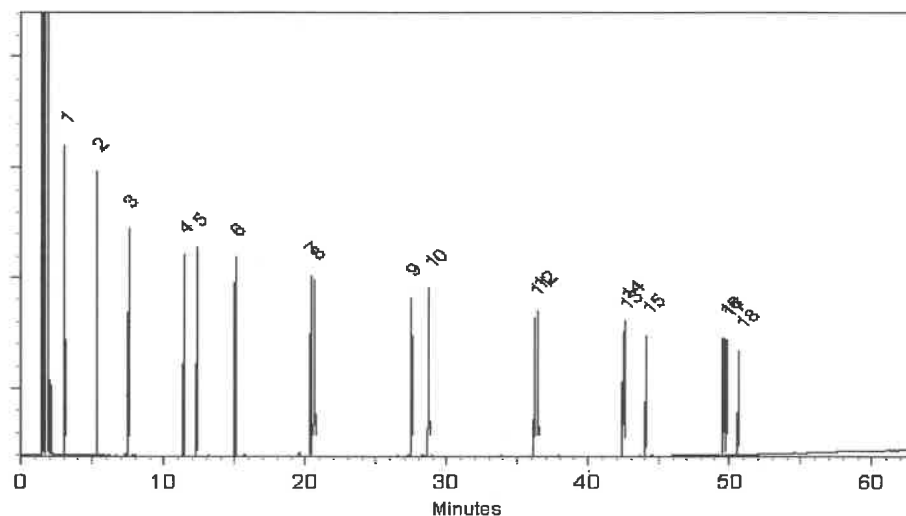
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240105ECS	99%	200.8	µg/mL	+/- 9.0474

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

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

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rbx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.
Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)
Inj. Temp:
250°C
Det. Temp:
330°C
Det. Type:
FID
Split Vent:
20 ml/min.
Inj. Vol
1µl



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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
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Certificate #FM 80397

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Catalog No. : 31480 **Lot No.:** A0214879
Description : MA Fractionation Surrogate Spike Mix
MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : July 31, 2030 **Storage:** 10°C or colder
Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13743
↓
P13772 } Y.P.
11/01/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,009.0 µg/mL	+/- 180.5961
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,008.5 µg/mL	+/- 180.5736

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

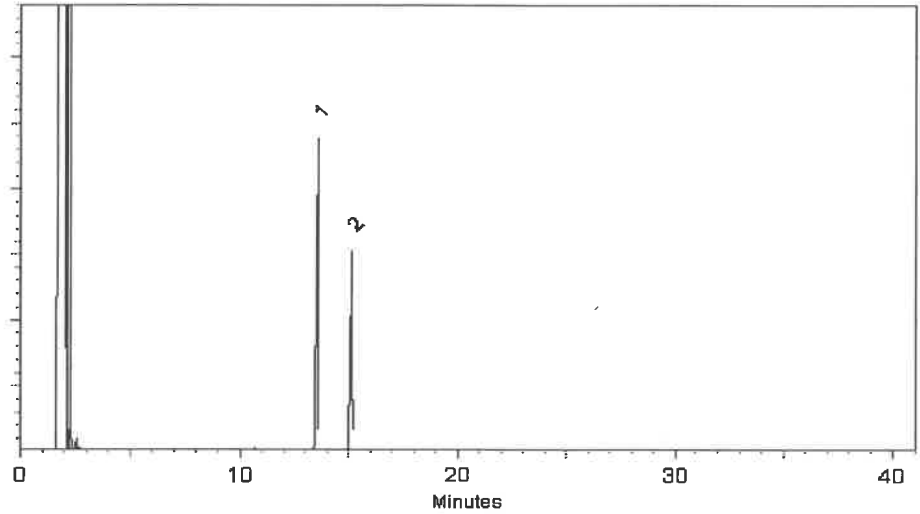
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



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

Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024

Balance Serial # 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31480 **Lot No.:** A0214879
Description : MA Fractionation Surrogate Spike Mix
MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : July 31, 2030 **Storage:** 10°C or colder
Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13743
↓
P13772 } Y.P.
11/01/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,009.0 µg/mL	+/- 180.5961
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,008.5 µg/mL	+/- 180.5736

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

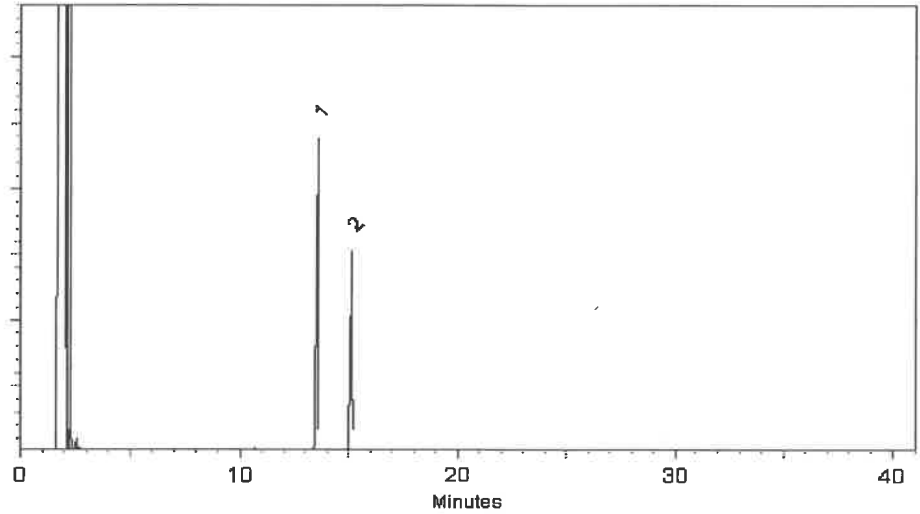
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



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

Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024

Balance Serial # 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

P13863 } y.p.
↓
P13866 } 01/08/25

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

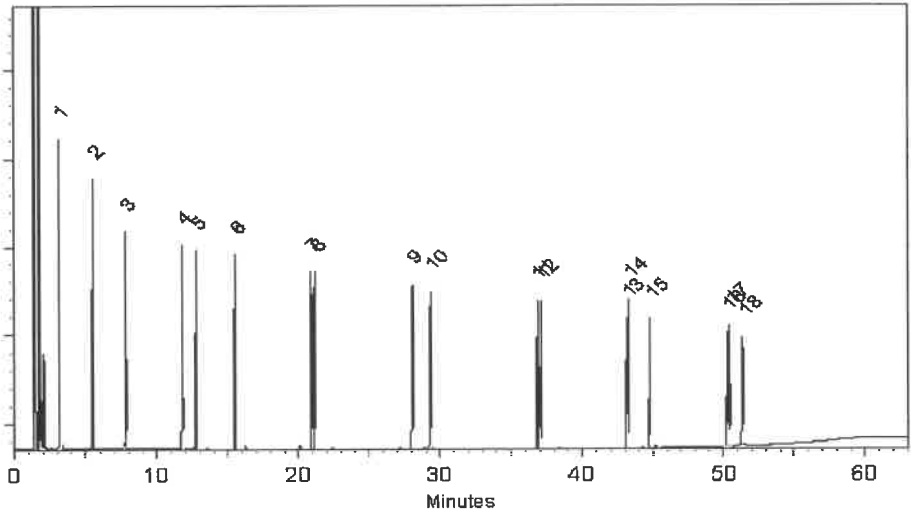
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	201.2	µg/mL	+/- 9.0655
18	Benzo(g,h,i)perylene	191-24-2	RP241014RSR	98%	200.3	µg/mL	+/- 9.0255

* 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.

Ven Kelley
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. : 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:

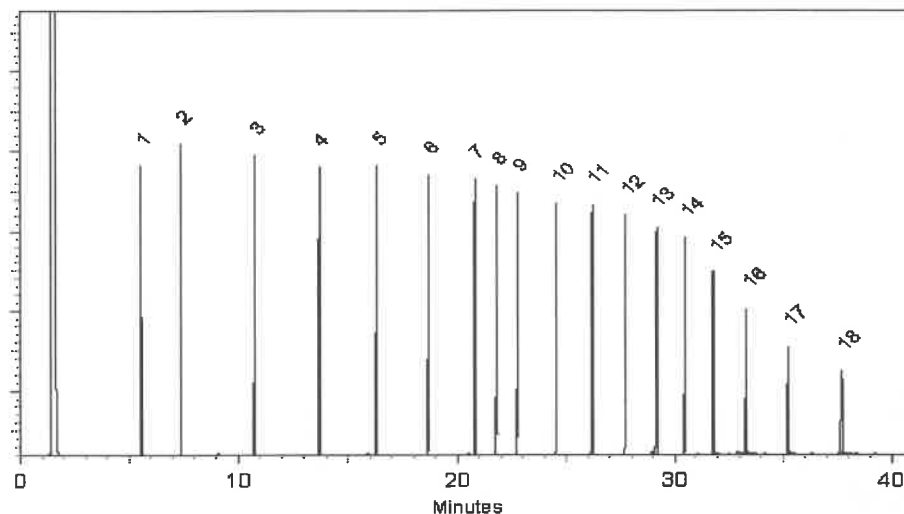
FID

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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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

P13896
↓
P13906 } Y.P.
03/06/25

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

hydrogen-constant pressure 10 psi.

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

250°C

Det. Temp:

330°C

Det. Type:

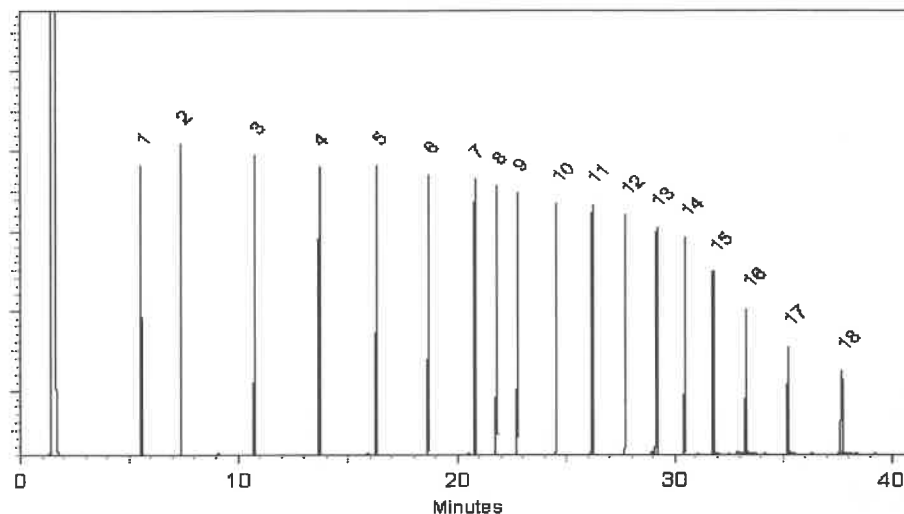
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



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

Penelope B. Riglin
Penelope Riglin - Operations Tech I

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

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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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

P13896
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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:

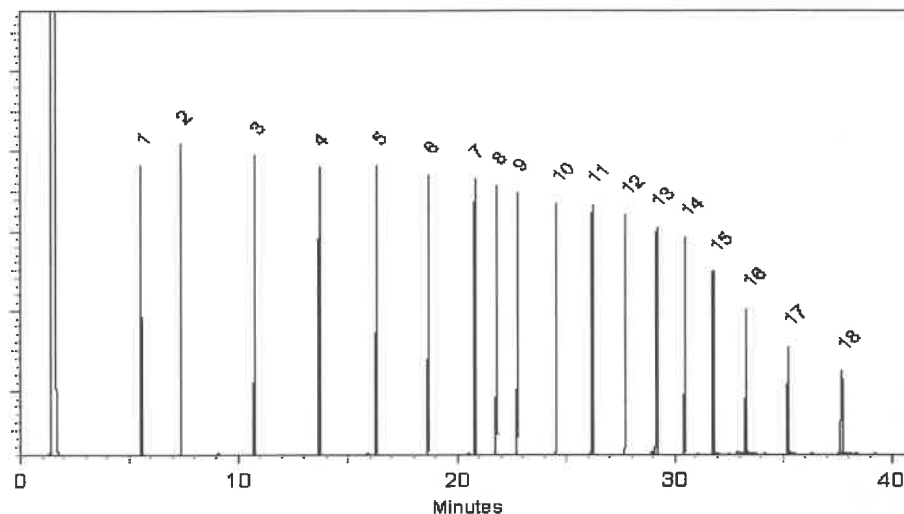
FID

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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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

P13896
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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:

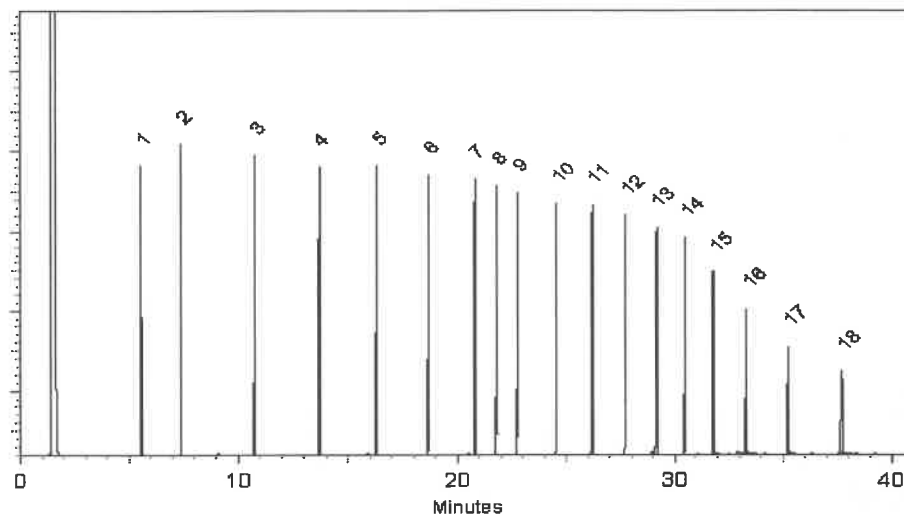
FID

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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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:

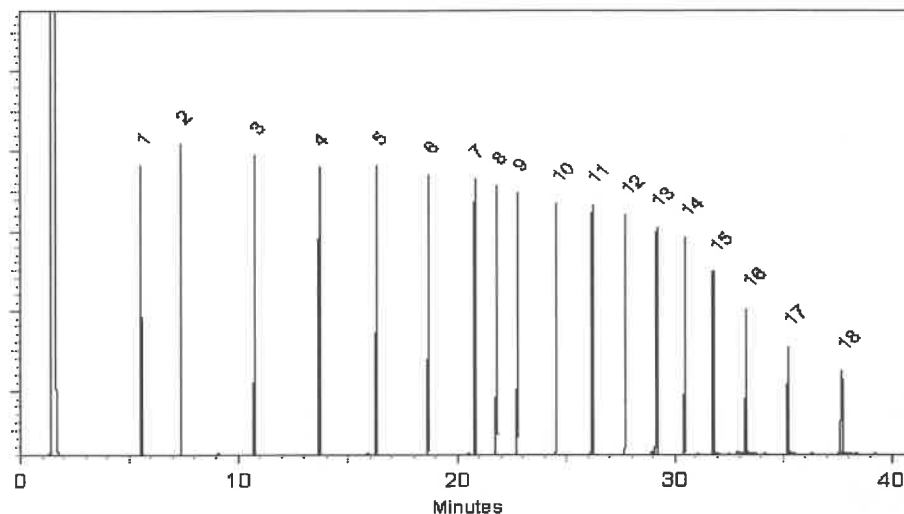
FID

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:

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Catalog No. : 30542 **Lot No.:** A0217408

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

P13896
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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
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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:

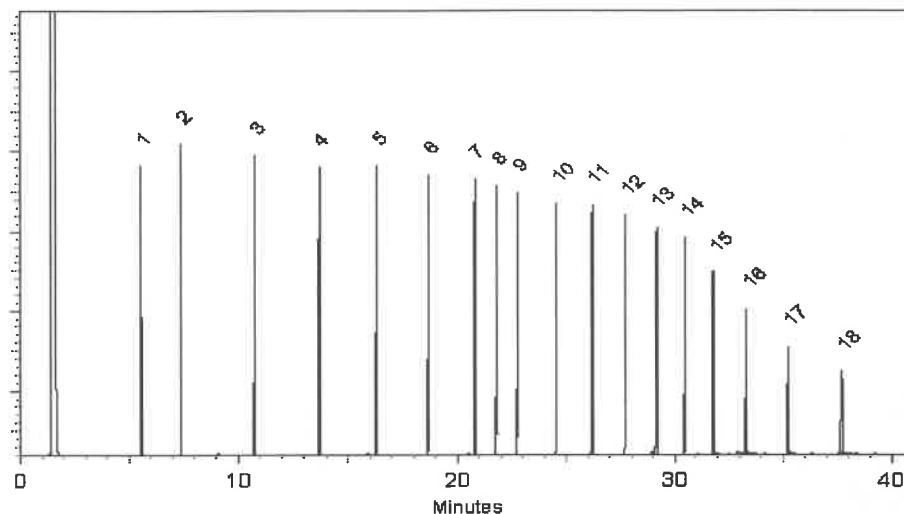
FID

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

P13896
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P13906 } Y.P.
03/06/25

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

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

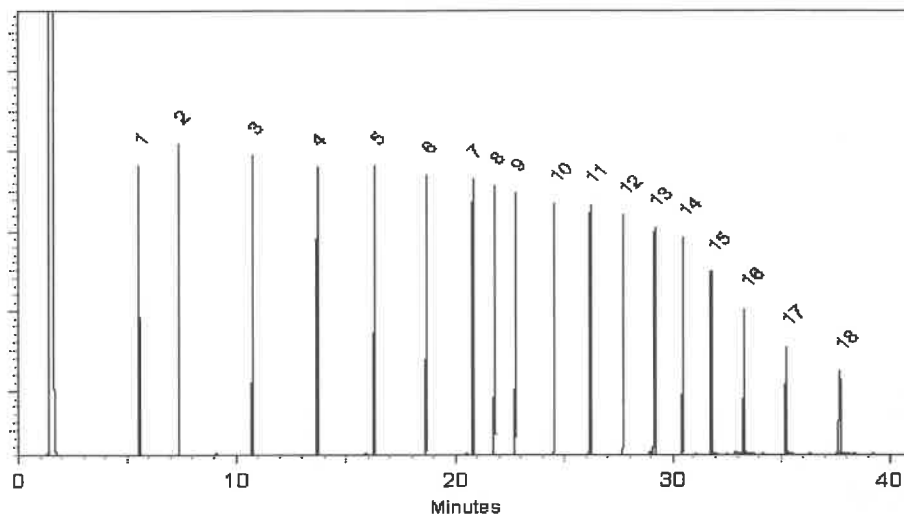
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Penelope B. Riglin
Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024

Balance Serial # 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

P13896
↓
P13906 } Y.P.
03/06/25

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
 hydrogen-constant pressure 10 psi.

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

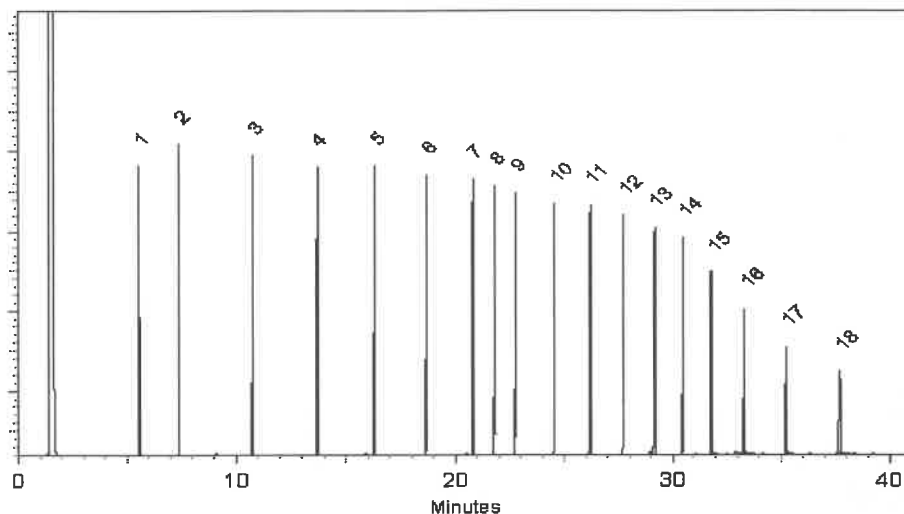
Inj. Temp:
 250°C

Det. Temp:
 330°C

Det. Type:
 FID

Split Vent:
 2 ml/min.

Inj. Vol
 1µl



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

Penelope B. Riglin
 Penelope Riglin - Operations Tech I

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

Jennifer Pollino
 Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

P13896
↓
P13906 } Y.P.
03/06/25

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

hydrogen-constant pressure 10 psi.

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

250°C

Det. Temp:

330°C

Det. Type:

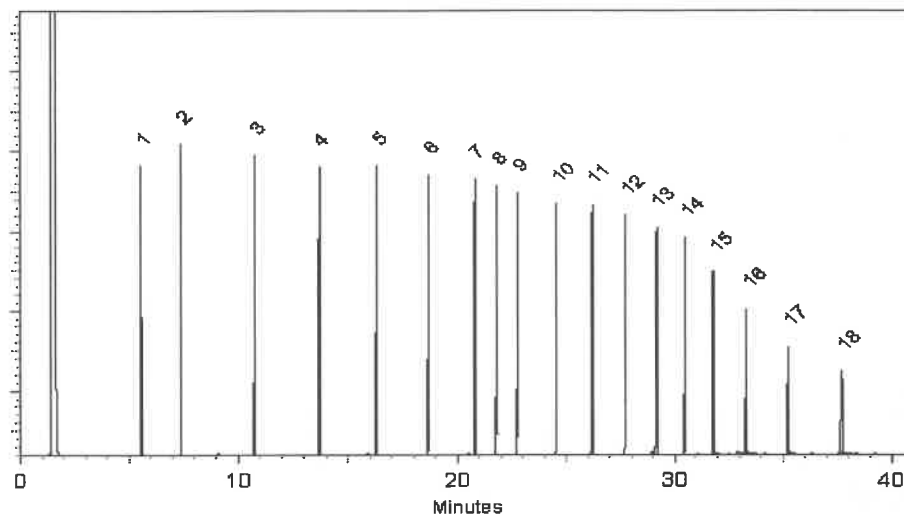
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



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

Penelope B. Riglin
Penelope Riglin - Operations Tech I

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

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0220449

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

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

Expiration Date : January 31, 2032 **Storage:** 10°C or colder

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

P13909
↓
P1395 } Y.P.
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%	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.)

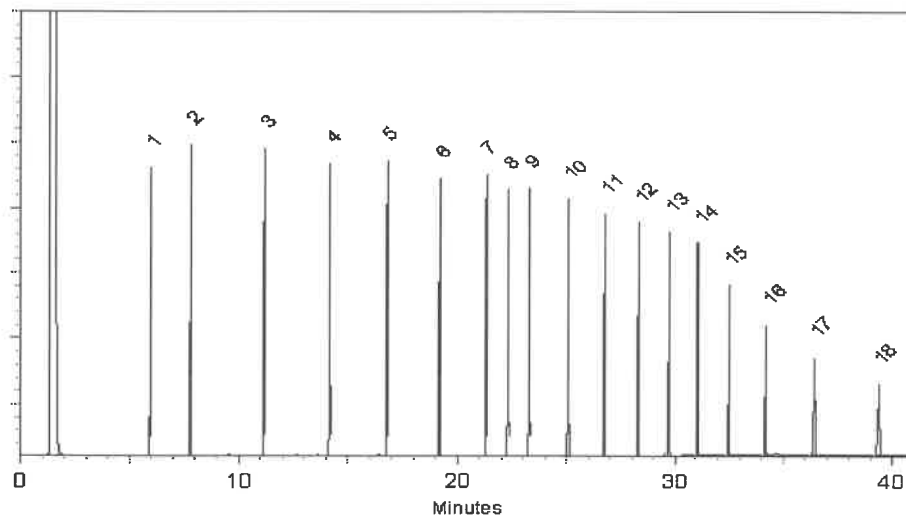
Inj. Temp:
250°C

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

Dillan Murphy
Dillan 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.



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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543

Lot No.: 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.)

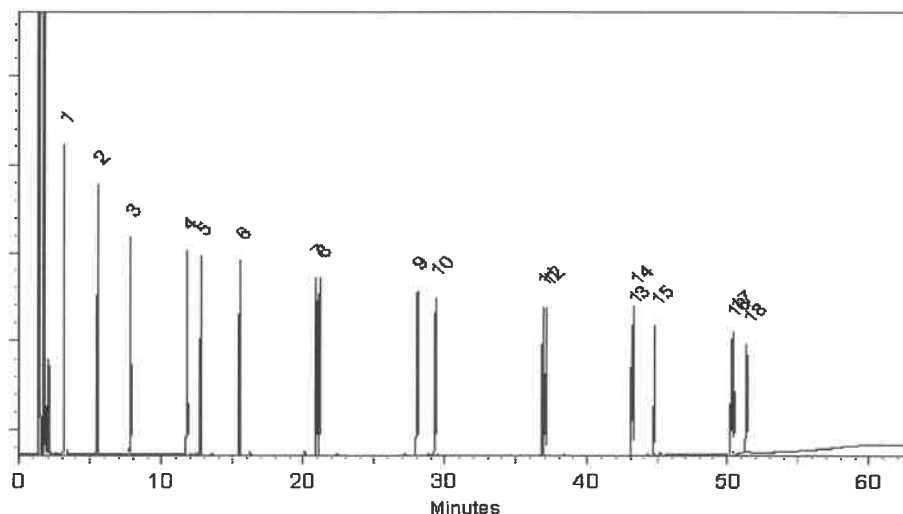
Inj. Temp:
250°C

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:

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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.: 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
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7	Phenanthrene	85-01-8	MKCT3391	99%	200.8 µg/mL	+/- 9.0474
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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.)

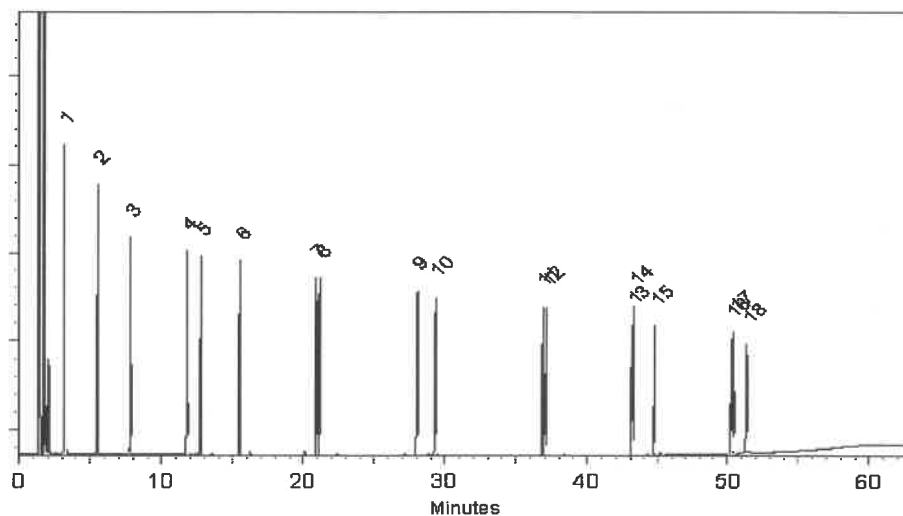
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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VenKelley
Ven Kelley - Operations Tech I

Date Mixed: 30-Dec-2024 **Balance Serial #** 1128360905

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 03-Jan-2025

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

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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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:

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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

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
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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
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9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCL8032	99%	201.6 µg/mL	+/- 9.0835
11	Benz(a)anthracene	56-55-3	I220012022BAA	99%	202.0 µg/mL	+/- 9.1015
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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
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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
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

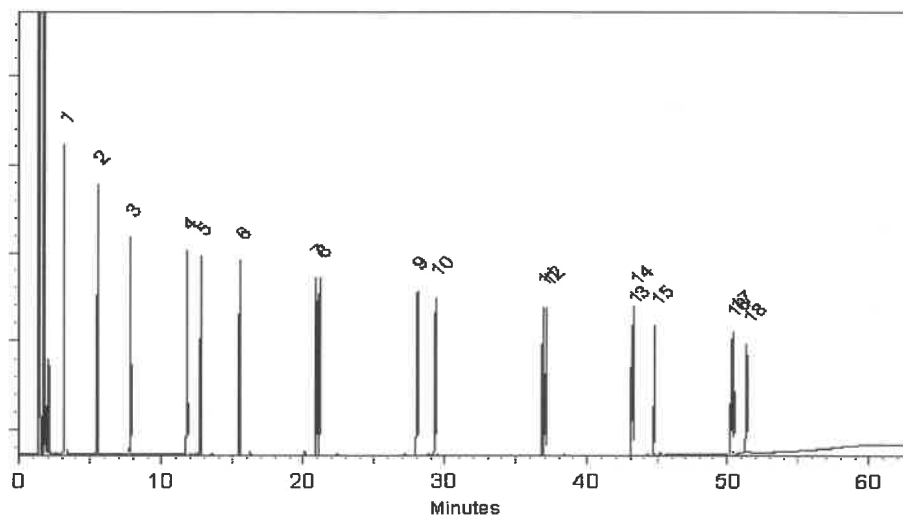
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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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.
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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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CERTIFIED REFERENCE MATERIAL

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chromatographic plus



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Catalog No. : 30543

Lot No.: A0220580

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NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50),
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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.
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P13935 } 08/06/25

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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10	Pyrene	129-00-0	BCCL8032	99%	201.6 µg/mL	+/- 9.0835
11	Benz(a)anthracene	56-55-3	I220012022BAA	99%	202.0 µg/mL	+/- 9.1015
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* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

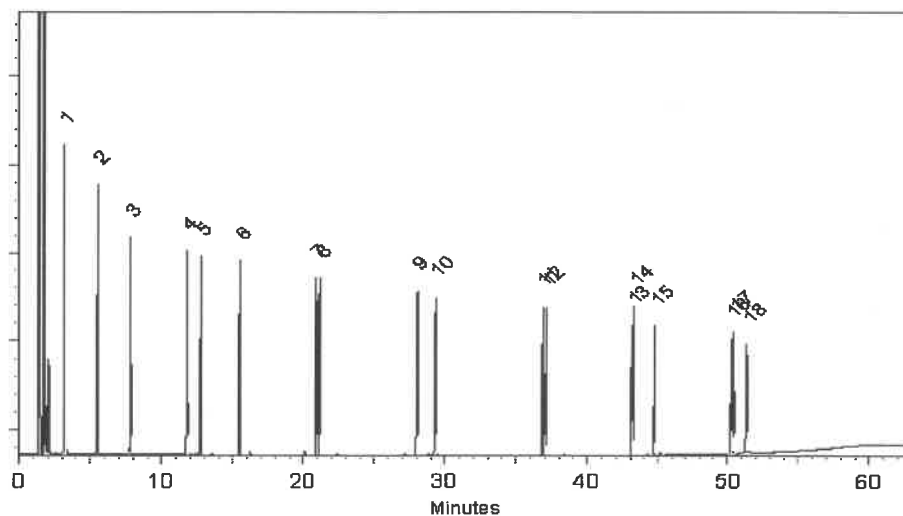
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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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:

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Certified Uncertainty Value Notes:

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- 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. : 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.)

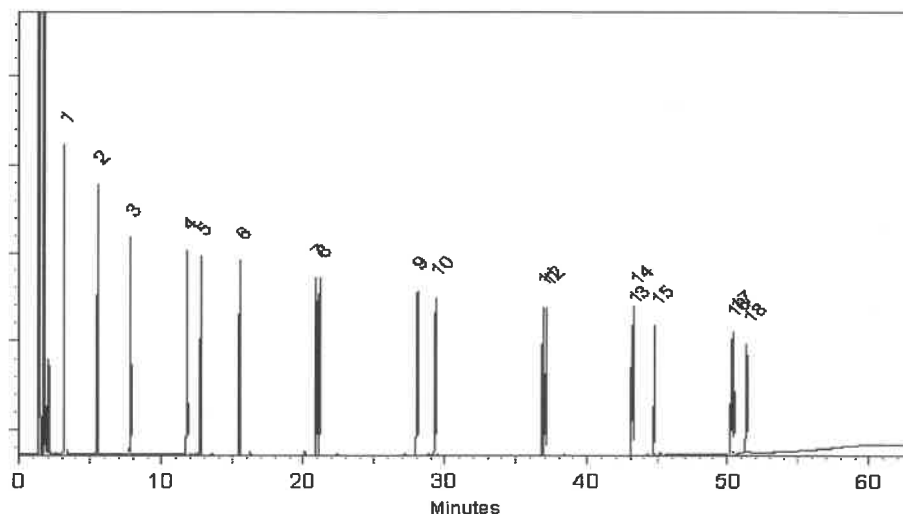
Inj. Temp:
250°C

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:

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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.: 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
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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.)

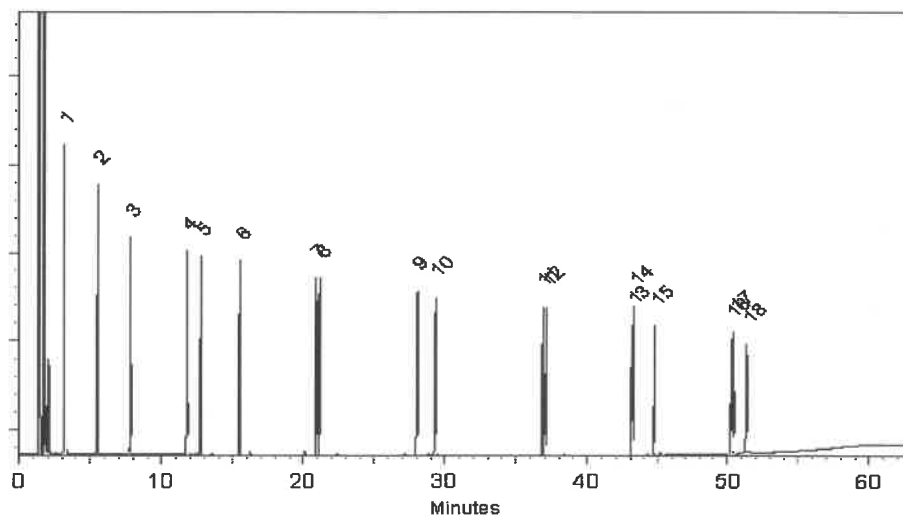
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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VenKelley
Ven Kelley - Operations Tech I

Date Mixed: 30-Dec-2024 **Balance Serial #** 1128360905

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 03-Jan-2025

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

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:

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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

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
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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
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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
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

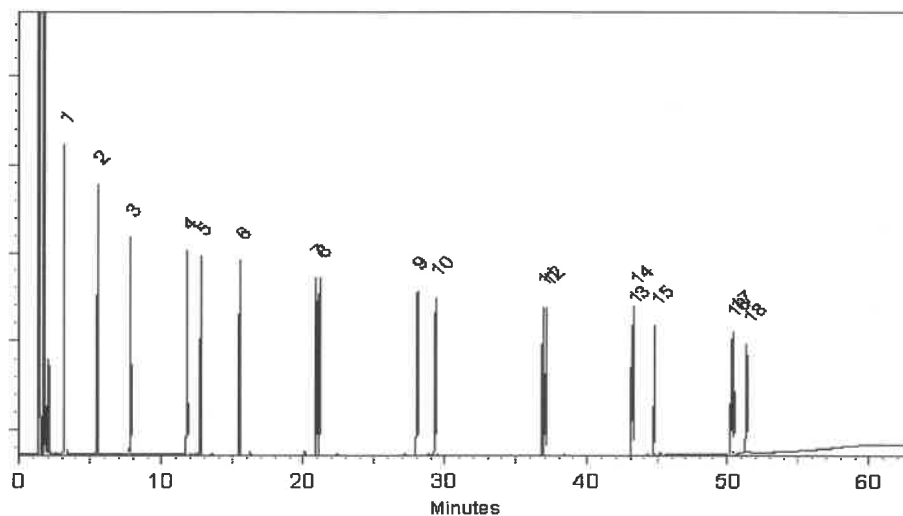
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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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.
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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/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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Catalog No. : 30543

Lot No.: A0220580

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NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50),
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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
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10	Pyrene	129-00-0	BCCL8032	99%	201.6 µg/mL	+/- 9.0835
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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
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

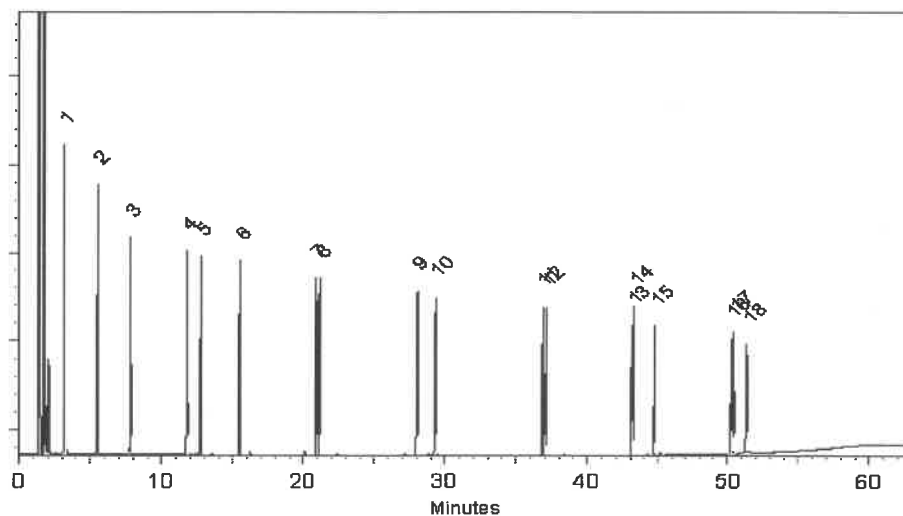
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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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:

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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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Handling Notes:

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

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. : 31480 **Lot No.:** A0219106
Description : MA Fractionation Surrogate Spike Mix
MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : October 31, 2030 **Storage:** 10°C or colder
Handling: Sonication required. Mix is **Ship:** Ambient
photosensitive.

P13947
L
P1395h

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,013.5 µg/mL	+/- 180.7988
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,011.0 µg/mL	+/- 180.6862

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

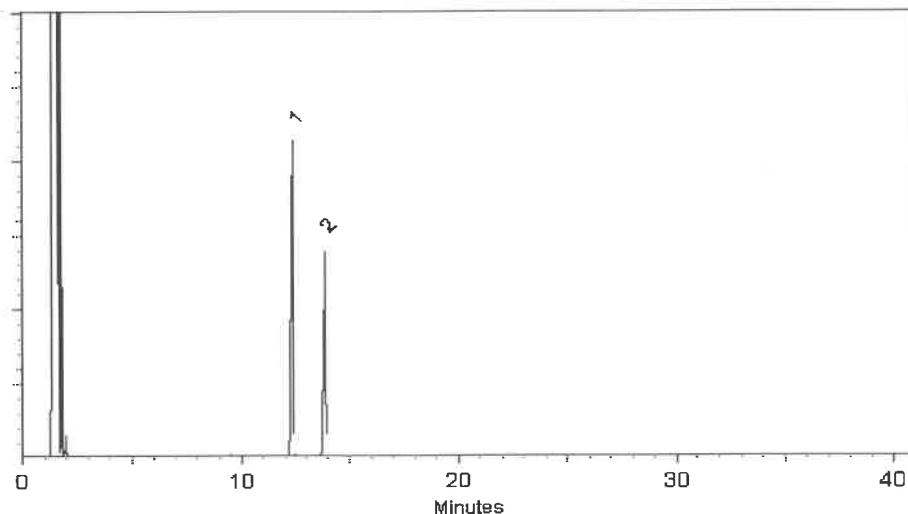
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



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

Wilner Torres
Wilner Torres - Operation Tech I

Date Mixed: 14-Nov-2024

Balance Serial # 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 20-Nov-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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photosensitive.

p13947
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p1395h

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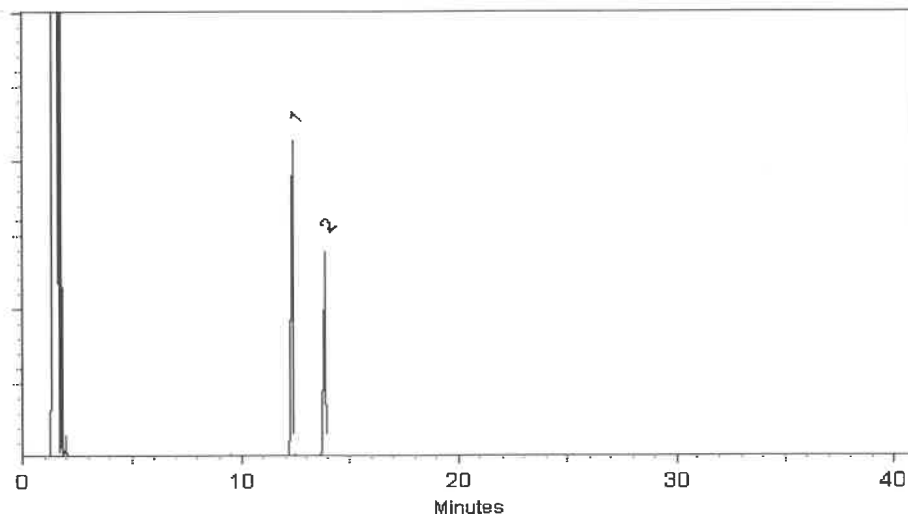
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Wilner Torres
Wilner Torres - Operation Tech I

Date Mixed: 14-Nov-2024

Balance Serial # 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 20-Nov-2024

Manufactured under Restek's ISO 9001:2015
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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

REPORT TO BE SENT TO:

COMPANY: Saxton Fall and Sand Gravel
ADDRESS: 3000 International Drive
CITY: Budd Lake STATE: N.J. ZIP:
ATTENTION: Rich Schindler
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Stan Hope
PROJECT NO.: LOCATION:
PROJECT MANAGER:
e-mail:
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: PO#:
ADDRESS:
CITY: Stan STATE: ZIP:
ATTENTION: PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) 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
☐ EDD FORMAT

1. Hex Chrom
2. PCB
3. SVOC-TCL BWA-20
4. TPH CAC
5. Trivalent Chromium
6. Cyanide
7. VOI-TCL VOA-10
8. EPH
9.

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER	
1.	<u>Lower Wall Pile-A</u>	<u>sol</u>	<u>X</u>		<u>5-1-25</u>	<u>12:50</u>	<u>4</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				<u>Pid=0.0</u>	
2.	<u>A</u>			<u>X</u>		<u>12:52</u>	<u>5</u>							<u>X</u>	<u>X</u>			
3.	<u>B</u>		<u>X</u>			<u>13:00</u>	<u>4</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>					
4.	<u>B</u>			<u>X</u>		<u>13:02</u>	<u>5</u>							<u>X</u>	<u>X</u>			
5.	<u>C</u>		<u>X</u>			<u>13:12</u>	<u>4</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>					
6.	<u>C</u>			<u>X</u>		<u>13:14</u>	<u>5</u>							<u>X</u>	<u>X</u>			
7.	<u>D</u>		<u>X</u>			<u>13:20</u>	<u>4</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>					
8.	<u>D</u>			<u>X</u>		<u>13:22</u>	<u>5</u>							<u>X</u>	<u>X</u>			
9.																		
10.																		

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

RELINQUISHED BY SAMPLER: 1. <u>[Signature]</u>	DATE/TIME: <u>5-1-2025</u>	RECEIVED BY: 1. <u>[Signature]</u>	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☒ COOLER TEMP <u>4.1°C</u>
RELINQUISHED BY SAMPLER: 2. <u>[Signature]</u>	DATE/TIME: <u></u>	RECEIVED BY: 2. <u></u>	Comments: <u>Adjusted Factor + 1</u>
RELINQUISHED BY SAMPLER: 3. <u>[Signature]</u>	DATE/TIME: <u>5-1-2025</u>	RECEIVED BY: 3. <u>[Signature]</u>	<u>Pid Meter calibrated 5-1-2025</u> <u>Equal volume of soil used, 5:1 Composite</u>
Page <u>1</u> of <u>1</u>			CLIENT: ☐ Hand Delivered ☐ Other
			Shipment Complete ☐ YES ☐ NO



Environmental Laboratory

www.chemtech.net | EMAIL: PM@chemtech.net

Project Name: STN Hope

Chemtech Order ID: _____

Sampler Name: Lawrence Pate

Client Project Coordinator & Phone: _____

Service Order #: _____

Work Order #: _____

Labor WBS #: _____

Page #: 1 of 1

Facility/Site: _____

Date: 5.1.2025

Site Address: 3000 Interchange

Arrive Time: 0830

Drive, Budd Lake, W.V.

Depart Time: 1410

Waste Stream (circle one): drum / roll-off / soil pile / in-situ / linear construction / frac-tank

Sample Matrices (circle all that apply): Water / Solid / NAPL / Concrete / Wipe

Collection Depth: _____

Dimensions/CY: _____

Temp (range): _____ °C PID Readings (range): _____ PPM Odor: Y / N Color: Y / N

Sample Description: Brown soil, Rocks.

Field Observations: Sample 6, small pile, large pile, however well pile.

Grid/Area Composite Map: _____

QA Control # A3041134

SEE

ATTACHED

Sampler Signature: 8.1.2025

Supervisor Review/Date: _____

Client Signature: _____

Date/Time Arrived at Lab: _____

Lower Wall

EXHIBIT 1

Soil Piles for Sampling

Piles for sampling are circled in red

4 Samples 25" #

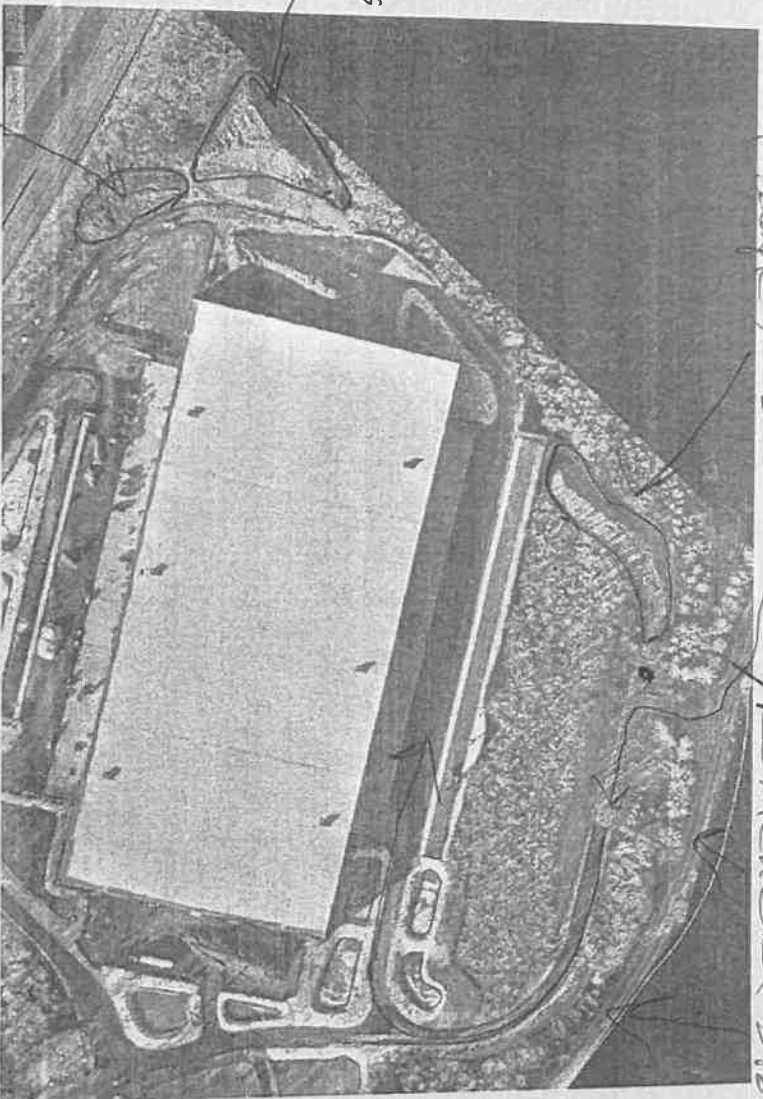
Contenetal Dr.

3 tests

Pile

6 Samples

Large Pile
30" #



4 Samples

Small Pile 20" #

Total 14 Samples

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1938	SAXT01	Order Date : 5/1/2025 2:05:00 PM	Project Mgr :
Client Name : Saxton Falls Sand and Grav		Project Name : Stan Hope	Report Type : Level 1
Client Contact : Rich Schindelar		Receive DateTime : 5/1/2025 12:00:00 AM 15:40	EDD Type : Excel NJ
Invoice Name : Saxton Falls Sand and Grav		Purchase Order :	Hard Copy Date :
Invoice Contact : Rich Schindelar			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1938-02	LOWER-WALL-PILE-A	Solid	05/01/2025	12:52	VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1938-04	LOWER-WALL-PILE-B	Solid	05/01/2025	13:02	VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1938-06	LOWER-WALL-PILE-C	Solid	05/01/2025	13:14	VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1938-08	LOWER-WALL-PILE-D	Solid	05/01/2025	13:22	VOC-TCLVOA-10		8260D	10 Bus. Days	

Relinquished By :

Date / Time :

LCJ

5-1-2025 1650

Received By :

Date / Time :

Wm Duden

5-1-25 16:5

Storage Area : VOA Refridgerator Room

Touch
Storage in VOA
FRZ # 02 Extract
in set # 06