

Cover Page

Order ID : Q1736

Project ID : Stockton

Client : G Environmental

Lab Sample Number

Q1736-01
Q1736-02

Client Sample Number

GST1
GST2

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: 4/12/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

CASE NARRATIVE

G Environmental

Project Name: Stockton

Project # N/A

Chemtech Project # Q1736

Test Name: EPH_F2

A. Number of Samples and Date of Receipt:

2 Solid samples were received on 04/04/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: EPH_F2, Mercury, Metals ICP-TAL, METALS-TAL, PCB and SVOC-SIMGroup1. This data package contains results for EPH_F2.

C. Analytical Techniques:

The analysis were performed on instrument FID_C. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224. The analysis of EPH_F2s was based on method NJEPH and extraction was done based on method 3541.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

Sample GST1 was diluted due to high concentration for Aliphatic compounds.

E. Additional Comments:

The soil samples results are based on a dry weight basis.



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F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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Signature_____

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 #: Q1736

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 Castody

✓

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: NILESH PRAJAPATI

Date: 04/12/2025

LAB CHRONICLE

OrderID:	Q1736	OrderDate:	4/4/2025 1:39:00 PM
Client:	G Environmental	Project:	Stockton
Contact:	Gary Landis	Location:	L21

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1736-01	GST1	SOIL			04/04/25			04/04/25
			PCB	8082A		04/07/25	04/07/25	
			EPH_F2	NJEPH		04/07/25	04/07/25	
			EPH_F2	NJEPH		04/07/25	04/08/25	
Q1736-01DL	GST1DL	Solid			04/04/25			04/04/25
			EPH_F2	NJEPH		04/07/25	04/08/25	
Q1736-02	GST2	SOIL			04/04/25			04/04/25
			PCB	8082A		04/07/25	04/07/25	
			EPH_F2	NJEPH		04/07/25	04/07/25	



QC SUMMARY

SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: GENV01
Lab Code: CHEM CASE No.: Q1736 SAS No.: Q1736 SDG No.: Q1736
Run Number: FC040725AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)	ortho-Terphenyl (SURR)		TOT OUT
PB167477BL	78	74		0
PB167477BS	83	78		0
PB167477BSD	84	78		0
GST1	59	49		0
GST2	91	86		0
GST2MS	86	80		0
GST2MSD	85	79		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: GENV01
Lab Code: CHEM CASE No.: Q1736 SAS No.: Q1736 SDG No.: Q1736
Run Number: FC040825AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)	ortho-Terphenyl (SURR)		TOT OUT
GST1DL	59	49		0

QC LIMITS

1-chlorooctadecane (SURR) (40-140)
ortho-Terphenyl (SURR) (40-140)

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

SOIL EPH SURROGATE RECOVERY

QC LIMITS

1-chlorooctadecane (SURR)

(40-140)

ortho-Terphenyl (SURR)

(40-140)

Column to be used to flag recovery values

* Values outside of contract required QC Limits

D Surrogate diluted out

SOLID EPH_F2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** G Environmental
Lab Code: CHEM **Cas No:** Q1736 **SAS No :** Q1736 **SDG No:** Q1736
Sample No : Q1736-02MS **Datafile:** FC068502.D
Client ID : GST2MS

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C28-C40	37.2	14.2	56.5	113		(40-140)
Aliphatic C9-C28	124.1	4.51	111	86		(40-140)

SOLID EPH_F2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** G Environmental
Lab Code: CHEM **Cas No:** Q1736 **SAS No :** Q1736 **SDG No:** Q1736
Sample No : Q1736-02MSD **Datafile:** FC068503.D
Client ID : GST2MSD

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	37.2	14.2	56.9	114		0.88 (40-140) 25
Aliphatic C9-C28	124.1	4.51	108	84		2.6 (40-140) 25

SOLID EPH_F2 LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** G Environmental
Lab Code: CHEM **Cas No:** Q1736 **SAS No :** Q1736 **SDG No:** Q1736
Sample No : PB167477BS **Datafile:** FC068499.D
Client ID : PB167477BS

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C28-C40	30.0	26.7	89		(40-140)
Aliphatic C9-C28	99.9	82.4	83		(40-140)

SOLID EPH_F2 LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** G Environmental
Lab Code: CHEM **Cas No:** Q1736 **SAS No :** Q1736 **SDG No:** Q1736
Sample No : PB167477BSD **Datafile:** FC068500.D
Client ID : PB167477BSD

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS	QC Limit Of RPD
Aliphatic C28-C40	30.0	25.5	85		4.6 (40-140)	50
Aliphatic C9-C28	99.9	82.1	82		0.465 (40-140)	50

4B
METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167477BL

Lab Name: CHEMTECH

Contract: GENV01

Lab Code: CHEM Case No.: Q1736

SAS No.: Q1736 SDG NO.: Q1736

Instrument ID: FID_C

Lab Sample ID: PB167477BL

Matrix: (soil/water) Solid

Date Extracted: 4/7/2025 9:40:00 AM

Level: (low/med) low

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

EPA SAMPLE NO.	LAB SAMPLE ID
PB167477BS	PB167477BS
PB167477BSD	PB167477BSD
GST1	Q1736-01
GST2	Q1736-02
GST2MS	Q1736-02MS
GST2MSD	Q1736-02MSD

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	G Environmental	Date Collected:	04/04/25
Project:	Stockton	Date Received:	04/04/25
Client Sample ID:	GST1	SDG No.:	Q1736
Lab Sample ID:	Q1736-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	78.6
Sample Wt/Vol:	30.03	Units:	g
Soil Aliquot Vol:			uL
Prep Method :		Test:	EPH_F2

Prep Date :	Date Analyzed :	Prep Batch ID
04/07/25 09:40	04/08/25 9:30	PB167477

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	119		2	2.32	10.2	mg/kg	FC068510.D
Total EPH	Total EPH	119			2.32	10.2	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 concentration for the sample is reported as the Total EPH.

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	04/04/25
Project:	Stockton	Date Received:	04/04/25
Client Sample ID:	GST1	SDG No.:	Q1736
Lab Sample ID:	Q1736-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	78.6
Sample Wt/Vol:	30.03	Units:	g
Soil Aliquot Vol:			uL
Prep Method :		Test:	EPH_F2

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068504.D	1	04/07/25	04/07/25	PB167477

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	110	E	1.16	5.08	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	579	E	1.50	2.54	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	29.3		40 - 140	59%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	24.7		40 - 140	49%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1736-01	Acq On:	07 Apr 2025 18:45
Client Sample ID:	GST1	Operator:	YP/AJ
Data file:	FC068504.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	3.349	6.652	2561760	22.54	300	ug/ml
Aliphatic C12-C16	6.653	10.053	4257325	37.687	200	ug/ml
Aliphatic C16-C21	10.054	13.420	11507056	104.388	300	ug/ml
Aliphatic C21-C28	13.421	17.087	124436506	1130	400	ug/ml
Aliphatic C28-C40	17.088	22.097	556531624	6840	600	ug/ml
Aliphatic EPH	3.349	22.097	699294271	8130		ug/ml
ortho-Terphenyl (SURR)	11.725	11.725	3188741	24.73		ug/ml
1-chlorooctadecane (SURR)	13.159	13.159	2696785	29.32		ug/ml
Aliphatic C9-C28	3.349	17.087	142762647	1290	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
 Data File : FC068504.D
 Signal(s) : FID1A.ch
 Acq On : 07 Apr 2025 18:45
 Operator : YP/AJ
 Sample : Q1736-01
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 GST1

Integration File: autoint1.e
 Quant Time: Apr 08 02:36:50 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Mon Apr 07 16:09:59 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	3188741	24.728 ug/ml
Spiked Amount	50.000	Recovery	= 49.46%
12) S 1-chlorooctadecane (S...	13.159	2696785	29.316 ug/ml
Spiked Amount	50.000	Recovery	= 58.63%

Target Compounds

(f)=RT Delta > 1/2 Window

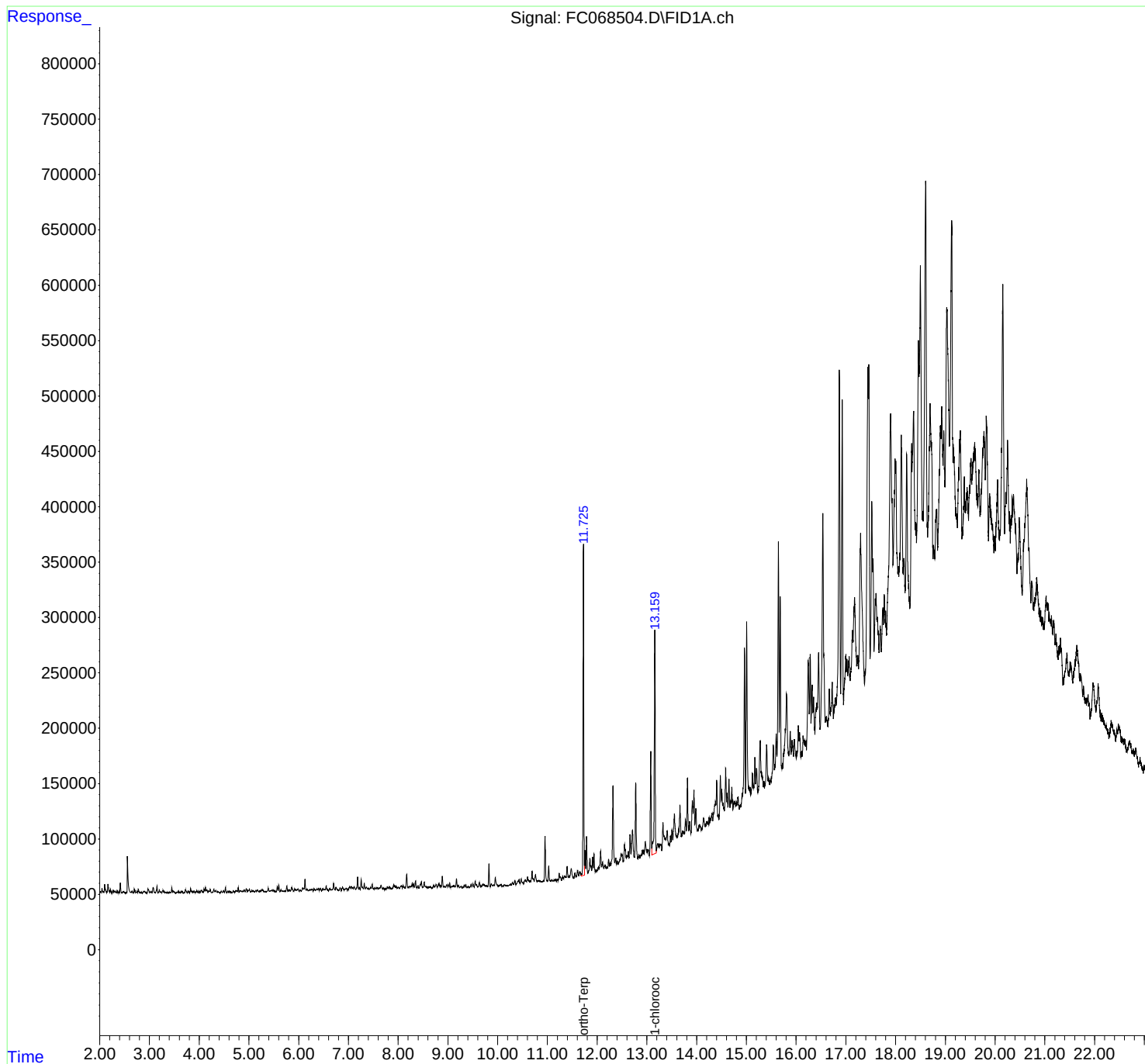
(m)=manual int.

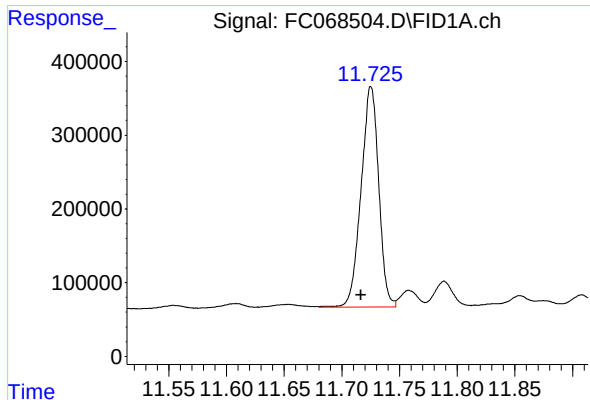
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
Data File : FC068504.D
Signal(s) : FID1A.ch
Acq On : 07 Apr 2025 18:45
Operator : YP/AJ
Sample : Q1736-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
GST1

Integration File: autoint1.e
Quant Time: Apr 08 02:36:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Mon Apr 07 16:09:59 2025
Response via : Initial Calibration
Integrator: ChemStation

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

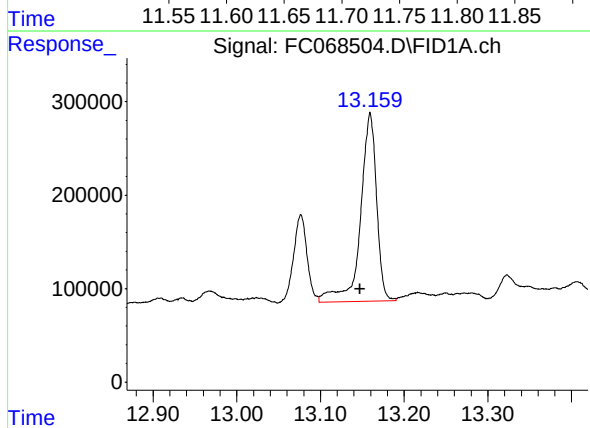




#9 ortho-Terphenyl (SURR)

R.T.: 11.725 min
Delta R.T.: 0.009 min
Response: 3188741
Conc: 24.73 ug/ml

Instrument :
FID_C
ClientSampleId :
GST1



#12 1-chlorooctadecane (SURR)

R.T.: 13.159 min
Delta R.T.: 0.012 min
Response: 2696785
Conc: 29.32 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
 Data File : FC068504.D
 Signal(s) : FID1A.ch
 Acq On : 07 Apr 2025 18:45
 Sample : Q1736-01
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.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	2.352	2.304	2.371	BV	1922	5613	0.02%	0.001%
2	2.385	2.371	2.396	PV	1014	7389	0.03%	0.001%
3	2.414	2.396	2.441	VV	8897	82084	0.28%	0.012%
4	2.482	2.441	2.514	VV	1198	18763	0.06%	0.003%
5	2.559	2.514	2.634	PV	31596	350015	1.21%	0.050%
6	2.646	2.634	2.672	VV	1737	21988	0.08%	0.003%
7	2.695	2.672	2.706	VV	3393	33376	0.11%	0.005%
8	2.710	2.706	2.728	VV	2378	16982	0.06%	0.002%
9	2.750	2.728	2.761	VV	1440	14813	0.05%	0.002%
10	2.777	2.761	2.864	VV	3587	50674	0.17%	0.007%
11	2.883	2.864	2.893	VV	1528	16312	0.06%	0.002%
12	2.903	2.893	2.954	VV	1613	17996	0.06%	0.003%
13	2.970	2.954	3.002	VV	3692	57102	0.20%	0.008%
14	3.018	3.002	3.028	VV	881	11394	0.04%	0.002%
15	3.039	3.028	3.053	VV	929	11537	0.04%	0.002%
16	3.075	3.053	3.120	VV	4853	79912	0.28%	0.011%
17	3.151	3.120	3.174	VV	6300	70512	0.24%	0.010%
18	3.200	3.174	3.220	VV	2671	33454	0.12%	0.005%
19	3.234	3.220	3.251	VV	1208	13564	0.05%	0.002%
20	3.272	3.251	3.287	VV	2315	32155	0.11%	0.005%
21	3.298	3.287	3.315	VV	1833	17706	0.06%	0.003%
22	3.329	3.315	3.369	VV	706	16280	0.06%	0.002%
23	3.389	3.369	3.412	VV	563	10177	0.04%	0.001%
24	3.449	3.412	3.463	VV	4963	49752	0.17%	0.007%
25	3.474	3.463	3.532	VV	2115	32786	0.11%	0.005%
26	3.554	3.532	3.567	PV	939	9122	0.03%	0.001%
27	3.581	3.567	3.595	VV	1294	14174	0.05%	0.002%
28	3.605	3.595	3.619	VV	846	8801	0.03%	0.001%
29	3.653	3.619	3.686	VV	1556	29617	0.10%	0.004%
30	3.727	3.686	3.757	VV	2716	48010	0.17%	0.007%
31	3.780	3.757	3.801	VV	1351	21760	0.07%	0.003%
32	3.828	3.801	3.850	VV	4308	52522	0.18%	0.007%
33	3.863	3.850	3.877	VV	1766	21353	0.07%	0.003%
34	3.900	3.877	3.917	VV	1809	29326	0.10%	0.004%
35	3.926	3.917	3.936	VV	837	7528	0.03%	0.001%
36	3.952	3.936	3.986	VV	2428	33494	0.12%	0.005%

					rteres			
37	4.003	3.986	4.017	VV	1254	11756	0.04%	0.002%
38	4.038	4.017	4.080	VV	2423	48575	0.17%	0.007%
39	4.098	4.080	4.111	VV	3533	36941	0.13%	0.005%
40	4.126	4.111	4.144	VV	5054	62225	0.21%	0.009%
41	4.154	4.144	4.177	VV	2923	37838	0.13%	0.005%
42	4.191	4.177	4.203	VV	1717	22136	0.08%	0.003%
43	4.222	4.203	4.247	VV	3221	43288	0.15%	0.006%
44	4.294	4.247	4.318	VV	3415	56269	0.19%	0.008%
45	4.335	4.318	4.363	VV	2276	37170	0.13%	0.005%
46	4.375	4.363	4.417	VV	955	18620	0.06%	0.003%
47	4.447	4.417	4.468	PV	1309	20483	0.07%	0.003%
48	4.489	4.468	4.508	VV	1628	24674	0.09%	0.003%
49	4.528	4.508	4.558	VV	4810	55980	0.19%	0.008%
50	4.575	4.558	4.589	VV	1658	17107	0.06%	0.002%
51	4.603	4.589	4.617	VV	1281	13610	0.05%	0.002%
52	4.633	4.617	4.663	VV	744	12820	0.04%	0.002%
53	4.685	4.663	4.716	VV	1465	25147	0.09%	0.004%
54	4.734	4.716	4.745	VV	1914	22801	0.08%	0.003%
55	4.753	4.745	4.771	VV	1477	19513	0.07%	0.003%
56	4.784	4.771	4.802	VV	4442	41680	0.14%	0.006%
57	4.818	4.802	4.828	VV	1842	18656	0.06%	0.003%
58	4.838	4.828	4.854	VV	1589	18891	0.07%	0.003%
59	4.865	4.854	4.876	VV	1469	13767	0.05%	0.002%
60	4.907	4.876	4.927	VV	2495	43217	0.15%	0.006%
61	4.947	4.927	4.967	VV	3382	47426	0.16%	0.007%
62	4.982	4.967	4.994	VV	1619	22579	0.08%	0.003%
63	5.011	4.994	5.031	VV	3039	38570	0.13%	0.005%
64	5.061	5.031	5.113	VV	1370	43154	0.15%	0.006%
65	5.141	5.113	5.155	VV	1900	24894	0.09%	0.004%
66	5.170	5.155	5.199	VV	2210	34603	0.12%	0.005%
67	5.229	5.199	5.241	VV	1579	24736	0.09%	0.004%
68	5.256	5.241	5.265	VV	2347	22650	0.08%	0.003%
69	5.275	5.265	5.320	VV	2275	35492	0.12%	0.005%
70	5.342	5.320	5.355	PV	515	6654	0.02%	0.001%
71	5.389	5.355	5.421	VV	3373	53517	0.18%	0.008%
72	5.437	5.421	5.450	VV	1128	15761	0.05%	0.002%
73	5.468	5.450	5.484	VV	2083	26670	0.09%	0.004%
74	5.499	5.484	5.551	VV	1190	23104	0.08%	0.003%
75	5.571	5.551	5.586	VV	4764	52795	0.18%	0.007%
76	5.601	5.586	5.626	VV	6145	68169	0.23%	0.010%
77	5.643	5.626	5.684	VV	1716	26776	0.09%	0.004%
78	5.729	5.684	5.737	VV	629	16304	0.06%	0.002%
79	5.762	5.737	5.781	VV	5172	62596	0.22%	0.009%
80	5.791	5.781	5.799	VV	1146	10536	0.04%	0.001%
81	5.815	5.799	5.835	VV	1435	23049	0.08%	0.003%
82	5.858	5.835	5.901	VV	3608	70461	0.24%	0.010%
83	5.919	5.901	5.934	VV	2340	29248	0.10%	0.004%
84	5.947	5.934	5.959	VV	1811	22671	0.08%	0.003%
85	5.987	5.959	6.011	VV	2151	44573	0.15%	0.006%
86	6.029	6.011	6.054	PV	1645	22245	0.08%	0.003%
87	6.080	6.054	6.094	VV	3329	47853	0.16%	0.007%
88	6.128	6.094	6.151	VV	11163	144680	0.50%	0.020%
89	6.172	6.151	6.190	VV	1909	29384	0.10%	0.004%

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90	6.232	6.190	6.247	VV	1926	39404	0.14%	0.006%
91	6.271	6.247	6.291	VV	1945	37037	0.13%	0.005%
92	6.317	6.291	6.333	VV	1771	32407	0.11%	0.005%
93	6.372	6.333	6.384	VV	1817	42242	0.15%	0.006%
94	6.400	6.384	6.418	VV	2649	35262	0.12%	0.005%
95	6.438	6.418	6.458	VV	2479	33574	0.12%	0.005%
96	6.487	6.458	6.505	VV	1914	35328	0.12%	0.005%
97	6.517	6.505	6.532	VV	1564	21115	0.07%	0.003%
98	6.553	6.532	6.569	VV	4696	55681	0.19%	0.008%
99	6.578	6.569	6.604	VV	1594	20031	0.07%	0.003%
100	6.625	6.604	6.641	PV	2255	26943	0.09%	0.004%
101	6.655	6.641	6.664	VV	1130	14896	0.05%	0.002%
102	6.703	6.664	6.725	VV	6820	97114	0.33%	0.014%
103	6.754	6.725	6.804	VV	3166	66716	0.23%	0.009%
104	6.832	6.804	6.856	VV	2479	38578	0.13%	0.005%
105	6.883	6.856	6.911	VV	2612	53560	0.18%	0.008%
106	6.959	6.911	6.981	VV	1922	53091	0.18%	0.008%
107	7.023	6.981	7.039	VV	2808	64393	0.22%	0.009%
108	7.056	7.039	7.076	VV	3370	60963	0.21%	0.009%
109	7.086	7.076	7.100	VV	2670	32217	0.11%	0.005%
110	7.117	7.100	7.145	VV	3375	56012	0.19%	0.008%
111	7.185	7.145	7.206	VV	11970	145760	0.50%	0.021%
112	7.219	7.206	7.238	VV	2151	30015	0.10%	0.004%
113	7.258	7.238	7.301	VV	9556	140243	0.48%	0.020%
114	7.320	7.301	7.339	VV	6057	69421	0.24%	0.010%
115	7.361	7.339	7.384	VV	2702	50476	0.17%	0.007%
116	7.394	7.384	7.424	VV	1354	24341	0.08%	0.003%
117	7.446	7.424	7.457	VV	2004	27637	0.10%	0.004%
118	7.479	7.457	7.516	VV	5196	81971	0.28%	0.012%
119	7.534	7.516	7.553	VV	1705	26852	0.09%	0.004%
120	7.574	7.553	7.592	VV	1744	33188	0.11%	0.005%
121	7.619	7.592	7.631	VV	1520	30658	0.11%	0.004%
122	7.656	7.631	7.694	VV	4055	85305	0.29%	0.012%
123	7.708	7.694	7.728	VV	1191	17448	0.06%	0.002%
124	7.746	7.728	7.758	VV	721	9381	0.03%	0.001%
125	7.782	7.758	7.801	VV	2531	40035	0.14%	0.006%
126	7.822	7.801	7.861	VV	2433	51416	0.18%	0.007%
127	7.910	7.861	7.949	VV	4199	114360	0.39%	0.016%
128	7.959	7.949	7.984	VV	2351	36579	0.13%	0.005%
129	8.002	7.984	8.021	VV	2135	31753	0.11%	0.004%
130	8.067	8.021	8.085	VV	3359	81649	0.28%	0.012%
131	8.102	8.085	8.145	VV	3337	66425	0.23%	0.009%
132	8.172	8.145	8.196	VV	13215	184879	0.64%	0.026%
133	8.205	8.196	8.218	VV	1664	19981	0.07%	0.003%
134	8.240	8.218	8.253	VV	2375	44664	0.15%	0.006%
135	8.284	8.253	8.299	VV	5405	88154	0.30%	0.012%
136	8.311	8.299	8.328	VV	4500	53406	0.18%	0.008%
137	8.350	8.328	8.379	VV	7219	100259	0.35%	0.014%
138	8.399	8.379	8.418	VV	2866	40519	0.14%	0.006%
139	8.468	8.418	8.490	VV	6492	138020	0.48%	0.020%
140	8.524	8.490	8.547	VV	5816	95887	0.33%	0.014%
141	8.557	8.547	8.592	VV	1807	38230	0.13%	0.005%

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142	8.606	8.592	8.617	VV	1311	16455	0.06%	0.002%
143	8.631	8.617	8.669	VV	1537	36739	0.13%	0.005%
144	8.714	8.669	8.734	VV	2913	52495	0.18%	0.007%
145	8.763	8.734	8.788	VV	3588	72604	0.25%	0.010%
146	8.820	8.788	8.853	VV	4783	109279	0.38%	0.015%
147	8.889	8.853	8.950	VV	10864	191426	0.66%	0.027%
148	8.974	8.950	8.988	VV	3036	44419	0.15%	0.006%
149	9.003	8.988	9.021	VV	3322	46703	0.16%	0.007%
150	9.037	9.021	9.057	VV	4571	54224	0.19%	0.008%
151	9.126	9.057	9.142	VV	2411	74873	0.26%	0.011%
152	9.174	9.142	9.194	VV	8414	109920	0.38%	0.016%
153	9.213	9.194	9.237	VV	2629	37277	0.13%	0.005%
154	9.259	9.237	9.290	VV	1140	19320	0.07%	0.003%
155	9.329	9.290	9.345	PV	2314	31770	0.11%	0.004%
156	9.361	9.345	9.391	VV	2878	31397	0.11%	0.004%
157	9.411	9.391	9.426	VV	806	8085	0.03%	0.001%
158	9.466	9.426	9.484	VV	2702	37972	0.13%	0.005%
159	9.502	9.484	9.526	VV	2947	41470	0.14%	0.006%
160	9.550	9.526	9.603	VV	5617	94044	0.32%	0.013%
161	9.631	9.603	9.661	VV	4039	69632	0.24%	0.010%
162	9.671	9.661	9.681	VV	1000	9642	0.03%	0.001%
163	9.703	9.681	9.716	VV	2538	38144	0.13%	0.005%
164	9.728	9.716	9.744	VV	2482	31616	0.11%	0.004%
165	9.756	9.744	9.769	VV	1368	17409	0.06%	0.002%
166	9.780	9.769	9.800	VV	1117	15084	0.05%	0.002%
167	9.827	9.800	9.851	VV	20679	204978	0.71%	0.029%
168	9.872	9.851	9.904	PV	2700	45591	0.16%	0.006%
169	9.919	9.904	9.932	VV	1345	19103	0.07%	0.003%
170	9.955	9.932	10.011	VV	8102	140516	0.48%	0.020%
171	10.038	10.011	10.051	VV	1081	18686	0.06%	0.003%
172	10.064	10.051	10.091	VV	1339	21186	0.07%	0.003%
173	10.133	10.091	10.157	PV	1163	18939	0.07%	0.003%
174	10.170	10.157	10.188	VV	595	8235	0.03%	0.001%
175	10.205	10.188	10.216	VV	315	2994	0.01%	0.000%
176	10.251	10.216	10.276	PV	1256	27239	0.09%	0.004%
177	10.299	10.276	10.322	VV	2871	44766	0.15%	0.006%
178	10.345	10.322	10.368	VV	3833	58579	0.20%	0.008%
179	10.430	10.368	10.454	VV	4800	129700	0.45%	0.018%
180	10.474	10.454	10.521	VV	5087	91584	0.32%	0.013%
181	10.551	10.521	10.581	VV	3536	88348	0.30%	0.013%
182	10.601	10.581	10.637	VV	6341	123724	0.43%	0.018%
183	10.646	10.637	10.663	VV	2729	35485	0.12%	0.005%
184	10.692	10.663	10.735	VV	11083	213762	0.74%	0.030%
185	10.761	10.735	10.796	VV	7493	151321	0.52%	0.021%
186	10.819	10.796	10.839	VV	2038	42915	0.15%	0.006%
187	10.851	10.839	10.867	VV	1797	22245	0.08%	0.003%
188	10.878	10.867	10.904	VV	946	16353	0.06%	0.002%
189	10.919	10.904	10.929	VV	1621	17570	0.06%	0.002%
190	10.954	10.929	10.998	VV	40851	479254	1.65%	0.068%
191	11.028	10.998	11.068	VV	14261	171109	0.59%	0.024%
192	11.088	11.068	11.120	VV	1748	22924	0.08%	0.003%
193	11.145	11.120	11.160	VV	1306	17390	0.06%	0.002%
194	11.174	11.160	11.188	VV	1464	13293	0.05%	0.002%

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195	11.202	11.188	11.221	VV	1090	13155	0.05%	0.002%
196	11.238	11.221	11.283	VV	6421	107540	0.37%	0.015%
197	11.310	11.283	11.327	PV	2987	47678	0.16%	0.007%
198	11.347	11.327	11.375	VV	3577	72016	0.25%	0.010%
199	11.398	11.375	11.419	VV	11820	153025	0.53%	0.022%
200	11.480	11.419	11.524	VV	8895	220605	0.76%	0.031%
201	11.555	11.524	11.574	PV	4364	55937	0.19%	0.008%
202	11.608	11.574	11.626	VV	6063	84568	0.29%	0.012%
203	11.653	11.626	11.678	VV	4331	77990	0.27%	0.011%
204	11.725	11.678	11.747	VV	300208	3188290	10.99%	0.451%
205	11.758	11.747	11.772	VV	22193	227023	0.78%	0.032%
206	11.789	11.772	11.814	VV	33822	370613	1.28%	0.052%
207	11.854	11.814	11.890	VV	13671	255698	0.88%	0.036%
208	11.908	11.890	11.922	VV	14114	154010	0.53%	0.022%
209	11.938	11.922	11.963	VV	16610	191142	0.66%	0.027%
210	11.977	11.963	11.994	VV	1612	15475	0.05%	0.002%
211	12.026	11.994	12.038	PV	3659	56133	0.19%	0.008%
212	12.069	12.038	12.091	VV	17627	256912	0.89%	0.036%
213	12.111	12.091	12.134	VV	6968	106567	0.37%	0.015%
214	12.158	12.134	12.179	VV	3846	61736	0.21%	0.009%
215	12.194	12.179	12.209	VV	1379	16889	0.06%	0.002%
216	12.230	12.209	12.248	VV	7817	88652	0.31%	0.013%
217	12.261	12.248	12.273	VV	4631	43204	0.15%	0.006%
218	12.319	12.273	12.356	VV	73213	1067111	3.68%	0.151%
219	12.374	12.356	12.392	VV	7343	103873	0.36%	0.015%
220	12.406	12.392	12.421	VV	3987	46233	0.16%	0.007%
221	12.482	12.421	12.524	VV	9307	300704	1.04%	0.043%
222	12.549	12.524	12.582	VV	16780	319616	1.10%	0.045%
223	12.627	12.582	12.641	VV	9416	212469	0.73%	0.030%
224	12.661	12.641	12.679	VV	24264	312784	1.08%	0.044%
225	12.710	12.679	12.749	VV	27762	615666	2.12%	0.087%
226	12.776	12.749	12.817	VV	67958	871481	3.00%	0.123%
227	12.844	12.817	12.861	VV	2588	51671	0.18%	0.007%
228	12.908	12.861	12.921	VV	6889	128018	0.44%	0.018%
229	12.934	12.921	12.946	VV	6851	74648	0.26%	0.011%
230	12.968	12.946	13.006	VV	13659	277684	0.96%	0.039%
231	13.024	13.006	13.048	VV	5757	99284	0.34%	0.014%
232	13.077	13.048	13.098	VV	93851	1054659	3.63%	0.149%
233	13.159	13.098	13.188	VV	197479	2709072	9.33%	0.384%
234	13.217	13.188	13.237	VV	8681	181466	0.63%	0.026%
235	13.249	13.237	13.300	VV	7965	233195	0.80%	0.033%
236	13.323	13.300	13.370	VV	25662	569504	1.96%	0.081%
237	13.407	13.370	13.450	VV	17730	491507	1.69%	0.070%
238	13.472	13.450	13.485	VV	11940	164238	0.57%	0.023%
239	13.503	13.485	13.519	VV	16139	250293	0.86%	0.035%
240	13.552	13.519	13.592	VV	31264	784564	2.70%	0.111%
241	13.603	13.592	13.614	VV	10449	133125	0.46%	0.019%
242	13.665	13.614	13.691	VV	37494	844832	2.91%	0.120%
243	13.722	13.691	13.735	VV	13204	295972	1.02%	0.042%
244	13.744	13.735	13.754	VV	11982	129417	0.45%	0.018%
245	13.775	13.754	13.792	VV	22659	382687	1.32%	0.054%
246	13.815	13.792	13.837	VV	60024	833334	2.87%	0.118%

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247	13.859	13.837	13.884	VV	19807	410438	1.41%	0.058%
248	13.914	13.884	13.928	VV	37368	650685	2.24%	0.092%
249	13.945	13.928	13.964	VV	46905	706817	2.44%	0.100%
250	13.984	13.964	14.021	VV	29917	605084	2.08%	0.086%
251	14.057	14.021	14.105	VV	14287	583175	2.01%	0.083%
252	14.137	14.105	14.170	VV	18519	556584	1.92%	0.079%
253	14.182	14.170	14.187	VV	13086	126108	0.43%	0.018%
254	14.209	14.187	14.234	VV	14950	391585	1.35%	0.055%
255	14.249	14.234	14.262	VV	18002	267314	0.92%	0.038%
256	14.304	14.262	14.322	VV	21158	611368	2.11%	0.087%
257	14.402	14.322	14.447	VV	49171	1910825	6.58%	0.271%
258	14.475	14.447	14.493	VV	52186	921909	3.18%	0.131%
259	14.505	14.493	14.522	VV	40634	591713	2.04%	0.084%
260	14.531	14.522	14.556	VV	27692	483892	1.67%	0.069%
261	14.584	14.556	14.601	VV	58462	1027296	3.54%	0.145%
262	14.610	14.601	14.628	VV	34257	488703	1.68%	0.069%
263	14.648	14.628	14.668	VV	47573	806303	2.78%	0.114%
264	14.707	14.668	14.729	VV	39435	1024572	3.53%	0.145%
265	14.771	14.729	14.792	VV	25959	875389	3.02%	0.124%
266	14.833	14.792	14.858	VV	28475	939223	3.24%	0.133%
267	14.961	14.858	14.982	VV	161486	3542982	12.21%	0.502%
268	15.004	14.982	15.058	VV	184239	3375080	11.63%	0.478%
269	15.073	15.058	15.085	VV	34283	534210	1.84%	0.076%
270	15.120	15.085	15.151	VV	46612	1404478	4.84%	0.199%
271	15.169	15.151	15.186	VV	58734	952787	3.28%	0.135%
272	15.204	15.186	15.231	VV	49443	1081853	3.73%	0.153%
273	15.276	15.231	15.340	VV	73109	2983814	10.28%	0.423%
274	15.352	15.340	15.374	VV	35575	661736	2.28%	0.094%
275	15.406	15.374	15.467	VV	68197	2407372	8.29%	0.341%
276	15.541	15.467	15.565	VV	65400	2572485	8.86%	0.364%
277	15.598	15.565	15.615	VV	75084	1751202	6.03%	0.248%
278	15.643	15.615	15.661	VV	247538	3892243	13.41%	0.551%
279	15.678	15.661	15.723	VV	197518	3435249	11.84%	0.486%
280	15.808	15.723	15.853	VV	108044	5367635	18.49%	0.760%
281	15.879	15.853	15.898	VV	73876	1631421	5.62%	0.231%
282	15.921	15.898	15.944	VV	63142	1634774	5.63%	0.231%
283	15.962	15.944	16.000	VV	64206	1910076	6.58%	0.270%
284	16.044	16.000	16.058	VV	75985	2068730	7.13%	0.293%
285	16.068	16.058	16.098	VV	70101	1436384	4.95%	0.203%
286	16.110	16.098	16.119	VV	52583	653412	2.25%	0.093%
287	16.143	16.119	16.162	VV	65030	1499910	5.17%	0.212%
288	16.174	16.162	16.207	VV	61068	1571598	5.41%	0.223%
289	16.242	16.207	16.264	VV	131742	3335048	11.49%	0.472%
290	16.282	16.264	16.300	VV	136913	2328799	8.02%	0.330%
291	16.317	16.300	16.334	VV	106972	1993482	6.87%	0.282%
292	16.349	16.334	16.375	VV	98029	2033566	7.01%	0.288%
293	16.414	16.375	16.424	VV	92394	2480094	8.55%	0.351%
294	16.450	16.424	16.483	VV	136720	3529283	12.16%	0.500%
295	16.535	16.483	16.596	VV	260593	8739354	30.11%	1.238%
296	16.610	16.596	16.637	VV	77412	1827135	6.30%	0.259%
297	16.665	16.637	16.688	VV	100645	2567868	8.85%	0.364%
298	16.723	16.688	16.748	VV	106593	3170272	10.92%	0.449%
299	16.792	16.748	16.804	VV	90078	2880356	9.92%	0.408%

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300	16.868	16.804	16.894	VV	383727	9657233	33.27%	1.368%
301	16.925	16.894	16.952	VV	355454	6797696	23.42%	0.963%
302	16.997	16.952	17.014	VV	124416	4078937	14.05%	0.578%
303	17.022	17.014	17.036	VV	123316	1544202	5.32%	0.219%
304	17.064	17.036	17.085	VV	123261	3306305	11.39%	0.468%
305	17.133	17.085	17.142	VV	148323	4291567	14.79%	0.608%
306	17.175	17.142	17.218	VV	174167	6809121	23.46%	0.964%
307	17.235	17.218	17.254	VV	122605	2546611	8.77%	0.361%
308	17.294	17.254	17.374	VV	231269	11553367	39.81%	1.636%
309	17.441	17.374	17.451	VV	374376	9814645	33.82%	1.390%
310	17.460	17.451	17.487	VV	384533	5666140	19.52%	0.802%
311	17.521	17.487	17.568	VV	257070	8907550	30.69%	1.261%
312	17.604	17.568	17.667	VV	174259	8955429	30.86%	1.268%
313	17.690	17.667	17.711	VV	143231	3496011	12.05%	0.495%
314	17.743	17.711	17.756	VV	160238	3917446	13.50%	0.555%
315	17.772	17.756	17.816	VV	170564	5478206	18.88%	0.776%
316	17.896	17.816	17.948	VV	331433	18233559	62.82%	2.582%
317	17.989	17.948	18.063	VV	290311	16083005	55.41%	2.277%
318	18.112	18.063	18.154	VV	307424	12644809	43.57%	1.791%
319	18.169	18.154	18.189	VV	198029	3956459	13.63%	0.560%
320	18.222	18.189	18.287	VV	291782	11827382	40.75%	1.675%
321	18.321	18.287	18.331	VV	299401	6141254	21.16%	0.870%
322	18.360	18.331	18.421	VV	330194	14293695	49.25%	2.024%
323	18.458	18.421	18.474	VV	387603	9852016	33.95%	1.395%
324	18.496	18.474	18.538	VV	454156	13485171	46.46%	1.910%
325	18.603	18.538	18.643	VV	533605	20944769	72.17%	2.966%
326	18.694	18.643	18.754	VV	329976	17788466	61.29%	2.519%
327	18.766	18.754	18.788	VV	201197	3912947	13.48%	0.554%
328	18.816	18.788	18.845	VV	233364	7479863	25.77%	1.059%
329	18.925	18.845	18.950	VV	322968	17372169	59.86%	2.460%
330	18.968	18.950	18.994	VV	303353	7393186	25.47%	1.047%
331	19.032	18.994	19.081	VV	410742	18109700	62.40%	2.564%
332	19.125	19.081	19.240	VV	487560	29023100	100.00%	4.110%
333	19.300	19.240	19.347	VV	297758	16107289	55.50%	2.281%
334	19.379	19.347	19.408	VV	254031	8438936	29.08%	1.195%
335	19.437	19.408	19.465	VV	245137	7962561	27.44%	1.128%
336	19.513	19.465	19.531	VV	266552	9882874	34.05%	1.400%
337	19.586	19.531	19.654	VV	283253	19084540	65.76%	2.703%
338	19.673	19.654	19.696	VV	258709	6022060	20.75%	0.853%
339	19.775	19.696	19.802	VV	288772	16387448	56.46%	2.321%
340	19.826	19.802	19.867	VV	300586	10078131	34.72%	1.427%
341	19.888	19.867	19.975	VV	231275	13684448	47.15%	1.938%
342	19.988	19.975	20.004	VV	191864	3285495	11.32%	0.465%
343	20.048	20.004	20.102	VV	240643	12224066	42.12%	1.731%
344	20.154	20.102	20.191	VV	416141	15145855	52.19%	2.145%
345	20.251	20.191	20.305	VV	274125	15308006	52.74%	2.168%
346	20.371	20.305	20.439	VV	225762	16391057	56.48%	2.321%
347	20.489	20.439	20.544	VV	200378	10676142	36.78%	1.512%
348	20.635	20.544	20.720	VV	236532	19216955	66.21%	2.721%
349	20.742	20.720	20.777	VV	141377	4478338	15.43%	0.634%
350	20.836	20.777	20.931	VV	145316	11300084	38.93%	1.600%
351	20.940	20.931	20.988	VV	107244	3516776	12.12%	0.498%

						rteres		
352	21.024	20.988	21.162	VV	124158	11305713	38.95%	1.601%
353	21.182	21.162	21.206	VV	101553	2516103	8.67%	0.356%
354	21.222	21.206	21.263	VV	87195	2686643	9.26%	0.380%
355	21.315	21.263	21.362	VV	83862	4125350	14.21%	0.584%
356	21.371	21.362	21.380	VV	46800	485336	1.67%	0.069%
357	21.443	21.380	21.488	VV	67686	3538685	12.19%	0.501%
358	21.519	21.488	21.561	VV	59050	2293252	7.90%	0.325%
359	21.643	21.561	21.717	VV	73331	5198319	17.91%	0.736%
360	21.730	21.717	21.815	VV	43625	1852072	6.38%	0.262%
361	21.824	21.815	21.834	VV	22098	237449	0.82%	0.034%
362	21.868	21.834	21.881	VV	25469	588218	2.03%	0.083%
363	21.890	21.881	21.908	VV	17889	215984	0.74%	0.031%
364	21.969	21.908	22.029	VV	33712	1377468	4.75%	0.195%
365	22.071	22.029	22.129	VV	31984	942328	3.25%	0.133%

Sum of corrected areas: 706171261

Aliphatic EPH 040225.M Tue Apr 08 03:26:29 2025

Report of Analysis

Client:	G Environmental	Date Collected:	04/04/25
Project:	Stockton	Date Received:	04/04/25
Client Sample ID:	GST1DL	SDG No.:	Q1736
Lab Sample ID:	Q1736-01DL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	78.6
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068510.D	2	04/07/25	04/08/25	PB167477

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	119		2.32	10.2	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	606	E	3.00	5.08	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	14.8		40 - 140	59%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	12.4		40 - 140	49%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1736-01DL	Acq On:	08 Apr 2025 09:30
Client Sample ID:	GST1DL	Operator:	YP/AJ
Data file:	FC068510.D	Misc:	
Instrument:	FID_C	ALS Vial:	11
Dilution Factor:	2	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.349	6.653	1320353	11.617	300	ug/ml
Aliphatic C12-C16	6.654	10.055	2155348	19.08	200	ug/ml
Aliphatic C16-C21	10.056	13.422	6460622	58.608	300	ug/ml
Aliphatic C21-C28	13.423	17.087	67890917	615.253	400	ug/ml
Aliphatic C28-C40	17.088	22.094	291387982	3580	600	ug/ml
Aliphatic EPH	3.349	22.094	369215222	4280		ug/ml
ortho-Terphenyl (SURR)	11.722	11.722	1595521	12.37		ug/ml
1-chlorooctadecane (SURR)	13.156	13.156	1366124	14.85		ug/ml
Aliphatic C9-C28	3.349	17.087	77827240	704.558	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040825AL\
 Data File : FC068510.D
 Signal(s) : FID1A.ch
 Acq On : 08 Apr 2025 09:30
 Operator : YP/AJ
 Sample : Q1736-01DL 2X
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 GST1DL

Integration File: autoint1.e
 Quant Time: Apr 09 04:12:53 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Mon Apr 07 16:09:59 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	1595521	12.373 ug/ml
Spiked Amount 50.000		Recovery =	24.75%
12) S 1-chlorooctadecane (S...	13.156	1366124	14.851 ug/ml
Spiked Amount 50.000		Recovery =	29.70%

Target Compounds

(f)=RT Delta > 1/2 Window

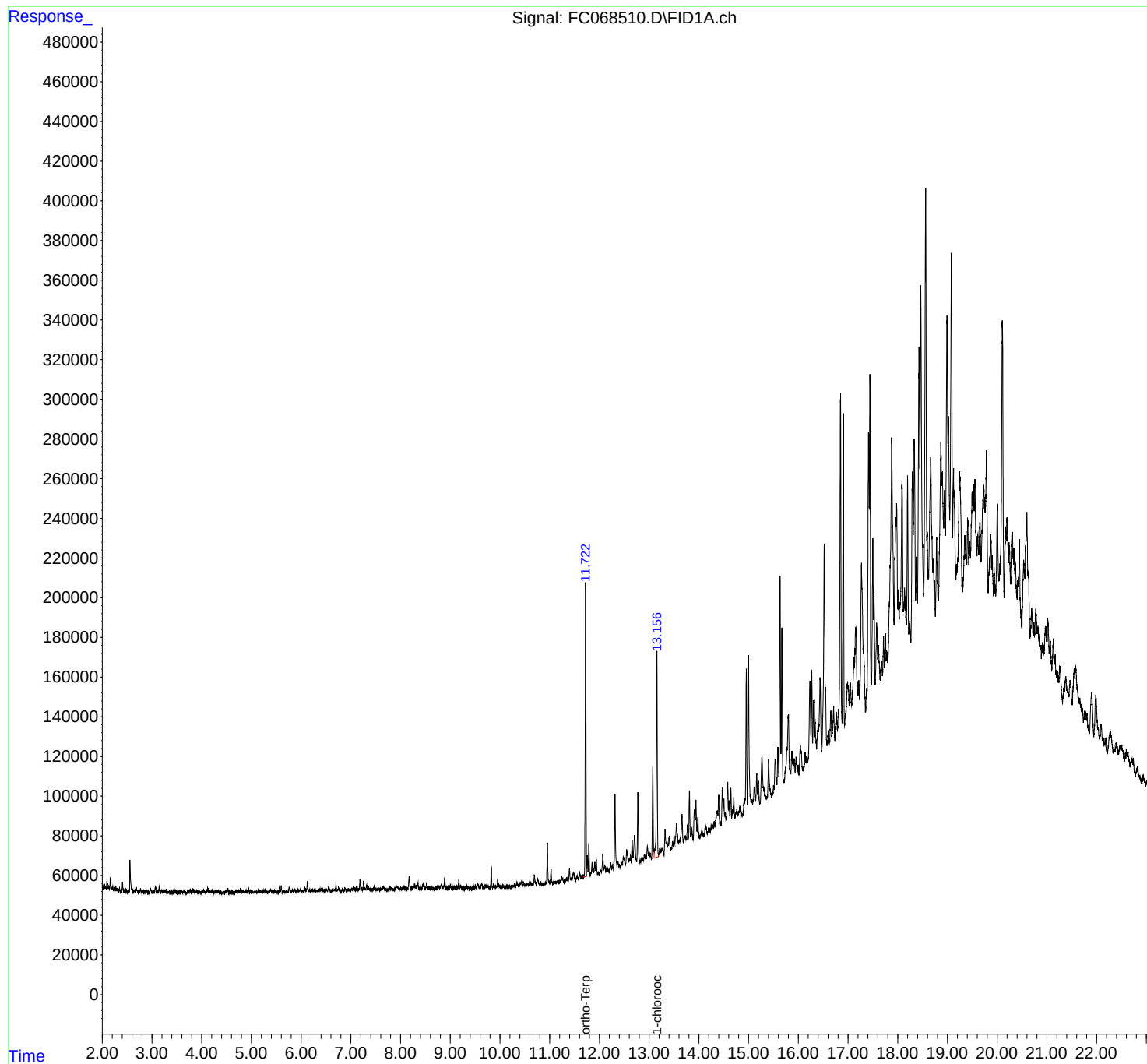
(m)=manual int.

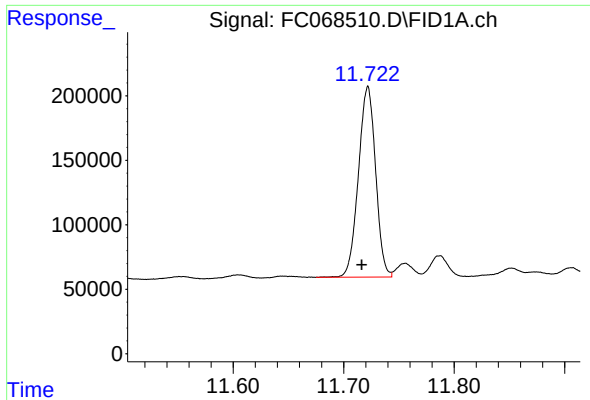
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040825AL\
Data File : FC068510.D
Signal(s) : FID1A.ch
Acq On : 08 Apr 2025 09:30
Operator : YP/AJ
Sample : Q1736-01DL 2X
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
GST1DL

Integration File: autoint1.e
Quant Time: Apr 09 04:12:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Mon Apr 07 16:09:59 2025
Response via : Initial Calibration
Integrator: ChemStation

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

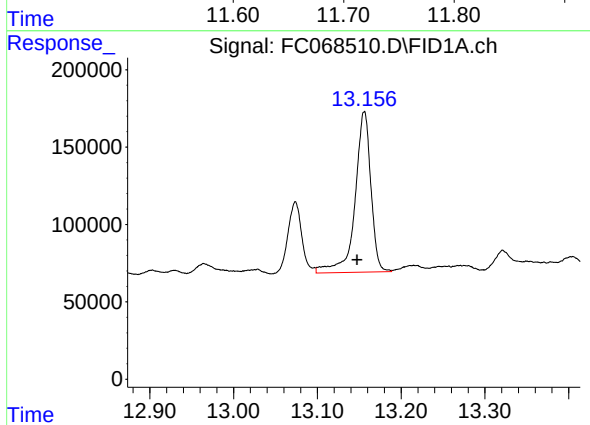




#9 ortho-Terphenyl (SURR)

R.T.: 11.722 min
Delta R.T.: 0.005 min
Response: 1595521
Conc: 12.37 ug/ml

Instrument :
FID_C
ClientSampleId :
GST1DL



#12 1-chlorooctadecane (SURR)

R.T.: 13.156 min
Delta R.T.: 0.009 min
Response: 1366124
Conc: 14.85 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040825AL\
 Data File : FC068510.D
 Signal(s) : FID1A.ch
 Acq On : 08 Apr 2025 09:30
 Sample : Q1736-01DL 2X
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.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	2.345	2.304	2.364	BV	974	3472	0.03%	0.001%
2	2.378	2.364	2.389	PV	558	4511	0.04%	0.001%
3	2.407	2.389	2.447	VV	4541	41684	0.38%	0.011%
4	2.475	2.447	2.503	VV	550	8372	0.08%	0.002%
5	2.515	2.503	2.522	PV	90	416	0.00%	0.000%
6	2.558	2.522	2.626	VV	14082	175360	1.61%	0.047%
7	2.640	2.626	2.669	VV	904	13271	0.12%	0.004%
8	2.689	2.669	2.699	VV	1636	16481	0.15%	0.004%
9	2.704	2.699	2.723	VV	1182	8495	0.08%	0.002%
10	2.744	2.723	2.755	VV	703	6332	0.06%	0.002%
11	2.771	2.755	2.854	VV	1801	24534	0.23%	0.007%
12	2.896	2.854	2.931	VV	836	17320	0.16%	0.005%
13	2.964	2.931	2.996	PV	1831	28409	0.26%	0.008%
14	3.013	2.996	3.023	VV	439	6059	0.06%	0.002%
15	3.034	3.023	3.051	VV	518	6561	0.06%	0.002%
16	3.069	3.051	3.118	VV	2494	40058	0.37%	0.011%
17	3.145	3.118	3.166	VV	3036	35260	0.32%	0.009%
18	3.194	3.166	3.216	VV	1361	18961	0.17%	0.005%
19	3.230	3.216	3.244	VV	675	7583	0.07%	0.002%
20	3.267	3.244	3.282	VV	1136	16080	0.15%	0.004%
21	3.292	3.282	3.310	VV	938	8910	0.08%	0.002%
22	3.337	3.310	3.362	VV	444	8902	0.08%	0.002%
23	3.384	3.362	3.409	VV	339	5844	0.05%	0.002%
24	3.445	3.409	3.459	VV	2482	24575	0.23%	0.007%
25	3.469	3.459	3.525	VV	1097	16092	0.15%	0.004%
26	3.549	3.525	3.561	PV	492	5144	0.05%	0.001%
27	3.576	3.561	3.588	VV	661	6897	0.06%	0.002%
28	3.600	3.588	3.615	VV	583	5419	0.05%	0.001%
29	3.648	3.615	3.684	VV	718	15043	0.14%	0.004%
30	3.723	3.684	3.743	VV	1284	21723	0.20%	0.006%
31	3.755	3.743	3.796	VV	1156	23904	0.22%	0.006%
32	3.824	3.796	3.848	VV	2156	27277	0.25%	0.007%
33	3.860	3.848	3.874	VV	968	11256	0.10%	0.003%
34	3.896	3.874	3.912	VV	930	15132	0.14%	0.004%
35	3.922	3.912	3.933	VV	502	4685	0.04%	0.001%
36	3.948	3.933	3.983	VV	1162	16527	0.15%	0.004%

					rteres			
37	3.999	3.983	4.011	VV	628	5424	0.05%	0.001%
38	4.033	4.011	4.079	VV	1178	25901	0.24%	0.007%
39	4.096	4.079	4.108	VV	1766	17765	0.16%	0.005%
40	4.123	4.108	4.138	VV	2441	27308	0.25%	0.007%
41	4.151	4.138	4.173	VV	1337	18028	0.17%	0.005%
42	4.188	4.173	4.200	VV	842	11386	0.10%	0.003%
43	4.219	4.200	4.244	VV	1578	20504	0.19%	0.005%
44	4.291	4.244	4.314	VV	1668	26800	0.25%	0.007%
45	4.331	4.314	4.359	VV	1174	18960	0.17%	0.005%
46	4.371	4.359	4.382	VV	508	4914	0.05%	0.001%
47	4.391	4.382	4.414	VV	384	3337	0.03%	0.001%
48	4.443	4.414	4.463	PV	652	9314	0.09%	0.002%
49	4.485	4.463	4.508	VV	848	13216	0.12%	0.004%
50	4.525	4.508	4.555	VV	2264	26059	0.24%	0.007%
51	4.572	4.555	4.586	VV	787	8353	0.08%	0.002%
52	4.599	4.586	4.614	VV	596	6825	0.06%	0.002%
53	4.625	4.614	4.658	VV	439	6740	0.06%	0.002%
54	4.684	4.658	4.713	VV	859	16745	0.15%	0.004%
55	4.731	4.713	4.742	VV	1109	14495	0.13%	0.004%
56	4.749	4.742	4.766	VV	912	11011	0.10%	0.003%
57	4.782	4.766	4.799	VV	2333	22784	0.21%	0.006%
58	4.815	4.799	4.828	VV	989	11347	0.10%	0.003%
59	4.835	4.828	4.849	VV	889	8744	0.08%	0.002%
60	4.861	4.849	4.872	VV	723	7545	0.07%	0.002%
61	4.905	4.872	4.925	VV	1229	22609	0.21%	0.006%
62	4.944	4.925	4.964	VV	1550	21428	0.20%	0.006%
63	4.977	4.964	4.991	VV	644	8939	0.08%	0.002%
64	5.008	4.991	5.028	VV	1312	16424	0.15%	0.004%
65	5.059	5.028	5.071	VV	674	10988	0.10%	0.003%
66	5.077	5.071	5.111	VV	588	9909	0.09%	0.003%
67	5.138	5.111	5.151	VV	867	11260	0.10%	0.003%
68	5.169	5.151	5.196	VV	1054	17020	0.16%	0.005%
69	5.226	5.196	5.238	VV	841	12839	0.12%	0.003%
70	5.254	5.238	5.295	VV	1165	27084	0.25%	0.007%
71	5.303	5.295	5.316	VV	358	3002	0.03%	0.001%
72	5.337	5.316	5.353	PV	392	5493	0.05%	0.001%
73	5.388	5.353	5.416	VV	1793	28005	0.26%	0.008%
74	5.437	5.416	5.447	VV	553	8682	0.08%	0.002%
75	5.465	5.447	5.482	VV	1030	13819	0.13%	0.004%
76	5.496	5.482	5.544	VV	643	13295	0.12%	0.004%
77	5.568	5.544	5.584	VV	2443	27721	0.25%	0.007%
78	5.599	5.584	5.624	VV	3070	33353	0.31%	0.009%
79	5.641	5.624	5.676	PV	845	13356	0.12%	0.004%
80	5.705	5.676	5.714	VV	374	6910	0.06%	0.002%
81	5.725	5.714	5.738	VV	329	3851	0.04%	0.001%
82	5.760	5.738	5.801	VV	2614	37415	0.34%	0.010%
83	5.815	5.801	5.832	VV	632	10344	0.09%	0.003%
84	5.856	5.832	5.897	VV	1874	37594	0.34%	0.010%
85	5.918	5.897	5.931	VV	948	12230	0.11%	0.003%
86	5.945	5.931	5.957	VV	948	11864	0.11%	0.003%
87	5.984	5.957	6.009	VV	1177	23902	0.22%	0.006%
88	6.027	6.009	6.050	VV	935	12969	0.12%	0.003%
89	6.079	6.050	6.093	VV	1664	24977	0.23%	0.007%

					rteres			
90	6.126	6.093	6.151	VV	5320	71620	0.66%	0.019%
91	6.170	6.151	6.188	VV	979	14341	0.13%	0.004%
92	6.230	6.188	6.248	VV	951	21011	0.19%	0.006%
93	6.272	6.248	6.291	VV	996	19423	0.18%	0.005%
94	6.305	6.291	6.332	VV	876	16009	0.15%	0.004%
95	6.370	6.332	6.383	VV	999	22198	0.20%	0.006%
96	6.398	6.383	6.418	VV	1395	19368	0.18%	0.005%
97	6.437	6.418	6.458	VV	1331	17520	0.16%	0.005%
98	6.486	6.458	6.502	VV	956	17489	0.16%	0.005%
99	6.516	6.502	6.534	VV	814	12534	0.12%	0.003%
100	6.551	6.534	6.568	VV	2285	26324	0.24%	0.007%
101	6.577	6.568	6.602	VV	786	9170	0.08%	0.002%
102	6.624	6.602	6.668	PV	1223	23041	0.21%	0.006%
103	6.676	6.668	6.684	VV	665	6246	0.06%	0.002%
104	6.702	6.684	6.723	VV	3410	40275	0.37%	0.011%
105	6.753	6.723	6.802	VV	1559	32650	0.30%	0.009%
106	6.831	6.802	6.856	VV	1205	18758	0.17%	0.005%
107	6.882	6.856	6.908	VV	1307	25359	0.23%	0.007%
108	6.955	6.908	6.977	VV	938	26381	0.24%	0.007%
109	7.025	6.977	7.038	VV	1317	29806	0.27%	0.008%
110	7.056	7.038	7.075	VV	1867	32036	0.29%	0.009%
111	7.084	7.075	7.101	VV	1311	16401	0.15%	0.004%
112	7.116	7.101	7.144	VV	1776	28214	0.26%	0.008%
113	7.184	7.144	7.205	VV	5818	73219	0.67%	0.020%
114	7.218	7.205	7.237	VV	1049	15003	0.14%	0.004%
115	7.257	7.237	7.300	VV	4851	71225	0.65%	0.019%
116	7.319	7.300	7.338	VV	2977	34524	0.32%	0.009%
117	7.359	7.338	7.424	VV	1395	37717	0.35%	0.010%
118	7.445	7.424	7.458	VV	991	14536	0.13%	0.004%
119	7.477	7.458	7.518	VV	2624	41402	0.38%	0.011%
120	7.534	7.518	7.549	VV	798	11833	0.11%	0.003%
121	7.570	7.549	7.588	VV	912	15935	0.15%	0.004%
122	7.601	7.588	7.631	VV	716	16046	0.15%	0.004%
123	7.654	7.631	7.691	VV	2036	41526	0.38%	0.011%
124	7.707	7.691	7.728	VV	729	9833	0.09%	0.003%
125	7.742	7.728	7.756	VV	425	5435	0.05%	0.001%
126	7.780	7.756	7.798	VV	1129	19403	0.18%	0.005%
127	7.821	7.798	7.861	VV	1192	28409	0.26%	0.008%
128	7.874	7.861	7.884	VV	599	6455	0.06%	0.002%
129	7.910	7.884	7.984	VV	2143	72393	0.66%	0.019%
130	8.001	7.984	8.024	VV	1053	17516	0.16%	0.005%
131	8.066	8.024	8.083	VV	1707	40371	0.37%	0.011%
132	8.100	8.083	8.142	VV	1686	34314	0.31%	0.009%
133	8.172	8.142	8.194	VV	6736	93915	0.86%	0.025%
134	8.205	8.194	8.216	VV	866	11207	0.10%	0.003%
135	8.240	8.216	8.254	VV	1274	25484	0.23%	0.007%
136	8.283	8.254	8.297	VV	2970	43880	0.40%	0.012%
137	8.310	8.297	8.326	VV	2327	27846	0.26%	0.007%
138	8.349	8.326	8.377	VV	3655	52432	0.48%	0.014%
139	8.397	8.377	8.418	VV	1440	20796	0.19%	0.006%
140	8.446	8.418	8.453	VV	2012	25777	0.24%	0.007%
141	8.467	8.453	8.488	VV	3228	42330	0.39%	0.011%

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142	8.523	8.488	8.547	VV	2844	50270	0.46%	0.013%
143	8.557	8.547	8.591	VV	1014	20223	0.19%	0.005%
144	8.605	8.591	8.614	VV	764	8453	0.08%	0.002%
145	8.633	8.614	8.667	VV	785	18359	0.17%	0.005%
146	8.714	8.667	8.729	VV	1208	22010	0.20%	0.006%
147	8.762	8.729	8.786	VV	1803	39015	0.36%	0.010%
148	8.818	8.786	8.850	VV	2363	53934	0.49%	0.014%
149	8.888	8.850	8.913	VV	5553	85331	0.78%	0.023%
150	8.925	8.913	8.948	VV	801	14144	0.13%	0.004%
151	8.973	8.948	8.986	VV	1502	21913	0.20%	0.006%
152	9.002	8.986	9.020	VV	1792	24358	0.22%	0.007%
153	9.036	9.020	9.055	VV	2372	27775	0.25%	0.007%
154	9.089	9.055	9.099	VV	839	17746	0.16%	0.005%
155	9.126	9.099	9.142	VV	1281	22928	0.21%	0.006%
156	9.172	9.142	9.194	VV	4220	56029	0.51%	0.015%
157	9.211	9.194	9.233	VV	1431	18335	0.17%	0.005%
158	9.258	9.233	9.285	VV	556	9787	0.09%	0.003%
159	9.328	9.285	9.344	VV	1119	15824	0.15%	0.004%
160	9.360	9.344	9.391	VV	1386	16014	0.15%	0.004%
161	9.408	9.391	9.424	VV	423	4601	0.04%	0.001%
162	9.465	9.424	9.486	PV	1447	21667	0.20%	0.006%
163	9.504	9.486	9.525	VV	1141	15717	0.14%	0.004%
164	9.549	9.525	9.602	VV	2926	50954	0.47%	0.014%
165	9.630	9.602	9.660	VV	2036	36839	0.34%	0.010%
166	9.671	9.660	9.684	VV	584	7097	0.07%	0.002%
167	9.703	9.684	9.718	VV	1250	19907	0.18%	0.005%
168	9.728	9.718	9.800	VV	1124	30743	0.28%	0.008%
169	9.825	9.800	9.849	VV	10286	102282	0.94%	0.027%
170	9.871	9.849	9.905	PV	1361	26299	0.24%	0.007%
171	9.920	9.905	9.932	VV	659	9919	0.09%	0.003%
172	9.954	9.932	10.016	VV	4378	73719	0.68%	0.020%
173	10.032	10.016	10.043	VV	477	6268	0.06%	0.002%
174	10.062	10.043	10.101	VV	796	13499	0.12%	0.004%
175	10.132	10.101	10.204	PV	636	15339	0.14%	0.004%
176	10.254	10.204	10.275	VV	657	14337	0.13%	0.004%
177	10.297	10.275	10.324	VV	1528	25303	0.23%	0.007%
178	10.343	10.324	10.368	VV	2040	29210	0.27%	0.008%
179	10.405	10.368	10.413	VV	1605	25061	0.23%	0.007%
180	10.428	10.413	10.453	VV	2311	32615	0.30%	0.009%
181	10.471	10.453	10.516	VV	2219	31684	0.29%	0.008%
182	10.551	10.516	10.579	PV	1215	26210	0.24%	0.007%
183	10.600	10.579	10.641	VV	2631	44833	0.41%	0.012%
184	10.647	10.641	10.660	VV	674	5206	0.05%	0.001%
185	10.692	10.660	10.733	VV	5216	82513	0.76%	0.022%
186	10.759	10.733	10.794	VV	3170	57838	0.53%	0.016%
187	10.818	10.794	10.837	VV	636	11304	0.10%	0.003%
188	10.848	10.837	10.864	VV	717	5962	0.05%	0.002%
189	10.890	10.864	10.900	PV	279	4371	0.04%	0.001%
190	10.917	10.900	10.928	VV	777	7908	0.07%	0.002%
191	10.953	10.928	10.996	VV	20748	235028	2.16%	0.063%
192	11.027	10.996	11.065	VV	7274	89747	0.82%	0.024%
193	11.087	11.065	11.111	VV	909	14550	0.13%	0.004%
194	11.147	11.111	11.160	VV	657	12485	0.11%	0.003%

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195	11.174	11.160	11.187	VV	749	7913	0.07%	0.002%
196	11.202	11.187	11.215	VV	661	7658	0.07%	0.002%
197	11.237	11.215	11.252	VV	3016	38001	0.35%	0.010%
198	11.260	11.252	11.282	VV	1705	18984	0.17%	0.005%
199	11.309	11.282	11.328	PV	1499	26082	0.24%	0.007%
200	11.343	11.328	11.356	VV	1729	23549	0.22%	0.006%
201	11.362	11.356	11.371	VV	1290	11373	0.10%	0.003%
202	11.397	11.371	11.417	VV	6253	80095	0.73%	0.021%
203	11.478	11.417	11.521	VV	4438	113125	1.04%	0.030%
204	11.553	11.521	11.574	PV	1954	29610	0.27%	0.008%
205	11.605	11.574	11.626	VV	2992	43393	0.40%	0.012%
206	11.646	11.626	11.674	VV	1837	33585	0.31%	0.009%
207	11.722	11.674	11.744	VV	147306	1624475	14.91%	0.436%
208	11.755	11.744	11.770	VV	11031	115448	1.06%	0.031%
209	11.787	11.770	11.813	VV	16874	190816	1.75%	0.051%
210	11.852	11.813	11.888	VV	6793	141602	1.30%	0.038%
211	11.906	11.888	11.920	VV	6763	83226	0.76%	0.022%
212	11.936	11.920	11.961	VV	8010	101344	0.93%	0.027%
213	11.976	11.961	11.988	VV	997	10347	0.09%	0.003%
214	12.027	11.988	12.037	VV	1769	34634	0.32%	0.009%
215	12.068	12.037	12.090	VV	9887	141191	1.30%	0.038%
216	12.108	12.090	12.134	VV	3955	62730	0.58%	0.017%
217	12.158	12.134	12.180	VV	2352	41860	0.38%	0.011%
218	12.196	12.180	12.206	VV	1160	13751	0.13%	0.004%
219	12.228	12.206	12.244	VV	4577	56426	0.52%	0.015%
220	12.258	12.244	12.272	VV	2766	32482	0.30%	0.009%
221	12.313	12.272	12.356	VV	38392	541797	4.97%	0.145%
222	12.374	12.356	12.392	VV	4520	69773	0.64%	0.019%
223	12.405	12.392	12.421	VV	2489	34958	0.32%	0.009%
224	12.481	12.421	12.493	VV	5798	140836	1.29%	0.038%
225	12.498	12.493	12.523	VV	5143	65049	0.60%	0.017%
226	12.548	12.523	12.594	VV	9245	219117	2.01%	0.059%
227	12.624	12.594	12.638	VV	5712	106730	0.98%	0.029%
228	12.658	12.638	12.676	VV	13166	179338	1.65%	0.048%
229	12.707	12.676	12.748	VV	15108	358242	3.29%	0.096%
230	12.773	12.748	12.817	VV	35997	477938	4.39%	0.128%
231	12.835	12.817	12.856	VV	2848	48217	0.44%	0.013%
232	12.874	12.856	12.884	VV	2929	37184	0.34%	0.010%
233	12.903	12.884	12.917	VV	4569	67334	0.62%	0.018%
234	12.929	12.917	12.943	VV	4274	53675	0.49%	0.014%
235	12.965	12.943	13.007	VV	8477	187604	1.72%	0.050%
236	13.027	13.007	13.045	VV	4329	74644	0.68%	0.020%
237	13.074	13.045	13.098	VV	47895	577838	5.30%	0.155%
238	13.156	13.098	13.189	VV	105532	1463678	13.43%	0.392%
239	13.215	13.189	13.234	VV	5734	123135	1.13%	0.033%
240	13.272	13.234	13.296	VV	5335	169276	1.55%	0.045%
241	13.322	13.296	13.384	VV	14876	415369	3.81%	0.111%
242	13.403	13.384	13.453	VV	10324	268340	2.46%	0.072%
243	13.471	13.453	13.484	VV	7731	110253	1.01%	0.030%
244	13.502	13.484	13.517	VV	10301	161636	1.48%	0.043%
245	13.549	13.517	13.591	VV	16152	457347	4.20%	0.123%
246	13.661	13.591	13.688	VV	20303	597852	5.49%	0.160%

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247	13.726	13.688	13.748	VV	8913	279020	2.56%	0.075%
248	13.772	13.748	13.789	VV	13746	255630	2.35%	0.069%
249	13.810	13.789	13.841	VV	31342	502901	4.61%	0.135%
250	13.859	13.841	13.883	VV	11797	234936	2.16%	0.063%
251	13.910	13.883	13.926	VV	20868	378927	3.48%	0.102%
252	13.942	13.926	13.962	VV	25729	404342	3.71%	0.108%
253	13.980	13.962	14.009	VV	16597	329227	3.02%	0.088%
254	14.058	14.009	14.101	VV	9444	432656	3.97%	0.116%
255	14.141	14.101	14.169	VV	11392	379003	3.48%	0.102%
256	14.195	14.169	14.228	VV	10061	319153	2.93%	0.086%
257	14.248	14.228	14.263	VV	11427	211214	1.94%	0.057%
258	14.283	14.263	14.294	VV	10932	192308	1.76%	0.052%
259	14.370	14.294	14.381	VV	17725	716807	6.58%	0.192%
260	14.398	14.381	14.424	VV	25456	467271	4.29%	0.125%
261	14.433	14.424	14.443	VV	11318	123909	1.14%	0.033%
262	14.472	14.443	14.488	VV	28752	524126	4.81%	0.141%
263	14.501	14.488	14.519	VV	22792	356327	3.27%	0.096%
264	14.529	14.519	14.548	VV	15521	247809	2.27%	0.066%
265	14.580	14.548	14.597	VV	31337	613995	5.63%	0.165%
266	14.607	14.597	14.624	VV	21416	291599	2.68%	0.078%
267	14.643	14.624	14.661	VV	27334	437059	4.01%	0.117%
268	14.702	14.661	14.724	VV	22087	625658	5.74%	0.168%
269	14.766	14.724	14.788	VV	16254	545285	5.00%	0.146%
270	14.825	14.788	14.849	VV	17131	549304	5.04%	0.147%
271	14.865	14.849	14.881	VV	13602	246353	2.26%	0.066%
272	14.954	14.881	14.975	VV	85793	1730225	15.88%	0.464%
273	14.998	14.975	15.081	VV	92467	2142040	19.65%	0.574%
274	15.112	15.081	15.143	VV	25420	776462	7.12%	0.208%
275	15.163	15.143	15.180	VV	31584	570297	5.23%	0.153%
276	15.196	15.180	15.231	VV	27571	662071	6.07%	0.178%
277	15.269	15.231	15.358	VV	39844	1890527	17.35%	0.507%
278	15.403	15.358	15.459	VV	37020	1463002	13.42%	0.392%
279	15.476	15.459	15.486	VV	20903	315025	2.89%	0.084%
280	15.535	15.486	15.570	VV	36493	1366324	12.54%	0.366%
281	15.590	15.570	15.608	VV	42379	777829	7.14%	0.209%
282	15.633	15.608	15.652	VV	127380	1957381	17.96%	0.525%
283	15.670	15.652	15.718	VV	102990	1867527	17.14%	0.501%
284	15.800	15.718	15.850	VV	56412	2920763	26.80%	0.783%
285	15.871	15.850	15.897	VV	38941	951234	8.73%	0.255%
286	15.916	15.897	15.936	VV	34888	759530	6.97%	0.204%
287	15.955	15.936	15.980	VV	35267	824256	7.56%	0.221%
288	15.996	15.980	16.012	VV	31373	570269	5.23%	0.153%
289	16.040	16.012	16.084	VV	40859	1488140	13.65%	0.399%
290	16.097	16.084	16.107	VV	29144	394767	3.62%	0.106%
291	16.138	16.107	16.151	VV	36794	854479	7.84%	0.229%
292	16.163	16.151	16.176	VV	34747	489137	4.49%	0.131%
293	16.234	16.176	16.255	VV	72296	2193756	20.13%	0.588%
294	16.272	16.255	16.289	VV	76908	1204901	11.06%	0.323%
295	16.306	16.289	16.323	VV	62158	1033947	9.49%	0.277%
296	16.338	16.323	16.368	VV	52244	1216205	11.16%	0.326%
297	16.400	16.368	16.410	VV	49486	1127707	10.35%	0.302%
298	16.440	16.410	16.474	VV	71944	2050406	18.81%	0.550%
299	16.522	16.474	16.577	VV	139297	4303547	39.49%	1.154%

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300	16.601	16.577	16.618	VV	44145	964438	8.85%	0.259%
301	16.655	16.618	16.674	VV	54190	1544081	14.17%	0.414%
302	16.711	16.674	16.738	VV	55952	1778062	16.31%	0.477%
303	16.771	16.738	16.791	VV	52554	1504237	13.80%	0.403%
304	16.850	16.791	16.881	VV	214328	4980824	45.70%	1.336%
305	16.906	16.881	16.931	VV	203860	3182252	29.20%	0.853%
306	16.991	16.931	17.023	VV	66770	3175229	29.13%	0.851%
307	17.045	17.023	17.074	VV	66405	1868133	17.14%	0.501%
308	17.155	17.074	17.201	VV	92497	5547328	50.90%	1.488%
309	17.217	17.201	17.235	VV	65817	1273497	11.69%	0.341%
310	17.271	17.235	17.352	VV	124769	5892302	54.07%	1.580%
311	17.414	17.352	17.426	VV	189438	4515233	41.43%	1.211%
312	17.440	17.426	17.464	VV	220731	3296260	30.25%	0.884%
313	17.499	17.464	17.515	VV	135962	2895635	26.57%	0.776%
314	17.524	17.515	17.547	VV	107663	1670720	15.33%	0.448%
315	17.576	17.547	17.598	VV	90594	2450316	22.48%	0.657%
316	17.612	17.598	17.649	VV	81307	2279640	20.92%	0.611%
317	17.673	17.649	17.692	VV	72491	1789848	16.42%	0.480%
318	17.715	17.692	17.734	VV	85122	1916533	17.59%	0.514%
319	17.753	17.734	17.769	VV	85821	1649465	15.13%	0.442%
320	17.778	17.769	17.794	VV	77417	1155758	10.60%	0.310%
321	17.878	17.794	17.925	VV	184129	9330254	85.61%	2.502%
322	17.979	17.925	17.999	VV	150798	5635759	51.71%	1.511%
323	18.011	17.999	18.028	VV	105407	1718049	15.76%	0.461%
324	18.086	18.028	18.115	VV	161450	6148222	56.41%	1.649%
325	18.139	18.115	18.173	VV	106773	3428334	31.46%	0.919%
326	18.197	18.173	18.222	VV	163247	3451181	31.67%	0.925%
327	18.242	18.222	18.263	VV	89959	2094832	19.22%	0.562%
328	18.296	18.263	18.312	VV	165023	3758153	34.48%	1.008%
329	18.332	18.312	18.359	VV	180507	4187839	38.43%	1.123%
330	18.377	18.359	18.395	VV	121545	2355020	21.61%	0.631%
331	18.428	18.395	18.444	VV	226896	5004104	45.92%	1.342%
332	18.462	18.444	18.521	VV	258132	7703110	70.68%	2.066%
333	18.561	18.521	18.612	VV	305655	9415319	86.39%	2.525%
334	18.663	18.612	18.757	VV	167239	10898371	100.00%	2.922%
335	18.781	18.757	18.818	VV	128710	3968562	36.41%	1.064%
336	18.867	18.818	18.888	VV	175845	5929340	54.41%	1.590%
337	18.897	18.888	18.924	VV	159290	3249036	29.81%	0.871%
338	18.942	18.924	18.960	VV	150631	3030606	27.81%	0.813%
339	18.991	18.960	19.011	VV	238859	5799217	53.21%	1.555%
340	19.020	19.011	19.046	VV	187546	3517935	32.28%	0.943%
341	19.081	19.046	19.104	VV	270072	6710269	61.57%	1.799%
342	19.122	19.104	19.171	VV	158674	5414374	49.68%	1.452%
343	19.245	19.171	19.313	VV	158694	10667286	97.88%	2.860%
344	19.348	19.313	19.391	VV	126224	5408086	49.62%	1.450%
345	19.408	19.391	19.432	VV	133318	3036197	27.86%	0.814%
346	19.451	19.432	19.463	VV	122560	2172079	19.93%	0.582%
347	19.523	19.463	19.536	VV	149259	6120866	56.16%	1.641%
348	19.552	19.536	19.595	VV	152456	4701904	43.14%	1.261%
349	19.611	19.595	19.630	VV	125866	2586402	23.73%	0.694%
350	19.654	19.630	19.678	VV	131981	3485342	31.98%	0.935%
351	19.723	19.678	19.764	VV	150701	7100440	65.15%	1.904%

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352	19.785	19.764	19.820	VV	165953	4510392	41.39%	1.209%
353	19.845	19.820	19.856	VV	112143	2309628	21.19%	0.619%
354	19.874	19.856	19.925	VV	122599	4537684	41.64%	1.217%
355	19.939	19.925	19.971	VV	105883	2729299	25.04%	0.732%
356	20.004	19.971	20.034	VV	137099	4332352	39.75%	1.162%
357	20.105	20.034	20.139	VV	229147	8725015	80.06%	2.340%
358	20.171	20.139	20.183	VV	124958	3037032	27.87%	0.814%
359	20.197	20.183	20.230	VV	130090	3403214	31.23%	0.913%
360	20.241	20.230	20.269	VV	114396	2568781	23.57%	0.689%
361	20.307	20.269	20.357	VV	122198	5850203	53.68%	1.569%
362	20.366	20.357	20.404	VV	104504	2809335	25.78%	0.753%
363	20.447	20.404	20.497	VV	117175	5184803	47.57%	1.390%
364	20.535	20.497	20.549	VV	107030	2966226	27.22%	0.795%
365	20.597	20.549	20.668	VV	130747	7222016	66.27%	1.937%
366	20.695	20.668	20.728	VV	81993	2688000	24.66%	0.721%
367	20.738	20.728	20.752	VV	73866	1025066	9.41%	0.275%
368	20.776	20.752	20.808	VV	79929	2502138	22.96%	0.671%
369	20.818	20.808	20.870	VV	71933	2475411	22.71%	0.664%
370	20.880	20.870	20.891	VV	62592	771507	7.08%	0.207%
371	20.913	20.891	20.943	VV	62738	1885726	17.30%	0.506%
372	20.980	20.943	21.003	VV	71453	2396675	21.99%	0.643%
373	21.018	21.003	21.046	VV	75070	1752428	16.08%	0.470%
374	21.066	21.046	21.100	VV	64612	1896070	17.40%	0.508%
375	21.130	21.100	21.149	VV	63569	1639485	15.04%	0.440%
376	21.166	21.149	21.241	VV	56353	2637611	24.20%	0.707%
377	21.264	21.241	21.315	VV	48192	1843082	16.91%	0.494%
378	21.380	21.315	21.444	VV	43501	2901881	26.63%	0.778%
379	21.466	21.444	21.508	VV	40852	1390120	12.76%	0.373%
380	21.570	21.508	21.734	VV	48128	4627858	42.46%	1.241%
381	21.753	21.734	21.768	VV	22749	430572	3.95%	0.115%
382	21.780	21.768	21.794	VV	22785	344655	3.16%	0.092%
383	21.806	21.794	21.861	VV	22529	674830	6.19%	0.181%
384	21.898	21.861	21.943	VV	31289	1126139	10.33%	0.302%
385	21.984	21.943	22.056	VV	30667	1228895	11.28%	0.330%
386	22.093	22.056	22.167	VV	15651	604830	5.55%	0.162%
387	22.185	22.167	22.220	VV	7875	125009	1.15%	0.034%
					Sum of corrected areas:		372925422	

Aliphatic EPH 040225.M Wed Apr 09 04:46:52 2025

Report of Analysis

Client:	G Environmental	Date Collected:	04/04/25
Project:	Stockton	Date Received:	04/04/25
Client Sample ID:	GST2	SDG No.:	Q1736
Lab Sample ID:	Q1736-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	80.5
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
04/07/25 09:40	04/07/25 16:52	PB167477

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	4.51	J	1	1.13	4.97	mg/kg	FC068501.D
Total EPH	Total EPH	4.51	J		1.13	4.97	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 concentration for the sample is reported as the Total EPH.

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	04/04/25
Project:	Stockton	Date Received:	04/04/25
Client Sample ID:	GST2	SDG No.:	Q1736
Lab Sample ID:	Q1736-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	80.5
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068501.D	1	04/07/25	04/07/25	PB167477

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	4.51	J	1.13	4.97	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	14.2		1.47	2.48	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	45.3		40 - 140	91%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	43.2		40 - 140	86%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1736-02	Acq On:	07 Apr 2025 16:52
Client Sample ID:	GST2	Operator:	YP/AJ
Data file:	FC068501.D	Misc:	
Instrument:	FID_C	ALS Vial:	14
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.349	6.652	476224	4.19	300	ug/ml
Aliphatic C12-C16	6.653	10.053	1030185	9.119	200	ug/ml
Aliphatic C16-C21	10.054	13.420	1923758	17.452	300	ug/ml
Aliphatic C21-C28	13.421	17.087	2628535	23.821	400	ug/ml
Aliphatic C28-C40	17.088	22.097	13959959	171.449	600	ug/ml
Aliphatic EPH	3.349	22.097	20018661	226.031		ug/ml
ortho-Terphenyl (SURR)	11.726	11.726	5571738	43.21		ug/ml
1-chlorooctadecane (SURR)	13.158	13.158	4166783	45.3		ug/ml
Aliphatic C9-C28	3.349	17.087	6058702	54.582	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
 Data File : FC068501.D
 Signal(s) : FID1A.ch
 Acq On : 07 Apr 2025 16:52
 Operator : YP/AJ
 Sample : Q1736-02
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 GST2

Integration File: autoint1.e
 Quant Time: Apr 08 02:35:06 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Mon Apr 07 16:09:59 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)	11.726	5571738	43.208 ug/ml
Spiked Amount	50.000	Recovery	= 86.42%
12) S 1-chlorooctadecane (S...	13.158	4166783	45.297 ug/ml
Spiked Amount	50.000	Recovery	= 90.59%

Target Compounds

(f)=RT Delta > 1/2 Window

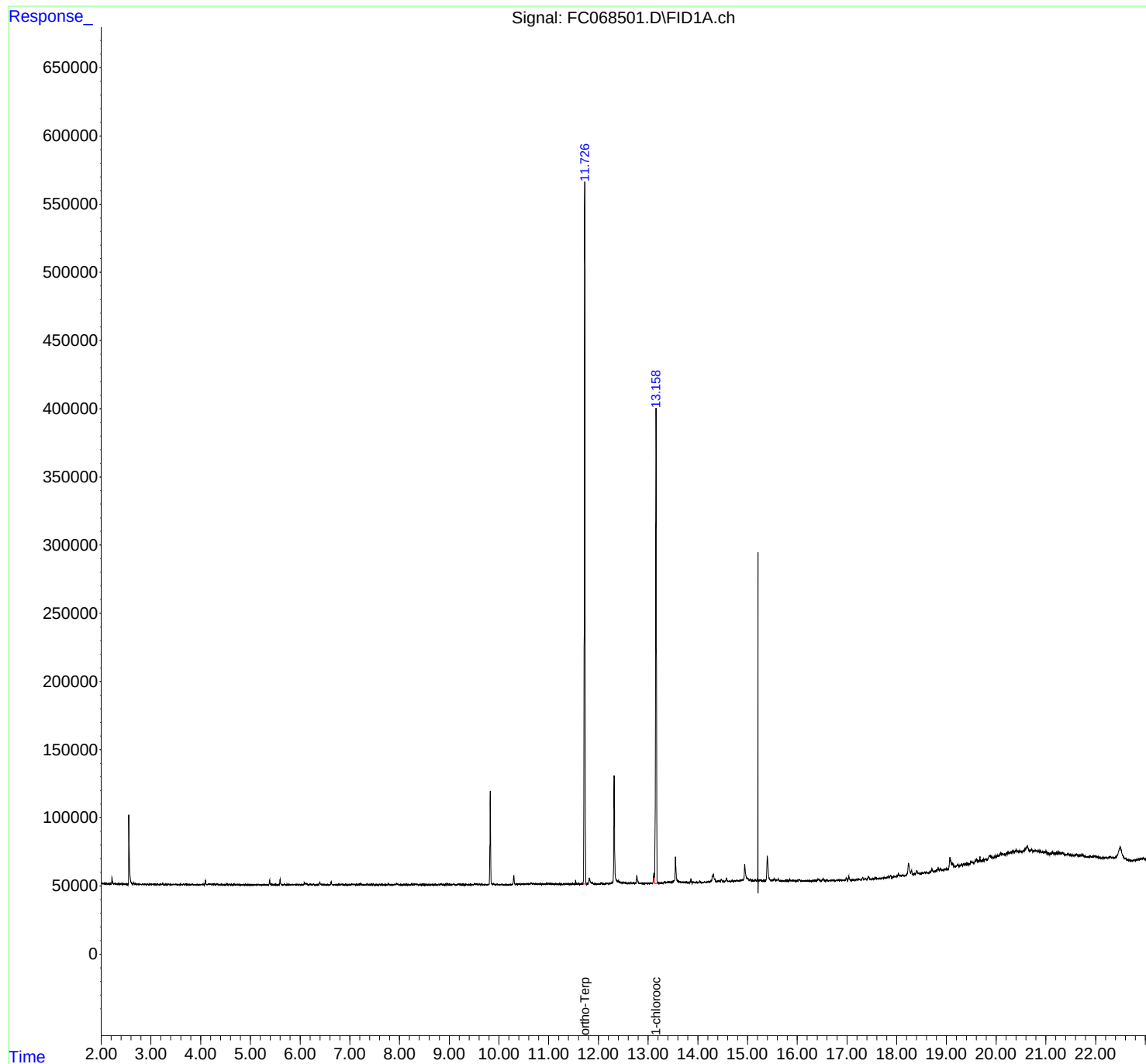
(m)=manual int.

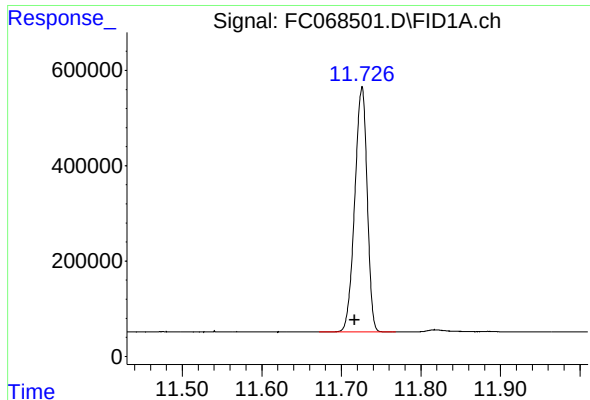
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
Data File : FC068501.D
Signal(s) : FID1A.ch
Acq On : 07 Apr 2025 16:52
Operator : YP/AJ
Sample : Q1736-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
GST2

Integration File: autoint1.e
Quant Time: Apr 08 02:35:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Mon Apr 07 16:09:59 2025
Response via : Initial Calibration
Integrator: ChemStation

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

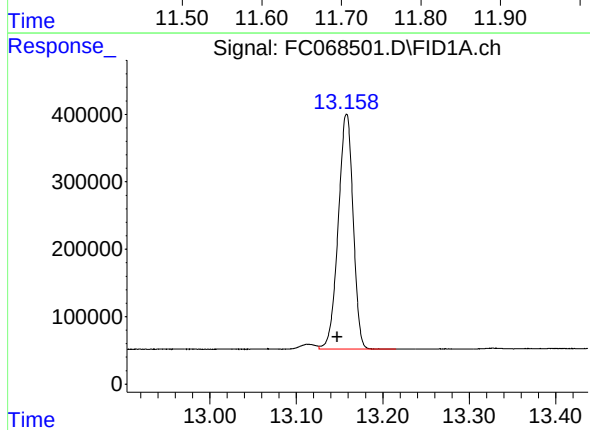




#9 ortho-Terphenyl (SURR)

R.T.: 11.726 min
Delta R.T.: 0.009 min
Response: 5571738
Conc: 43.21 ug/ml

Instrument :
FID_C
ClientSampleId :
GST2



#12 1-chlorooctadecane (SURR)

R.T.: 13.158 min
Delta R.T.: 0.011 min
Response: 4166783
Conc: 45.30 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
Data File : FC068501.D
Signal(s) : FID1A.ch
Acq On : 07 Apr 2025 16:52
Sample : Q1736-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.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	2.370	2.321	2.381	BV	80	402	0.01%	0.001%
2	2.388	2.381	2.396	VV	117	636	0.01%	0.002%
3	2.414	2.396	2.444	VV	559	5200	0.09%	0.017%
4	2.469	2.444	2.514	PV	149	2825	0.05%	0.009%
5	2.522	2.514	2.531	VV	86	469	0.01%	0.002%
6	2.555	2.531	2.641	VV	48812	493516	8.84%	1.627%
7	2.655	2.641	2.708	VV	1464	18110	0.32%	0.060%
8	2.710	2.708	2.771	VV	162	2410	0.04%	0.008%
9	2.787	2.771	2.871	VV	147	3971	0.07%	0.013%
10	2.895	2.871	2.921	PV	145	1917	0.03%	0.006%
11	2.927	2.921	2.964	VV	99	1283	0.02%	0.004%
12	2.972	2.964	3.000	VV	86	1321	0.02%	0.004%
13	3.026	3.000	3.053	VV	190	2686	0.05%	0.009%
14	3.072	3.053	3.098	VV	147	1943	0.03%	0.006%
15	3.108	3.098	3.116	PV	105	699	0.01%	0.002%
16	3.136	3.116	3.203	VV	277	6381	0.11%	0.021%
17	3.236	3.203	3.274	VV	570	7694	0.14%	0.025%
18	3.352	3.274	3.414	VV	295	8590	0.15%	0.028%
19	3.450	3.414	3.471	VV	318	3813	0.07%	0.013%
20	3.488	3.471	3.558	VV	104	2829	0.05%	0.009%
21	3.571	3.558	3.583	PV	87	890	0.02%	0.003%
22	3.647	3.583	3.678	VV	312	6555	0.12%	0.022%
23	3.692	3.678	3.737	VV	208	4961	0.09%	0.016%
24	3.753	3.737	3.813	VV	185	4869	0.09%	0.016%
25	3.829	3.813	3.852	VV	116	1894	0.03%	0.006%
26	3.866	3.852	3.909	VV	118	1997	0.04%	0.007%
27	3.937	3.909	3.991	PV	124	4119	0.07%	0.014%
28	3.998	3.991	4.008	VV	128	1018	0.02%	0.003%
29	4.016	4.008	4.027	VV	90	736	0.01%	0.002%
30	4.045	4.027	4.078	VV	151	2974	0.05%	0.010%
31	4.097	4.078	4.117	VV	3243	26607	0.48%	0.088%
32	4.149	4.117	4.198	VV	552	15313	0.27%	0.050%
33	4.209	4.198	4.235	VV	304	5915	0.11%	0.020%
34	4.243	4.235	4.258	VV	264	2940	0.05%	0.010%
35	4.291	4.258	4.309	VV	235	5275	0.09%	0.017%
36	4.326	4.309	4.370	VV	589	8395	0.15%	0.028%

					rteres			
37	4.397	4.370	4.499	VV	221	8264	0.15%	0.027%
38	4.532	4.499	4.556	VV	782	11157	0.20%	0.037%
39	4.568	4.556	4.606	VV	274	4651	0.08%	0.015%
40	4.624	4.606	4.661	VV	238	4462	0.08%	0.015%
41	4.677	4.661	4.741	VV	473	10191	0.18%	0.034%
42	4.748	4.741	4.773	VV	193	2722	0.05%	0.009%
43	4.783	4.773	4.831	VV	252	4357	0.08%	0.014%
44	4.870	4.831	4.891	VV	225	5354	0.10%	0.018%
45	4.897	4.891	4.953	VV	174	4090	0.07%	0.013%
46	4.964	4.953	4.991	VV	176	2462	0.04%	0.008%
47	5.010	4.991	5.094	VV	175	6264	0.11%	0.021%
48	5.108	5.094	5.121	VV	209	2260	0.04%	0.007%
49	5.127	5.121	5.152	VV	208	3184	0.06%	0.010%
50	5.163	5.152	5.193	VV	198	3238	0.06%	0.011%
51	5.209	5.193	5.221	VV	143	2142	0.04%	0.007%
52	5.232	5.221	5.242	VV	161	1606	0.03%	0.005%
53	5.251	5.242	5.258	VV	122	1056	0.02%	0.003%
54	5.272	5.258	5.313	VV	297	5497	0.10%	0.018%
55	5.317	5.313	5.330	VV	155	1176	0.02%	0.004%
56	5.342	5.330	5.366	VV	149	2112	0.04%	0.007%
57	5.389	5.366	5.447	PV	3511	36169	0.65%	0.119%
58	5.459	5.447	5.509	VV	178	5177	0.09%	0.017%
59	5.528	5.509	5.548	VV	194	3188	0.06%	0.011%
60	5.572	5.548	5.580	VV	234	3266	0.06%	0.011%
61	5.598	5.580	5.661	VV	4065	43918	0.79%	0.145%
62	5.681	5.661	5.711	VV	504	7457	0.13%	0.025%
63	5.719	5.711	5.731	VV	184	1772	0.03%	0.006%
64	5.740	5.731	5.755	VV	268	2068	0.04%	0.007%
65	5.806	5.755	5.864	VV	274	13423	0.24%	0.044%
66	5.880	5.864	5.904	VV	343	6122	0.11%	0.020%
67	5.923	5.904	5.973	VV	318	9302	0.17%	0.031%
68	5.982	5.973	6.035	VV	300	7554	0.14%	0.025%
69	6.084	6.035	6.108	VV	1392	25392	0.45%	0.084%
70	6.118	6.108	6.184	VV	891	24390	0.44%	0.080%
71	6.197	6.184	6.250	VV	522	11873	0.21%	0.039%
72	6.269	6.250	6.313	VV	362	8154	0.15%	0.027%
73	6.325	6.313	6.370	VV	257	6641	0.12%	0.022%
74	6.399	6.370	6.421	VV	2061	25122	0.45%	0.083%
75	6.432	6.421	6.520	VV	431	10137	0.18%	0.033%
76	6.551	6.520	6.578	VV	175	4391	0.08%	0.014%
77	6.581	6.578	6.589	VV	203	833	0.01%	0.003%
78	6.594	6.589	6.608	VV	141	1053	0.02%	0.003%
79	6.625	6.608	6.652	VV	2365	22887	0.41%	0.075%
80	6.671	6.652	6.688	VV	138	2050	0.04%	0.007%
81	6.705	6.688	6.713	VV	168	1799	0.03%	0.006%
82	6.729	6.713	6.746	VV	143	2319	0.04%	0.008%
83	6.755	6.746	6.768	VV	124	1411	0.03%	0.005%
84	6.780	6.768	6.794	VV	153	1602	0.03%	0.005%
85	6.832	6.794	6.919	VV	340	13105	0.23%	0.043%
86	6.934	6.919	6.967	PV	138	2486	0.04%	0.008%
87	7.036	6.967	7.164	VV	376	25747	0.46%	0.085%
88	7.177	7.164	7.201	VV	181	2819	0.05%	0.009%
89	7.218	7.201	7.291	VV	1068	15955	0.29%	0.053%

					rteres			
90	7.320	7.291	7.331	VV	155	2489	0.04%	0.008%
91	7.349	7.331	7.371	VV	530	6662	0.12%	0.022%
92	7.377	7.371	7.432	VV	151	4304	0.08%	0.014%
93	7.480	7.432	7.515	VV	314	6540	0.12%	0.022%
94	7.534	7.515	7.554	VV	177	3324	0.06%	0.011%
95	7.567	7.554	7.583	VV	191	2691	0.05%	0.009%
96	7.605	7.583	7.621	VV	228	3887	0.07%	0.013%
97	7.627	7.621	7.661	VV	197	2514	0.05%	0.008%
98	7.704	7.661	7.750	VV	198	5179	0.09%	0.017%
99	7.775	7.750	7.808	PV	783	11176	0.20%	0.037%
100	7.901	7.808	7.916	VV	245	7594	0.14%	0.025%
101	7.937	7.916	7.952	VV	1042	12651	0.23%	0.042%
102	7.962	7.952	8.024	VV	681	10833	0.19%	0.036%
103	8.036	8.024	8.060	VV	172	2210	0.04%	0.007%
104	8.112	8.060	8.132	VV	185	4546	0.08%	0.015%
105	8.172	8.132	8.197	VV	152	4128	0.07%	0.014%
106	8.246	8.197	8.271	VV	614	10949	0.20%	0.036%
107	8.317	8.271	8.334	VV	864	14575	0.26%	0.048%
108	8.351	8.334	8.404	VV	313	7258	0.13%	0.024%
109	8.415	8.404	8.431	VV	127	1421	0.03%	0.005%
110	8.440	8.431	8.534	VV	118	3875	0.07%	0.013%
111	8.584	8.534	8.624	VV	230	5110	0.09%	0.017%
112	8.656	8.624	8.666	VV	110	1591	0.03%	0.005%
113	8.676	8.666	8.687	VV	122	1160	0.02%	0.004%
114	8.714	8.687	8.742	VV	211	3901	0.07%	0.013%
115	8.797	8.742	8.807	VV	198	5474	0.10%	0.018%
116	8.830	8.807	8.881	VV	503	12572	0.23%	0.041%
117	8.890	8.881	8.904	VV	137	1894	0.03%	0.006%
118	8.907	8.904	8.931	VV	136	1343	0.02%	0.004%
119	8.959	8.931	8.998	VV	905	12276	0.22%	0.040%
120	9.089	8.998	9.154	PV	569	16024	0.29%	0.053%
121	9.183	9.154	9.248	VV	357	13418	0.24%	0.044%
122	9.249	9.248	9.303	VV	198	3272	0.06%	0.011%
123	9.319	9.303	9.328	VV	114	1151	0.02%	0.004%
124	9.393	9.328	9.412	VV	151	5111	0.09%	0.017%
125	9.418	9.412	9.447	VV	105	1614	0.03%	0.005%
126	9.475	9.447	9.486	VV	174	2706	0.05%	0.009%
127	9.509	9.486	9.544	VV	857	16832	0.30%	0.055%
128	9.555	9.544	9.604	VV	518	11980	0.21%	0.040%
129	9.626	9.604	9.648	VV	315	6151	0.11%	0.020%
130	9.658	9.648	9.718	VV	207	6179	0.11%	0.020%
131	9.737	9.718	9.761	VV	242	3458	0.06%	0.011%
132	9.826	9.761	9.878	VV	68439	678980	12.16%	2.239%
133	9.890	9.878	9.928	VV	654	9452	0.17%	0.031%
134	9.953	9.928	10.014	VV	491	9229	0.17%	0.030%
135	10.030	10.014	10.040	PV	146	1208	0.02%	0.004%
136	10.059	10.040	10.081	VV	279	3279	0.06%	0.011%
137	10.101	10.081	10.168	VV	179	3430	0.06%	0.011%
138	10.207	10.168	10.221	VV	109	2019	0.04%	0.007%
139	10.225	10.221	10.233	VV	126	457	0.01%	0.002%
140	10.301	10.233	10.361	VV	6771	80731	1.45%	0.266%
141	10.374	10.361	10.384	VV	320	4004	0.07%	0.013%

					rteres			
142	10.403	10.384	10.422	VV	405	7264	0.13%	0.024%
143	10.431	10.422	10.460	VV	313	5998	0.11%	0.020%
144	10.494	10.460	10.511	VV	352	8873	0.16%	0.029%
145	10.559	10.511	10.617	VV	659	27165	0.49%	0.090%
146	10.647	10.617	10.674	VV	1138	22189	0.40%	0.073%
147	10.692	10.674	10.749	VV	705	22985	0.41%	0.076%
148	10.792	10.749	10.814	VV	488	15193	0.27%	0.050%
149	10.831	10.814	10.870	VV	402	9568	0.17%	0.032%
150	10.882	10.870	10.921	VV	262	6883	0.12%	0.023%
151	10.949	10.921	10.968	VV	515	9945	0.18%	0.033%
152	10.985	10.968	11.000	VV	492	8517	0.15%	0.028%
153	11.024	11.000	11.051	VV	640	15049	0.27%	0.050%
154	11.068	11.051	11.102	VV	393	8890	0.16%	0.029%
155	11.145	11.102	11.192	VV	282	10444	0.19%	0.034%
156	11.251	11.192	11.275	VV	224	6176	0.11%	0.020%
157	11.328	11.275	11.350	VV	454	8587	0.15%	0.028%
158	11.369	11.350	11.383	VV	535	6582	0.12%	0.022%
159	11.396	11.383	11.430	VV	419	6091	0.11%	0.020%
160	11.441	11.430	11.453	VV	109	1033	0.02%	0.003%
161	11.475	11.453	11.516	VV	586	9424	0.17%	0.031%
162	11.524	11.516	11.549	VV	106	3685	0.07%	0.012%
163	11.564	11.549	11.588	VV	441	7438	0.13%	0.025%
164	11.594	11.588	11.621	VV	363	3400	0.06%	0.011%
165	11.726	11.621	11.768	PV	509188	5583484	100.00%	18.410%
166	11.818	11.768	11.869	VV	4463	88318	1.58%	0.291%
167	11.886	11.869	11.939	VV	1093	16383	0.29%	0.054%
168	11.958	11.939	11.988	VV	162	1986	0.04%	0.007%
169	12.004	11.988	12.026	VV	180	2252	0.04%	0.007%
170	12.059	12.026	12.104	VV	845	16547	0.30%	0.055%
171	12.115	12.104	12.140	VV	187	2868	0.05%	0.009%
172	12.166	12.140	12.201	VV	722	12133	0.22%	0.040%
173	12.317	12.201	12.386	VV	78951	1021189	18.29%	3.367%
174	12.403	12.386	12.484	VV	2749	78569	1.41%	0.259%
175	12.497	12.484	12.583	VV	818	40171	0.72%	0.132%
176	12.596	12.583	12.614	VV	407	6493	0.12%	0.021%
177	12.649	12.614	12.684	VV	895	19347	0.35%	0.064%
178	12.708	12.684	12.730	VV	1020	14581	0.26%	0.048%
179	12.772	12.730	12.848	VV	5783	98655	1.77%	0.325%
180	12.877	12.848	12.893	VV	298	4743	0.08%	0.016%
181	12.921	12.893	12.932	VV	138	2312	0.04%	0.008%
182	12.948	12.932	12.957	VV	216	2289	0.04%	0.008%
183	12.969	12.957	13.001	VV	285	3869	0.07%	0.013%
184	13.021	13.001	13.041	PV	194	3367	0.06%	0.011%
185	13.068	13.041	13.085	VV	472	6612	0.12%	0.022%
186	13.114	13.085	13.126	VV	7169	92112	1.65%	0.304%
187	13.158	13.126	13.231	VV	349971	4175166	74.78%	13.766%
188	13.244	13.231	13.255	VV	271	2630	0.05%	0.009%
189	13.274	13.255	13.299	VV	403	6327	0.11%	0.021%
190	13.328	13.299	13.350	VV	1386	21874	0.39%	0.072%
191	13.369	13.350	13.381	VV	811	12709	0.23%	0.042%
192	13.397	13.381	13.424	VV	881	20123	0.36%	0.066%
193	13.441	13.424	13.478	VV	835	22681	0.41%	0.075%
194	13.549	13.478	13.695	VV	19603	352384	6.31%	1.162%

					rteres			
195	13.742	13.695	13.811	VV	712	34725	0.62%	0.114%
196	13.859	13.811	13.884	VV	3082	44477	0.80%	0.147%
197	13.907	13.884	13.921	VV	603	9352	0.17%	0.031%
198	13.929	13.921	13.949	VV	508	6618	0.12%	0.022%
199	13.959	13.949	13.993	VV	336	6676	0.12%	0.022%
200	14.003	13.993	14.013	VV	222	2495	0.04%	0.008%
201	14.038	14.013	14.085	VV	1345	20933	0.37%	0.069%
202	14.147	14.085	14.184	VV	511	18211	0.33%	0.060%
203	14.208	14.184	14.233	VV	861	14861	0.27%	0.049%
204	14.310	14.233	14.373	VV	6082	202562	3.63%	0.668%
205	14.423	14.373	14.450	VV	1181	44195	0.79%	0.146%
206	14.474	14.450	14.517	VV	2502	54142	0.97%	0.179%
207	14.530	14.517	14.548	VV	888	14542	0.26%	0.048%
208	14.575	14.548	14.611	VV	3198	59945	1.07%	0.198%
209	14.635	14.611	14.661	VV	845	21443	0.38%	0.071%
210	14.691	14.661	14.721	VV	1483	34614	0.62%	0.114%
211	14.790	14.721	14.813	VV	1658	56055	1.00%	0.185%
212	14.851	14.813	14.868	VV	1395	36955	0.66%	0.122%
213	14.875	14.868	14.883	VV	1351	11839	0.21%	0.039%
214	14.942	14.883	15.038	VV	13052	348188	6.24%	1.148%
215	15.056	15.038	15.133	VV	1733	72476	1.30%	0.239%
216	15.156	15.133	15.180	VV	1315	31437	0.56%	0.104%
217	15.208	15.180	15.241	VV	73651	185986	3.33%	0.613%
218	15.248	15.241	15.261	VV	1152	13481	0.24%	0.044%
219	15.265	15.261	15.328	VV	1175	38321	0.69%	0.126%
220	15.341	15.328	15.358	VV	822	14138	0.25%	0.047%
221	15.397	15.358	15.507	VV	18441	396964	7.11%	1.309%
222	15.532	15.507	15.571	VV	1942	52908	0.95%	0.174%
223	15.617	15.571	15.645	VV	1764	47228	0.85%	0.156%
224	15.664	15.645	15.708	VV	854	21961	0.39%	0.072%
225	15.718	15.708	15.738	VV	528	8659	0.16%	0.029%
226	15.778	15.738	15.820	VV	642	24798	0.44%	0.082%
227	15.846	15.820	15.903	VV	1244	35225	0.63%	0.116%
228	15.926	15.903	15.991	VV	796	28158	0.50%	0.093%
229	15.999	15.991	16.007	VV	476	3954	0.07%	0.013%
230	16.035	16.007	16.118	VV	1380	38000	0.68%	0.125%
231	16.143	16.118	16.158	VV	261	4856	0.09%	0.016%
232	16.176	16.158	16.185	VV	227	2913	0.05%	0.010%
233	16.222	16.185	16.299	VV	375	15551	0.28%	0.051%
234	16.344	16.299	16.387	PV	423	11009	0.20%	0.036%
235	16.418	16.387	16.466	VV	1495	33450	0.60%	0.110%
236	16.477	16.466	16.486	VV	342	3449	0.06%	0.011%
237	16.518	16.486	16.570	VV	1323	26719	0.48%	0.088%
238	16.601	16.570	16.624	VV	686	10510	0.19%	0.035%
239	16.649	16.624	16.670	PV	116	2610	0.05%	0.009%
240	16.681	16.670	16.696	VV	217	2555	0.05%	0.008%
241	16.710	16.696	16.731	VV	274	3311	0.06%	0.011%
242	16.741	16.731	16.781	VV	194	3572	0.06%	0.012%
243	16.796	16.781	16.813	VV	188	2039	0.04%	0.007%
244	16.834	16.813	16.860	VV	332	4466	0.08%	0.015%
245	16.887	16.860	16.941	VV	385	6370	0.11%	0.021%
246	16.985	16.941	17.011	PV	1342	22189	0.40%	0.073%

					rteres			
247	17.037	17.011	17.077	VV	3007	41379	0.74%	0.136%
248	17.112	17.077	17.128	PV	223	2932	0.05%	0.010%
249	17.140	17.128	17.160	VV	260	2345	0.04%	0.008%
250	17.191	17.160	17.201	PV	215	3050	0.05%	0.010%
251	17.245	17.201	17.280	VV	519	12036	0.22%	0.040%
252	17.316	17.280	17.344	PV	1877	28708	0.51%	0.095%
253	17.364	17.344	17.399	VV	723	16127	0.29%	0.053%
254	17.434	17.399	17.468	VV	2040	39363	0.70%	0.130%
255	17.486	17.468	17.500	VV	156	2214	0.04%	0.007%
256	17.525	17.500	17.535	PV	327	3321	0.06%	0.011%
257	17.570	17.535	17.631	VV	697	20315	0.36%	0.067%
258	17.657	17.631	17.694	VV	319	6157	0.11%	0.020%
259	17.751	17.694	17.766	PV	339	9513	0.17%	0.031%
260	17.830	17.766	17.850	VV	1212	24669	0.44%	0.081%
261	17.875	17.850	17.905	VV	1851	28019	0.50%	0.092%
262	17.966	17.905	17.981	PV	769	19750	0.35%	0.065%
263	18.036	17.981	18.092	VV	2081	71376	1.28%	0.235%
264	18.112	18.092	18.138	VV	1238	23414	0.42%	0.077%
265	18.238	18.138	18.279	VV	9340	255913	4.58%	0.844%
266	18.298	18.279	18.337	VV	4216	80654	1.44%	0.266%
267	18.404	18.337	18.467	VV	3489	127056	2.28%	0.419%
268	18.510	18.467	18.541	VV	1550	54059	0.97%	0.178%
269	18.566	18.541	18.578	VV	1695	30516	0.55%	0.101%
270	18.591	18.578	18.641	VV	1524	48732	0.87%	0.161%
271	18.708	18.641	18.750	VV	3426	130481	2.34%	0.430%
272	18.831	18.750	18.856	VV	3839	150286	2.69%	0.496%
273	18.876	18.856	18.954	VV	3388	145311	2.60%	0.479%
274	18.974	18.954	18.986	VV	2590	46606	0.83%	0.154%
275	19.005	18.986	19.028	VV	2802	62800	1.12%	0.207%
276	19.070	19.028	19.176	VV	10702	509100	9.12%	1.679%
277	19.228	19.176	19.268	VV	5150	233379	4.18%	0.769%
278	19.308	19.268	19.324	VV	5183	158001	2.83%	0.521%
279	19.355	19.324	19.368	VV	5069	123904	2.22%	0.409%
280	19.409	19.368	19.451	VV	5326	241796	4.33%	0.797%
281	19.492	19.451	19.502	VV	6239	165889	2.97%	0.547%
282	19.512	19.502	19.526	VV	6186	85504	1.53%	0.282%
283	19.536	19.526	19.558	VV	6090	108515	1.94%	0.358%
284	19.605	19.558	19.629	VV	7743	281059	5.03%	0.927%
285	19.638	19.629	19.650	VV	6313	77047	1.38%	0.254%
286	19.673	19.650	19.704	VV	7776	215050	3.85%	0.709%
287	19.721	19.704	19.734	VV	6510	113957	2.04%	0.376%
288	19.781	19.734	19.814	VV	7459	330520	5.92%	1.090%
289	19.870	19.814	19.911	VV	9546	482077	8.63%	1.590%
290	19.919	19.911	19.942	VV	8393	152020	2.72%	0.501%
291	19.979	19.942	19.997	VV	8953	270166	4.84%	0.891%
292	20.019	19.997	20.038	VV	8766	205527	3.68%	0.678%
293	20.052	20.038	20.071	VV	9196	178390	3.19%	0.588%
294	20.091	20.071	20.108	VV	10767	222425	3.98%	0.733%
295	20.141	20.108	20.154	VV	10010	268822	4.81%	0.886%
296	20.170	20.154	20.188	VV	9857	189741	3.40%	0.626%
297	20.244	20.188	20.261	VV	10655	443517	7.94%	1.462%
298	20.295	20.261	20.306	VV	10493	278488	4.99%	0.918%
299	20.339	20.306	20.371	VV	11518	422247	7.56%	1.392%

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300	20.402	20.371	20.448	VV	11791	504845	9.04%	1.665%
301	20.479	20.448	20.501	VV	11023	334777	6.00%	1.104%
302	20.625	20.501	20.693	VV	13912	1313585	23.53%	4.331%
303	20.718	20.693	20.738	VV	11036	282644	5.06%	0.932%
304	20.751	20.738	20.762	VV	10196	145084	2.60%	0.478%
305	20.795	20.762	20.815	VV	10298	317838	5.69%	1.048%
306	20.835	20.815	20.844	VV	9571	166575	2.98%	0.549%
307	20.853	20.844	20.874	VV	9614	162568	2.91%	0.536%
308	20.885	20.874	20.923	VV	9441	261497	4.68%	0.862%
309	20.935	20.923	20.950	VV	8649	137370	2.46%	0.453%
310	20.971	20.950	21.086	VV	8993	640814	11.48%	2.113%
311	21.135	21.086	21.165	VV	7789	333657	5.98%	1.100%
312	21.176	21.165	21.190	VV	7075	102731	1.84%	0.339%
313	21.206	21.190	21.224	VV	7079	135038	2.42%	0.445%
314	21.269	21.224	21.311	VV	7042	343773	6.16%	1.133%
315	21.335	21.311	21.389	VV	6474	277646	4.97%	0.915%
316	21.411	21.389	21.423	VV	5360	106491	1.91%	0.351%
317	21.458	21.423	21.525	VV	5383	295148	5.29%	0.973%
318	21.539	21.525	21.568	VV	4242	103660	1.86%	0.342%
319	21.615	21.568	21.651	VV	4375	199665	3.58%	0.658%
320	21.665	21.651	21.678	VV	3519	55678	1.00%	0.184%
321	21.681	21.678	21.690	VV	3552	25793	0.46%	0.085%
322	21.728	21.690	21.778	VV	3992	179386	3.21%	0.591%
323	21.784	21.778	21.822	VV	2730	59522	1.07%	0.196%
324	21.840	21.822	21.875	VV	2313	63058	1.13%	0.208%
325	21.895	21.875	21.917	VV	2220	48580	0.87%	0.160%
326	21.927	21.917	21.945	VV	2113	31308	0.56%	0.103%
327	21.986	21.945	22.034	VV	2090	90156	1.61%	0.297%
328	22.042	22.034	22.117	VV	1327	38208	0.68%	0.126%
Sum of corrected areas:					30328774			

Aliphatic EPH 040225.M Tue Apr 08 03:25:04 2025



CALIBRATION SUMMARY

Initial Calibration Report for SequenceID : FC040225AL

AreaCount

Parameter Range	FC068487.D	FC068488.D	FC068489.D	FC068490.D	FC068491.D	
Aliphatic C9-C12	31367127.000	16130027.000	6778558.000	3641705.000	1827350.000	
Aliphatic C12-C16	20853084.000	10782879.000	4521531.000	2435718.000	1179147.000	
Aliphatic C16-C21	30321517.000	15706100.000	6611532.000	3549560.000	1753192.000	
Aliphatic C21-C28	39460175.000	19791819.000	8362333.000	4426042.000	2778833.000	
Aliphatic C28-C40	48104700.000	23485614.000	9405447.000	4618163.000	2799253.000	
Aliphatic EPH	170106603.000	85896439.000	35679401.000	18671188.000	10337775.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aliphatic C9-C12	113656.0139996	6.918				
Aliphatic C12-C16	112966.617	6.328				
Aliphatic C16-C21	110233.8779996	6.789				
Aliphatic C21-C28	110346.279	15.151				
Aliphatic C28-C40	81423.2843332	8.279				
Aliphatic EPH	101529.318444	8.166				

Concentration

Parameter Range	FC068487.D	FC068488.D	FC068489.D	FC068490.D	FC068491.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	FC068487.D	FC068488.D	FC068489.D	FC068490.D	FC068491.D	
Aliphatic C9-C12	104557.090000	107533.513333	112975.966666	121390.166666	121823.333333	
Aliphatic C12-C16	104265.420000	107828.790000	113038.275000	121785.900000	117914.700000	
Aliphatic C16-C21	101071.723333	104707.333333	110192.200000	118318.666666	116879.466666	

Initial Calibration Report for SequenceID : FC040225AL

Aliphatic C21-C28	98650.437500	98959.095000	104529.162500	110651.050000	138941.650000	
Aliphatic C28-C40	80174.500000	78285.380000	78378.725000	76969.383333	93308.433333	
Aliphatic EPH	94503.668333	95440.487777	99109.447222	103728.822222	114864.166666	

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
 Data File : FC068487.D
 Signal(s) : FID1A.ch
 Acq On : 02 Apr 2025 15:55
 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 02 18:40:11 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Wed Apr 02 18:36:21 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)	11.724	11880180	95.656 ug/ml
Spiked Amount 50.000		Recovery =	191.31%
12) S 1-chlorooctadecane (S...	13.319	9868760	95.935 ug/ml
Spiked Amount 50.000		Recovery =	191.87%
Target Compounds			
1) T n-Nonane (C9)	3.452	10365720	96.196 ug/ml
2) T n-Decane (C10)	4.529	10521483	96.105 ug/ml
3) T A~Naphthalene (C11.7)	6.127	11665756	96.161 ug/ml
4) T n-Dodecane (C12)	6.555	10486955	96.034 ug/ml
5) T A~2-methylnaphthalene...	7.186	11170905	96.220 ug/ml
6) T n-Tetradecane (C14)	8.351	10270310	95.833 ug/ml
7) T n-Hexadecane (C16)	9.954	10571379	96.046 ug/ml
8) T n-Octadecane (C18)	11.398	10427644	95.368 ug/ml
10) T n-Eicosane (C20)	12.707	10010883	95.620 ug/ml
11) T n-Heneicosane (C21)	13.152	8643827	96.750 ug/ml
13) T n-Docosane (C22)	13.905	9857768	96.157 ug/ml
14) T n-Tetracosane (C24)	15.008	9949523	96.654 ug/ml
15) T n-Hexacosane (C26)	16.029	9895654	97.633 ug/ml
16) T n-Octacosane (C28)	16.978	9762020	98.466 ug/ml
17) T n-Tricontane (C30)	17.867	9828298	98.386 ug/ml
18) T n-Dotriacontane (C32)	18.699	9379832	98.492 ug/ml
19) T n-Tetratriacontane (C34)	19.482	8564585	99.243 ug/ml
20) T n-Hexatriacontane (C36)	20.220	7527188	100.403 ug/ml
21) T n-Octatriacontane (C38)	20.994	6779473	103.145 ug/ml
22) T n-Tetracontane (C40)	21.972	6015830	112.470 ug/ml

(f)=RT Delta > 1/2 Window

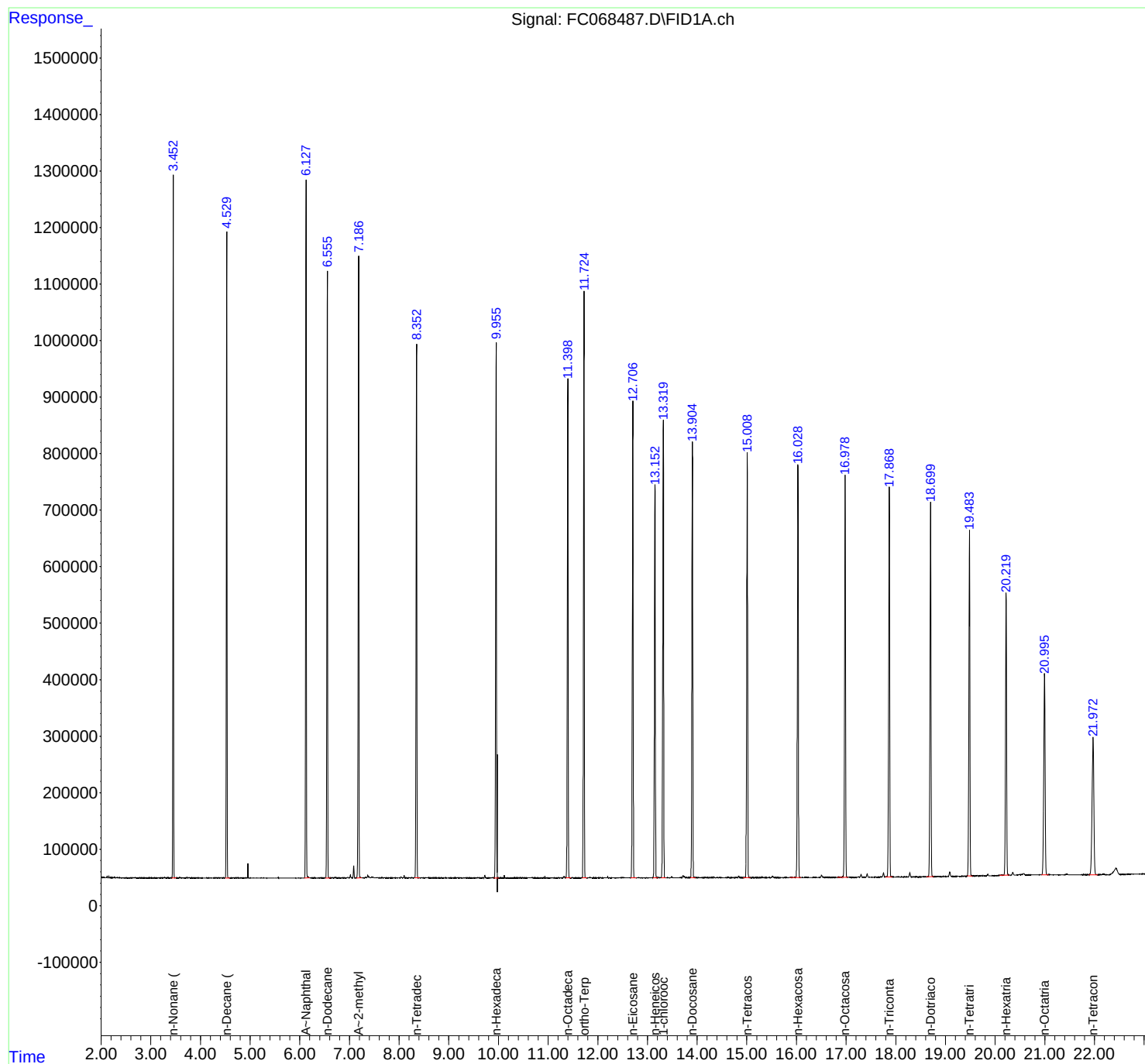
(m)=manual int.

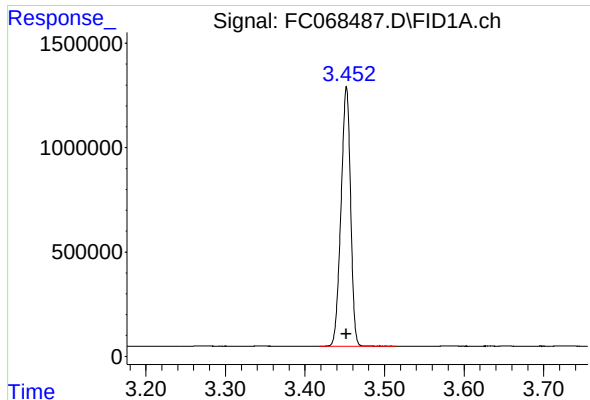
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
Data File : FC068487.D
Signal(s) : FID1A.ch
Acq On : 02 Apr 2025 15:55
Operator : YP/AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Apr 02 18:40:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Wed Apr 02 18:36:21 2025
Response via : Initial Calibration
Integrator: ChemStation

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

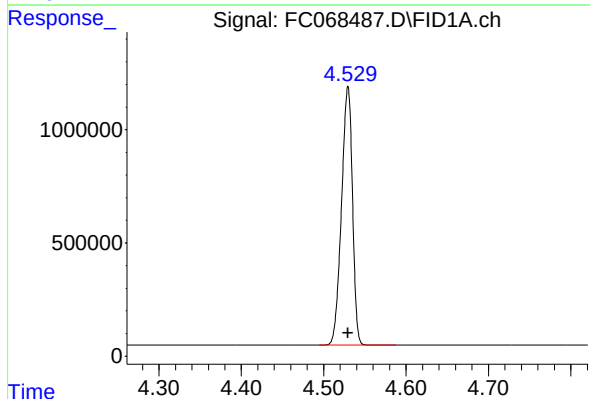




#1 n-Nonane (C9)

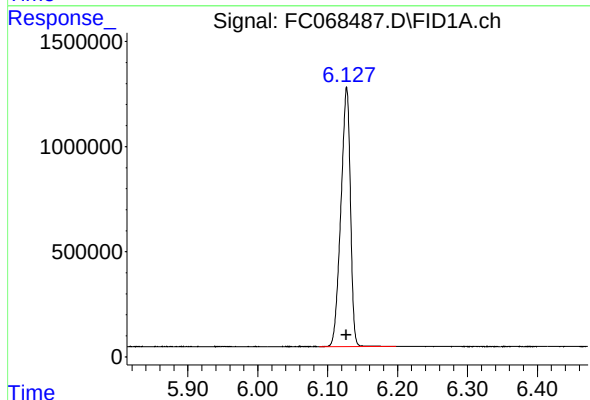
R.T.: 3.452 min
Delta R.T.: 0.000 min
Response: 10365720
Conc: 96.20 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



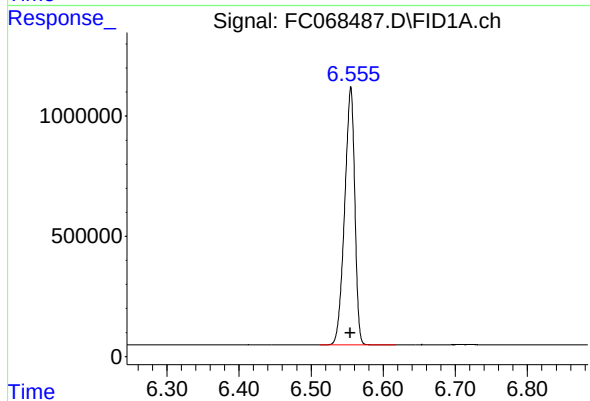
#2 n-Decane (C10)

R.T.: 4.529 min
Delta R.T.: 0.000 min
Response: 10521483
Conc: 96.10 ug/ml



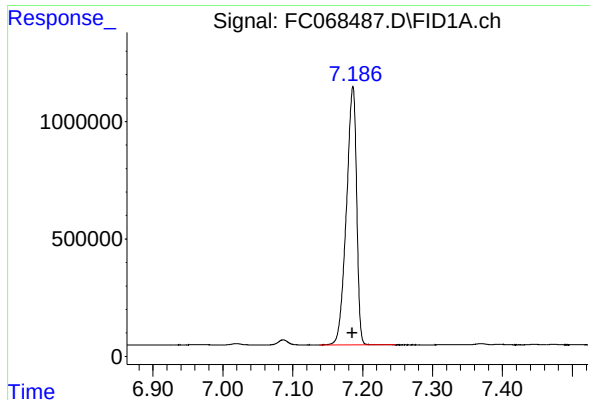
#3 A~Naphthalene (C11.7)

R.T.: 6.127 min
Delta R.T.: 0.000 min
Response: 11665756
Conc: 96.16 ug/ml



#4 n-Dodecane (C12)

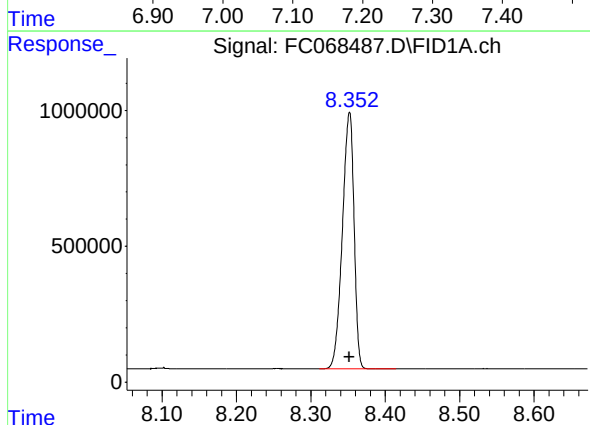
R.T.: 6.555 min
Delta R.T.: 0.000 min
Response: 10486955
Conc: 96.03 ug/ml



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

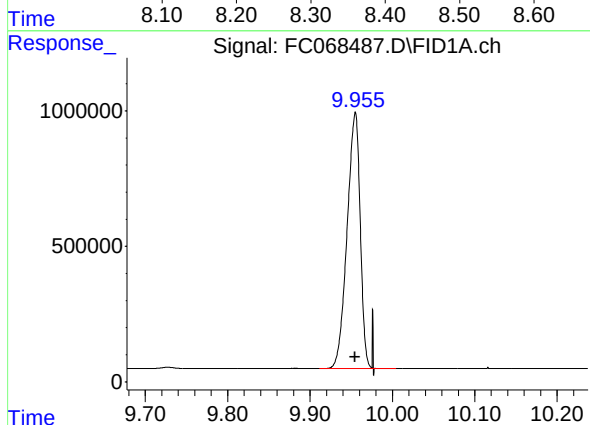
R.T.: 7.186 min
Delta R.T.: 0.000 min
Response: 11170905
Conc: 96.22 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



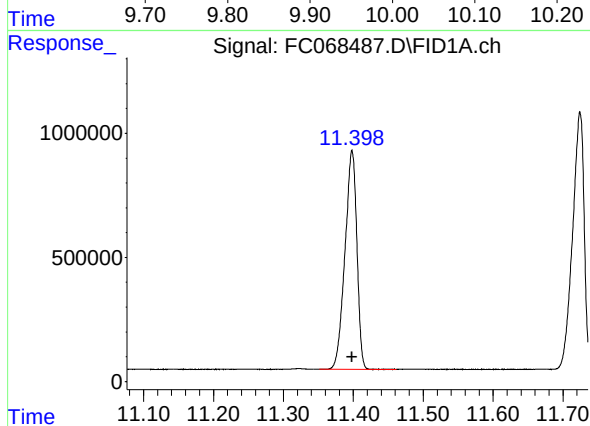
#6 n-Tetradecane (C14)

R.T.: 8.351 min
Delta R.T.: 0.000 min
Response: 10270310
Conc: 95.83 ug/ml



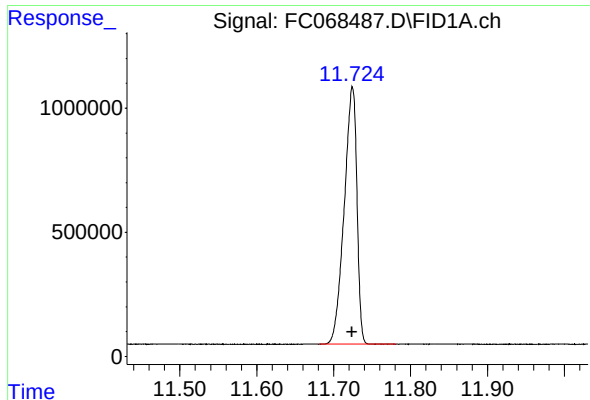
#7 n-Hexadecane (C16)

R.T.: 9.954 min
Delta R.T.: 0.000 min
Response: 10571379
Conc: 96.05 ug/ml



#8 n-Octadecane (C18)

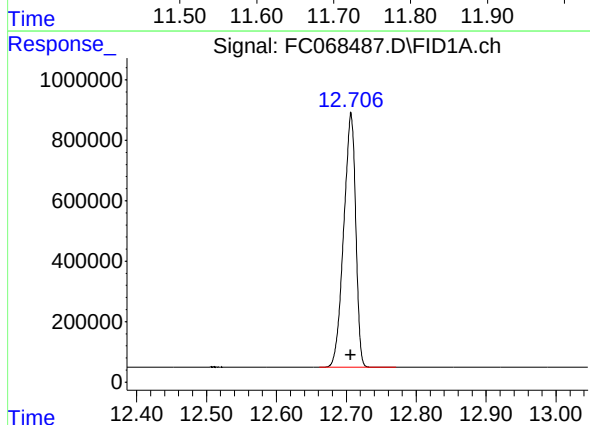
R.T.: 11.398 min
Delta R.T.: 0.000 min
Response: 10427644
Conc: 95.37 ug/ml



#9 ortho-Terphenyl (SURR)

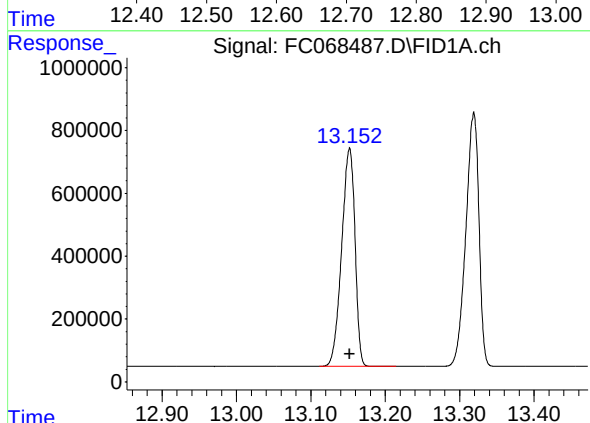
R.T.: 11.724 min
Delta R.T.: 0.000 min
Response: 11880180
Conc: 95.66 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



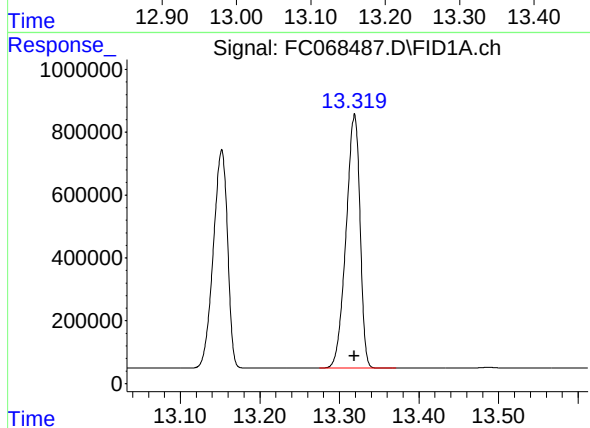
#10 n-Eicosane (C20)

R.T.: 12.707 min
Delta R.T.: 0.000 min
Response: 10010883
Conc: 95.62 ug/ml



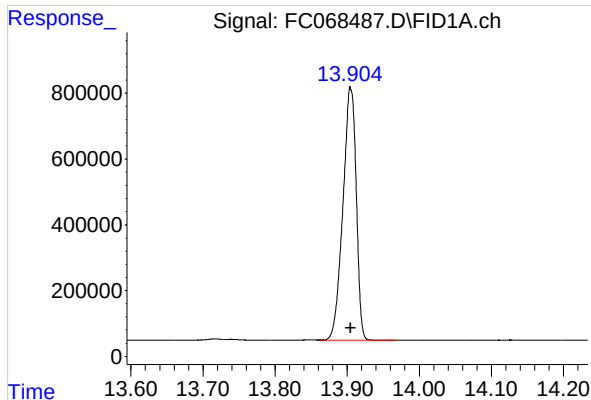
#11 n-Heneicosane (C21)

R.T.: 13.152 min
Delta R.T.: 0.000 min
Response: 8643827
Conc: 96.75 ug/ml



#12 1-chlorooctadecane (SURR)

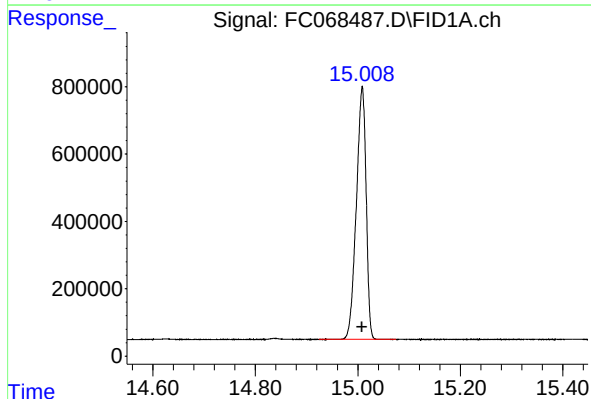
R.T.: 13.319 min
Delta R.T.: 0.000 min
Response: 9868760
Conc: 95.94 ug/ml



#13 n-Docosane (C22)

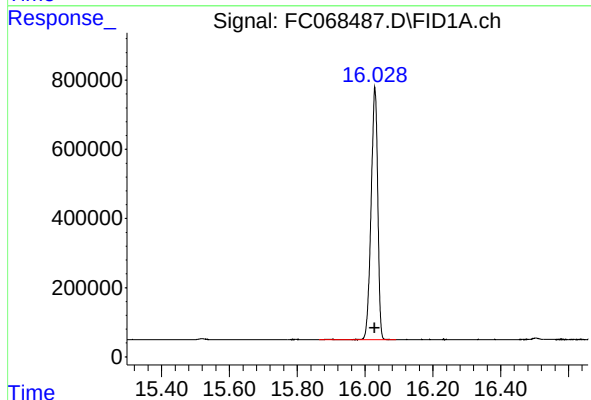
R.T.: 13.905 min
Delta R.T.: 0.000 min
Response: 9857768
Conc: 96.16 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



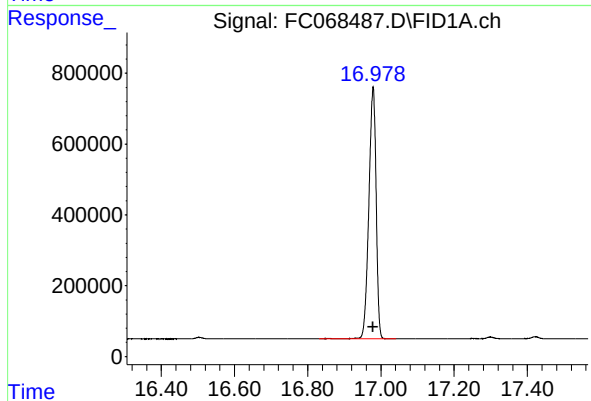
#14 n-Tetracosane (C24)

R.T.: 15.008 min
Delta R.T.: 0.000 min
Response: 9949523
Conc: 96.65 ug/ml



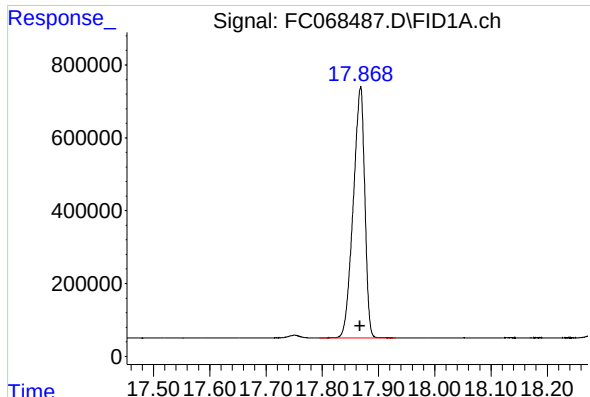
#15 n-Hexacosane (C26)

R.T.: 16.029 min
Delta R.T.: 0.000 min
Response: 9895654
Conc: 97.63 ug/ml



#16 n-Octacosane (C28)

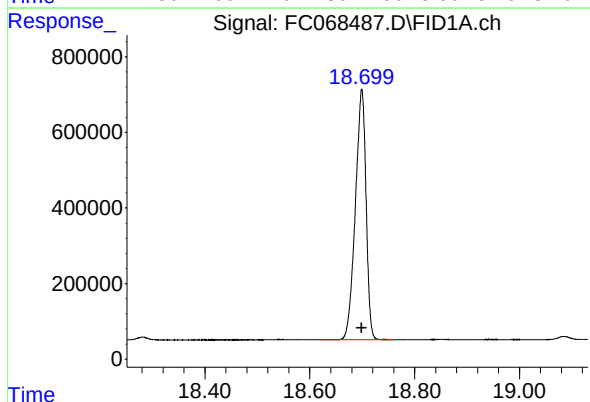
R.T.: 16.978 min
Delta R.T.: 0.000 min
Response: 9762020
Conc: 98.47 ug/ml



#17 n-Tricontane (C30)

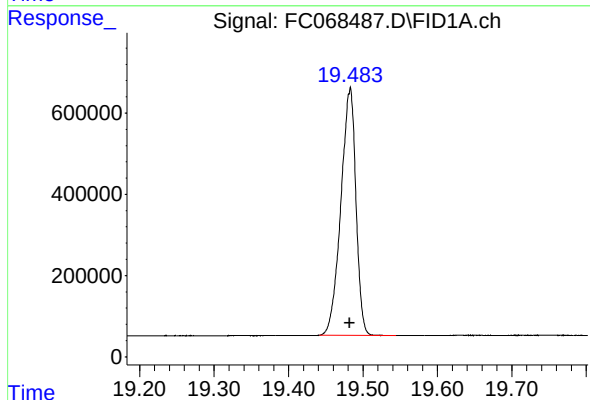
R.T.: 17.867 min
Delta R.T.: 0.000 min
Response: 9828298
Conc: 98.39 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



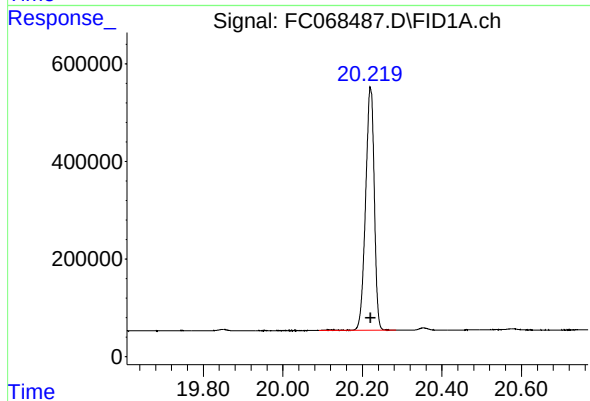
#18 n-Dotriacontane (C32)

R.T.: 18.699 min
Delta R.T.: 0.000 min
Response: 9379832
Conc: 98.49 ug/ml



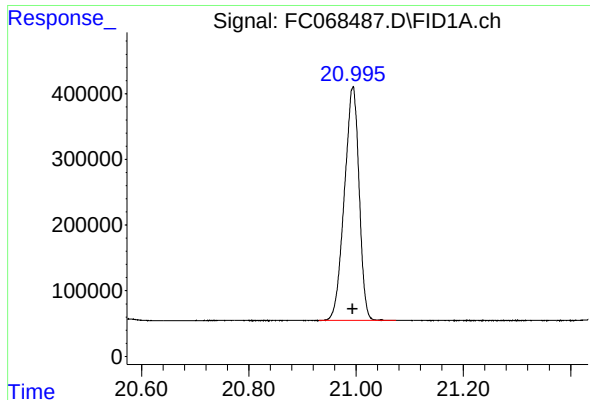
#19 n-Tetratriacontane (C34)

R.T.: 19.482 min
Delta R.T.: 0.000 min
Response: 8564585
Conc: 99.24 ug/ml



#20 n-Hexatriacontane (C36)

R.T.: 20.220 min
Delta R.T.: 0.000 min
Response: 7527188
Conc: 100.40 ug/ml



#21 n-Octatriacontane (C38)

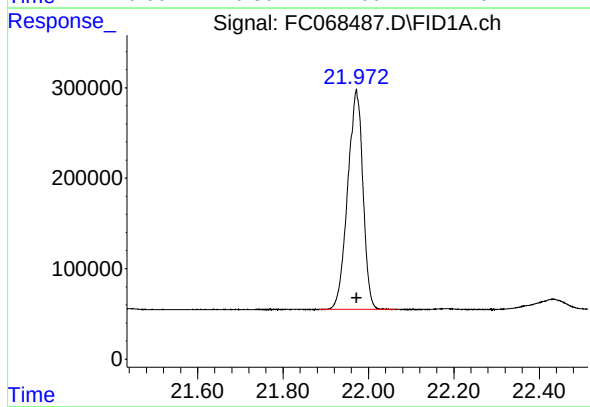
R.T.: 20.994 min
Delta R.T.: 0.000 min
Response: 6779473
Conc: 103.14 ug/ml

Instrument :

FID_C

ClientSampleId :

100 PPM ALIPHATIC HC STD1



#22 n-Tetracontane (C40)

R.T.: 21.972 min
Delta R.T.: 0.000 min
Response: 6015830
Conc: 112.47 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
 Data File : FC068487.D
 Signal(s) : FID1A.ch
 Acq On : 02 Apr 2025 15:55
 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 040225.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	3.394	3.489	BB	1244812	10363876	87.23%	4.857%
2	4.529	4.465	4.589	BB	1137434	10520101	88.54%	4.930%
3	6.127	6.070	6.159	BV	1235695	11591816	97.56%	5.432%
4	6.555	6.485	6.607	BB	1080006	10483150	88.23%	4.912%
5	7.186	7.132	7.259	BB	1095149	11169562	94.01%	5.234%
6	8.351	8.290	8.392	BB	948351	10281027	86.53%	4.818%
7	9.955	9.905	9.994	BB	953107	10572057	88.98%	4.954%
8	11.398	11.350	11.439	VB	882700	10435293	87.83%	4.890%
9	11.724	11.652	11.755	BB	1037992	11881348	100.00%	5.568%
10	12.707	12.660	12.754	BB	843179	10011347	84.26%	4.691%
11	13.152	13.079	13.209	BB	694811	8648431	72.79%	4.053%
12	13.319	13.232	13.370	BB	805528	9874877	83.11%	4.627%
13	13.905	13.825	13.945	BB	762856	9872787	83.09%	4.626%
14	15.008	14.925	15.065	BB	753269	9951208	83.75%	4.663%
15	16.029	15.947	16.090	BB	729864	9887874	83.22%	4.634%
16	16.978	16.892	17.042	BB	712949	9748306	82.05%	4.568%
17	17.868	17.804	17.945	BB	686373	9836699	82.79%	4.610%
18	18.699	18.624	18.772	BB	663923	9381590	78.96%	4.396%
19	19.482	19.440	19.554	BB	601873	8574594	72.17%	4.018%
20	20.220	20.154	20.295	BB	495856	7513944	63.24%	3.521%
21	20.994	20.909	21.075	BB	354666	6777428	57.04%	3.176%
22	21.972	21.872	22.077	BB	242986	6020445	50.67%	2.821%
Sum of corrected areas:						213397756		

Aliphatic EPH 040225.M Thu Apr 03 04:43:33 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
 Data File : FC068488.D
 Signal(s) : FID1A.ch
 Acq On : 02 Apr 2025 16:32
 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 02 18:42:09 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Wed Apr 02 18:36:21 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	6132743	49.584 ug/ml
Spiked Amount 50.000		Recovery =	99.17%
12) S 1-chlorooctadecane (S...	13.316	5068423	49.511 ug/ml
Spiked Amount 50.000		Recovery =	99.02%
Target Compounds			
1) T n-Nonane (C9)	3.450	5322320	49.593 ug/ml
2) T n-Decane (C10)	4.527	5408287	49.598 ug/ml
3) T A~Naphthalene (C11.7)	6.123	5978798	49.520 ug/ml
4) T n-Dodecane (C12)	6.551	5407228	49.677 ug/ml
5) T A~2-methylnaphthalene...	7.181	5719494	49.507 ug/ml
6) T n-Tetradecane (C14)	8.348	5329090	49.817 ug/ml
7) T n-Hexadecane (C16)	9.951	5452271	49.690 ug/ml
8) T n-Octadecane (C18)	11.395	5466510	49.997 ug/ml
10) T n-Eicosane (C20)	12.704	5173413	49.608 ug/ml
11) T n-Heneicosane (C21)	13.149	4417117	49.626 ug/ml
13) T n-Docosane (C22)	13.902	5029327	49.368 ug/ml
14) T n-Tetracosane (C24)	15.005	5013802	49.130 ug/ml
15) T n-Hexacosane (C26)	16.026	4920185	49.020 ug/ml
16) T n-Octacosane (C28)	16.976	4816075	49.043 ug/ml
17) T n-Tricontane (C30)	17.864	4845359	48.993 ug/ml
18) T n-Dotriacontane (C32)	18.696	4629419	49.065 ug/ml
19) T n-Tetratriacontane (C34)	19.480	4225995	49.308 ug/ml
20) T n-Hexatriacontane (C36)	20.218	3700388	49.570 ug/ml
21) T n-Octatriacontane (C38)	20.992	3298654	50.124 ug/ml
22) T n-Tetracontane (C40)	21.967	2766547	51.135 ug/ml

(f)=RT Delta > 1/2 Window

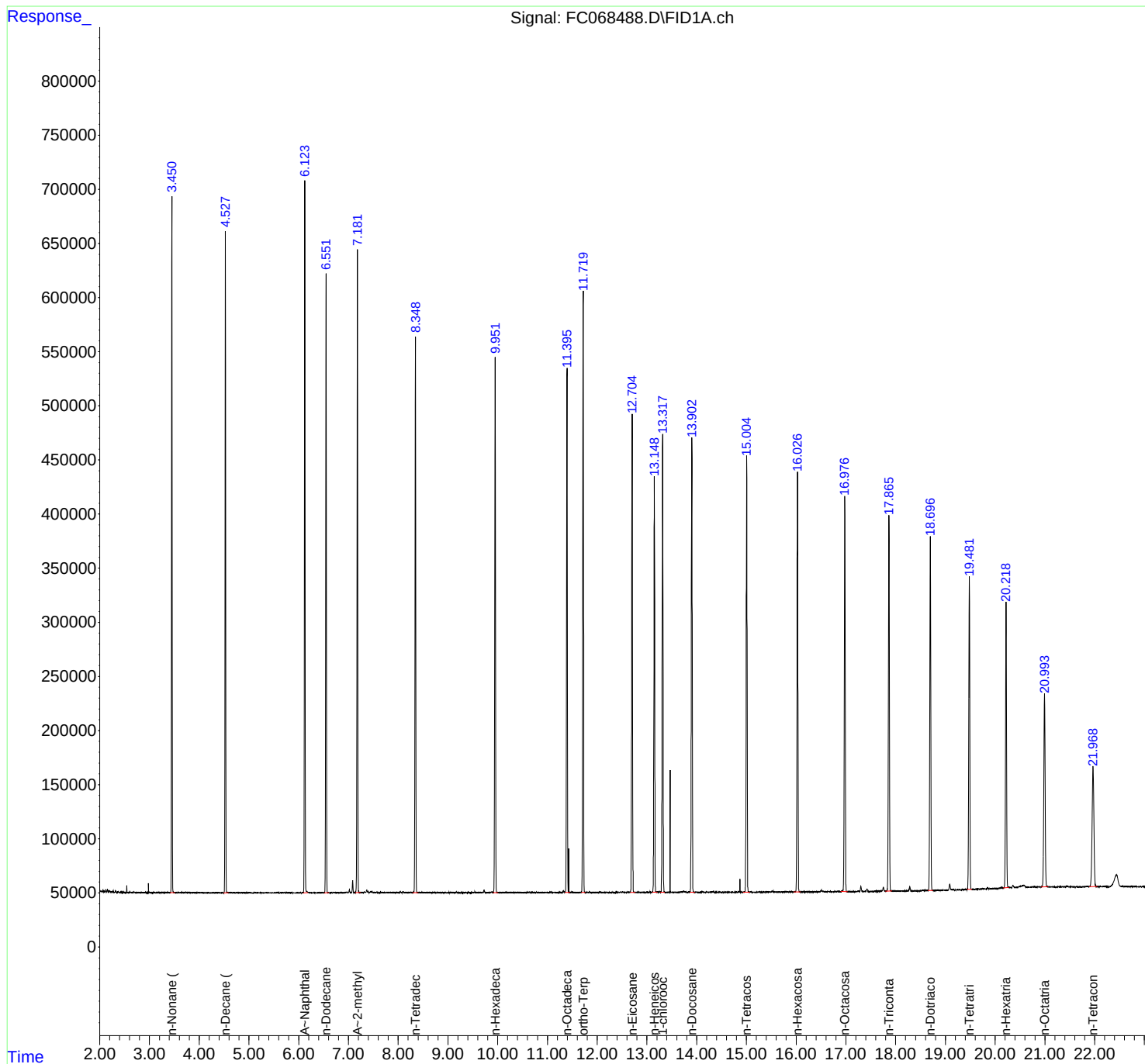
(m)=manual int.

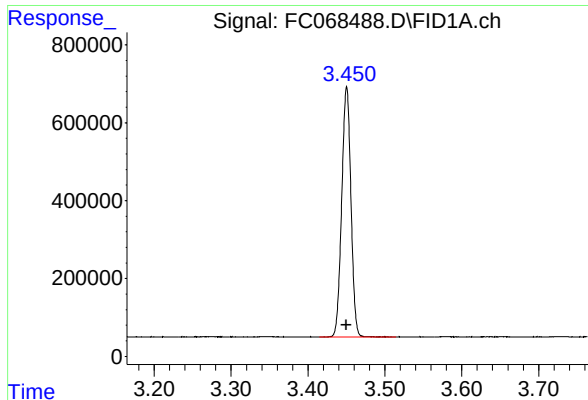
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
Data File : FC068488.D
Signal(s) : FID1A.ch
Acq On : 02 Apr 2025 16:32
Operator : YP/AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Apr 02 18:42:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Wed Apr 02 18:36:21 2025
Response via : Initial Calibration
Integrator: ChemStation

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

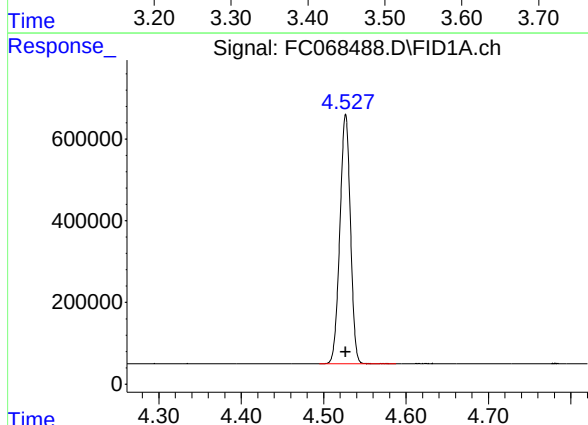




#1 n-Nonane (C9)

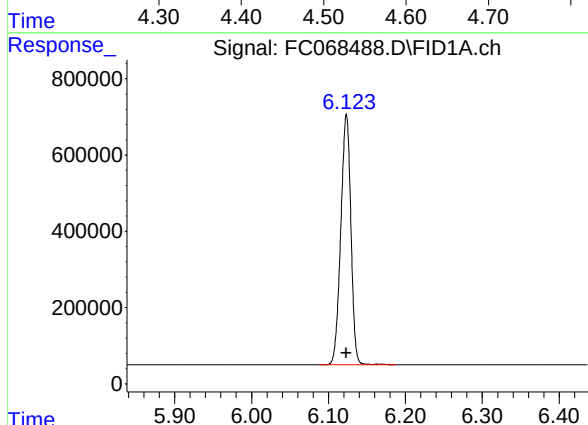
R.T.: 3.450 min
Delta R.T.: 0.000 min
Response: 5322320
Conc: 49.59 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



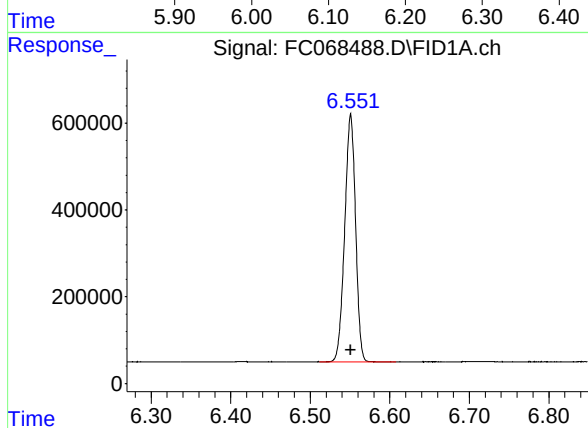
#2 n-Decane (C10)

R.T.: 4.527 min
Delta R.T.: 0.000 min
Response: 5408287
Conc: 49.60 ug/ml



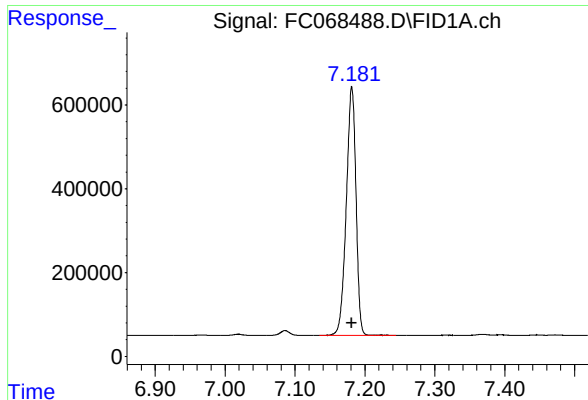
#3 A~Naphthalene (C11.7)

R.T.: 6.123 min
Delta R.T.: 0.000 min
Response: 5978798
Conc: 49.52 ug/ml



#4 n-Dodecane (C12)

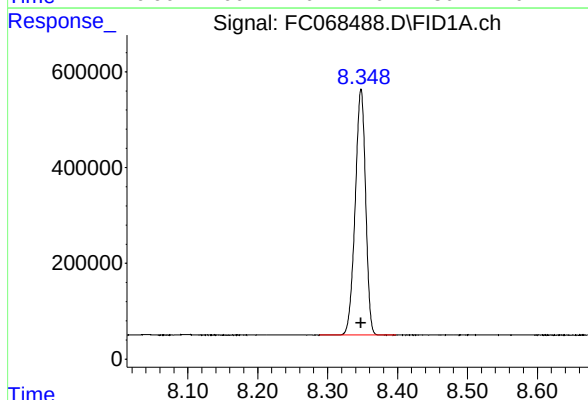
R.T.: 6.551 min
Delta R.T.: 0.000 min
Response: 5407228
Conc: 49.68 ug/ml



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

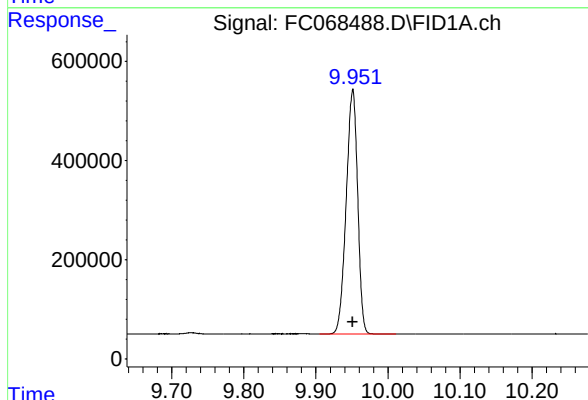
R.T.: 7.181 min
Delta R.T.: 0.000 min
Response: 5719494
Conc: 49.51 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



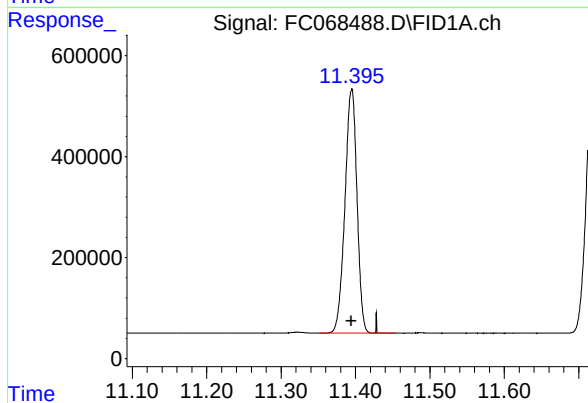
#6 n-Tetradecane (C14)

R.T.: 8.348 min
Delta R.T.: 0.000 min
Response: 5329090
Conc: 49.82 ug/ml



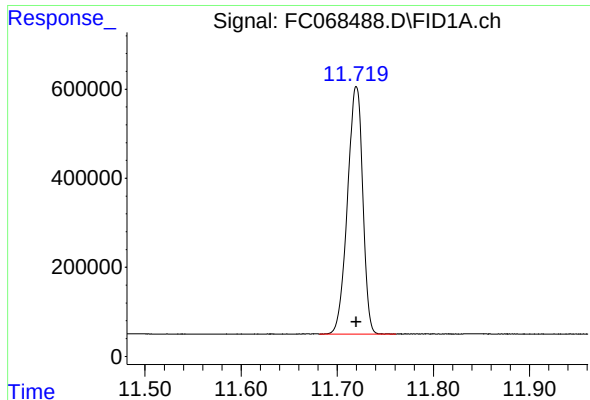
#7 n-Hexadecane (C16)

R.T.: 9.951 min
Delta R.T.: 0.000 min
Response: 5452271
Conc: 49.69 ug/ml



#8 n-Octadecane (C18)

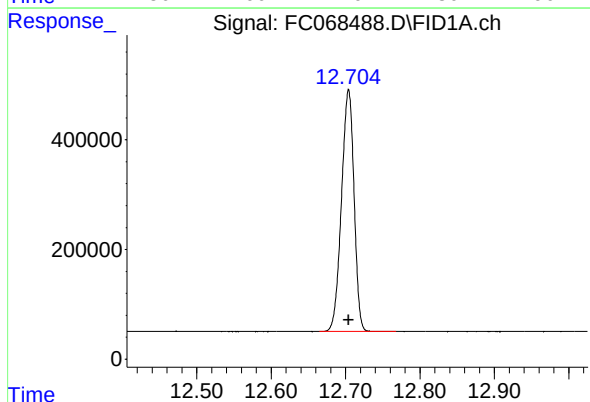
R.T.: 11.395 min
Delta R.T.: 0.000 min
Response: 5466510
Conc: 50.00 ug/ml



#9 ortho-Terphenyl (SURR)

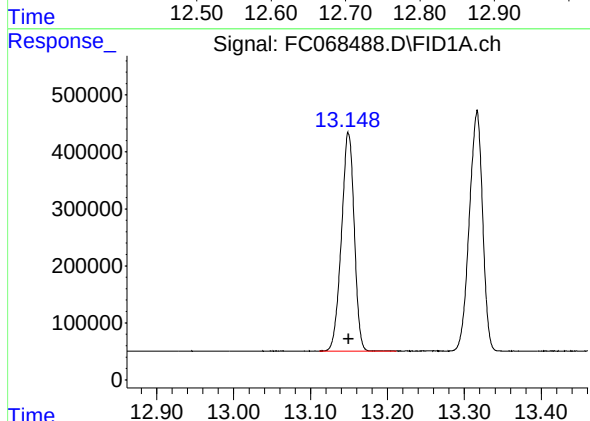
R.T.: 11.720 min
Delta R.T.: 0.000 min
Response: 6132743
Conc: 49.58 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



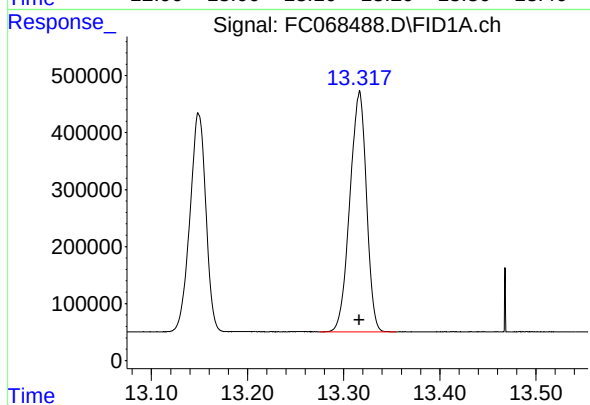
#10 n-Eicosane (C20)

R.T.: 12.704 min
Delta R.T.: 0.000 min
Response: 5173413
Conc: 49.61 ug/ml



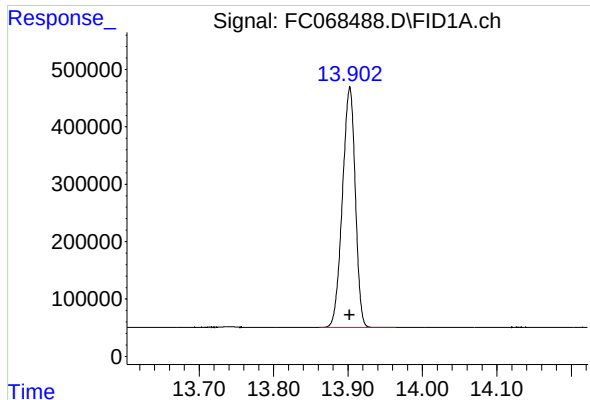
#11 n-Heneicosane (C21)

R.T.: 13.149 min
Delta R.T.: 0.000 min
Response: 4417117
Conc: 49.63 ug/ml



#12 1-chlorooctadecane (SURR)

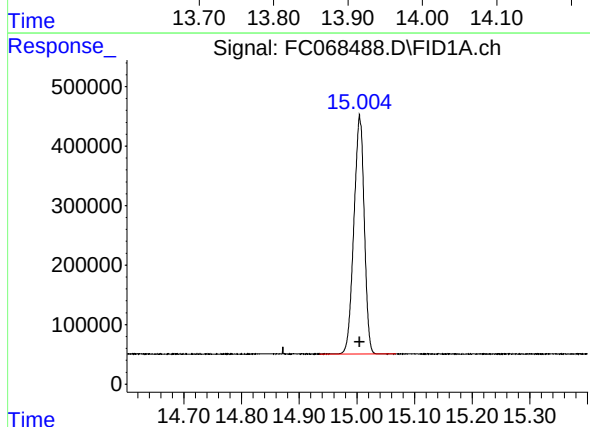
R.T.: 13.316 min
Delta R.T.: 0.000 min
Response: 5068423
Conc: 49.51 ug/ml



#13 n-Docosane (C22)

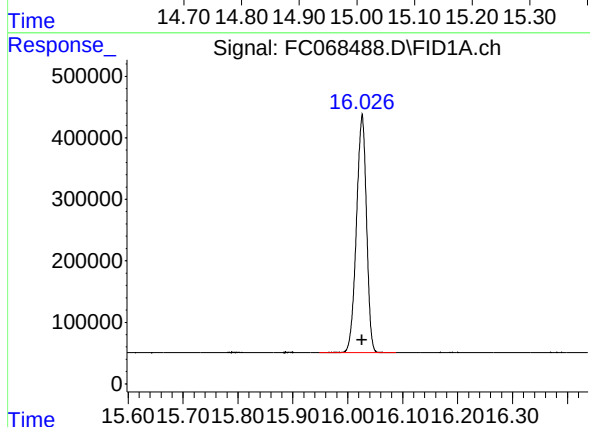
R.T.: 13.902 min
Delta R.T.: 0.000 min
Response: 5029327
Conc: 49.37 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



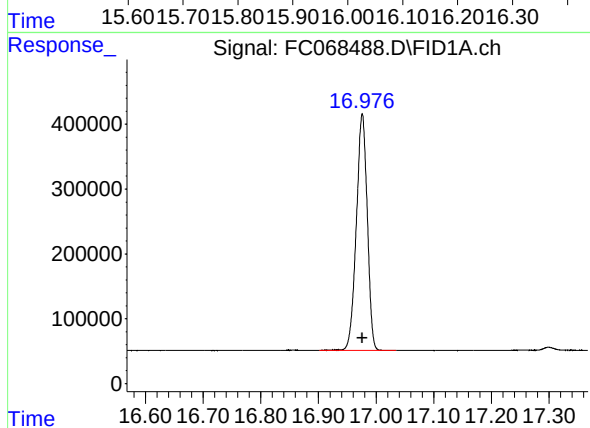
#14 n-Tetracosane (C24)

R.T.: 15.005 min
Delta R.T.: 0.000 min
Response: 5013802
Conc: 49.13 ug/ml



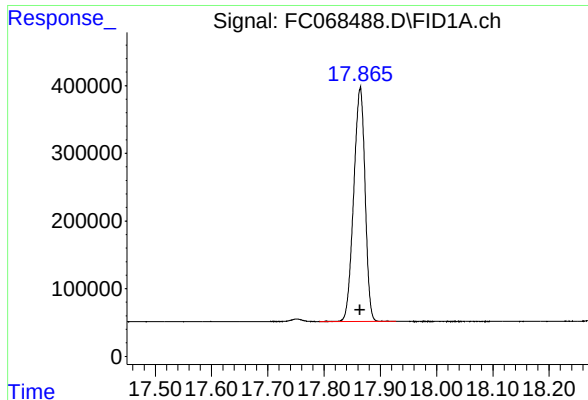
#15 n-Hexacosane (C26)

R.T.: 16.026 min
Delta R.T.: 0.000 min
Response: 4920185
Conc: 49.02 ug/ml



#16 n-Octacosane (C28)

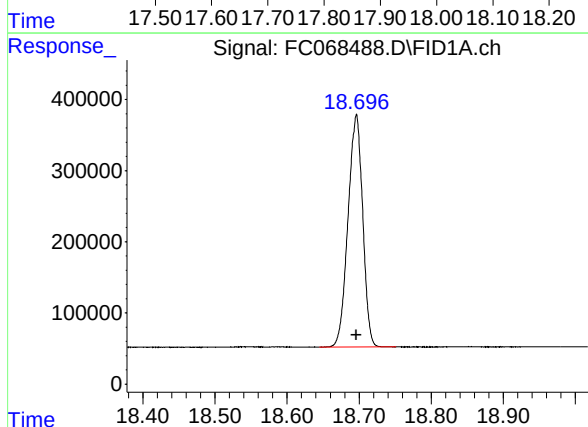
R.T.: 16.976 min
Delta R.T.: 0.000 min
Response: 4816075
Conc: 49.04 ug/ml



#17 n-Tricontane (C30)

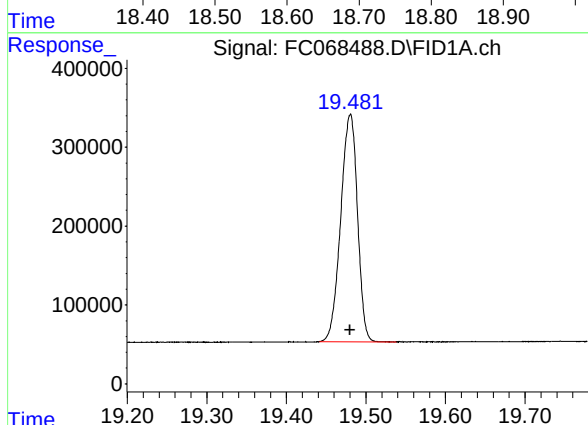
R.T.: 17.864 min
Delta R.T.: 0.000 min
Response: 4845359
Conc: 48.99 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



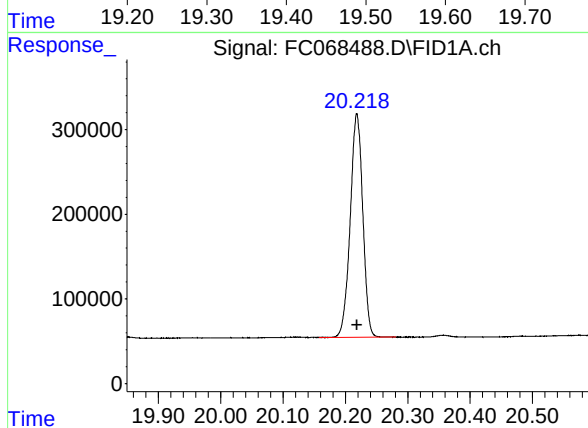
#18 n-Dotriacontane (C32)

R.T.: 18.696 min
Delta R.T.: 0.000 min
Response: 4629419
Conc: 49.07 ug/ml



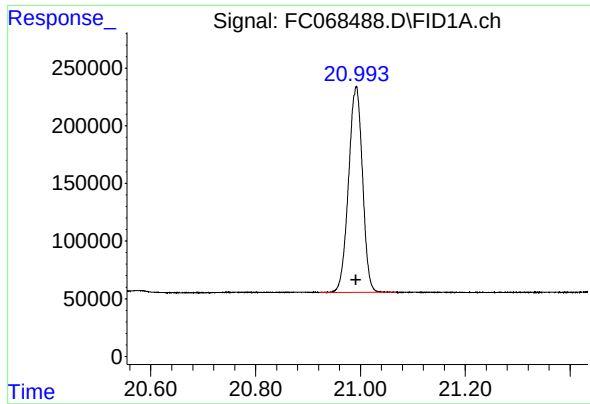
#19 n-Tetatriacontane (C34)

R.T.: 19.480 min
Delta R.T.: 0.000 min
Response: 4225995
Conc: 49.31 ug/ml



#20 n-Hexatriacontane (C36)

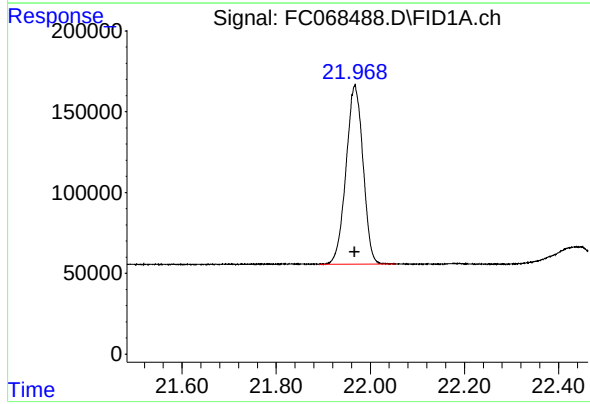
R.T.: 20.218 min
Delta R.T.: 0.000 min
Response: 3700388
Conc: 49.57 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.992 min
Delta R.T.: 0.000 min
Response: 3298654
Conc: 50.12 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



#22 n-Tetracontane (C40)

R.T.: 21.967 min
Delta R.T.: 0.000 min
Response: 2766547
Conc: 51.14 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
 Data File : FC068488.D
 Signal(s) : FID1A.ch
 Acq On : 02 Apr 2025 16:32
 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 040225.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	3.417	3.495	BB	643548	5318977	86.71%	4.918%
2	4.527	4.472	4.562	BB	611654	5404406	88.10%	4.997%
3	6.123	6.067	6.195	BB	658673	5978980	97.47%	5.529%
4	6.551	6.490	6.600	BB	568824	5406644	88.14%	5.000%
5	7.181	7.132	7.239	BB	592622	5719500	93.24%	5.289%
6	8.348	8.285	8.397	BB	513188	5330711	86.90%	4.929%
7	9.951	9.905	10.005	BB	489950	5452168	88.88%	5.042%
8	11.395	11.355	11.454	BB	485239	5466805	89.12%	5.055%
9	11.720	11.660	11.762	BB	556307	6134078	100.00%	5.672%
10	12.704	12.637	12.759	BB	441563	5169871	84.28%	4.781%
11	13.149	13.079	13.184	BB	384099	4414115	71.96%	4.082%
12	13.316	13.275	13.357	BB	424508	5069424	82.64%	4.688%
13	13.902	13.837	13.942	BB	418234	5029032	81.99%	4.650%
14	15.005	14.935	15.052	BB	398093	5012342	81.71%	4.635%
15	16.026	15.960	16.082	BB	383817	4918591	80.18%	4.548%
16	16.976	16.830	17.034	BB	365107	4831854	78.77%	4.468%
17	17.864	17.797	17.927	BB	344325	4849869	79.06%	4.485%
18	18.696	18.645	18.762	BB	325694	4631503	75.50%	4.283%
19	19.480	19.440	19.537	BB	288362	4230904	68.97%	3.912%
20	20.218	20.149	20.292	BB	264179	3706900	60.43%	3.428%
21	20.992	20.905	21.070	BB	178401	3298239	53.77%	3.050%
22	21.967	21.877	22.062	BB	110535	2768199	45.13%	2.560%
Sum of corrected areas:						108143112		

Aliphatic EPH 040225.M Thu Apr 03 04:44:01 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
 Data File : FC068489.D
 Signal(s) : FID1A.ch
 Acq On : 02 Apr 2025 17:09
 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 02 18:38:11 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Wed Apr 02 18:36:21 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)	11.716	2591844	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
12) S 1-chlorooctadecane (S...	13.314	2141005	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
Target Compounds			
1) T n-Nonane (C9)	3.451	2237116	20.000 ug/ml
2) T n-Decane (C10)	4.526	2274882	20.000 ug/ml
3) T A~Naphthalene (C11.7)	6.123	2519456	20.000 ug/ml
4) T n-Dodecane (C12)	6.551	2270642	20.000 ug/ml
5) T A~2-methylnaphthalene...	7.180	2409709	20.000 ug/ml
6) T n-Tetradecane (C14)	8.347	2232688	20.000 ug/ml
7) T n-Hexadecane (C16)	9.950	2288357	20.000 ug/ml
8) T n-Octadecane (C18)	11.391	2288117	20.000 ug/ml
10) T n-Eicosane (C20)	12.702	2185592	20.000 ug/ml
11) T n-Heneicosane (C21)	13.148	1844920	20.000 ug/ml
13) T n-Docosane (C22)	13.901	2129148	20.000 ug/ml
14) T n-Tetracosane (C24)	15.004	2127660	20.000 ug/ml
15) T n-Hexacosane (C26)	16.025	2075088	20.000 ug/ml
16) T n-Octacosane (C28)	16.975	2013228	20.000 ug/ml
17) T n-Tricontane (C30)	17.863	2030134	20.000 ug/ml
18) T n-Dotriacontane (C32)	18.695	1933414	20.000 ug/ml
19) T n-Tetratriacontane (C34)	19.478	1739064	20.000 ug/ml
20) T n-Hexatriacontane (C36)	20.218	1493355	20.000 ug/ml
21) T n-Octatriacontane (C38)	20.990	1273221	20.000 ug/ml
22) T n-Tetracontane (C40)	21.965	936374	20.000 ug/ml

(f)=RT Delta > 1/2 Window

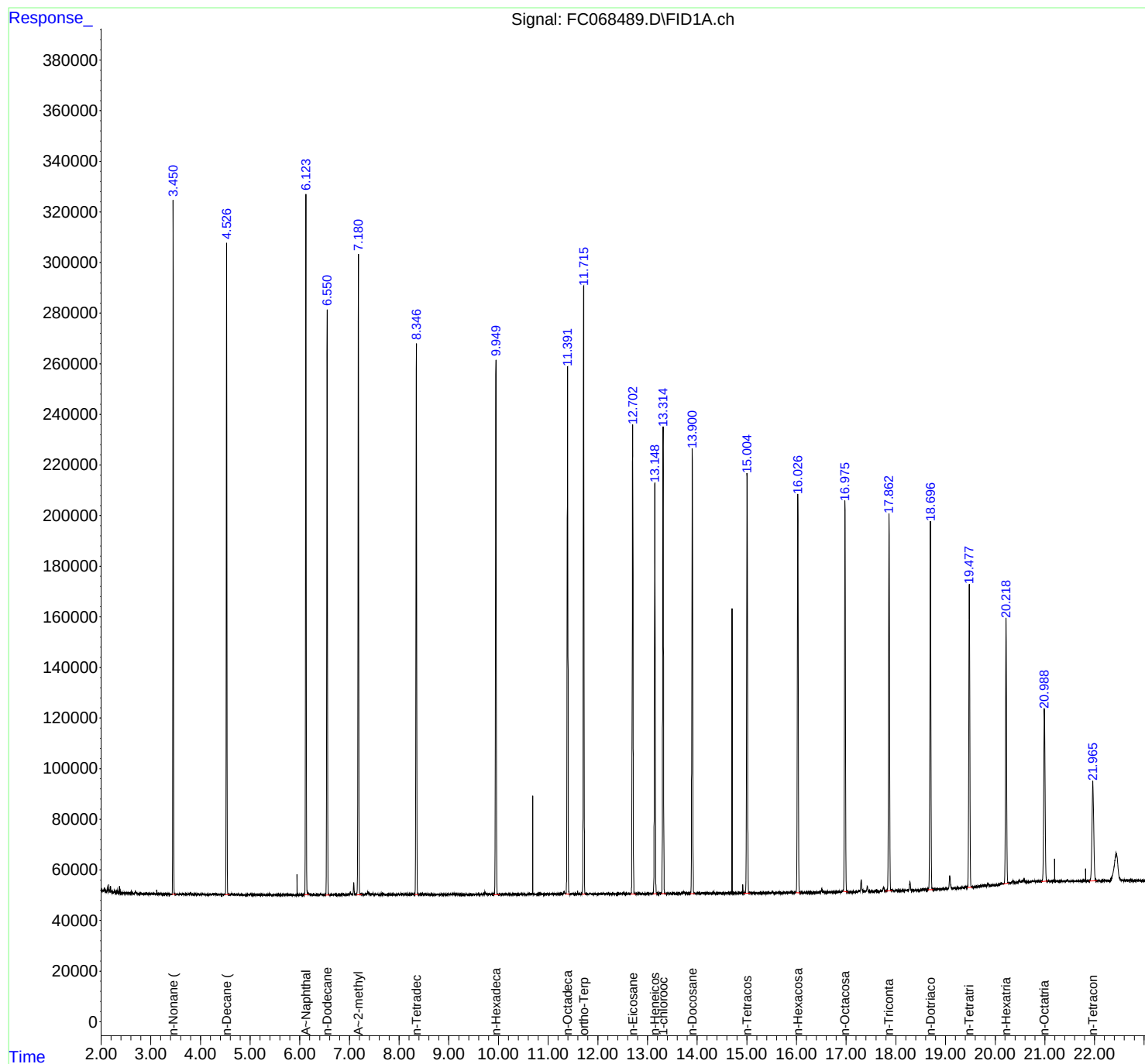
(m)=manual int.

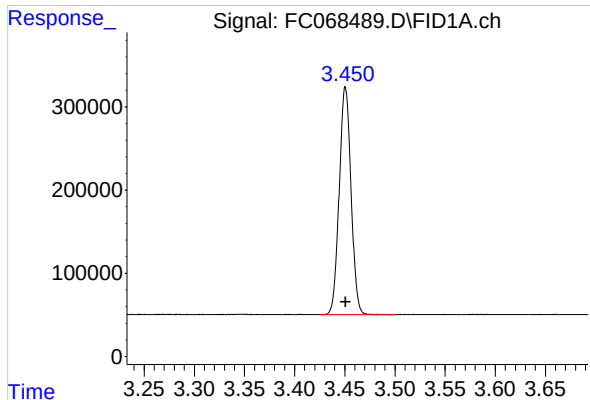
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
Data File : FC068489.D
Signal(s) : FID1A.ch
Acq On : 02 Apr 2025 17:09
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Apr 02 18:38:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Wed Apr 02 18:36:21 2025
Response via : Initial Calibration
Integrator: ChemStation

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

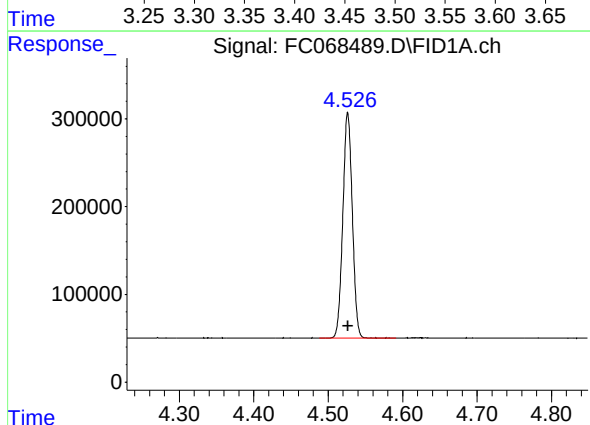




#1 n-Nonane (C9)

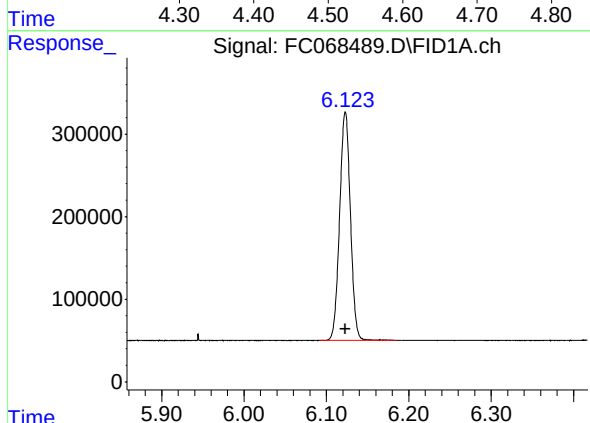
R.T.: 3.451 min
Delta R.T.: 0.000 min
Response: 2237116
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



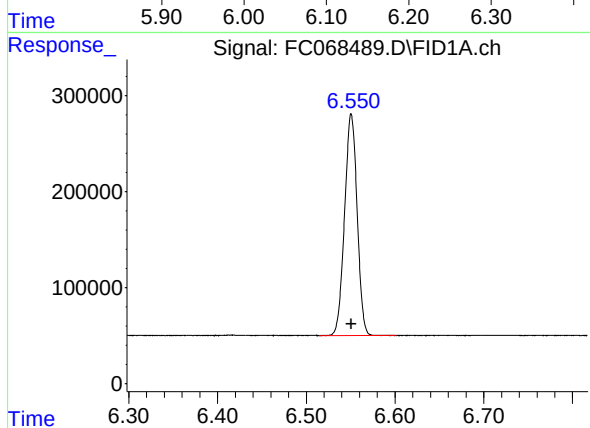
#2 n-Decane (C10)

R.T.: 4.526 min
Delta R.T.: 0.000 min
Response: 2274882
Conc: 20.00 ug/ml



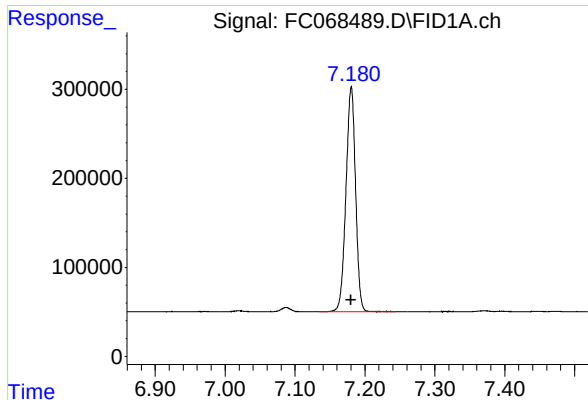
#3 A~Naphthalene (C11.7)

R.T.: 6.123 min
Delta R.T.: 0.000 min
Response: 2519456
Conc: 20.00 ug/ml



#4 n-Dodecane (C12)

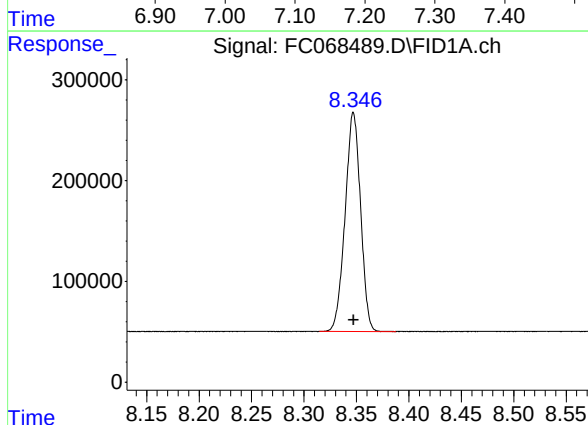
R.T.: 6.551 min
Delta R.T.: 0.000 min
Response: 2270642
Conc: 20.00 ug/ml



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

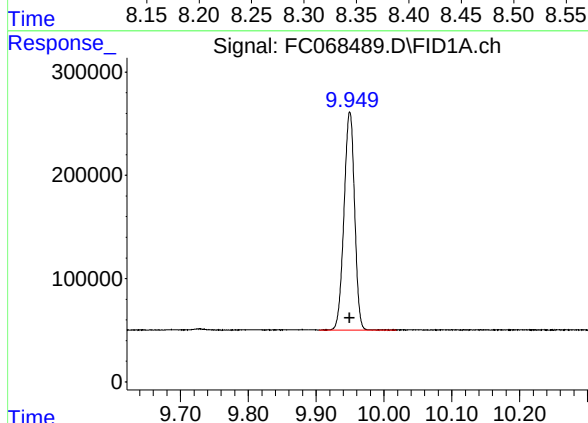
R.T.: 7.180 min
Delta R.T.: 0.000 min
Response: 2409709
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



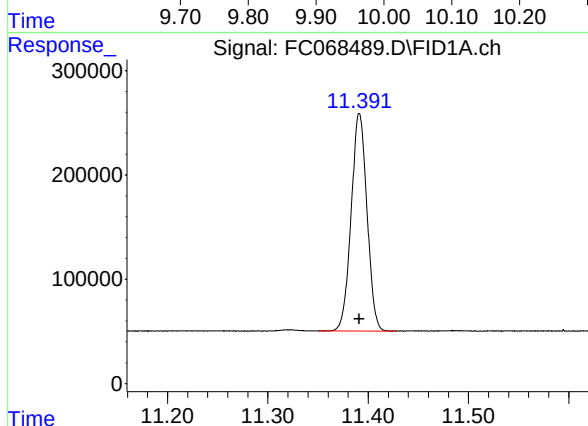
#6 n-Tetradecane (C14)

R.T.: 8.347 min
Delta R.T.: 0.000 min
Response: 2232688
Conc: 20.00 ug/ml



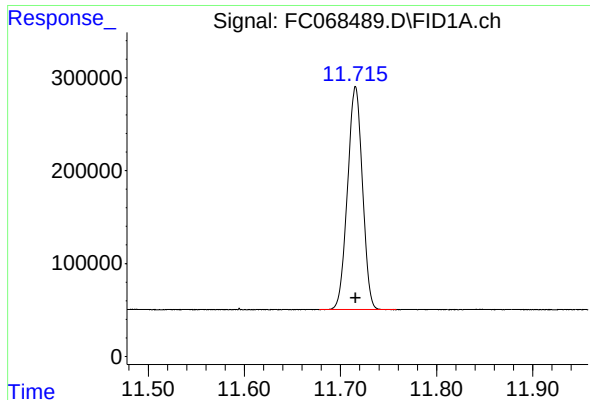
#7 n-Hexadecane (C16)

R.T.: 9.950 min
Delta R.T.: 0.000 min
Response: 2288357
Conc: 20.00 ug/ml



#8 n-Octadecane (C18)

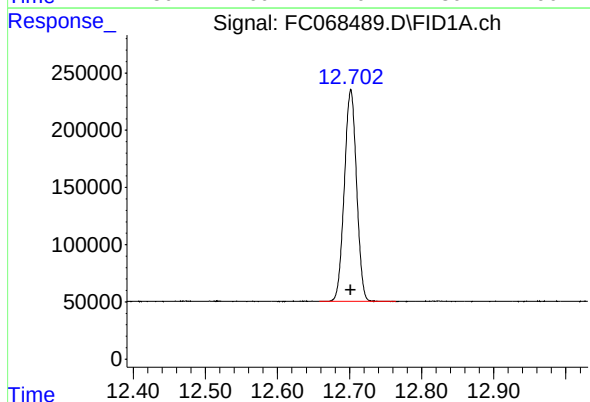
R.T.: 11.391 min
Delta R.T.: 0.000 min
Response: 2288117
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURR)

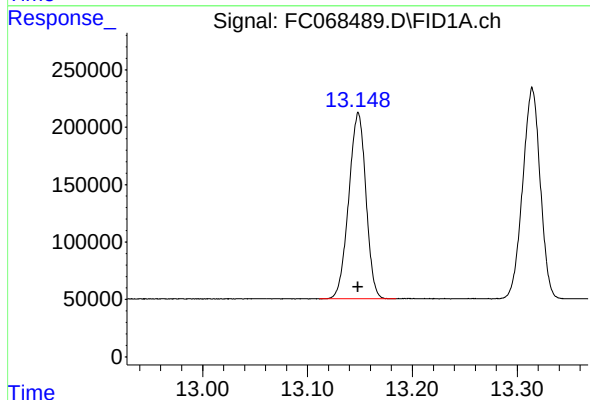
R.T.: 11.716 min
Delta R.T.: 0.000 min
Response: 2591844
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



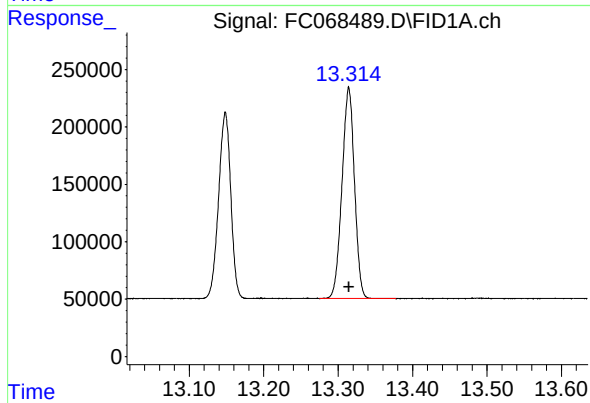
#10 n-Eicosane (C20)

R.T.: 12.702 min
Delta R.T.: 0.000 min
Response: 2185592
Conc: 20.00 ug/ml



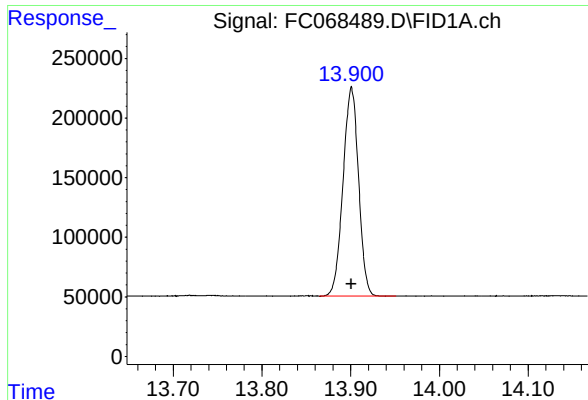
#11 n-Heneicosane (C21)

R.T.: 13.148 min
Delta R.T.: 0.000 min
Response: 1844920
Conc: 20.00 ug/ml



#12 1-chlorooctadecane (SURR)

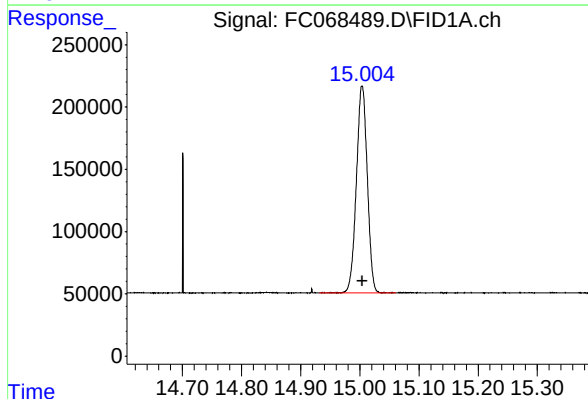
R.T.: 13.314 min
Delta R.T.: 0.000 min
Response: 2141005
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

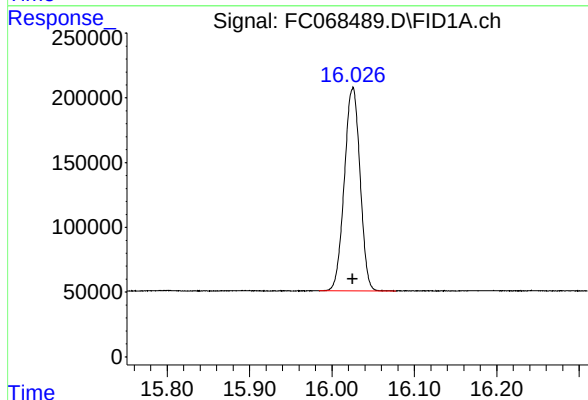
R.T.: 13.901 min
Delta R.T.: 0.000 min
Response: 2129148
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



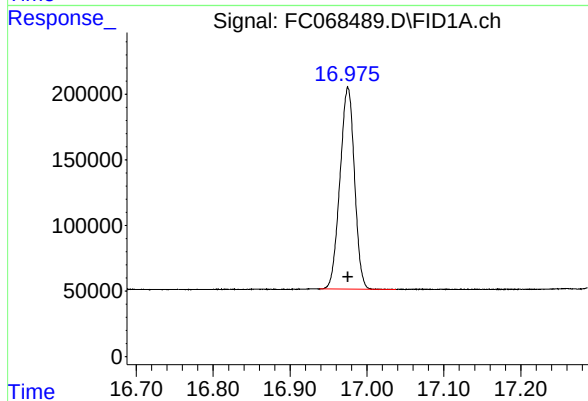
#14 n-Tetracosane (C24)

R.T.: 15.004 min
Delta R.T.: 0.000 min
Response: 2127660
Conc: 20.00 ug/ml



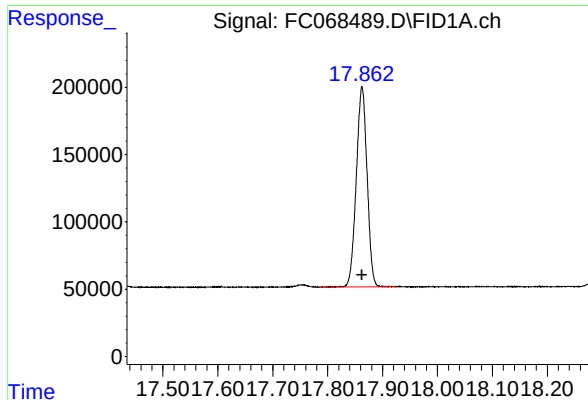
#15 n-Hexacosane (C26)

R.T.: 16.025 min
Delta R.T.: 0.000 min
Response: 2075088
Conc: 20.00 ug/ml



#16 n-Octacosane (C28)

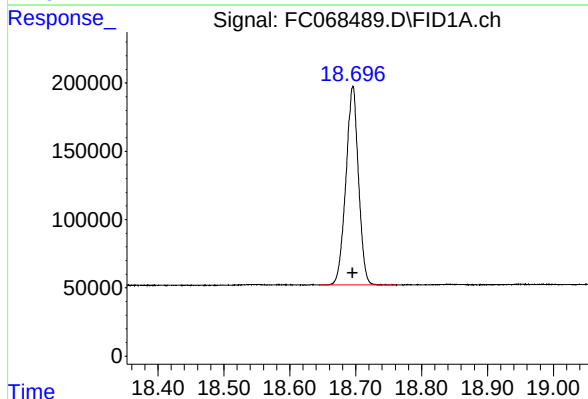
R.T.: 16.975 min
Delta R.T.: 0.000 min
Response: 2013228
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

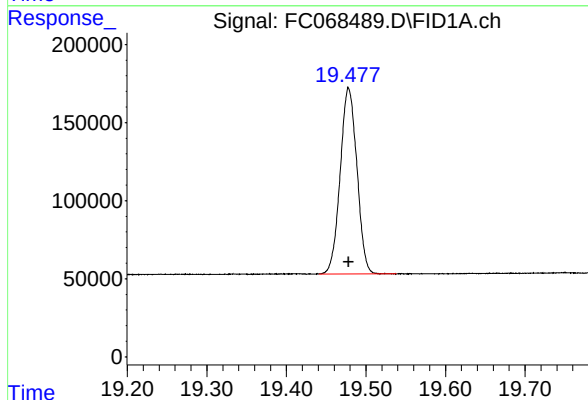
R.T.: 17.863 min
Delta R.T.: 0.000 min
Response: 2030134
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



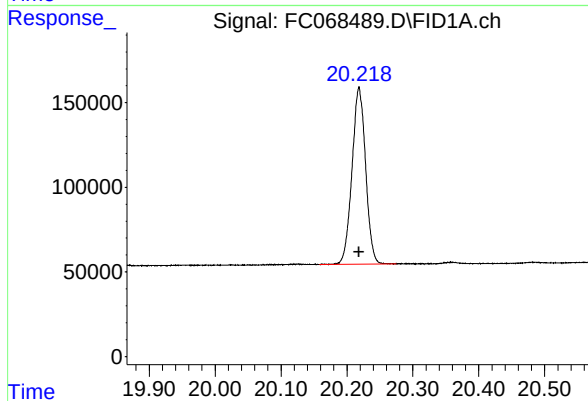
#18 n-Dotriacontane (C32)

R.T.: 18.695 min
Delta R.T.: 0.000 min
Response: 1933414
Conc: 20.00 ug/ml



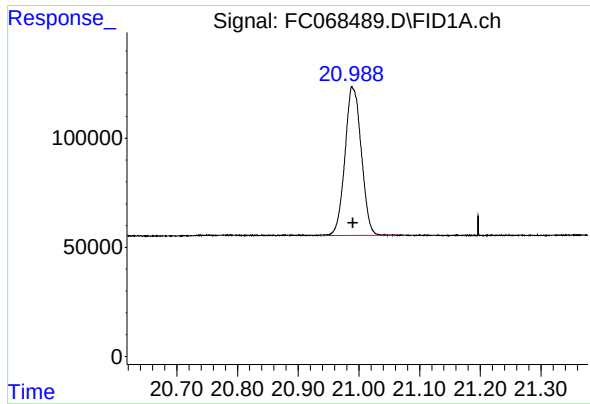
#19 n-Tetatriacontane (C34)

R.T.: 19.478 min
Delta R.T.: 0.000 min
Response: 1739064
Conc: 20.00 ug/ml



#20 n-Hexatriacontane (C36)

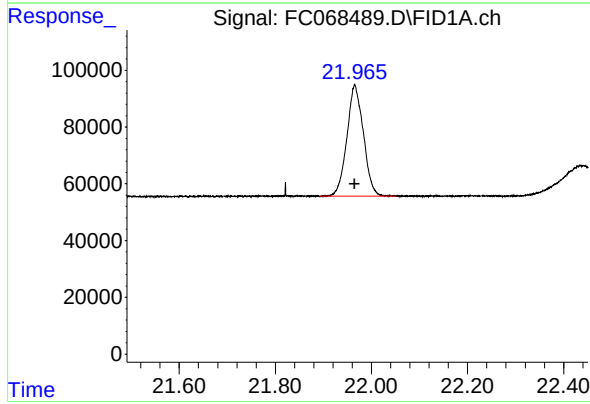
R.T.: 20.218 min
Delta R.T.: 0.000 min
Response: 1493355
Conc: 20.00 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.990 min
Delta R.T.: 0.000 min
Response: 1273221
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



#22 n-Tetracontane (C40)

R.T.: 21.965 min
Delta R.T.: 0.000 min
Response: 936374
Conc: 20.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
Data File : FC068489.D
Signal(s) : FID1A.ch
Acq On : 02 Apr 2025 17:09
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 040225.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	3.397	3.492	BB	273892	2236131	86.27%	4.964%
2	4.526	4.474	4.562	BB	255746	2274213	87.74%	5.049%
3	6.123	6.072	6.194	BB	277535	2521641	97.29%	5.598%
4	6.551	6.499	6.595	BB	231229	2268214	87.51%	5.036%
5	7.180	7.134	7.222	BB	252605	2405296	92.80%	5.340%
6	8.347	8.289	8.387	BB	217801	2236984	86.30%	4.966%
7	9.950	9.894	9.990	BB	211474	2284547	88.14%	5.072%
8	11.391	11.354	11.427	BB	208925	2289647	88.34%	5.083%
9	11.716	11.659	11.759	BB	240360	2591995	100.00%	5.755%
10	12.702	12.644	12.757	BB	185520	2182814	84.21%	4.846%
11	13.148	13.090	13.184	BB	162705	1844367	71.16%	4.095%
12	13.314	13.252	13.364	BB	183703	2139071	82.53%	4.749%
13	13.901	13.842	13.939	BB	175059	2126312	82.03%	4.721%
14	15.004	14.934	15.052	BB	166053	2127278	82.07%	4.723%
15	16.025	15.964	16.077	BB	156807	2077986	80.17%	4.613%
16	16.975	16.889	17.025	BB	154393	2030757	78.35%	4.509%
17	17.863	17.790	17.904	BB	148810	2028137	78.25%	4.503%
18	18.695	18.645	18.754	BB	145089	1931861	74.53%	4.289%
19	19.478	19.440	19.539	BB	118871	1743088	67.25%	3.870%
20	20.218	20.089	20.275	BB	104579	1493285	57.61%	3.315%
21	20.990	20.912	21.065	BB	67071	1271399	49.05%	2.823%
22	21.965	21.880	22.060	BB	39436	937677	36.18%	2.082%
Sum of corrected areas:							45042699	

Aliphatic EPH 040225.M Thu Apr 03 04:44:24 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
 Data File : FC068490.D
 Signal(s) : FID1A.ch
 Acq On : 02 Apr 2025 17:45
 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 02 18:44:06 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Wed Apr 02 18:36:21 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	1390233	10.902 ug/ml
Spiked Amount 50.000		Recovery =	21.80%
12) S 1-chlorooctadecane (S...	13.310	1145180	10.864 ug/ml
Spiked Amount 50.000		Recovery =	21.73%
Target Compounds			
1) T n-Nonane (C9)	3.450	1201876	10.873 ug/ml
2) T n-Decane (C10)	4.525	1219789	10.864 ug/ml
3) T A~Naphthalene (C11.7)	6.121	1349544	10.858 ug/ml
4) T n-Dodecane (C12)	6.549	1219403	10.876 ug/ml
5) T A~2-methylnaphthalene...	7.178	1290927	10.855 ug/ml
6) T n-Tetradecane (C14)	8.345	1202170	10.901 ug/ml
7) T n-Hexadecane (C16)	9.946	1233954	10.906 ug/ml
8) T n-Octadecane (C18)	11.388	1246935	11.018 ug/ml
10) T n-Eicosane (C20)	12.697	1173081	10.908 ug/ml
11) T n-Heneicosane (C21)	13.143	976829	10.714 ug/ml
13) T n-Docosane (C22)	13.897	1135158	10.833 ug/ml
14) T n-Tetracosane (C24)	15.001	1133376	10.807 ug/ml
15) T n-Hexacosane (C26)	16.022	1092872	10.652 ug/ml
16) T n-Octacosane (C28)	16.974	1058084	10.570 ug/ml
17) T n-Tricontane (C30)	17.861	1069974	10.602 ug/ml
18) T n-Dotriacontane (C32)	18.694	1005787	10.487 ug/ml
19) T n-Tetratriacontane (C34)	19.479	883903	10.233 ug/ml
20) T n-Hexatriacontane (C36)	20.218	730670	9.840 ug/ml
21) T n-Octatriacontane (C38)	20.990	574412	9.015 ug/ml
22) T n-Tetracontane (C40)	21.966	348193	7.065 ug/ml

(f)=RT Delta > 1/2 Window

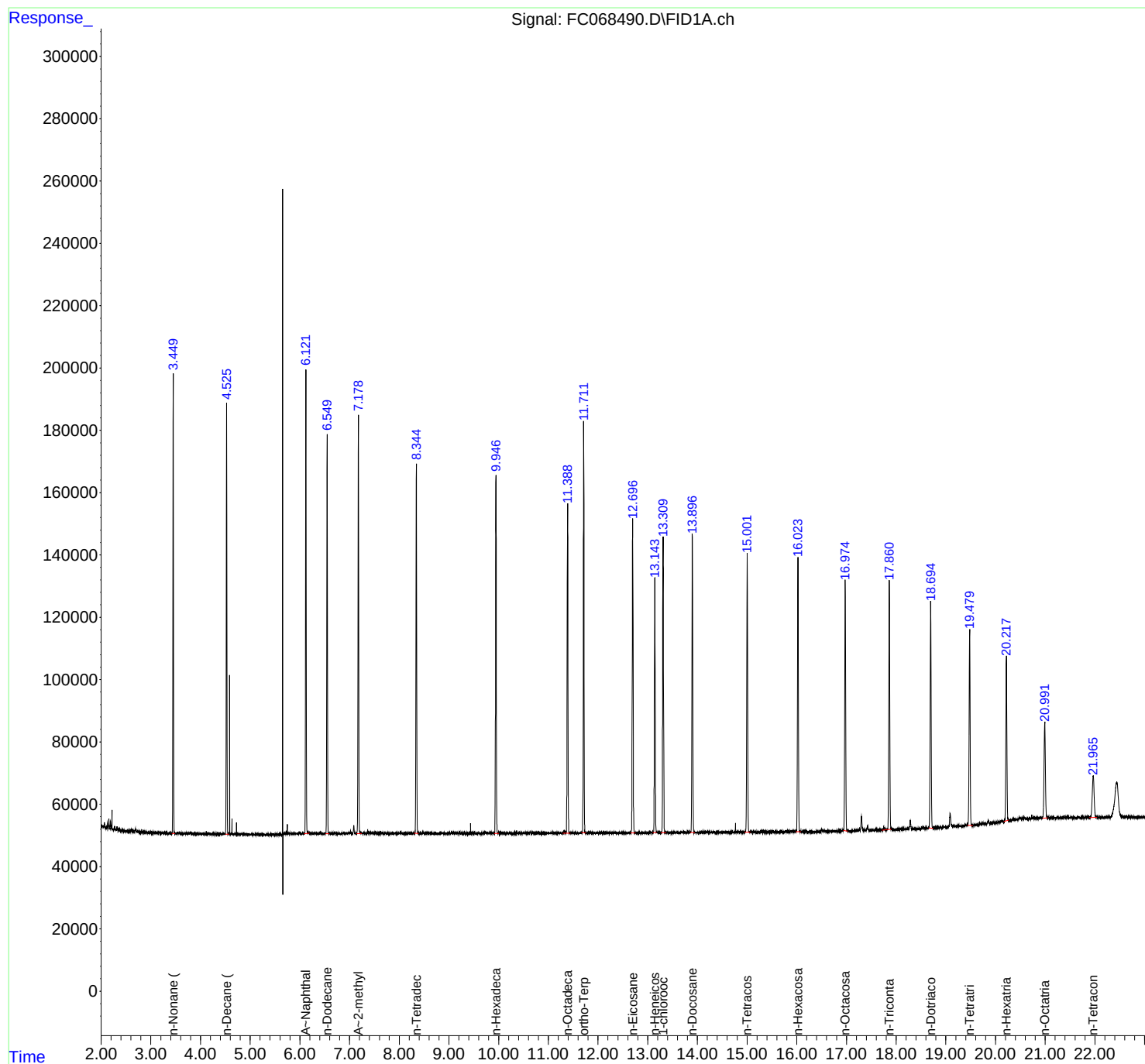
(m)=manual int.

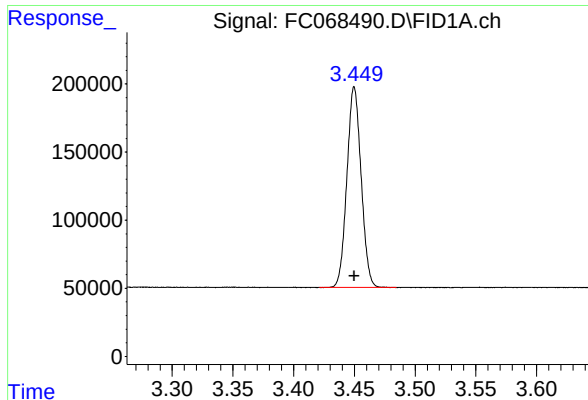
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
Data File : FC068490.D
Signal(s) : FID1A.ch
Acq On : 02 Apr 2025 17:45
Operator : YP/AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
Quant Time: Apr 02 18:44:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Wed Apr 02 18:36:21 2025
Response via : Initial Calibration
Integrator: ChemStation

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

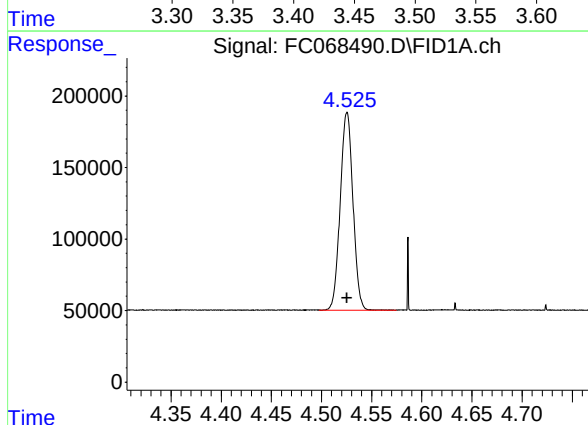




#1 n-Nonane (C9)

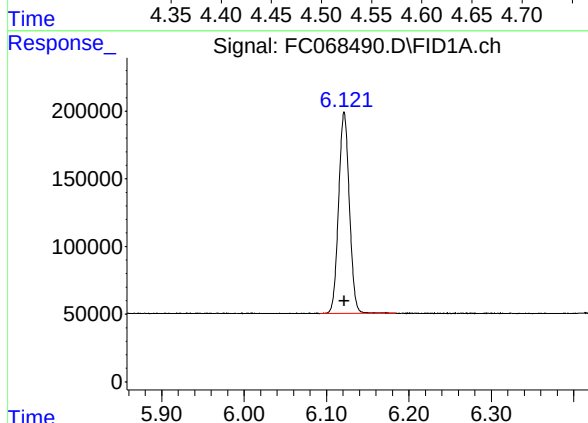
R.T.: 3.450 min
Delta R.T.: 0.000 min
Response: 1201876
Conc: 10.87 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



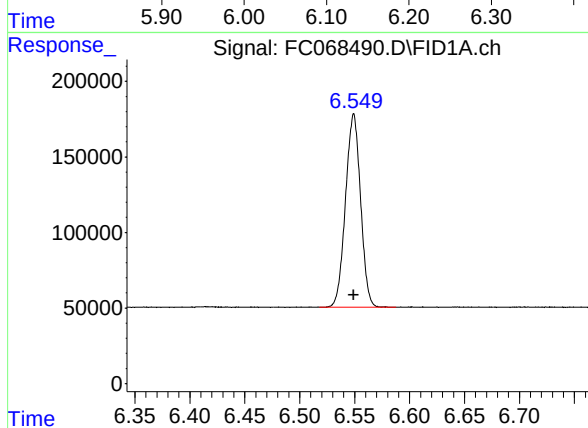
#2 n-Decane (C10)

R.T.: 4.525 min
Delta R.T.: 0.000 min
Response: 1219789
Conc: 10.86 ug/ml



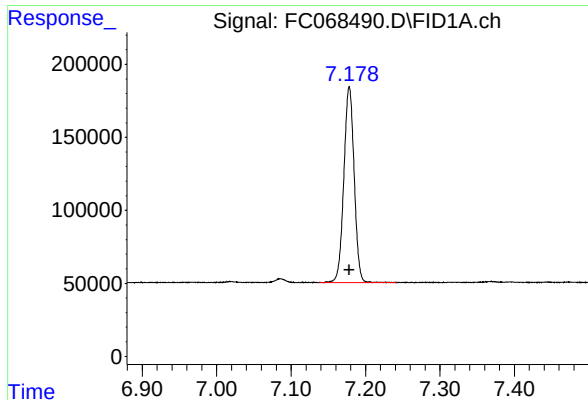
#3 A~Naphthalene (C11.7)

R.T.: 6.121 min
Delta R.T.: 0.000 min
Response: 1349544
Conc: 10.86 ug/ml



#4 n-Dodecane (C12)

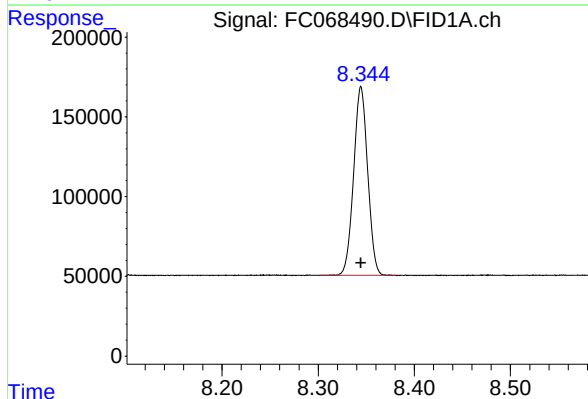
R.T.: 6.549 min
Delta R.T.: 0.000 min
Response: 1219403
Conc: 10.88 ug/ml



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

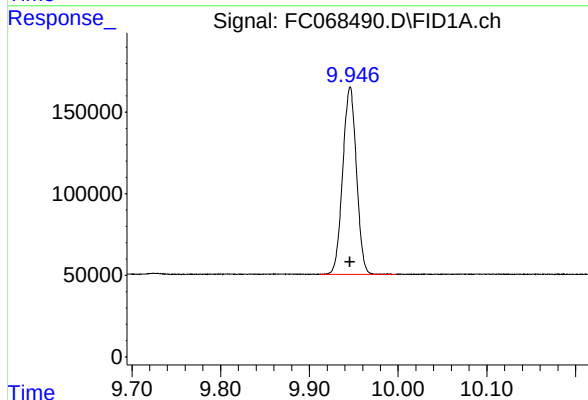
R.T.: 7.178 min
Delta R.T.: 0.000 min
Response: 1290927
Conc: 10.86 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



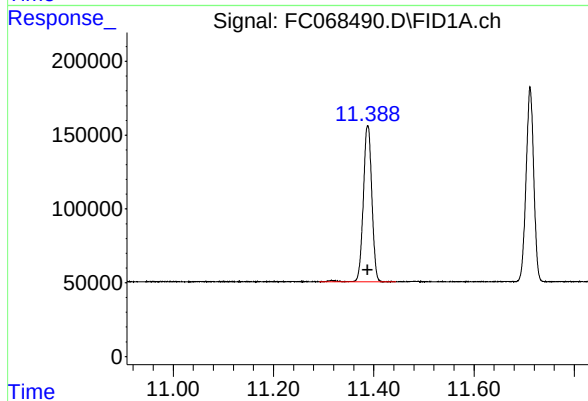
#6 n-Tetradecane (C14)

R.T.: 8.345 min
Delta R.T.: 0.000 min
Response: 1202170
Conc: 10.90 ug/ml



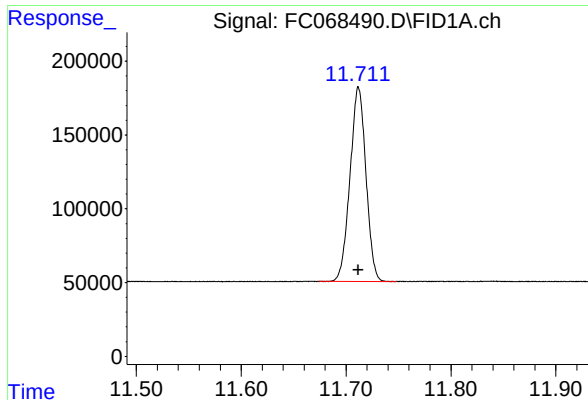
#7 n-Hexadecane (C16)

R.T.: 9.946 min
Delta R.T.: 0.000 min
Response: 1233954
Conc: 10.91 ug/ml



#8 n-Octadecane (C18)

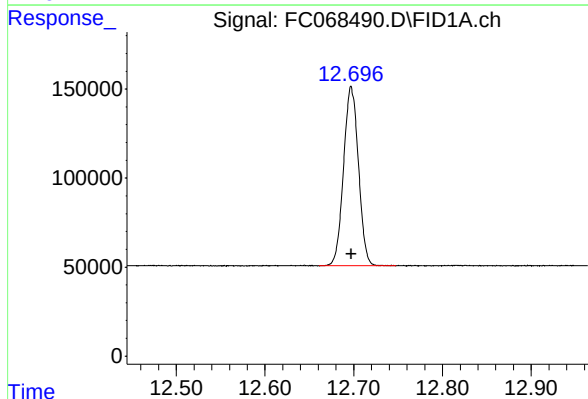
R.T.: 11.388 min
Delta R.T.: 0.000 min
Response: 1246935
Conc: 11.02 ug/ml



#9 ortho-Terphenyl (SURR)

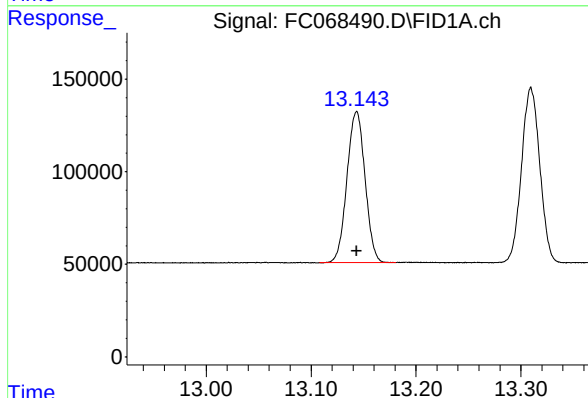
R.T.: 11.712 min
Delta R.T.: 0.000 min
Response: 1390233
Conc: 10.90 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



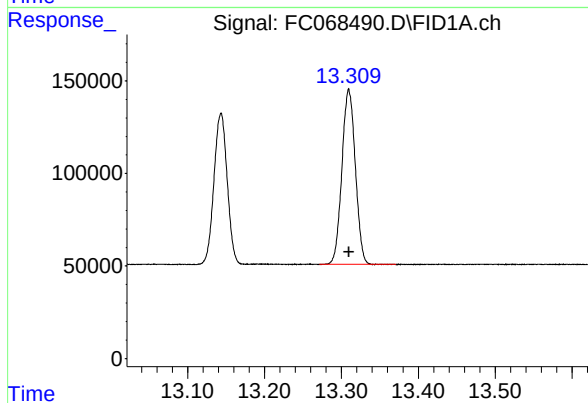
#10 n-Eicosane (C20)

R.T.: 12.697 min
Delta R.T.: 0.000 min
Response: 1173081
Conc: 10.91 ug/ml



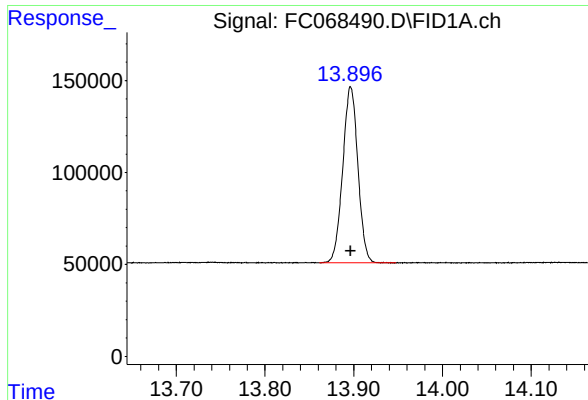
#11 n-Heneicosane (C21)

R.T.: 13.143 min
Delta R.T.: 0.000 min
Response: 976829
Conc: 10.71 ug/ml



#12 1-chlorooctadecane (SURR)

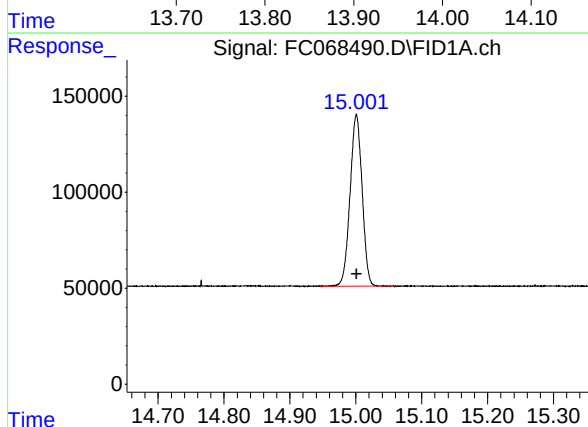
R.T.: 13.310 min
Delta R.T.: 0.000 min
Response: 1145180
Conc: 10.86 ug/ml



#13 n-Docosane (C22)

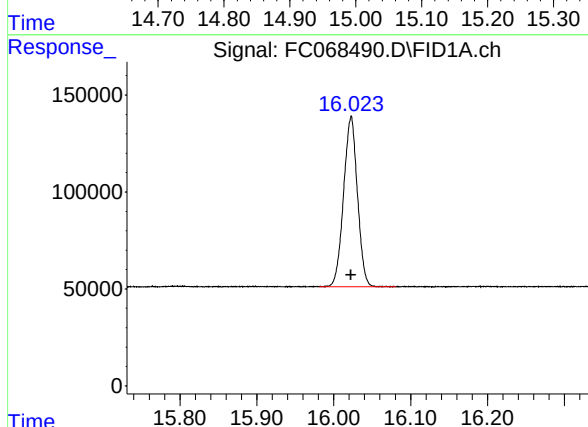
R.T.: 13.897 min
Delta R.T.: 0.000 min
Response: 1135158
Conc: 10.83 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



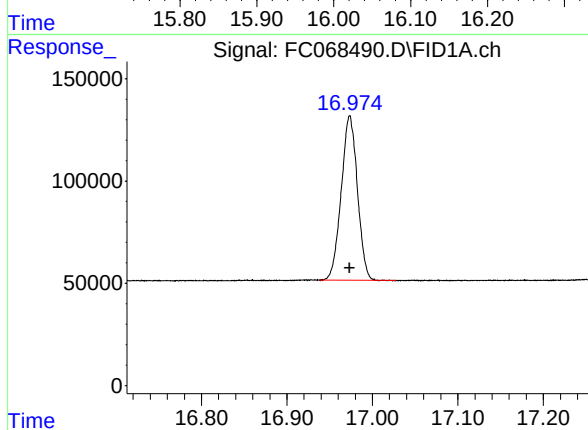
#14 n-Tetracosane (C24)

R.T.: 15.001 min
Delta R.T.: 0.000 min
Response: 1133376
Conc: 10.81 ug/ml



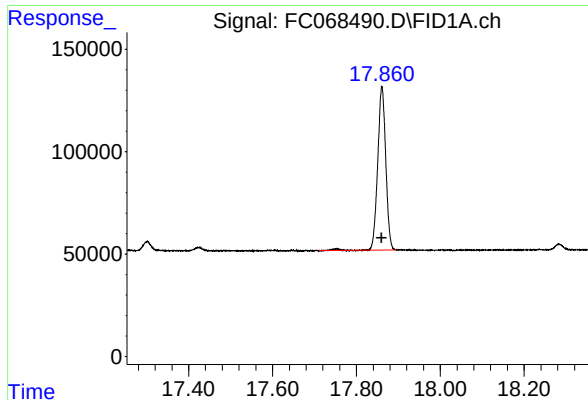
#15 n-Hexacosane (C26)

R.T.: 16.022 min
Delta R.T.: 0.000 min
Response: 1092872
Conc: 10.65 ug/ml



#16 n-Octacosane (C28)

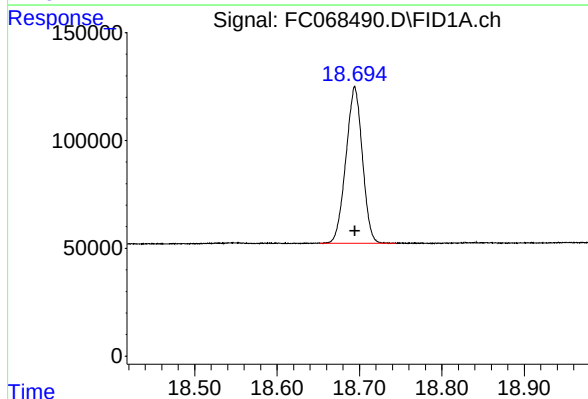
R.T.: 16.974 min
Delta R.T.: 0.000 min
Response: 1058084
Conc: 10.57 ug/ml



#17 n-Tricontane (C30)

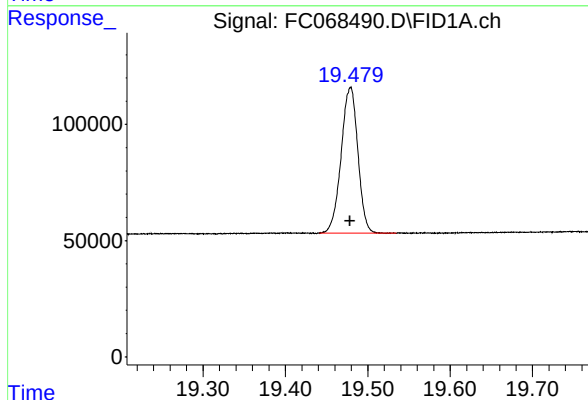
R.T.: 17.861 min
Delta R.T.: 0.000 min
Response: 1069974
Conc: 10.60 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



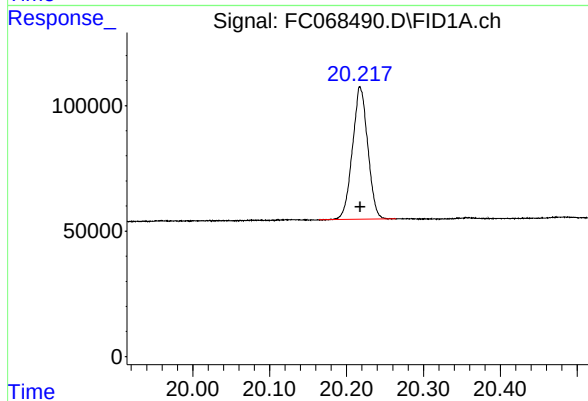
#18 n-Dotriacontane (C32)

R.T.: 18.694 min
Delta R.T.: 0.000 min
Response: 1005787
Conc: 10.49 ug/ml



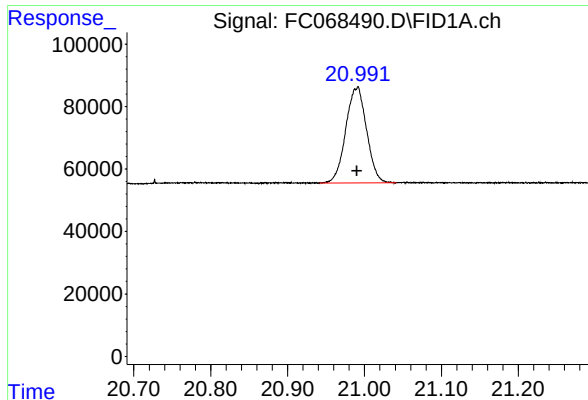
#19 n-Tetratriacontane (C34)

R.T.: 19.479 min
Delta R.T.: 0.000 min
Response: 883903
Conc: 10.23 ug/ml



#20 n-Hexatriacontane (C36)

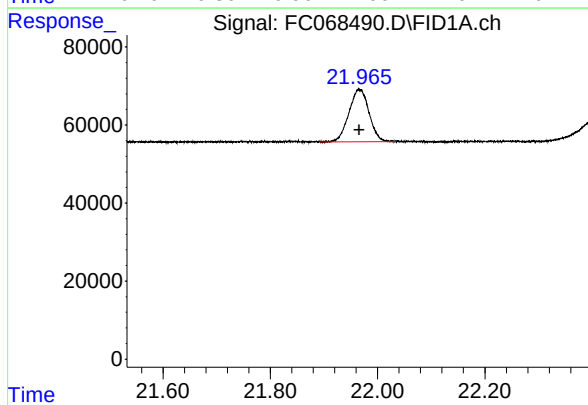
R.T.: 20.218 min
Delta R.T.: 0.000 min
Response: 730670
Conc: 9.84 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.990 min
Delta R.T.: 0.000 min
Response: 574412
Conc: 9.01 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



#22 n-Tetracontane (C40)

R.T.: 21.966 min
Delta R.T.: 0.000 min
Response: 348193
Conc: 7.07 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
Data File : FC068490.D
Signal(s) : FID1A.ch
Acq On : 02 Apr 2025 17:45
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 040225.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	3.485	BB	147070	1201948	86.23%	5.054%
2	4.525	4.470	4.567	BB	138153	1219712	87.51%	5.129%
3	5.654	5.622	5.673	BB	89906	99529	7.14%	0.419%
4	6.122	6.060	6.190	BB	148699	1350754	96.91%	5.680%
5	6.549	6.497	6.587	BB	127617	1220045	87.53%	5.130%
6	7.178	7.115	7.225	BB	134219	1288889	92.47%	5.420%
7	8.345	8.292	8.382	BB	118254	1203274	86.33%	5.060%
8	9.946	9.882	9.997	BB	114476	1232444	88.42%	5.183%
9	11.388	11.343	11.423	BB	105736	1233569	88.50%	5.187%
10	11.712	11.652	11.747	BB	131923	1393818	100.00%	5.861%
11	12.697	12.642	12.748	BB	100660	1171298	84.04%	4.925%
12	13.143	13.082	13.175	BB	81787	976483	70.06%	4.106%
13	13.310	13.247	13.344	BB	94476	1144693	82.13%	4.814%
14	13.897	13.828	13.940	BB	95508	1136151	81.51%	4.778%
15	15.001	14.935	15.045	BB	89105	1133153	81.30%	4.765%
16	16.022	15.963	16.073	BB	87324	1094113	78.50%	4.601%
17	16.974	16.912	17.025	BB	80482	1062625	76.24%	4.468%
18	17.861	17.793	17.895	BB	80101	1064269	76.36%	4.475%
19	18.694	18.627	18.745	BB	72752	1010448	72.49%	4.249%
20	19.479	19.440	19.535	BB	62698	885284	63.52%	3.723%
21	20.218	20.155	20.265	BB	52210	731617	52.49%	3.077%
22	20.990	20.917	21.060	BB	30178	577919	41.46%	2.430%
23	21.966	21.880	22.047	BB	13217	348626	25.01%	1.466%
Sum of corrected areas:							23780663	

Aliphatic EPH 040225.M Thu Apr 03 04:44:46 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
 Data File : FC068491.D
 Signal(s) : FID1A.ch
 Acq On : 02 Apr 2025 19:00
 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 03 04:11:03 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Wed Apr 02 19:03:12 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)	11.713	671418	5.241 ug/ml
Spiked Amount 50.000		Recovery =	10.48%
12) S 1-chlorooctadecane (S...	13.312	558601	5.270 ug/ml
Spiked Amount 50.000		Recovery =	10.54%
Target Compounds			
1) T n-Nonane (C9)	3.449	575716	5.191 ug/ml
2) T n-Decane (C10)	4.457f	666236	5.910 ug/ml
3) T A~Naphthalene (C11.7)	6.121	643451	5.170 ug/ml
4) T n-Dodecane (C12)	6.549	585398	5.201 ug/ml
5) T A~2-methylnaphthalene...	7.178	615511	5.165 ug/ml
6) T n-Tetradecane (C14)	8.345	582110	5.253 ug/ml
7) T n-Hexadecane (C16)	9.947	597037	5.256 ug/ml
8) T n-Octadecane (C18)	11.389	602829	5.292 ug/mlm
10) T n-Eicosane (C20)	12.699	585838	5.397 ug/ml
11) T n-Heneicosane (C21)	13.146	476560	5.220 ug/ml
13) T n-Docosane (C22)	13.897	602914	5.626 ug/ml
14) T n-Tetracosane (C24)	15.002	689645	6.234 ug/ml
15) T n-Hexacosane (C26)	16.024	727762	6.588 ug/ml
16) T n-Octacosane (C28)	16.973	745209	6.804 ug/mlm
17) T n-Tricontane (C30)	17.861	741958	6.733 ug/mlm
18) T n-Dotriacontane (C32)	18.695	682032	6.572 ug/ml
19) T n-Tetratriacontane (C34)	19.479	514685	5.736 ug/ml
20) T n-Hexatriacontane (C36)	20.220	386018	5.169 ug/ml
21) T n-Octatriacontane (C38)	20.992	287493	4.629 ug/ml
22) T n-Tetracontane (C40)	21.968	191044	4.143 ug/mlm

(f)=RT Delta > 1/2 Window

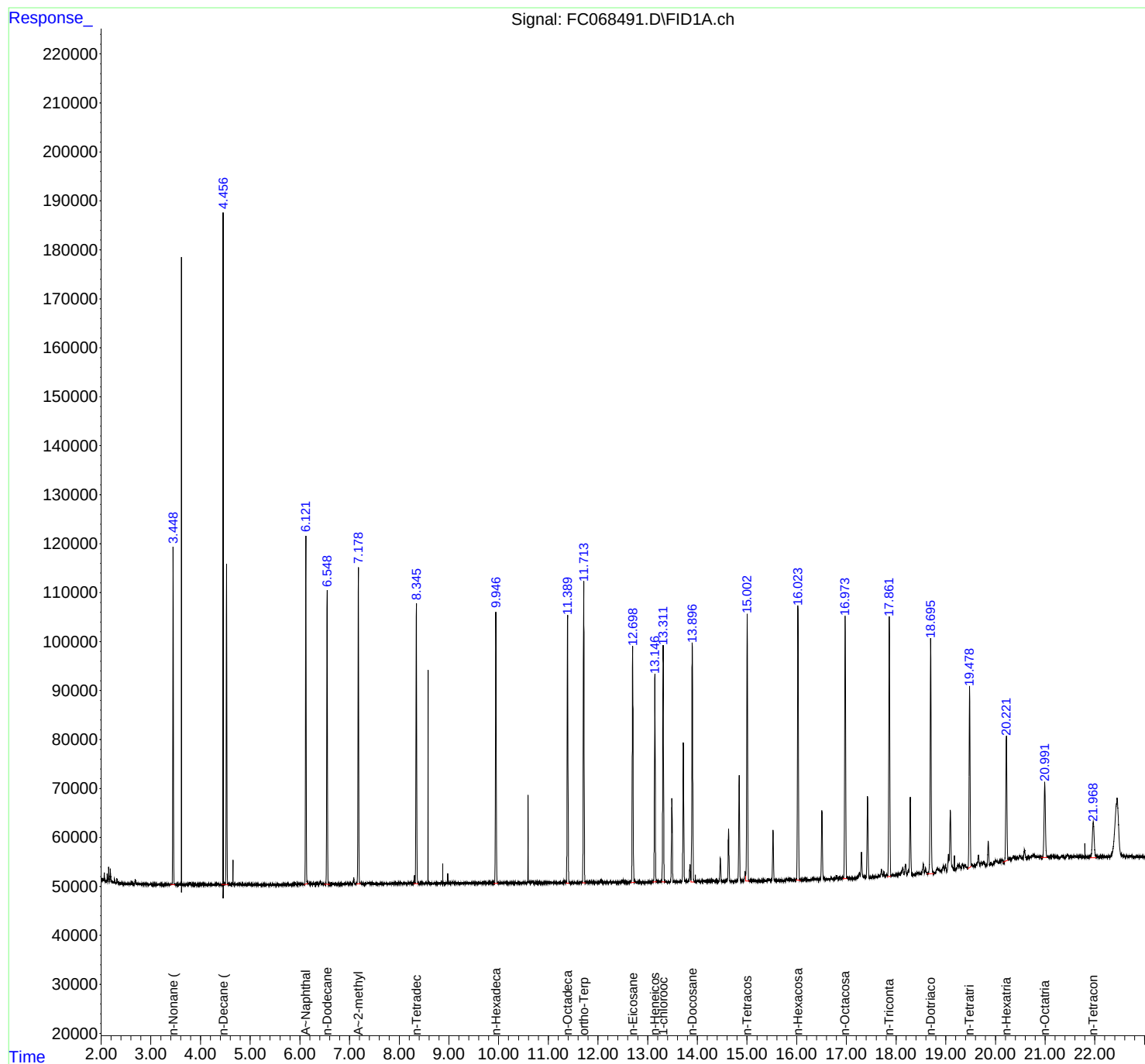
(m)=manual int.

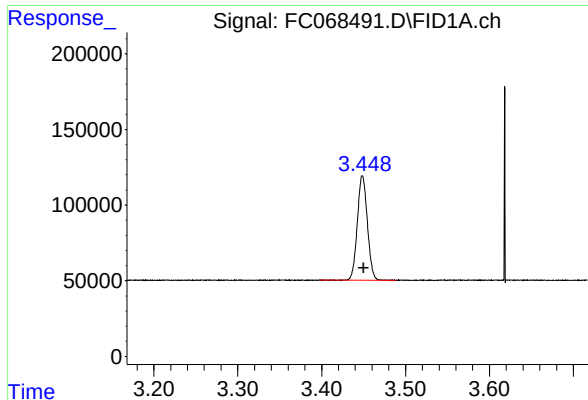
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
Data File : FC068491.D
Signal(s) : FID1A.ch
Acq On : 02 Apr 2025 19:00
Operator : YP/AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
Quant Time: Apr 03 04:11:03 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Wed Apr 02 19:03:12 2025
Response via : Initial Calibration
Integrator: ChemStation

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

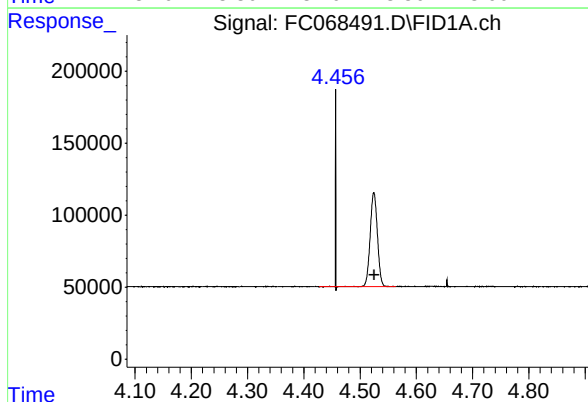




#1 n-Nonane (C9)

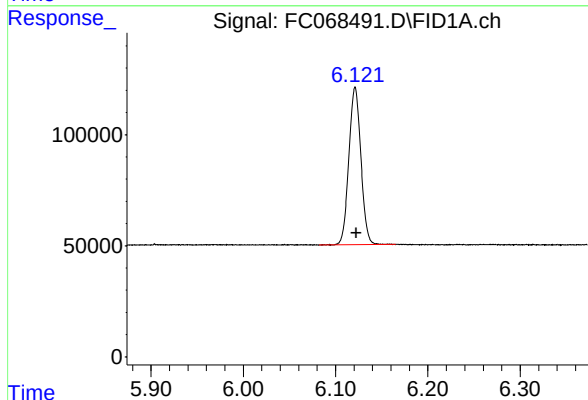
R.T.: 3.449 min
Delta R.T.: -0.001 min
Response: 575716
Conc: 5.19 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



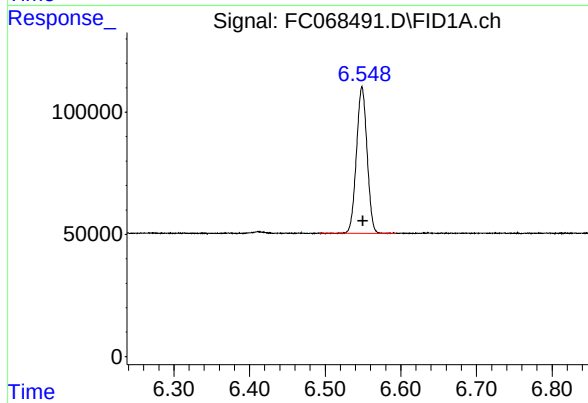
#2 n-Decane (C10)

R.T.: 4.457 min
Delta R.T.: -0.009 min
Response: 666236
Conc: 5.91 ug/ml



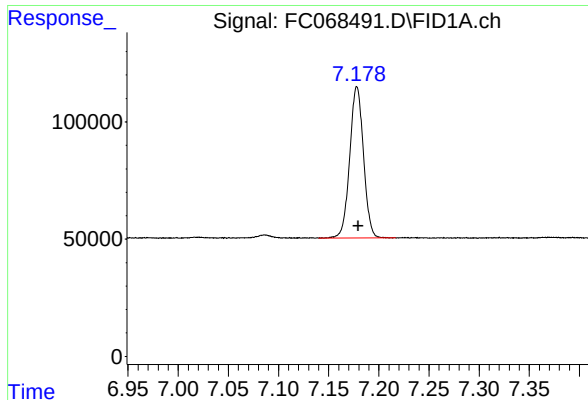
#3 A~Naphthalene (C11.7)

R.T.: 6.121 min
Delta R.T.: -0.001 min
Response: 643451
Conc: 5.17 ug/ml



#4 n-Dodecane (C12)

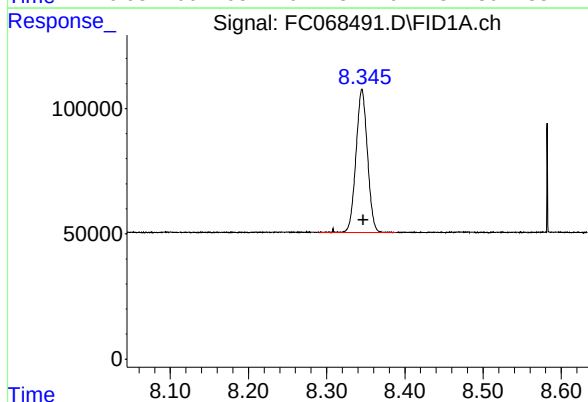
R.T.: 6.549 min
Delta R.T.: -0.001 min
Response: 585398
Conc: 5.20 ug/ml



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

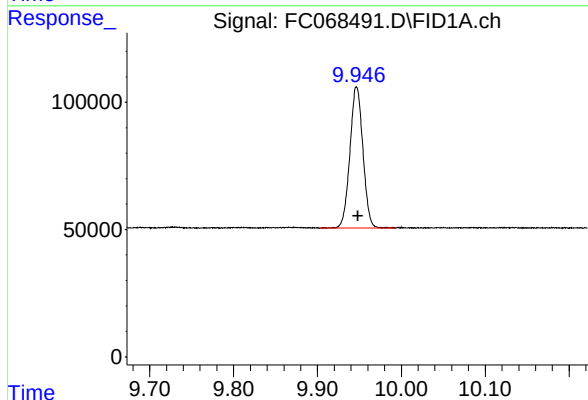
R.T.: 7.178 min
Delta R.T.: -0.002 min
Response: 615511
Conc: 5.16 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



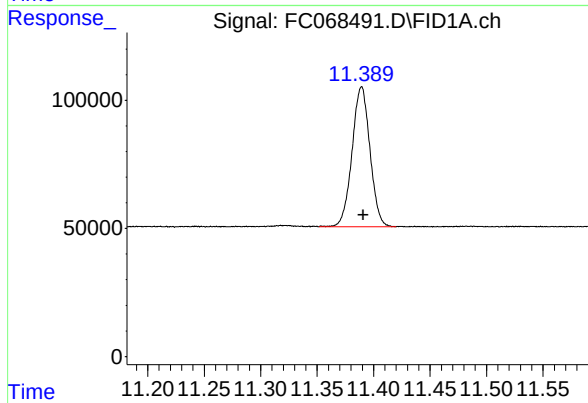
#6 n-Tetradecane (C14)

R.T.: 8.345 min
Delta R.T.: -0.002 min
Response: 582110
Conc: 5.25 ug/ml



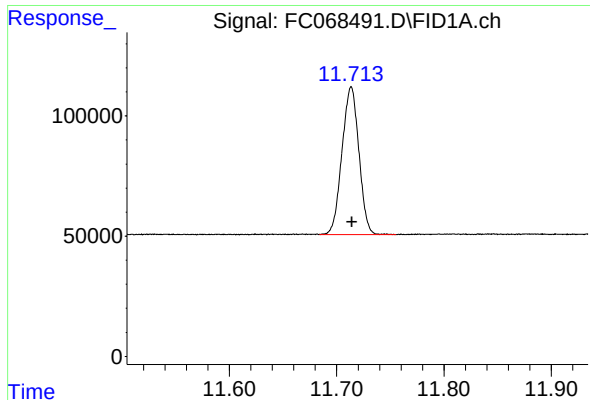
#7 n-Hexadecane (C16)

R.T.: 9.947 min
Delta R.T.: -0.002 min
Response: 597037
Conc: 5.26 ug/ml



#8 n-Octadecane (C18)

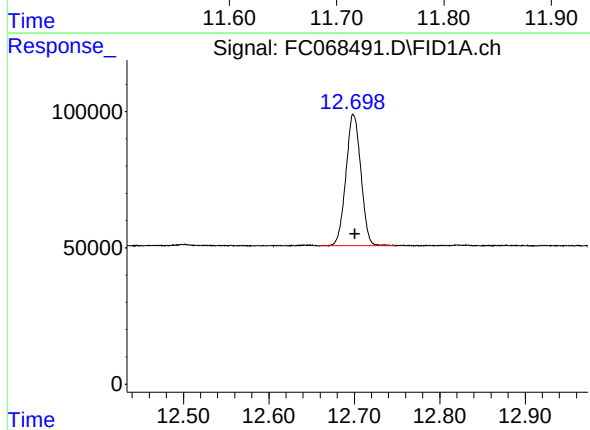
R.T.: 11.389 min
Delta R.T.: -0.002 min
Response: 602829
Conc: 5.29 ug/ml m



#9 ortho-Terphenyl (SURR)

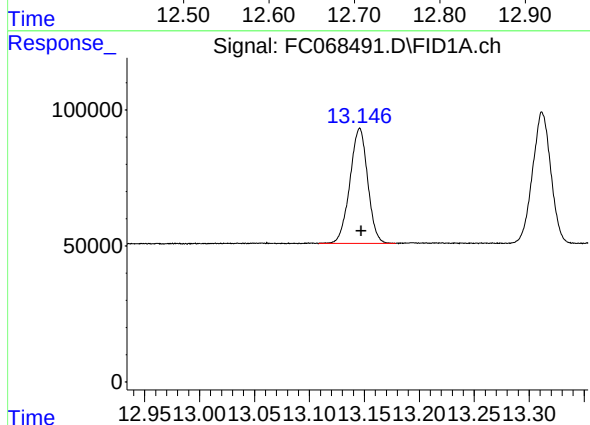
R.T.: 11.713 min
Delta R.T.: 0.000 min
Response: 671418
Conc: 5.24 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



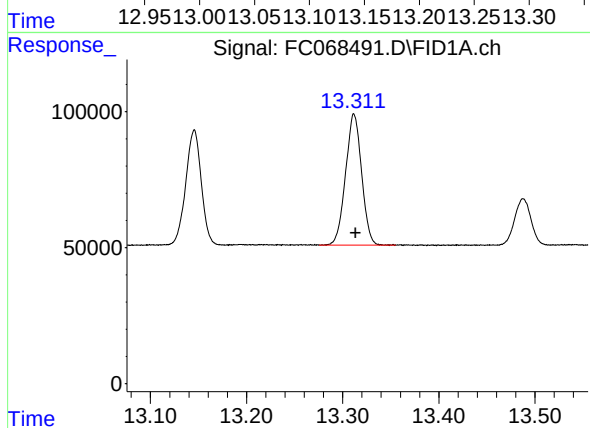
#10 n-Eicosane (C20)

R.T.: 12.699 min
Delta R.T.: -0.002 min
Response: 585838
Conc: 5.40 ug/ml



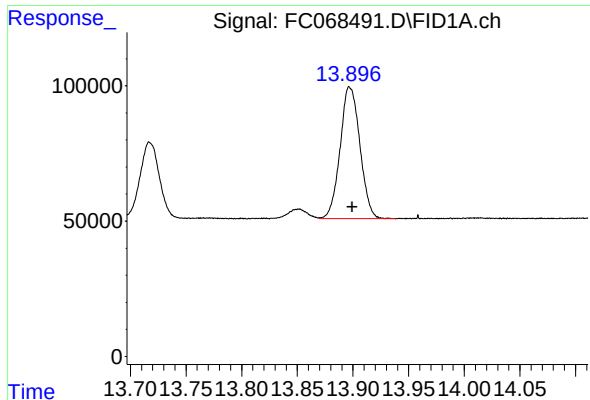
#11 n-Heneicosane (C21)

R.T.: 13.146 min
Delta R.T.: -0.002 min
Response: 476560
Conc: 5.22 ug/ml



#12 1-chlorooctadecane (SURR)

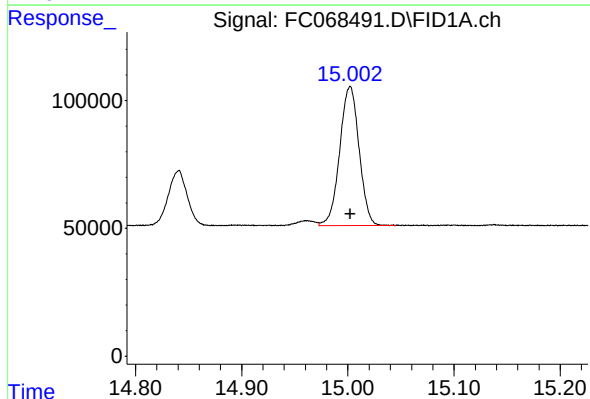
R.T.: 13.312 min
Delta R.T.: -0.002 min
Response: 558601
Conc: 5.27 ug/ml



#13 n-Docosane (C22)

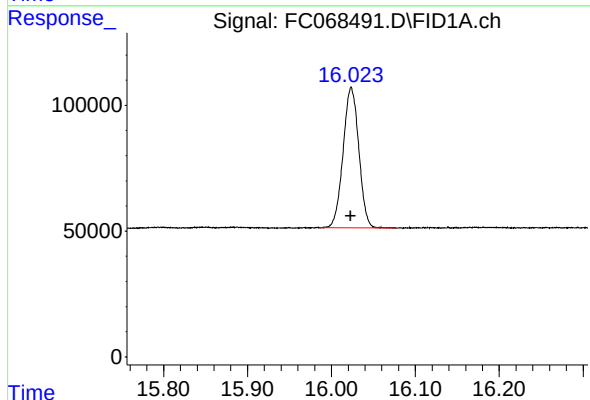
R.T.: 13.897 min
Delta R.T.: -0.002 min
Response: 602914
Conc: 5.63 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



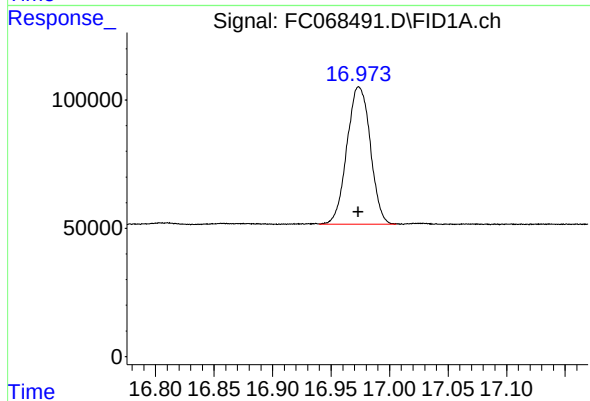
#14 n-Tetracosane (C24)

R.T.: 15.002 min
Delta R.T.: 0.000 min
Response: 689645
Conc: 6.23 ug/ml



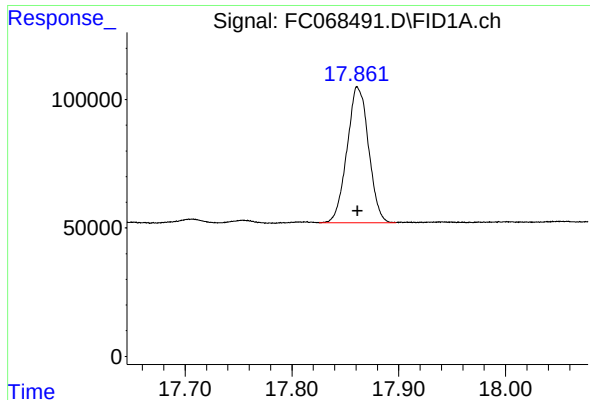
#15 n-Hexacosane (C26)

R.T.: 16.024 min
Delta R.T.: 0.000 min
Response: 727762
Conc: 6.59 ug/ml



#16 n-Octacosane (C28)

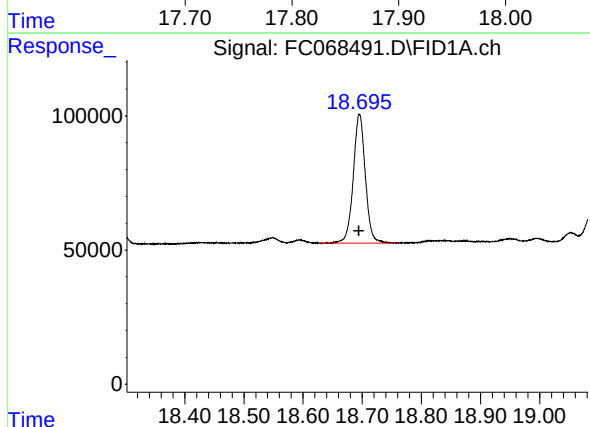
R.T.: 16.973 min
Delta R.T.: 0.000 min
Response: 745209
Conc: 6.80 ug/ml m



#17 n-Tricontane (C30)

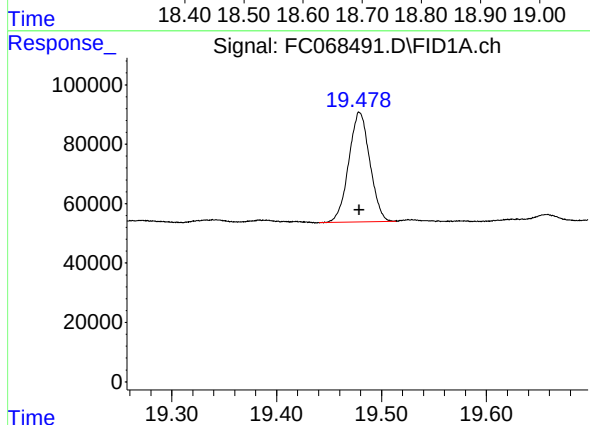
R.T.: 17.861 min
Delta R.T.: 0.000 min
Response: 741958
Conc: 6.73 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



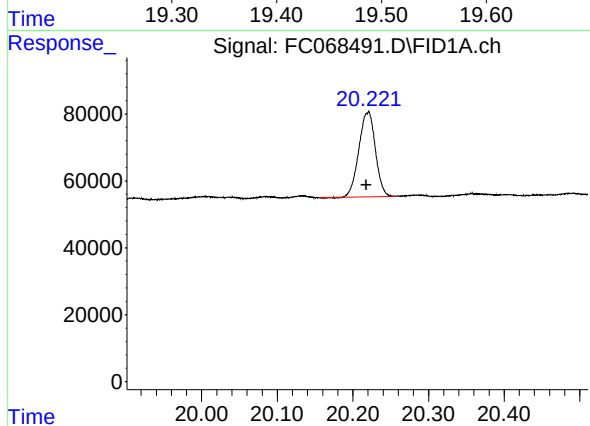
#18 n-Dotriacontane (C32)

R.T.: 18.695 min
Delta R.T.: 0.000 min
Response: 682032
Conc: 6.57 ug/ml



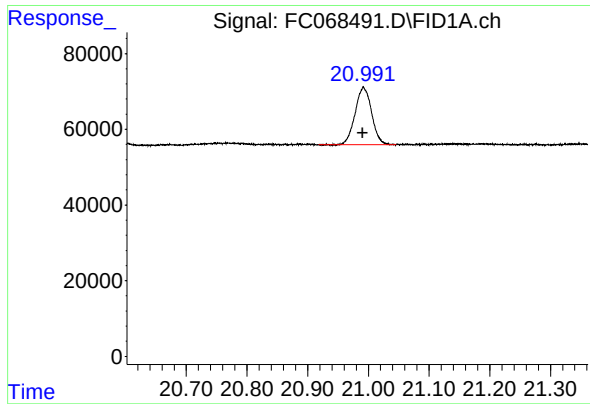
#19 n-Tetatriacontane (C34)

R.T.: 19.479 min
Delta R.T.: 0.000 min
Response: 514685
Conc: 5.74 ug/ml



#20 n-Hexatriacontane (C36)

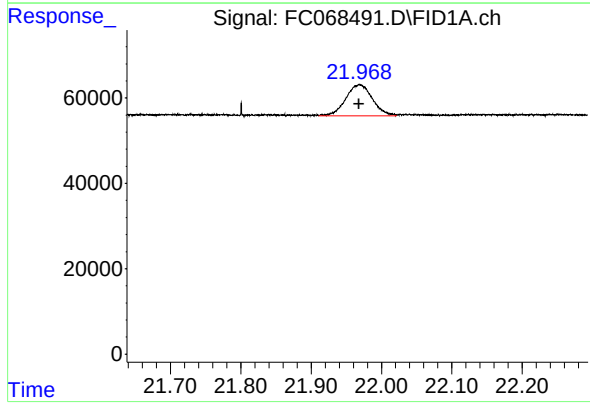
R.T.: 20.220 min
Delta R.T.: 0.002 min
Response: 386018
Conc: 5.17 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.992 min
Delta R.T.: 0.001 min
Response: 287493
Conc: 4.63 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



#22 n-Tetracontane (C40)

R.T.: 21.968 min
Delta R.T.: 0.000 min
Response: 191044
Conc: 4.14 ug/ml m

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
Data File : FC068491.D
Signal(s) : FID1A.ch
Acq On : 02 Apr 2025 19:00
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 040225.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	3.397	3.489	BB	68941	575716	75.90%	4.546%
2	4.524	4.499	4.556	M	65478	586317	77.30%	4.630%
3	6.121	6.082	6.165	BB	71288	643451	84.83%	5.081%
4	6.549	6.492	6.594	BB	59963	585398	77.18%	4.622%
5	7.178	7.140	7.217	BB	64496	615511	81.15%	4.860%
6	8.345	8.290	8.389	BB	57228	582110	76.74%	4.596%
7	9.947	9.902	9.994	BB	55351	597037	78.71%	4.714%
8	11.389	11.295	11.429	BB	54614	608753	80.26%	4.807%
9	11.713	11.684	11.755	BB	61634	671418	88.52%	5.301%
10	12.699	12.659	12.749	BB	48124	585838	77.24%	4.626%
11	13.146	13.109	13.179	BB	42333	476560	62.83%	3.763%
12	13.312	13.275	13.355	BB	48126	558601	73.64%	4.411%
13	13.897	13.870	13.939	VB	48568	602914	79.49%	4.761%
14	15.002	14.973	15.045	VB	54425	689645	90.92%	5.445%
15	16.024	15.985	16.077	BB	55890	727762	95.95%	5.746%
16	16.974	16.834	17.012	BB	53563	758512	100.00%	5.989%
17	17.862	17.789	17.895	BB	52419	747589	98.56%	5.903%
18	18.695	18.627	18.757	BB	48018	682032	89.92%	5.385%
19	19.479	19.440	19.514	BV	36958	514685	67.85%	4.064%
20	20.220	20.155	20.257	BB	25283	386018	50.89%	3.048%
21	20.992	20.919	21.045	BB	15280	287493	37.90%	2.270%
22	21.969	21.895	22.020	BB	7175	181436	23.92%	1.433%
Sum of corrected areas:						12664796		

Aliphatic EPH 040225.M Thu Apr 03 04:45:38 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
 Data File : FC068492.D
 Signal(s) : FID1A.ch
 Acq On : 02 Apr 2025 20:13
 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 03 07:42:36 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Thu Apr 03 07:41:29 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)	11.716	2591401	20.108 ug/ml
Spiked Amount 50.000		Recovery =	40.22%
12) S 1-chlorooctadecane (S...	13.314	2149147	20.148 ug/ml
Spiked Amount 50.000		Recovery =	40.30%
Target Compounds			
1) T n-Nonane (C9)	3.448	2242104	20.116 ug/ml
2) T n-Decane (C10)	4.525	2274575	19.529 ug/ml
3) T A~Naphthalene (C11.7)	6.122	2513231	20.079 ug/ml
4) T n-Dodecane (C12)	6.550	2271902	20.085 ug/ml
5) T A~2-methylnaphthalene...	7.179	2400525	20.045 ug/ml
6) T n-Tetradecane (C14)	8.347	2242147	20.107 ug/ml
7) T n-Hexadecane (C16)	9.949	2292596	20.041 ug/ml
8) T n-Octadecane (C18)	11.392	2297837	20.041 ug/ml
10) T n-Eicosane (C20)	12.702	2190226	20.008 ug/ml
11) T n-Heneicosane (C21)	13.147	1866216	20.284 ug/ml
13) T n-Docosane (C22)	13.900	2138064	19.807 ug/ml
14) T n-Tetracosane (C24)	15.003	2142674	19.220 ug/ml
15) T n-Hexacosane (C26)	16.025	2106089	18.941 ug/ml
16) T n-Octacosane (C28)	16.975	2058682	18.734 ug/ml
17) T n-Tricontane (C30)	17.863	2080957	18.846 ug/ml
18) T n-Dotriacontane (C32)	18.696	1978446	19.022 ug/ml
19) T n-Tetratriacontane (C34)	19.480	1792702	19.988 ug/ml
20) T n-Hexatriacontane (C36)	20.219	1551401	20.729 ug/ml
21) T n-Octatriacontane (C38)	20.994	1342897	21.495 ug/ml
22) T n-Tetracontane (C40)	21.969	1072756	22.792 ug/ml

(f)=RT Delta > 1/2 Window

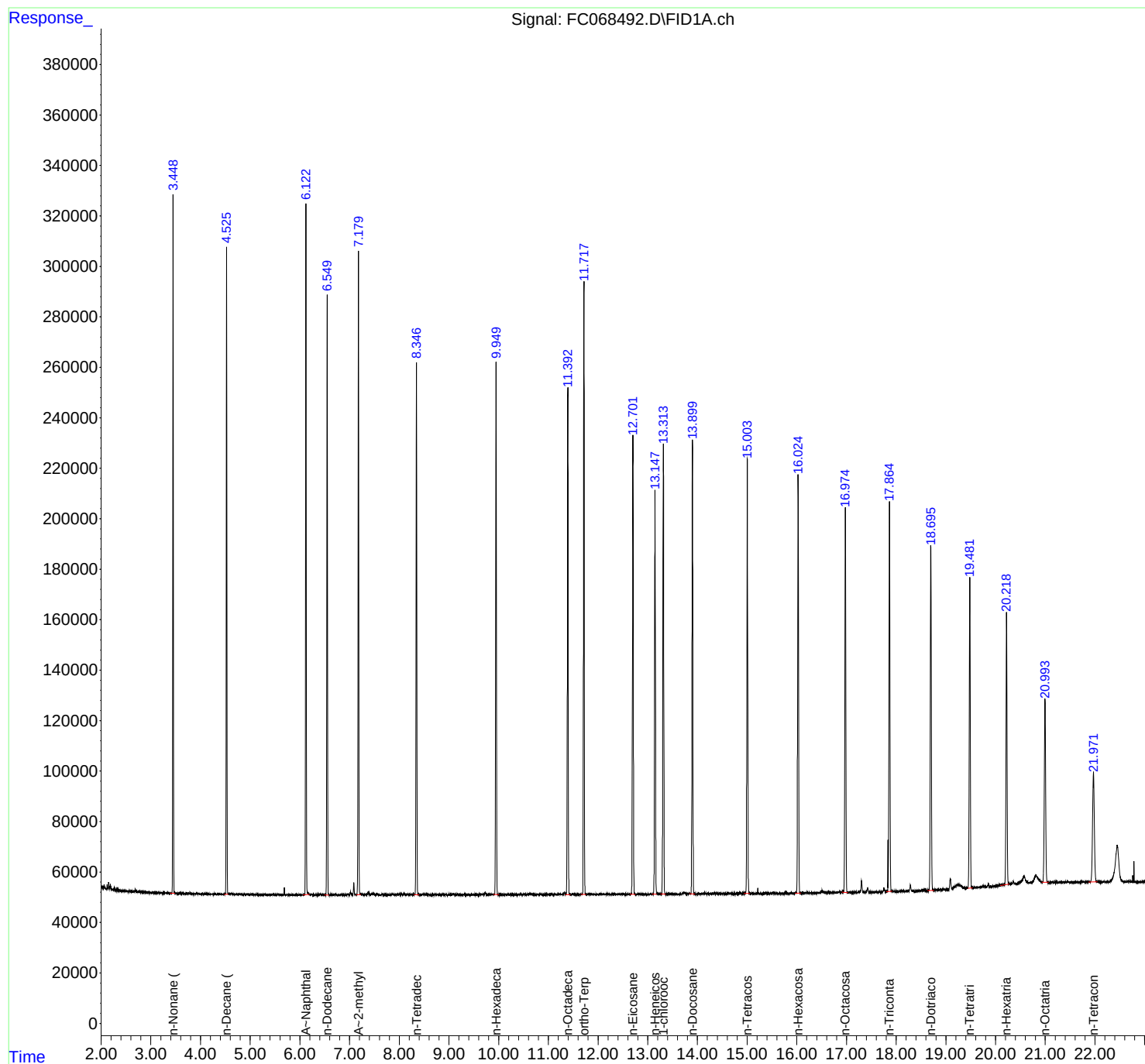
(m)=manual int.

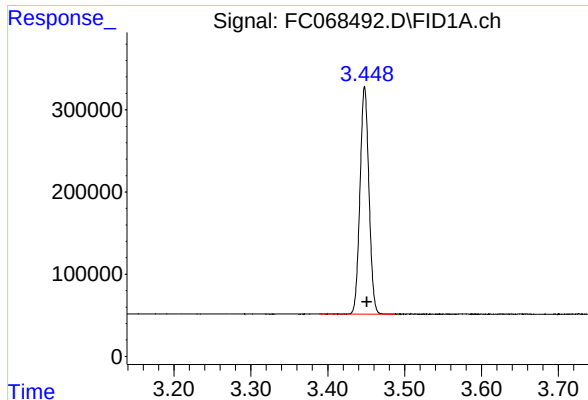
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
Data File : FC068492.D
Signal(s) : FID1A.ch
Acq On : 02 Apr 2025 20:13
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Apr 03 07:42:36 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Thu Apr 03 07:41:29 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)

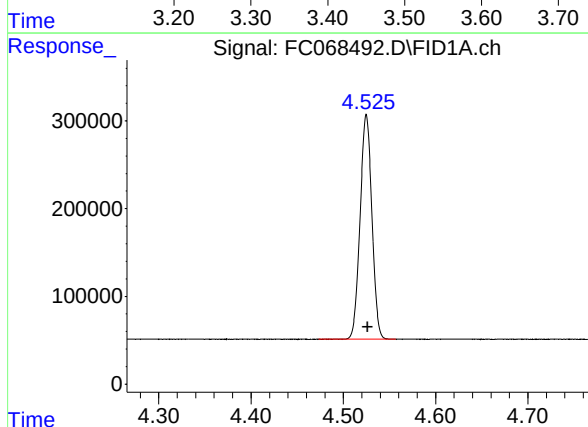
R.T.: 3.448 min
Delta R.T.: -0.003 min
Response: 2242104
Conc: 20.12 ug/ml

Instrument :

FID_C

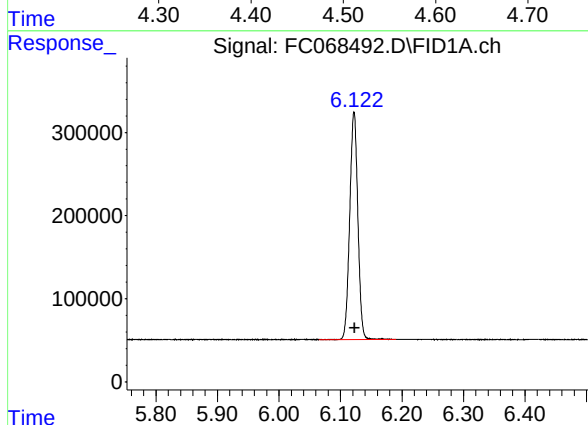
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



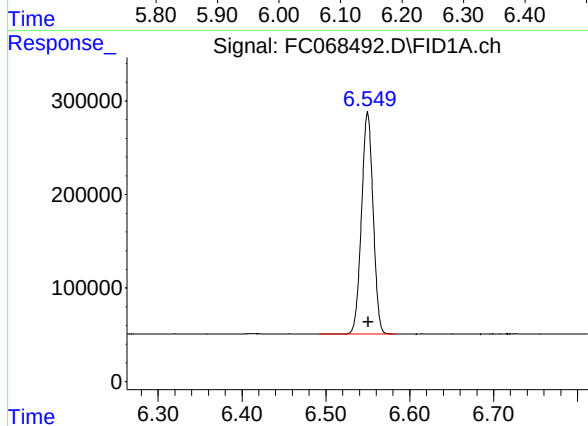
#2 n-Decane (C10)

R.T.: 4.525 min
Delta R.T.: -0.001 min
Response: 2274575
Conc: 19.53 ug/ml



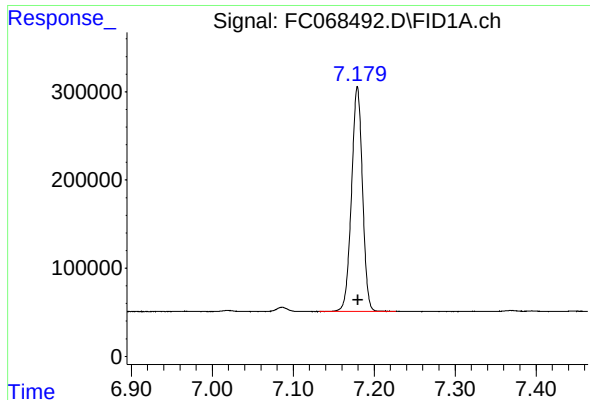
#3 A~Naphthalene (C11.7)

R.T.: 6.122 min
Delta R.T.: 0.000 min
Response: 2513231
Conc: 20.08 ug/ml



#4 n-Dodecane (C12)

R.T.: 6.550 min
Delta R.T.: 0.000 min
Response: 2271902
Conc: 20.09 ug/ml



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

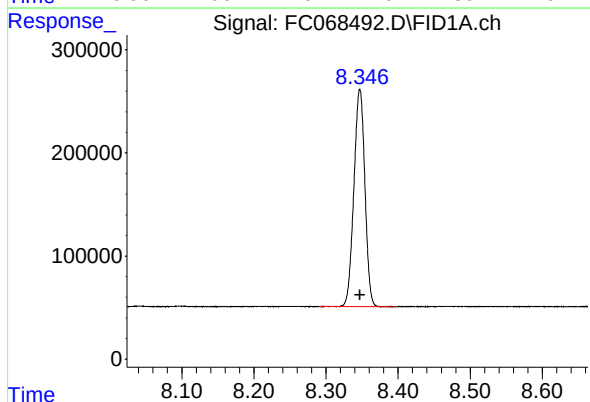
R.T.: 7.179 min
Delta R.T.: -0.001 min
Response: 2400525
Conc: 20.05 ug/ml

Instrument :

FID_C

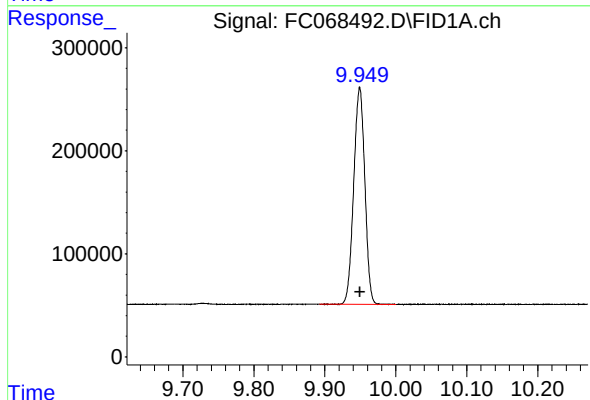
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



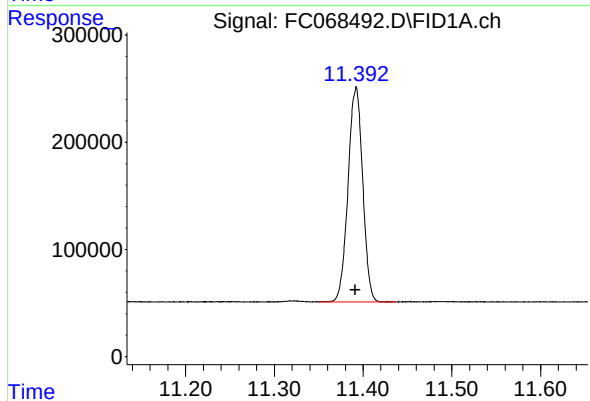
#6 n-Tetradecane (C14)

R.T.: 8.347 min
Delta R.T.: 0.000 min
Response: 2242147
Conc: 20.11 ug/ml



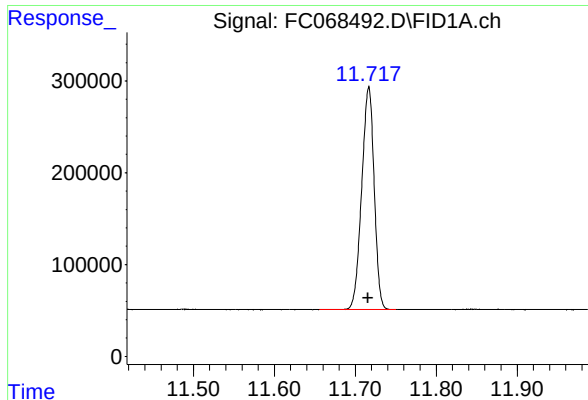
#7 n-Hexadecane (C16)

R.T.: 9.949 min
Delta R.T.: 0.000 min
Response: 2292596
Conc: 20.04 ug/ml



#8 n-Octadecane (C18)

R.T.: 11.392 min
Delta R.T.: 0.000 min
Response: 2297837
Conc: 20.04 ug/ml



#9 ortho-Terphenyl (SURR)

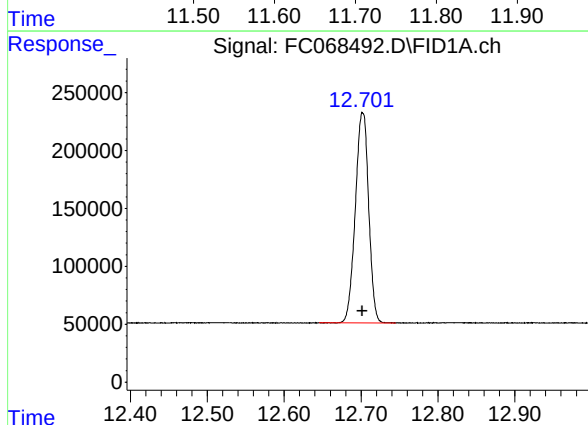
R.T.: 11.716 min
Delta R.T.: 0.000 min
Response: 2591401
Conc: 20.11 ug/ml

Instrument :

FID_C

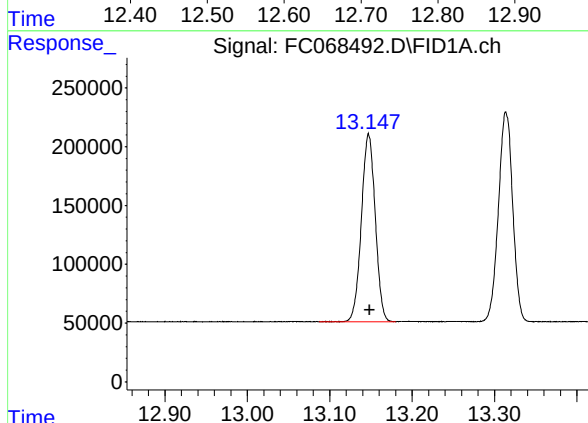
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



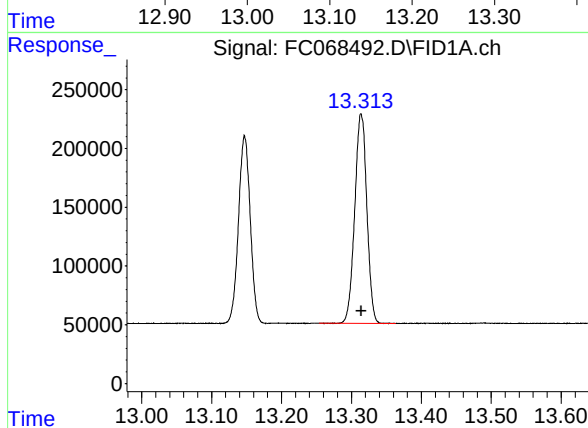
#10 n-Eicosane (C20)

R.T.: 12.702 min
Delta R.T.: 0.000 min
Response: 2190226
Conc: 20.01 ug/ml



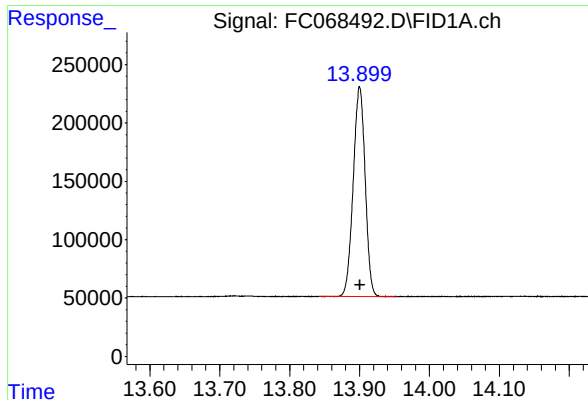
#11 n-Heneicosane (C21)

R.T.: 13.147 min
Delta R.T.: -0.001 min
Response: 1866216
Conc: 20.28 ug/ml



#12 1-chlorooctadecane (SURR)

R.T.: 13.314 min
Delta R.T.: 0.000 min
Response: 2149147
Conc: 20.15 ug/ml



#13 n-Docosane (C22)

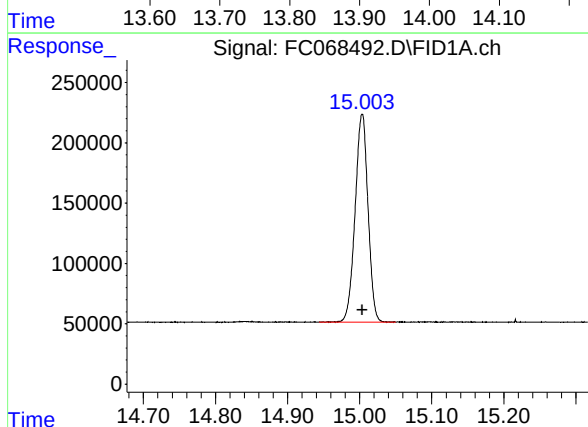
R.T.: 13.900 min
Delta R.T.: 0.000 min
Response: 2138064
Conc: 19.81 ug/ml

Instrument :

FID_C

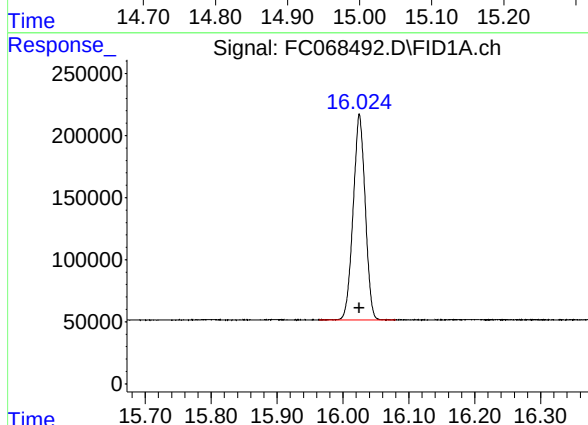
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



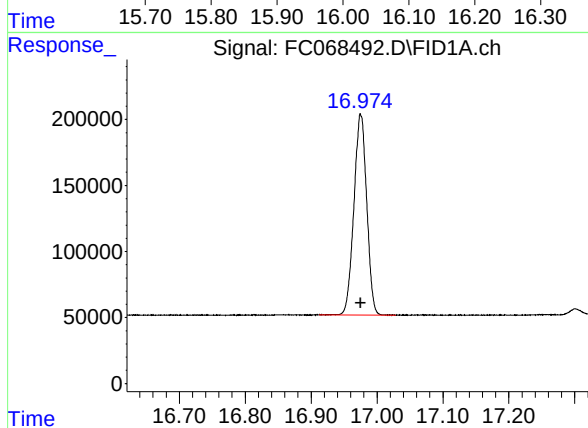
#14 n-Tetracosane (C24)

R.T.: 15.003 min
Delta R.T.: 0.000 min
Response: 2142674
Conc: 19.22 ug/ml



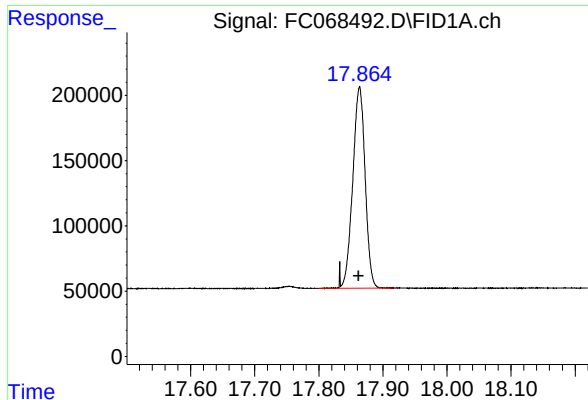
#15 n-Hexacosane (C26)

R.T.: 16.025 min
Delta R.T.: 0.000 min
Response: 2106089
Conc: 18.94 ug/ml



#16 n-Octacosane (C28)

R.T.: 16.975 min
Delta R.T.: 0.000 min
Response: 2058682
Conc: 18.73 ug/ml



#17 n-Tricontane (C30)

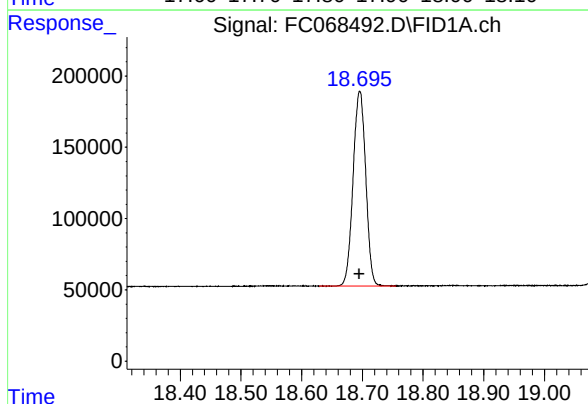
R.T.: 17.863 min
Delta R.T.: 0.000 min
Response: 2080957
Conc: 18.85 ug/ml

Instrument :

FID_C

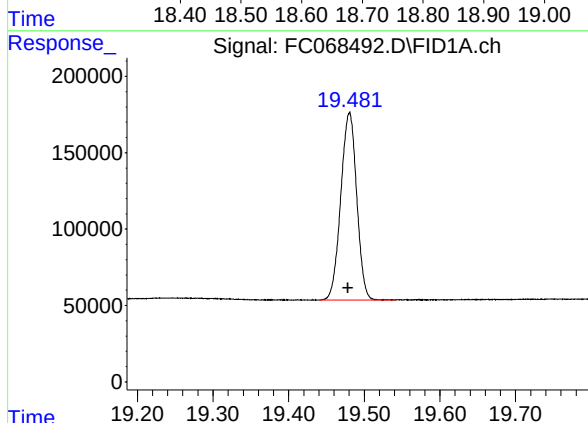
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



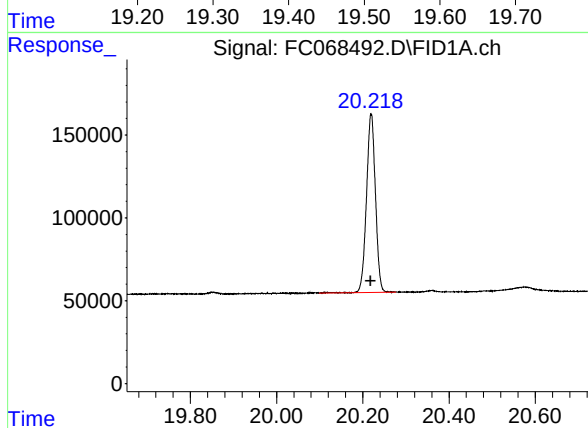
#18 n-Dotriacontane (C32)

R.T.: 18.696 min
Delta R.T.: 0.000 min
Response: 1978446
Conc: 19.02 ug/ml



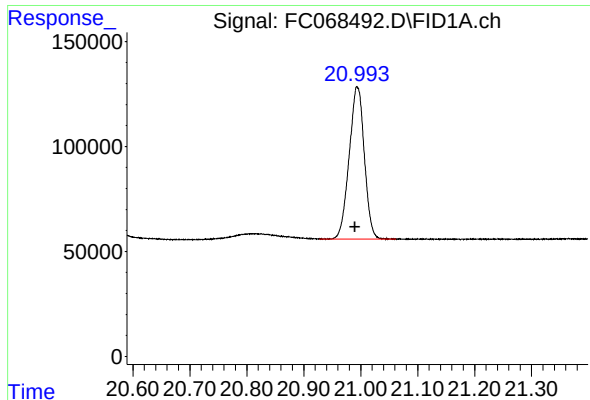
#19 n-Tetatriacontane (C34)

R.T.: 19.480 min
Delta R.T.: 0.002 min
Response: 1792702
Conc: 19.99 ug/ml



#20 n-Hexatriacontane (C36)

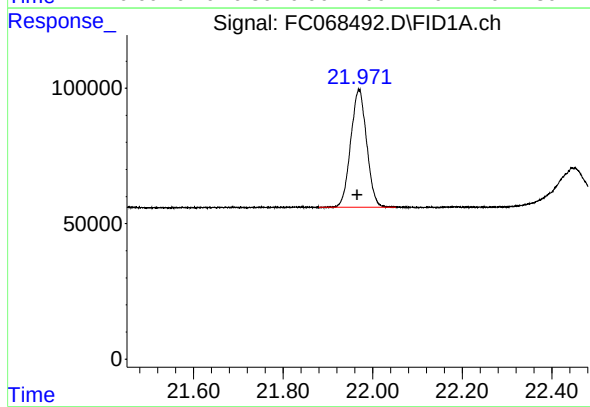
R.T.: 20.219 min
Delta R.T.: 0.000 min
Response: 1551401
Conc: 20.73 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.994 min
Delta R.T.: 0.004 min
Response: 1342897
Conc: 21.50 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



#22 n-Tetracontane (C40)

R.T.: 21.969 min
Delta R.T.: 0.004 min
Response: 1072756
Conc: 22.79 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040225AL\
Data File : FC068492.D
Signal(s) : FID1A.ch
Acq On : 02 Apr 2025 20:13
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 040225.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	3.448	3.389	3.489	BB	276525	2242104	86.52%	4.917%
2	4.525	4.474	4.557	BB	255870	2274575	87.77%	4.988%
3	6.122	6.065	6.190	BB	274217	2513231	96.98%	5.512%
4	6.550	6.492	6.584	BB	237032	2271902	87.67%	4.983%
5	7.179	7.132	7.227	BB	254742	2400525	92.63%	5.265%
6	8.347	8.290	8.397	BB	211106	2242147	86.52%	4.917%
7	9.949	9.892	10.000	BB	210470	2292596	88.47%	5.028%
8	11.392	11.350	11.437	BB	200191	2297837	88.67%	5.039%
9	11.716	11.655	11.750	BB	243450	2591401	100.00%	5.683%
10	12.702	12.645	12.745	BB	181665	2190226	84.52%	4.803%
11	13.147	13.087	13.180	BB	159832	1866216	72.02%	4.093%
12	13.314	13.254	13.364	BB	178383	2149147	82.93%	4.713%
13	13.900	13.842	13.952	BB	179918	2138064	82.51%	4.689%
14	15.003	14.944	15.050	BB	172682	2142674	82.68%	4.699%
15	16.025	15.964	16.080	BB	165511	2106089	81.27%	4.619%
16	16.975	16.912	17.029	BB	151816	2058682	79.44%	4.515%
17	17.863	17.800	17.920	BB	154402	2080957	80.30%	4.564%
18	18.696	18.629	18.755	BB	136790	1978446	76.35%	4.339%
19	19.480	19.440	19.542	BB	122538	1792702	69.18%	3.932%
20	20.219	20.099	20.277	BB	107949	1551401	59.87%	3.402%
21	20.994	20.927	21.062	BB	72481	1342897	51.82%	2.945%
22	21.969	21.880	22.052	BB	43348	1072756	41.40%	2.353%
Sum of corrected areas:							45596573	

Aliphatic EPH 040225.M Thu Apr 03 04:46:00 2025

Continuing Calibration Report for SequenceID : FC040725AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV

File ID : FC068497.D

Aliphatic C9-C12	6682131.000	60.000	3.349	6.652	111368.850	113656.014	2.012
Aliphatic C12-C16	4492250.000	40.000	6.653	10.053	112306.250	112966.617	0.585
Aliphatic C16-C21	6578642.000	60.000	10.054	13.420	109644.033	110233.878	0.535
Aliphatic C21-C28	8495195.000	80.000	13.421	17.087	106189.938	110346.279	3.767
Aliphatic C28-C40	9408552.000	120.000	17.088	22.097	78404.600	81423.284	3.707
Aliphatic EPH	35656770.000	360.000	3.349	22.097	99046.583	101529.318	2.445

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	07 Apr 2025 14:23
Client Sample ID:		Operator:	YP/AJ
Data file:	FC068497.D	Misc:	
Instrument:	FID_C	ALS Vial:	10
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.349	6.652	6682131.000	60.000	ug/ml
Aliphatic C12-C16	6.653	10.053	4492250.000	40.000	ug/ml
Aliphatic C16-C21	10.054	13.420	6578642.000	60.000	ug/ml
Aliphatic C21-C28	13.421	17.087	8495195.000	80.000	ug/ml
Aliphatic C28-C40	17.088	22.097	9408552.000	120.000	ug/ml
Aliphatic EPH	3.349	22.097	35656770.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
 Data File : FC068497.D
 Signal(s) : FID1A.ch
 Acq On : 07 Apr 2025 14:23
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 04/08/2025
 Supervised By :mohammad ahmed 04/09/2025

Integration File: autoint1.e
 Quant Time: Apr 08 02:33:27 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Mon Apr 07 16:09:59 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	2586160	20.055 ug/ml
Spiked Amount 50.000		Recovery =	40.11%
12) S 1-chlorooctadecane (S...	13.154	1897566	20.628 ug/ml
Spiked Amount 50.000		Recovery =	41.26%
Target Compounds			
1) T n-Nonane (C9)	3.449	2180496	19.568 ug/ml
2) T n-Decane (C10)	4.525	2248773	19.312 ug/ml
3) T A~Naphthalene (C11.7)	6.124	2476515	19.801 ug/ml
4) T n-Dodecane (C12)	6.552	2252862	19.921 ug/ml
5) T A~2-methylnaphthalene...	7.182	2398589	20.044 ug/ml
6) T n-Tetradecane (C14)	8.350	2223113	19.920 ug/ml
7) T n-Hexadecane (C16)	9.953	2269137	19.847 ug/ml
8) T n-Octadecane (C18)	11.397	2274403	19.837 ug/ml
10) T n-Eicosane (C20)	12.708	2173946	19.873 ug/ml
11) T n-Heneicosane (C21)	13.320	2130293	19.973 ug/ml
13) T n-Docosane (C22)	13.908	2130957	19.738 ug/ml
14) T n-Tetracosane (C24)	15.012	2140196	19.199 ug/ml
15) T n-Hexacosane (C26)	16.035	2114881	19.015 ug/ml
16) T n-Octacosane (C28)	16.987	2109161	19.049 ug/ml
17) T n-Tricontane (C30)	17.877	2194022	19.848 ug/ml
18) T n-Dotriacontane (C32)	18.711	2124585	20.409 ug/ml
19) T n-Tetratriacontane (C34)	19.497	1809605	20.152 ug/ml
20) T n-Hexatriacontane (C36)	20.236	1371970	18.327 ug/ml
21) T n-Octatriacontane (C38)	21.013	1038358	16.608 ug/mlm
22) T n-Tetracontane (C40)	21.997	870012	18.622 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
Data File : FC068497.D
Signal(s) : FID1A.ch
Acq On : 07 Apr 2025 14:23
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

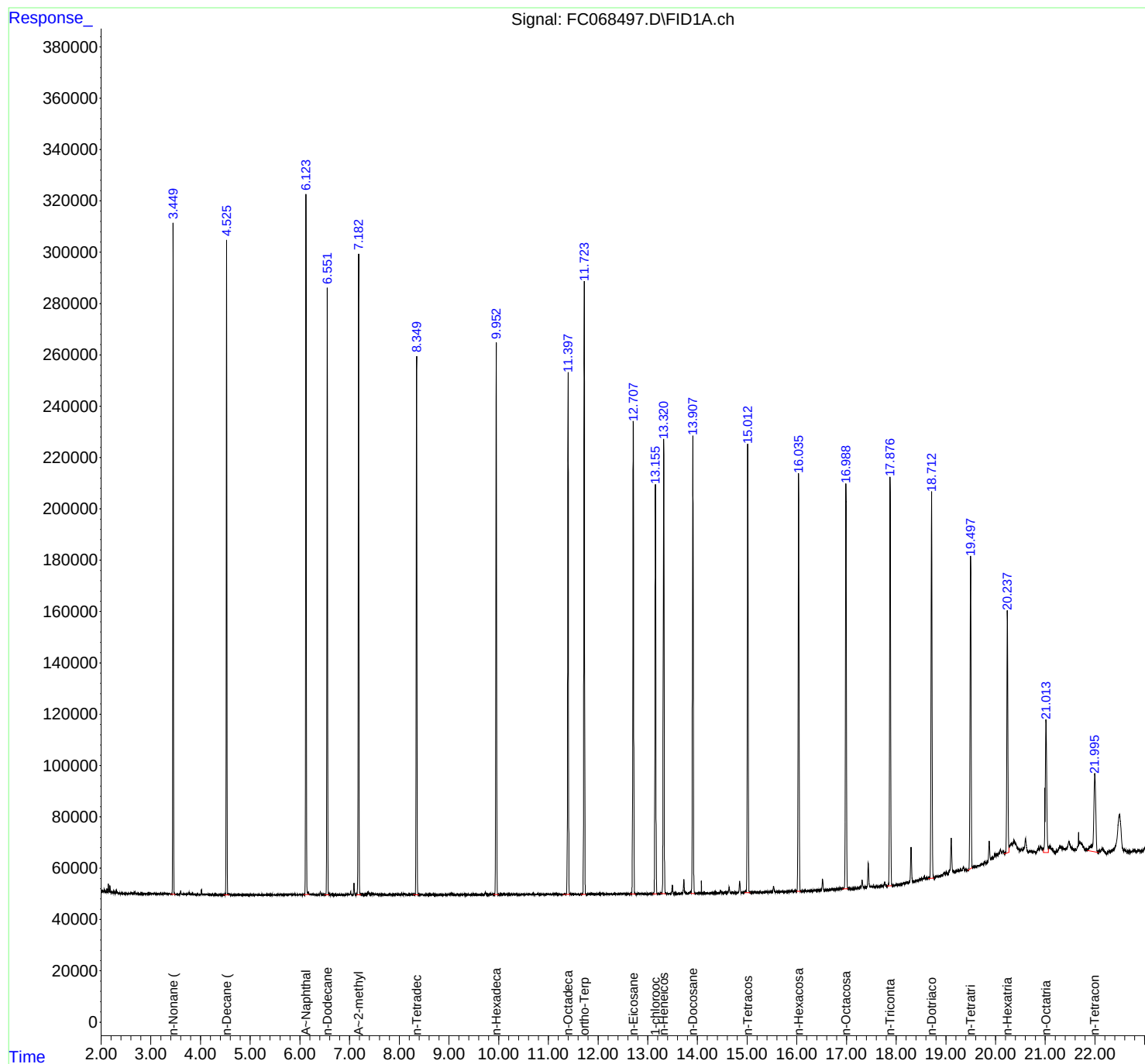
Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 04/08/2025
Supervised By :mohammad ahmed 04/09/2025

Integration File: autoint1.e
Quant Time: Apr 08 02:33:27 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Mon Apr 07 16:09:59 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\FC04072
Data File : FC068497.D
Signal(s) : FID1A.ch
Acq On : 07 Apr 2025 14:23
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/08/2025
Supervised By :mohammad ahmed 04/09/2025

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.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	3.492	BB	261516	2180496	84.31%	4.852%
2	4.525	4.472	4.569	BB	255152	2248773	86.95%	5.004%
3	6.124	6.074	6.194	BB	272679	2476515	95.76%	5.511%
4	6.552	6.489	6.584	BB	236949	2252862	87.11%	5.013%
5	7.182	7.135	7.232	BB	249430	2398589	92.75%	5.338%
6	8.350	8.287	8.394	BB	208282	2223113	85.96%	4.947%
7	9.953	9.894	10.002	BB	215155	2269137	87.74%	5.050%
8	11.397	11.289	11.434	BB	203507	2274403	87.95%	5.061%
9	11.722	11.660	11.757	BB	238419	2586160	100.00%	5.755%
10	12.708	12.640	12.759	BB	184525	2173946	84.06%	4.838%
11	13.154	13.094	13.192	BB	159095	1897566	73.37%	4.223%
12	13.320	13.260	13.369	BB	177015	2130293	82.37%	4.741%
13	13.908	13.873	13.947	VB	178500	2130957	82.40%	4.742%
14	15.012	14.949	15.065	BB	174499	2140196	82.76%	4.763%
15	16.035	15.992	16.080	BB	163213	2114881	81.78%	4.706%
16	16.987	16.919	17.030	BB	154556	2109161	81.56%	4.694%
17	17.877	17.815	17.914	BB	158935	2194022	84.84%	4.882%
18	18.711	18.642	18.765	BB	151106	2124585	82.15%	4.728%
19	19.497	19.440	19.530	BB	121373	1809605	69.97%	4.027%
20	20.236	20.182	20.270	BV	94618	1371970	53.05%	3.053%
21	21.014	20.949	21.062	BV	49991	959945	37.12%	2.136%
22	21.997	21.849	22.074	BV	29995	870012	33.64%	1.936%
Sum of corrected areas:						44937187		

Aliphatic EPH 040225.M Tue Apr 08 03:18:19 2025

Continuing Calibration Report for SequenceID : FC040725AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV

File ID : FC068506.D

Aliphatic C9-C12	7148989.000	60.000	3.349	6.652	119149.817	113656.014	-4.834
Aliphatic C12-C16	4796745.000	40.000	6.653	10.053	119918.625	112966.617	-6.154
Aliphatic C16-C21	6987395.000	60.000	10.054	13.420	116456.583	110233.878	-5.645
Aliphatic C21-C28	8925778.000	80.000	13.421	17.087	111572.225	110346.279	-1.111
Aliphatic C28-C40	9592709.000	120.000	17.088	22.097	79939.242	81423.284	1.823
Aliphatic EPH	37451616.000	360.000	3.349	22.097	104032.267	101529.318	-2.465

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	07 Apr 2025 21:15
Client Sample ID:		Operator:	YP/AJ
Data file:	FC068506.D	Misc:	
Instrument:	FID_C	ALS Vial:	10
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.349	6.652	7148989.000	60.000	ug/ml
Aliphatic C12-C16	6.653	10.053	4796745.000	40.000	ug/ml
Aliphatic C16-C21	10.054	13.420	6987395.000	60.000	ug/ml
Aliphatic C21-C28	13.421	17.087	8925778.000	80.000	ug/ml
Aliphatic C28-C40	17.088	22.097	9592709.000	120.000	ug/ml
Aliphatic EPH	3.349	22.097	37451616.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
 Data File : FC068506.D
 Signal(s) : FID1A.ch
 Acq On : 07 Apr 2025 21:15
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 04/08/2025
 Supervised By :mohammad ahmed 04/09/2025

Integration File: autoint1.e
 Quant Time: Apr 08 02:37:27 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Mon Apr 07 16:09:59 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)	11.721	2739240	21.242 ug/ml
Spiked Amount 50.000		Recovery =	42.48%
12) S 1-chlorooctadecane (S...	13.153	2021607	21.977 ug/ml
Spiked Amount 50.000		Recovery =	43.95%
Target Compounds			
1) T n-Nonane (C9)	3.451	2328385	20.895 ug/ml
2) T n-Decane (C10)	4.526	2405472	20.658 ug/ml
3) T A~Naphthalene (C11.7)	6.125	2647289	21.167 ug/ml
4) T n-Dodecane (C12)	6.552	2415132	21.355 ug/ml
5) T A~2-methylnaphthalene...	7.183	2577783	21.541 ug/ml
6) T n-Tetradecane (C14)	8.350	2377210	21.300 ug/ml
7) T n-Hexadecane (C16)	9.953	2419535	21.163 ug/ml
8) T n-Octadecane (C18)	11.397	2416705	21.078 ug/ml
10) T n-Eicosane (C20)	12.707	2308530	21.104 ug/ml
11) T n-Heneicosane (C21)	13.320	2262160	21.210 ug/ml
13) T n-Docosane (C22)	13.906	2256348	20.899 ug/ml
14) T n-Tetracosane (C24)	15.012	2255446	20.233 ug/ml
15) T n-Hexacosane (C26)	16.034	2215113	19.916 ug/ml
16) T n-Octacosane (C28)	16.985	2198871	19.859 ug/ml
17) T n-Tricontane (C30)	17.875	2272469	20.557 ug/ml
18) T n-Dotriacontane (C32)	18.711	2196932	21.104 ug/ml
19) T n-Tetratriacontane (C34)	19.495	1867075	20.792 ug/ml
20) T n-Hexatriacontane (C36)	20.234	1372166	18.329 ug/mlm
21) T n-Octatriacontane (C38)	21.011	1038247	16.607 ug/mlm
22) T n-Tetracontane (C40)	21.995	845820	18.104 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
Data File : FC068506.D
Signal(s) : FID1A.ch
Acq On : 07 Apr 2025 21:15
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

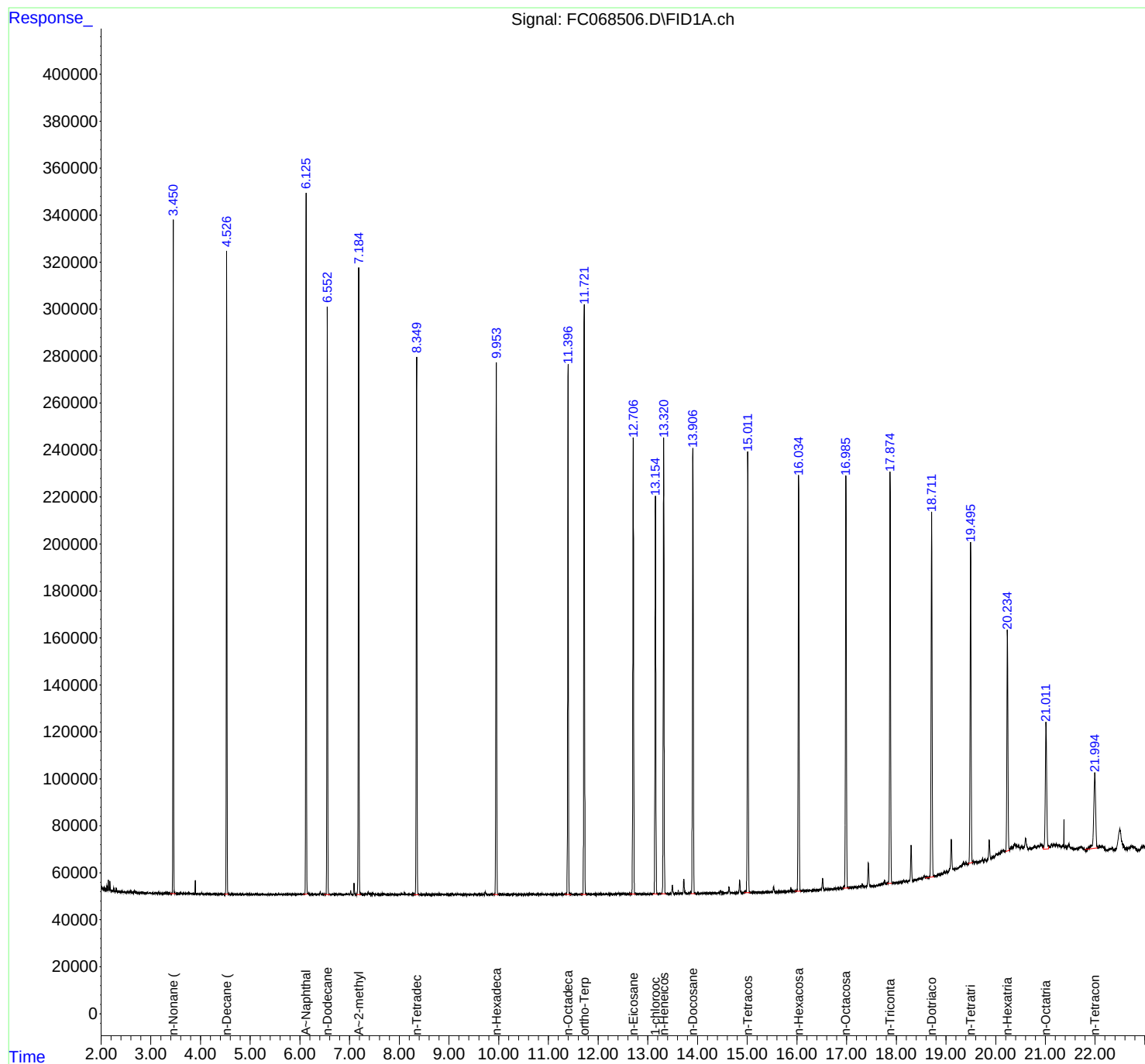
Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 04/08/2025
Supervised By :mohammad ahmed 04/09/2025

Integration File: autoint1.e
Quant Time: Apr 08 02:37:27 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Mon Apr 07 16:09:59 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

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/08/2025
Supervised By :mohammad ahmed 04/09/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC04072
Data File : FC068506.D
Signal(s) : FID1A.ch
Acq On : 07 Apr 2025 21:15
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.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	3.398	3.500	BB	286279	2328385	85.00%	4.905%
2	4.526	4.477	4.565	BB	272963	2405472	87.82%	5.067%
3	6.125	6.070	6.158	BV	298475	2647289	96.64%	5.577%
4	6.552	6.490	6.600	BB	250697	2415132	88.17%	5.088%
5	7.183	7.135	7.227	BB	266786	2577783	94.11%	5.430%
6	8.350	8.288	8.385	BB	227141	2377210	86.78%	5.008%
7	9.953	9.895	9.992	BB	226861	2419535	88.33%	5.097%
8	11.397	11.328	11.453	BB	225455	2416705	88.23%	5.091%
9	11.721	11.653	11.767	BB	251154	2739240	100.00%	5.771%
10	12.707	12.638	12.755	BB	194104	2308530	84.28%	4.863%
11	13.153	13.093	13.202	BB	169364	2021607	73.80%	4.259%
12	13.320	13.258	13.372	BB	194246	2262160	82.58%	4.766%
13	13.906	13.873	13.957	VB	189503	2256348	82.37%	4.753%
14	15.012	14.933	15.065	BB	185461	2255446	82.34%	4.751%
15	16.034	15.963	16.088	BB	176338	2215113	80.87%	4.666%
16	16.985	16.923	17.048	BB	175185	2198871	80.27%	4.632%
17	17.875	17.812	17.915	BB	174461	2272469	82.96%	4.787%
18	18.711	18.587	18.763	PB	154040	2196932	80.20%	4.628%
19	19.495	19.440	19.532	BV	136411	1867075	68.16%	3.933%
20	20.235	19.970	20.287	BV	93797	1468901	53.62%	3.094%
21	21.012	20.953	21.075	BB	52558	973460	35.54%	2.051%
22	21.995	21.795	22.050	BV	32065	845820	30.88%	1.782%
Sum of corrected areas:						47469480		

Aliphatic EPH 040225.M Tue Apr 08 03:23:37 2025

Continuing Calibration Report for SequenceID : FC040825AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV

File ID : FC068509.D

Aliphatic C9-C12	7037737.000	60.000	3.349	6.653	117295.617	113656.014	-3.202
Aliphatic C12-C16	4773823.000	40.000	6.654	10.055	119345.575	112966.617	-5.647
Aliphatic C16-C21	7017670.000	60.000	10.056	13.422	116961.167	110233.878	-6.103
Aliphatic C21-C28	9090037.000	80.000	13.423	17.087	113625.463	110346.279	-2.972
Aliphatic C28-C40	9806940.000	120.000	17.088	22.094	81724.500	81423.284	-0.370
Aliphatic EPH	37726207.000	360.000	3.349	22.094	104795.019	101529.318	-3.217

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	08 Apr 2025 08:52
Client Sample ID:		Operator:	YP/AJ
Data file:	FC068509.D	Misc:	
Instrument:	FID_C	ALS Vial:	10
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.349	6.653	7037737.000	60.000	ug/ml
Aliphatic C12-C16	6.654	10.055	4773823.000	40.000	ug/ml
Aliphatic C16-C21	10.056	13.422	7017670.000	60.000	ug/ml
Aliphatic C21-C28	13.423	17.087	9090037.000	80.000	ug/ml
Aliphatic C28-C40	17.088	22.094	9806940.000	120.000	ug/ml
Aliphatic EPH	3.349	22.094	37726207.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040825AL\
 Data File : FC068509.D
 Signal(s) : FID1A.ch
 Acq On : 08 Apr 2025 08:52
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 04/09/2025
 Supervised By :mohammad ahmed 04/10/2025

Integration File: autoint1.e
 Quant Time: Apr 09 04:12:30 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Mon Apr 07 16:09:59 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)	11.723	2741934	21.263 ug/ml
Spiked Amount 50.000		Recovery =	42.53%
12) S 1-chlorooctadecane (S...	13.156	2031932	22.089 ug/ml
Spiked Amount 50.000		Recovery =	44.18%
Target Compounds			
1) T n-Nonane (C9)	3.449	2284308	20.499 ug/ml
2) T n-Decane (C10)	4.526	2368894	20.344 ug/ml
3) T A~Naphthalene (C11.7)	6.125	2617091	20.925 ug/ml
4) T n-Dodecane (C12)	6.553	2384535	21.085 ug/ml
5) T A~2-methylnaphthalene...	7.184	2542718	21.248 ug/ml
6) T n-Tetradecane (C14)	8.351	2358328	21.131 ug/ml
7) T n-Hexadecane (C16)	9.955	2415495	21.128 ug/ml
8) T n-Octadecane (C18)	11.398	2421382	21.119 ug/ml
10) T n-Eicosane (C20)	12.710	2318884	21.198 ug/ml
11) T n-Heneicosane (C21)	13.322	2277404	21.353 ug/ml
13) T n-Docosane (C22)	13.909	2287214	21.185 ug/ml
14) T n-Tetracosane (C24)	15.013	2287857	20.524 ug/ml
15) T n-Hexacosane (C26)	16.036	2261919	20.337 ug/ml
16) T n-Octacosane (C28)	16.987	2253047	20.348 ug/ml
17) T n-Tricontane (C30)	17.876	2347308	21.234 ug/ml
18) T n-Dotriacontane (C32)	18.709	2272481	21.830 ug/ml
19) T n-Tetratriacontane (C34)	19.494	1934457	21.543 ug/ml
20) T n-Hexatriacontane (C36)	20.234	1400181	18.704 ug/ml
21) T n-Octatriacontane (C38)	21.009	1046373	16.737 ug/mlm
22) T n-Tetracontane (C40)	21.994	806140	17.255 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040825AL\
Data File : FC068509.D
Signal(s) : FID1A.ch
Acq On : 08 Apr 2025 08:52
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

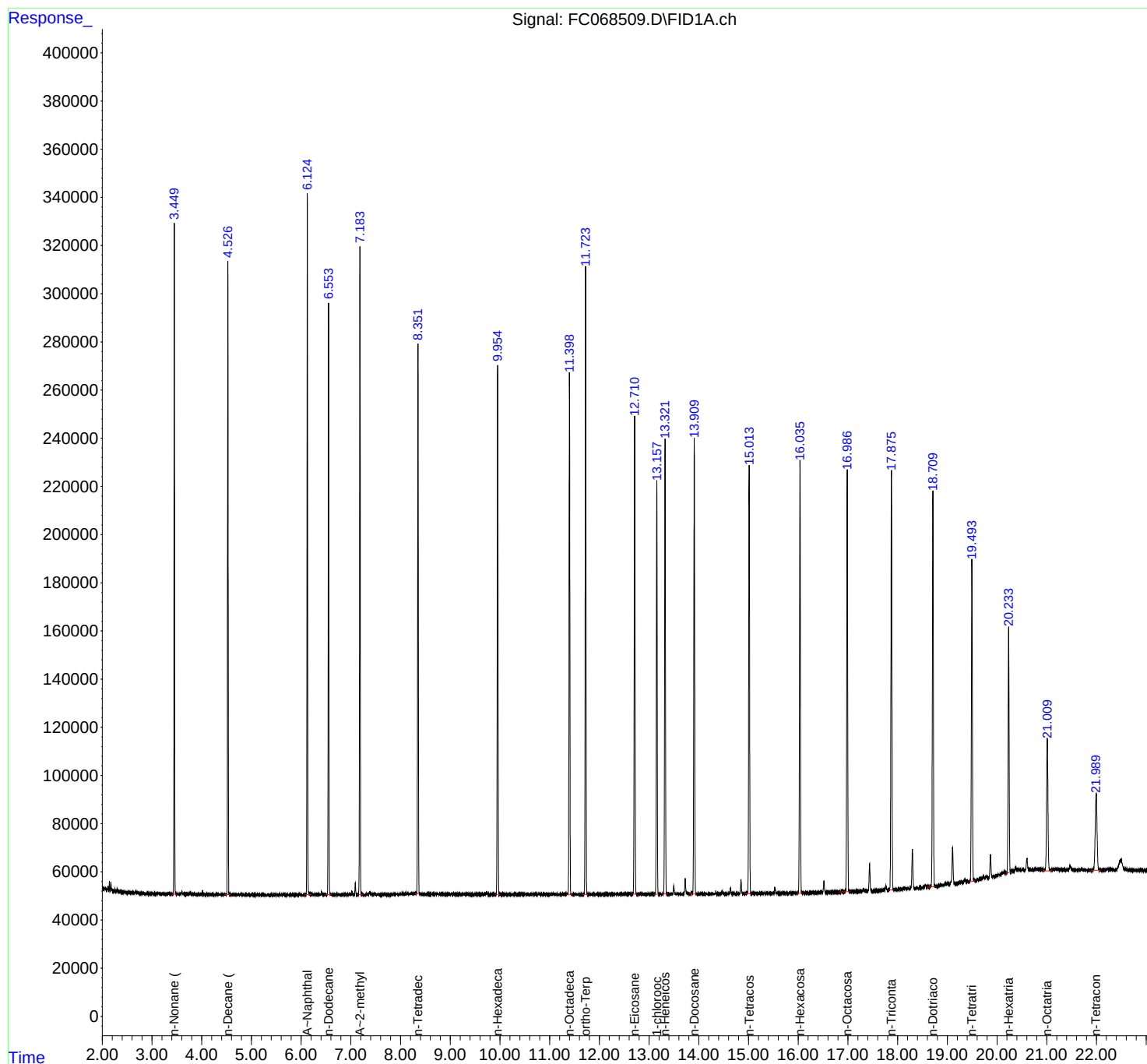
Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 04/09/2025
Supervised By :mohammad ahmed 04/10/2025

Integration File: autoint1.e
Quant Time: Apr 09 04:12:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Mon Apr 07 16:09:59 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

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/09/2025
Supervised By :mohammad ahmed 04/10/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC04082
Data File : FC068509.D
Signal(s) : FID1A.ch
Acq On : 08 Apr 2025 08:52
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.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	3.397	3.492	BB	277864	2284308	83.31%	4.797%
2	4.526	4.472	4.568	BB	262269	2368894	86.40%	4.974%
3	6.125	6.075	6.192	BB	290833	2617091	95.45%	5.496%
4	6.553	6.490	6.598	BB	245773	2384535	86.97%	5.007%
5	7.184	7.137	7.232	BB	268335	2542718	92.73%	5.340%
6	8.351	8.290	8.380	BB	228707	2358328	86.01%	4.952%
7	9.955	9.898	9.990	BB	219399	2415495	88.09%	5.072%
8	11.398	11.342	11.448	BB	216316	2421382	88.31%	5.085%
9	11.723	11.665	11.768	BB	261454	2741934	100.00%	5.758%
10	12.710	12.652	12.752	BB	198201	2318884	84.57%	4.869%
11	13.156	13.093	13.190	BB	172476	2031932	74.11%	4.267%
12	13.322	13.263	13.363	BB	188885	2277404	83.06%	4.782%
13	13.909	13.810	13.947	BB	188647	2287214	83.42%	4.803%
14	15.013	14.922	15.052	BB	177737	2287857	83.44%	4.804%
15	16.036	15.977	16.083	BB	178292	2261919	82.49%	4.750%
16	16.987	16.818	17.037	BB	174768	2253047	82.17%	4.731%
17	17.876	17.813	17.912	BB	173935	2347308	85.61%	4.929%
18	18.709	18.585	18.765	VB	163721	2272481	82.88%	4.772%
19	19.494	19.440	19.557	BB	132655	1934457	70.55%	4.062%
20	20.234	20.170	20.268	BV	101581	1400181	51.07%	2.940%
21	21.011	20.937	21.085	BB	54479	1007279	36.74%	2.115%
22	21.994	21.907	22.078	BB	31095	806140	29.40%	1.693%
Sum of corrected areas:						47620789		

Aliphatic EPH 040225.M Wed Apr 09 04:23:07 2025

Continuing Calibration Report for SequenceID : FC040825AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV

File ID : FC068512.D

Aliphatic C9-C12	7222772.000	60.000	3.349	6.653	120379.533	113656.014	-5.916
Aliphatic C12-C16	4679529.000	40.000	6.654	10.055	116988.225	112966.617	-3.560
Aliphatic C16-C21	6686553.000	60.000	10.056	13.422	111442.550	110233.878	-1.096
Aliphatic C21-C28	8623503.000	80.000	13.423	17.087	107793.788	110346.279	2.313
Aliphatic C28-C40	9762172.000	120.000	17.088	22.094	81351.433	81423.284	0.088
Aliphatic EPH	36974529.000	360.000	3.349	22.094	102707.025	101529.318	-1.160

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	08 Apr 2025 11:24
Client Sample ID:		Operator:	YP/AJ
Data file:	FC068512.D	Misc:	
Instrument:	FID_C	ALS Vial:	10
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.349	6.653	7222772.000	60.000	ug/ml
Aliphatic C12-C16	6.654	10.055	4679529.000	40.000	ug/ml
Aliphatic C16-C21	10.056	13.422	6686553.000	60.000	ug/ml
Aliphatic C21-C28	13.423	17.087	8623503.000	80.000	ug/ml
Aliphatic C28-C40	17.088	22.094	9762172.000	120.000	ug/ml
Aliphatic EPH	3.349	22.094	36974529.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040825AL\
 Data File : FC068512.D
 Signal(s) : FID1A.ch
 Acq On : 08 Apr 2025 11:24
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
 Quant Time: Apr 09 04:13:28 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Mon Apr 07 16:09:59 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	2657931	20.612 ug/ml
Spiked Amount 50.000		Recovery =	41.22%
12) S 1-chlorooctadecane (S...	13.155	1936213	21.048 ug/ml
Spiked Amount 50.000		Recovery =	42.10%
Target Compounds			
1) T n-Nonane (C9)	3.449	2310190	20.732 ug/ml
2) T n-Decane (C10)	4.525	2388705	20.514 ug/ml
3) T A~Naphthalene (C11.7)	6.124	2625395	20.992 ug/ml
4) T n-Dodecane (C12)	6.552	2523877	22.317 ug/ml
5) T A~2-methylnaphthalene...	7.183	2551206	21.319 ug/ml
6) T n-Tetradecane (C14)	8.351	2328274	20.862 ug/ml
7) T n-Hexadecane (C16)	9.953	2351255	20.566 ug/ml
8) T n-Octadecane (C18)	11.398	2323755	20.267 ug/ml
10) T n-Eicosane (C20)	12.708	2204348	20.151 ug/ml
11) T n-Heneicosane (C21)	13.321	2158450	20.237 ug/ml
13) T n-Docosane (C22)	13.908	2153579	19.947 ug/ml
14) T n-Tetracosane (C24)	15.013	2160259	19.379 ug/ml
15) T n-Hexacosane (C26)	16.035	2147691	19.310 ug/ml
16) T n-Octacosane (C28)	16.985	2161974	19.526 ug/ml
17) T n-Tricontane (C30)	17.876	2283266	20.655 ug/ml
18) T n-Dotriacontane (C32)	18.710	2240146	21.520 ug/ml
19) T n-Tetratriacontane (C34)	19.494	1927031	21.460 ug/ml
20) T n-Hexatriacontane (C36)	20.235	1422135	18.997 ug/ml
21) T n-Octatriacontane (C38)	21.012	1032061	16.508 ug/ml
22) T n-Tetracontane (C40)	21.993	857533	18.355 ug/ml

(f)=RT Delta > 1/2 Window

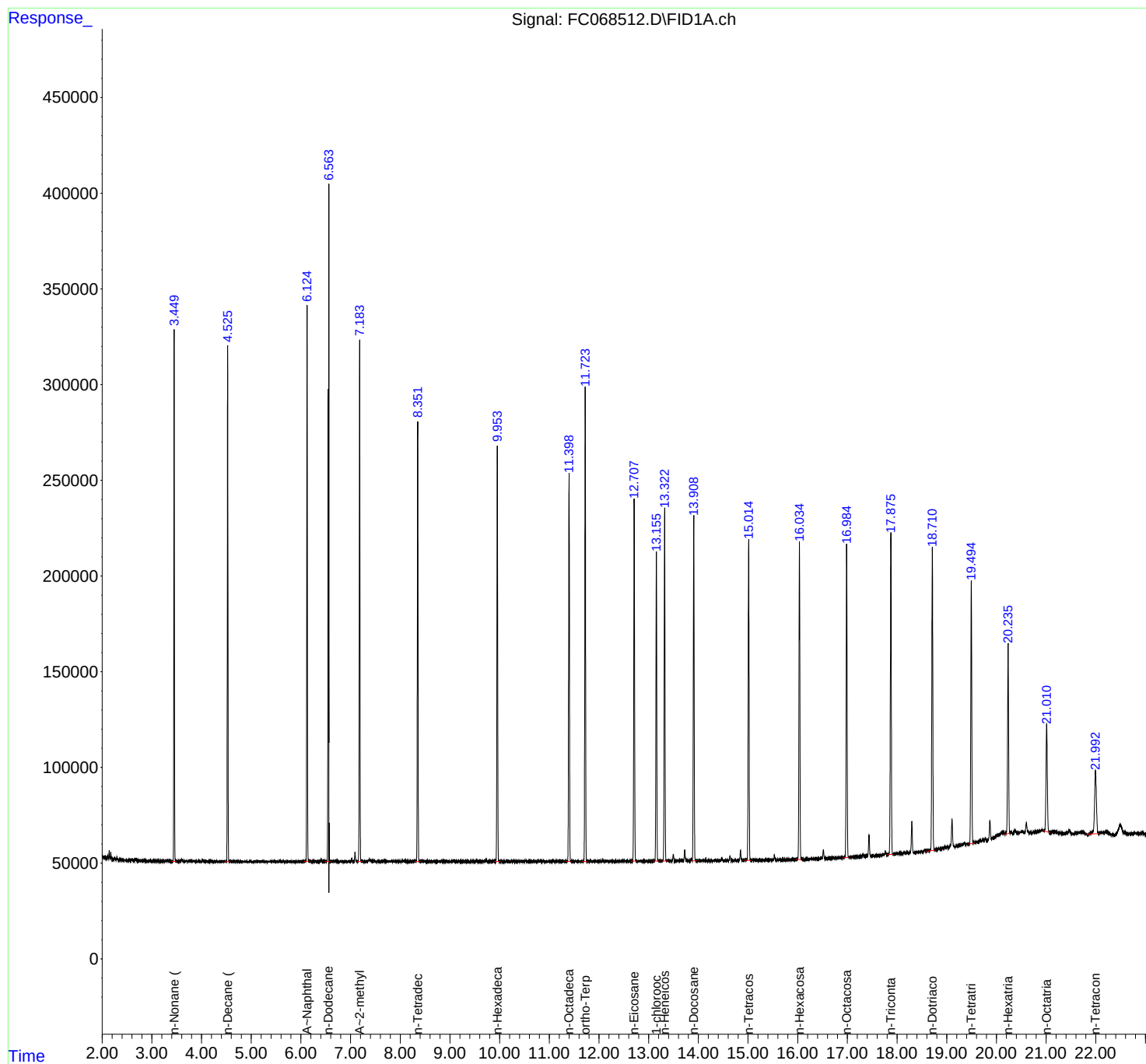
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040825AL\
Data File : FC068512.D
Signal(s) : FID1A.ch
Acq On : 08 Apr 2025 11:24
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Apr 09 04:13:28 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Mon Apr 07 16:09:59 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\FC040825AL\
 Data File : FC068512.D
 Signal(s) : FID1A.ch
 Acq On : 08 Apr 2025 11:24
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.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	3.495	BB	277734	2310190	86.92%	4.942%
2	4.525	4.470	4.562	BB	269817	2388705	89.87%	5.110%
3	6.124	6.065	6.157	BV	291304	2625395	98.78%	5.616%
4	6.552	6.490	6.595	BB	246353	2523877	94.96%	5.399%
5	7.183	7.135	7.229	BB	273634	2551206	95.98%	5.458%
6	8.351	8.292	8.392	BB	229322	2328274	87.60%	4.981%
7	9.953	9.895	10.005	BB	217189	2351255	88.46%	5.030%
8	11.398	11.342	11.429	BB	203659	2323755	87.43%	4.971%
9	11.722	11.662	11.762	BB	247797	2657931	100.00%	5.686%
10	12.708	12.652	12.760	BB	185905	2204348	82.93%	4.716%
11	13.155	13.095	13.204	BB	161332	1936213	72.85%	4.142%
12	13.321	13.264	13.375	BB	183697	2158450	81.21%	4.617%
13	13.908	13.873	13.962	VB	180779	2153579	81.02%	4.607%
14	15.013	14.934	15.059	BB	164625	2160259	81.28%	4.621%
15	16.035	15.964	16.079	BB	166285	2147691	80.80%	4.594%
16	16.985	16.919	17.022	BB	162607	2161974	81.34%	4.625%
17	17.876	17.802	17.917	BB	168384	2283266	85.90%	4.884%
18	18.710	18.584	18.764	PB	158882	2240146	84.28%	4.792%
19	19.494	19.440	19.560	BB	136940	1927031	72.50%	4.122%
20	20.235	20.165	20.270	VV	99518	1422135	53.51%	3.042%
21	21.012	20.944	21.082	BB	55892	1032061	38.83%	2.208%
22	21.993	21.809	22.052	BV	33050	857533	32.26%	1.834%
Sum of corrected areas:							46745273	

Aliphatic EPH 040225.M Wed Apr 09 04:24:12 2025



QC SAMPLE DATA

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	PB167477BL	SDG No.:	Q1736
Lab Sample ID:	PB167477BL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
04/07/25 09:40	04/07/25 15:00	PB167477

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	0.91	U	1	0.91	4.00	mg/kg	FC068498.D
Total EPH	Total EPH	0.91	U		0.91	4.00	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 concentration for the sample is reported as the Total EPH.

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	PB167477BL	SDG No.:	Q1736
Lab Sample ID:	PB167477BL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068498.D	1	04/07/25	04/07/25	PB167477

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	0.91	U	0.91	4.00	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	1.18	U	1.18	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	38.8		40 - 140	78%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	36.8		40 - 140	74%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB167477BL	Acq On:	07 Apr 2025 15:00
Client Sample ID:	PB167477BL	Operator:	YP/AJ
Data file:	FC068498.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	3.349	6.652	0	0	300	ug/ml
Aliphatic C12-C16	6.653	10.053	0	0	200	ug/ml
Aliphatic C16-C21	10.054	13.420	0	0	300	ug/ml
Aliphatic C21-C28	13.421	17.087	0	0	400	ug/ml
Aliphatic C28-C40	17.088	22.097	0	0	600	ug/ml
Aliphatic EPH	3.349	22.097	0	0		ug/ml
ortho-Terphenyl (SURR)	11.726	11.726	4743922	36.79		ug/ml
1-chlorooctadecane (SURR)	13.157	13.157	3572616	38.84		ug/ml
Aliphatic C9-C28	3.349	17.087	0	0	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
Data File : FC068498.D
Signal(s) : FID1A.ch
Acq On : 07 Apr 2025 15:00
Operator : YP/AJ
Sample : PB167477BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB167477BL

Integration File: autoint1.e
Quant Time: Apr 08 02:33:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Mon Apr 07 16:09:59 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)	11.726	4743922	36.788 ug/ml
Spiked Amount	50.000	Recovery	= 73.58%
12) S 1-chlorooctadecane (S...	13.157	3572616	38.837 ug/ml
Spiked Amount	50.000	Recovery	= 77.67%

Target Compounds

(f)=RT Delta > 1/2 Window

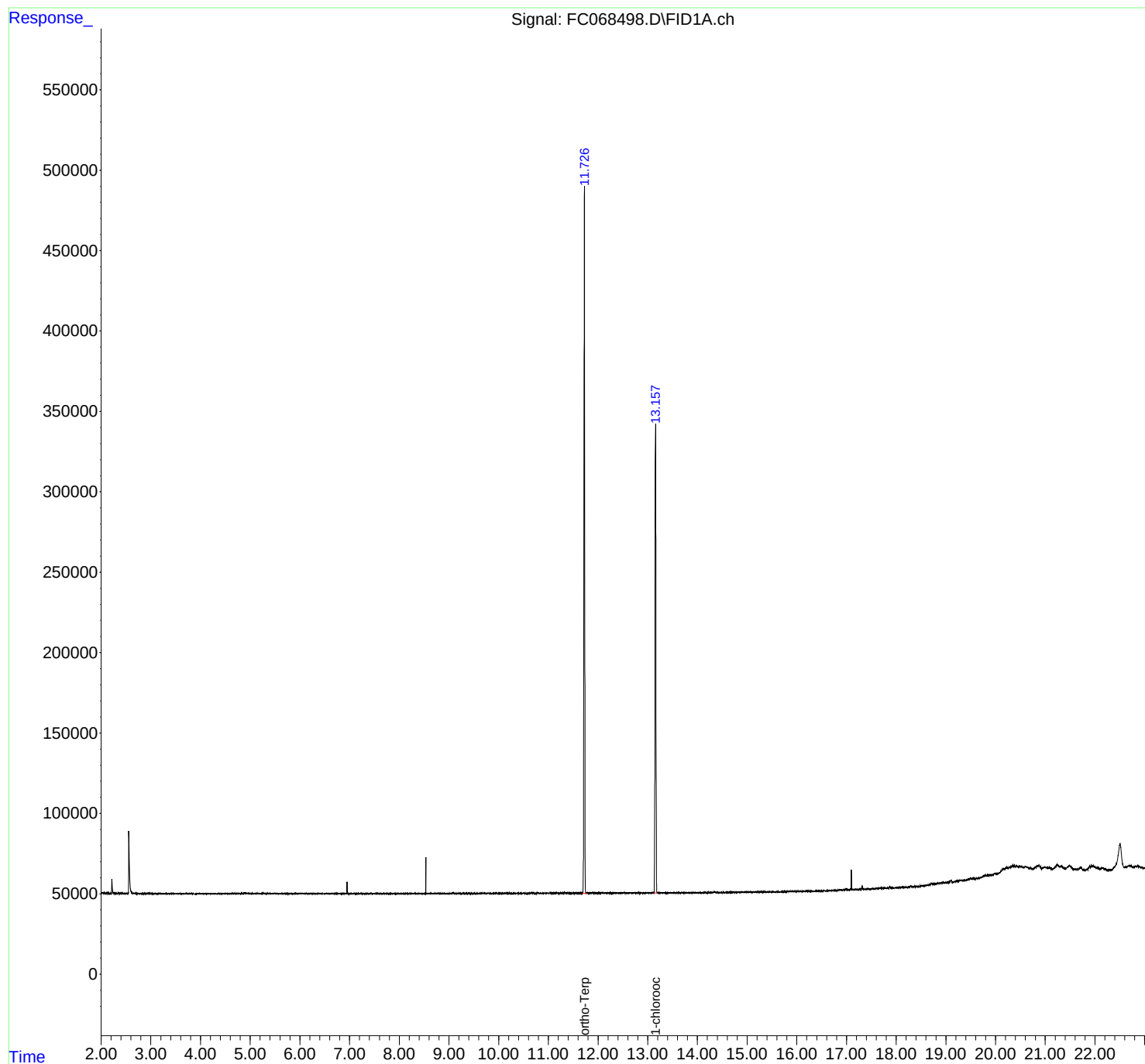
(m)=manual int.

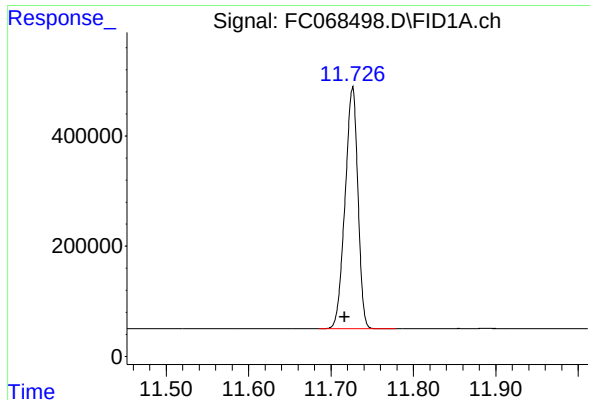
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
Data File : FC068498.D
Signal(s) : FID1A.ch
Acq On : 07 Apr 2025 15:00
Operator : YP/AJ
Sample : PB167477BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB167477BL

Integration File: autoint1.e
Quant Time: Apr 08 02:33:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Mon Apr 07 16:09:59 2025
Response via : Initial Calibration
Integrator: ChemStation

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

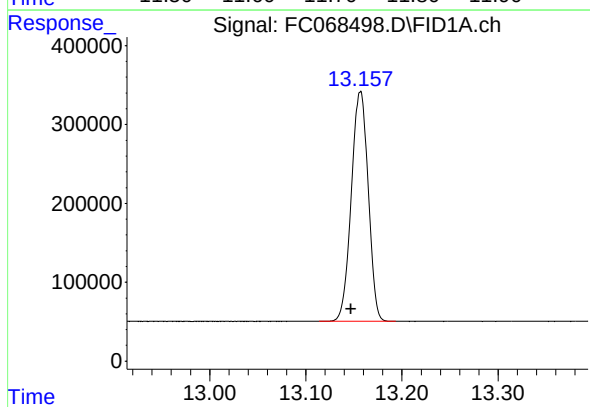




#9 ortho-Terphenyl (SURR)

R.T.: 11.726 min
Delta R.T.: 0.009 min
Response: 4743922
Conc: 36.79 ug/ml

Instrument :
FID_C
ClientSampleId :
PB167477BL



#12 1-chlorooctadecane (SURR)

R.T.: 13.157 min
Delta R.T.: 0.009 min
Response: 3572616
Conc: 38.84 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
Data File : FC068498.D
Signal(s) : FID1A.ch
Acq On : 07 Apr 2025 15:00
Sample : PB167477BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.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	11.726	11.685	11.779	BB	436095	4743922	100.00%	57.042%
2	13.157	13.114	13.194	BB	291694	3572616	75.31%	42.958%
Sum of corrected areas:							8316538	

Aliphatic EPH 040225.M Tue Apr 08 03:18:41 2025

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	PB167477BS	SDG No.:	Q1736
Lab Sample ID:	PB167477BS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
04/07/25 09:40	04/07/25 15:38	PB167477

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	82.4	E	1	0.91	3.99	mg/kg	FC068499.D
Total EPH	Total EPH	82.4			0.91	3.99	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 concentration for the sample is reported as the Total EPH.

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	PB167477BS	SDG No.:	Q1736
Lab Sample ID:	PB167477BS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068499.D	1	04/07/25	04/07/25	PB167477

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	82.4	E	0.91	3.99	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	26.7		1.18	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	41.6		40 - 140	83%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	38.9		40 - 140	78%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB167477BS	Acq On:	07 Apr 2025 15:38
Client Sample ID:	PB167477BS	Operator:	YP/AJ
Data file:	FC068499.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	3.349	6.652	25085090	220.711	300	ug/ml
Aliphatic C12-C16	6.653	10.053	31632981	280.021	200	ug/ml
Aliphatic C16-C21	10.054	13.420	36406234	330.264	300	ug/ml
Aliphatic C21-C28	13.421	17.087	44723519	405.302	400	ug/ml
Aliphatic C28-C40	17.088	22.097	32657686	401.085	600	ug/ml
Aliphatic EPH	3.349	22.097	170505510	1640		ug/ml
ortho-Terphenyl (SURR)	11.723	11.723	5017440	38.91		ug/ml
1-chlorooctadecane (SURR)	13.155	13.155	3829400	41.63		ug/ml
Aliphatic C9-C28	3.349	17.087	137847824	1240	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
 Data File : FC068499.D
 Signal(s) : FID1A.ch
 Acq On : 07 Apr 2025 15:38
 Operator : YP/AJ
 Sample : PB167477BS
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :

FID_C

ClientSampleId :

PB167477BS

Manual Integrations**APPROVED**

Reviewed By :Yogesh Patel 04/08/2025

Supervised By :mohammad ahmed 04/09/2025

Integration File: autoint1.e

Quant Time: Apr 08 02:34:01 2025

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M

Quant Title : GC Extractables

QLast Update : Mon Apr 07 16:09:59 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)	11.723	5017440	38.909 ug/ml
Spiked Amount 50.000		Recovery =	77.82%
12) S 1-chlorooctadecane (S...	13.155	3829400	41.629 ug/ml
Spiked Amount 50.000		Recovery =	83.26%
Target Compounds			
1) T n-Nonane (C9)	3.464	4527194	40.627 ug/ml
2) T n-Decane (C10)	4.534	4837407	41.543 ug/ml
3) T A~Naphthalene (C11.7)	6.128	5511580	44.068 ug/ml
4) T n-Dodecane (C12)	6.555	4958100	43.841 ug/ml
5) T A~2-methylnaphthalene...	7.185	5022144	41.967 ug/ml
6) T n-Tetradecane (C14)	8.353	4912505	44.017 ug/ml
7) T n-Hexadecane (C16)	9.954	4984029	43.594 ug/ml
8) T n-Octadecane (C18)	11.398	4949660	43.170 ug/ml
10) T n-Eicosane (C20)	12.710	5085985	46.494 ug/ml
11) T n-Heneicosane (C21)	13.322	4883757	45.790 ug/ml
13) T n-Docosane (C22)	13.909	4844280	44.869 ug/ml
14) T n-Tetracosane (C24)	15.008	9965257	89.396 ug/ml
15) T n-Hexacosane (C26)	16.038	4743872	42.652 ug/ml
16) T n-Octacosane (C28)	16.987	4726739	42.689 ug/ml
17) T n-Tricontane (C30)	17.877	4634804	41.928 ug/ml
18) T n-Dotriacontane (C32)	18.711	4475417	42.992 ug/ml
19) T n-Tetratriacontane (C34)	19.496	4317114	48.077 ug/ml
20) T n-Hexatriacontane (C36)	20.236	3968013	53.005 ug/ml
21) T n-Octatriacontane (C38)	21.016	3656573	58.487 ug/ml
22) T n-Tetracontane (C40)	22.000	3268804	69.965 ug/mlm

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
Data File : FC068499.D
Signal(s) : FID1A.ch
Acq On : 07 Apr 2025 15:38
Operator : YP/AJ
Sample : PB167477BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

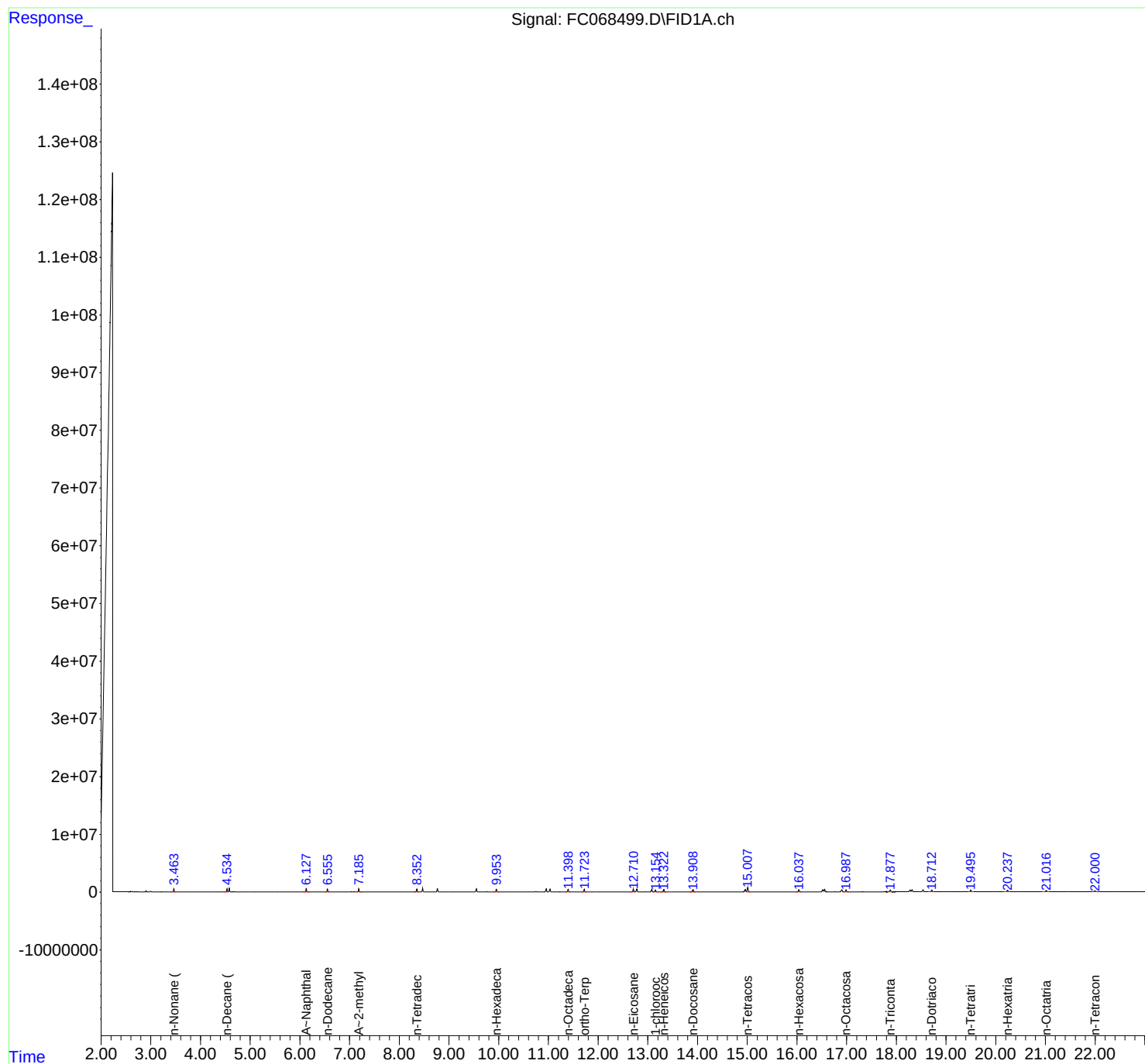
Instrument :
FID_C
ClientSampleId :
PB167477BS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 04/08/2025
Supervised By :mohammad ahmed 04/09/2025

Integration File: autoint1.e
Quant Time: Apr 08 02:34:01 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Mon Apr 07 16:09:59 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

ClientSampleId :

PB167477BS

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/08/2025

Supervised By :mohammad ahmed 04/09/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC04072
Data File : FC068499.D
Signal(s) : FID1A.ch
Acq On : 07 Apr 2025 15:38
Sample : PB167477BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.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	3.464	3.429	3.505	BB	546670	4527194	45.43%	2.518%
2	4.534	4.470	4.557	BV	544019	4837407	48.54%	2.690%
3	4.580	4.557	4.624	VV	614789	5250809	52.69%	2.920%
4	6.128	6.064	6.194	BB	601921	5511580	55.31%	3.065%
5	6.555	6.490	6.594	BB	511436	4958100	49.75%	2.757%
6	7.185	7.137	7.247	BB	523509	5022144	50.40%	2.793%
7	8.353	8.284	8.385	BB	481059	4912505	49.30%	2.732%
8	8.471	8.404	8.519	BB	560218	5544472	55.64%	3.084%
9	8.768	8.705	8.810	BB	555818	5559081	55.78%	3.092%
10	9.553	9.490	9.610	BB	547113	5610750	56.30%	3.120%
11	9.954	9.889	10.007	BB	460776	4984029	50.01%	2.772%
12	10.957	10.874	10.994	BV	522491	5452296	54.71%	3.032%
13	11.033	10.994	11.050	PBA	496684	5222298	52.41%	2.904%
14	11.398	11.334	11.435	BB	449117	4949660	49.67%	2.753%
15	11.723	11.664	11.769	BB	467739	5017440	50.35%	2.790%
16	12.710	12.642	12.744	BV	434502	5085985	51.04%	2.829%
17	12.780	12.744	12.825	VB	476941	5455267	54.74%	3.034%
18	13.080	13.007	13.108	BV	479155	5356971	53.76%	2.979%
19	13.155	13.108	13.204	VB	317809	3829400	38.43%	2.130%
20	13.322	13.250	13.375	BB	403386	4883757	49.01%	2.716%
21	13.909	13.839	13.954	BB	383709	4844280	48.61%	2.694%
22	14.960	14.892	14.980	BV	402458	5221497	52.40%	2.904%
23	15.008	14.980	15.069	VB	767501	9965257	100.00%	5.542%
24	16.038	15.972	16.090	BB	358784	4743872	47.60%	2.638%
25	16.520	16.445	16.536	BV	350157	5155766	51.74%	2.867%
26	16.556	16.536	16.584	VV	447055	5127612	51.45%	2.852%
27	16.903	16.825	16.942	BV	377907	4938496	49.56%	2.747%
28	16.987	16.942	17.045	VB	352854	4726739	47.43%	2.629%
29	17.877	17.812	17.932	BB	341415	4634804	46.51%	2.578%
30	18.278	18.195	18.293	BV	286393	3259300	32.71%	1.813%
31	18.538	18.442	18.604	BB	354096	5029490	50.47%	2.797%
32	18.711	18.645	18.755	BB	311626	4475417	44.91%	2.489%
33	19.496	19.440	19.555	BB	311085	4317114	43.32%	2.401%
34	20.236	20.157	20.280	VV	256469	3968013	39.82%	2.207%
35	21.016	20.930	21.075	BV	197393	3656573	36.69%	2.034%
36	21.998	21.922	22.062	PV	130997	3316975	33.29%	1.845%

37 22.495 22.217 22.594 BB 8382 452451 4.54% 0.252%
Sum of corrected areas: 1798

Aliphatic EPH 040225.M Tue Apr 08 03:21:02 2025

Instrument :

FID_C

ClientSampleId :

PB167477BS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/08/2025

Supervised By :mohammad ahmed 04/09/2025

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	PB167477BSD	SDG No.:	Q1736
Lab Sample ID:	PB167477BSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
04/07/25 09:40	04/07/25 16:15	PB167477

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	82.1	E	1	0.91	3.99	mg/kg	FC068500.D
Total EPH	Total EPH	82.1			0.91	3.99	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 concentration for the sample is reported as the Total EPH.

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	PB167477BSD	SDG No.:	Q1736
Lab Sample ID:	PB167477BSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068500.D	1	04/07/25	04/07/25	PB167477

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	82.1	E	0.91	3.99	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	25.5		1.18	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	42.0		40 - 140	84%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	38.9		40 - 140	78%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB167477BSD	Acq On:	07 Apr 2025 16:15
Client Sample ID:	PB167477BSD	Operator:	YP/AJ
Data file:	FC068500.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	3.349	6.652	24828638	218.454	300	ug/ml
Aliphatic C12-C16	6.653	10.053	31458596	278.477	200	ug/ml
Aliphatic C16-C21	10.054	13.420	36281862	329.135	300	ug/ml
Aliphatic C21-C28	13.421	17.087	44757186	405.607	400	ug/ml
Aliphatic C28-C40	17.088	22.097	31223292	383.469	600	ug/ml
Aliphatic EPH	3.349	22.097	168549574	1620		ug/ml
ortho-Terphenyl (SURR)	11.726	11.726	5016735	38.9		ug/ml
1-chlorooctadecane (SURR)	13.157	13.157	3861482	41.98		ug/ml
Aliphatic C9-C28	3.349	17.087	137326282	1230	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
 Data File : FC068500.D
 Signal(s) : FID1A.ch
 Acq On : 07 Apr 2025 16:15
 Operator : YP/AJ
 Sample : PB167477BSD
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 PB167477BSD

Integration File: autoint1.e
 Quant Time: Apr 08 02:34:32 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Mon Apr 07 16:09:59 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)	11.726	5016735	38.904 ug/ml
Spiked Amount 50.000		Recovery =	77.81%
12) S 1-chlorooctadecane (S...	13.157	3861482	41.978 ug/ml
Spiked Amount 50.000		Recovery =	83.96%
Target Compounds			
1) T n-Nonane (C9)	3.464	4508428	40.459 ug/ml
2) T n-Decane (C10)	4.535	4785213	41.095 ug/ml
3) T A~Naphthalene (C11.7)	6.129	5453427	43.603 ug/ml
4) T n-Dodecane (C12)	6.556	4901450	43.340 ug/ml
5) T A~2-methylnaphthalene...	7.187	4970712	41.537 ug/ml
6) T n-Tetradecane (C14)	8.354	4882699	43.750 ug/ml
7) T n-Hexadecane (C16)	9.957	4983600	43.590 ug/ml
8) T n-Octadecane (C18)	11.401	4975696	43.397 ug/ml
10) T n-Eicosane (C20)	12.712	5134921	46.941 ug/ml
11) T n-Heneicosane (C21)	13.325	4937020	46.289 ug/ml
13) T n-Docosane (C22)	13.912	4897705	45.364 ug/ml
14) T n-Tetracosane (C24)	15.010	10008578	89.784 ug/ml
15) T n-Hexacosane (C26)	16.040	4784492	43.017 ug/ml
16) T n-Octacosane (C28)	16.988	4749112	42.891 ug/ml
17) T n-Tricontane (C30)	17.879	4631669	41.899 ug/ml
18) T n-Dotriacontane (C32)	18.712	4418890	42.449 ug/ml
19) T n-Tetratriacontane (C34)	19.496	4147827	46.191 ug/ml
20) T n-Hexatriacontane (C36)	20.236	3618863	48.341 ug/ml
21) T n-Octatriacontane (C38)	21.015	3235533	51.752 ug/ml
22) T n-Tetracontane (C40)	21.997	3010048	64.427 ug/ml

(f)=RT Delta > 1/2 Window

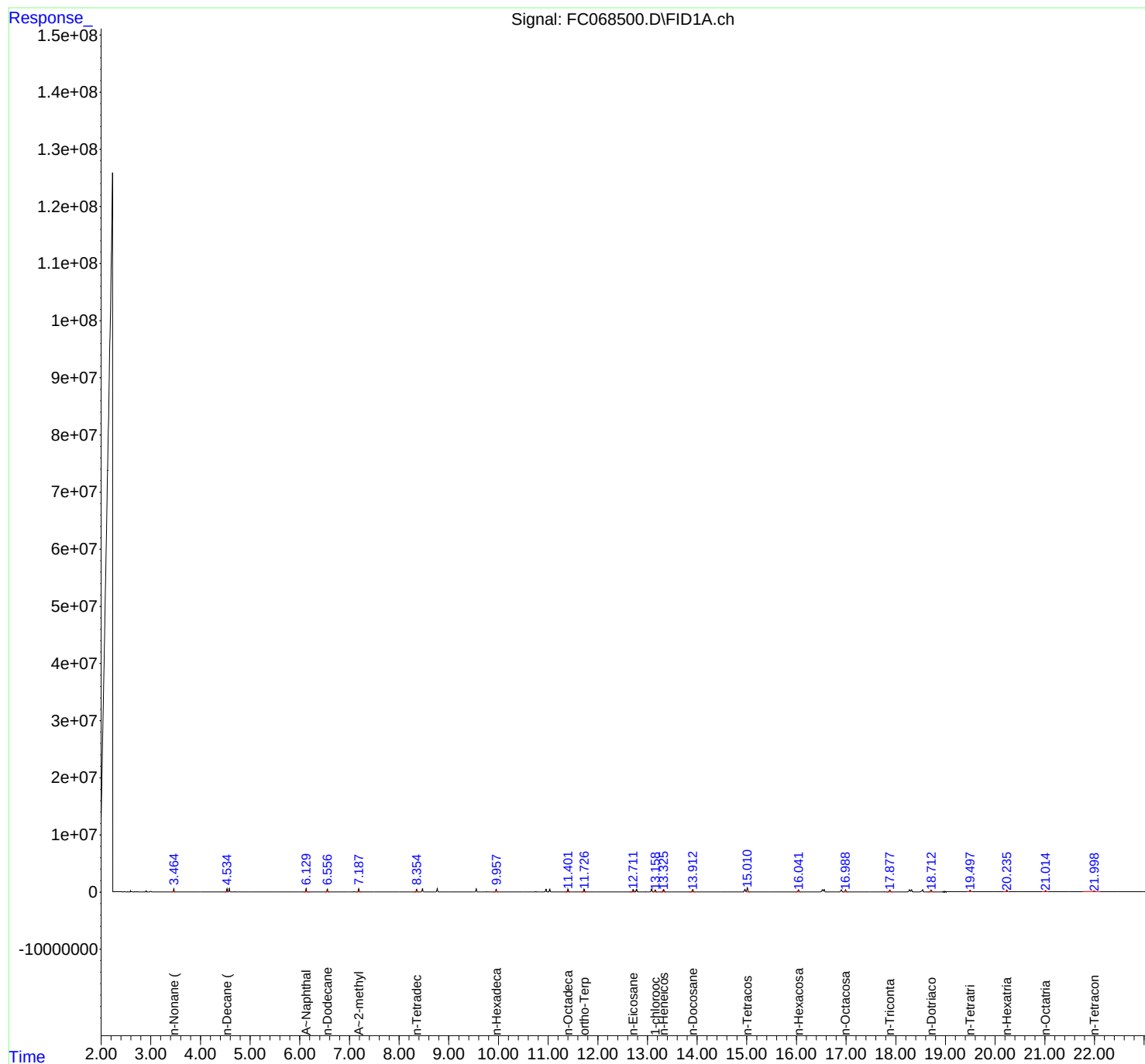
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
Data File : FC068500.D
Signal(s) : FID1A.ch
Acq On : 07 Apr 2025 16:15
Operator : YP/AJ
Sample : PB167477BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB167477BSD

Integration File: autoint1.e
Quant Time: Apr 08 02:34:32 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Mon Apr 07 16:09:59 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\FC040725AL\
 Data File : FC068500.D
 Signal(s) : FID1A.ch
 Acq On : 07 Apr 2025 16:15
 Sample : PB167477BSD
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.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	3.464	3.434	3.509	BB	547339	4508428	45.05%	2.534%
2	4.535	4.480	4.557	BV	545784	4785213	47.81%	2.689%
3	4.580	4.557	4.624	VV	599314	5180120	51.76%	2.911%
4	6.129	6.077	6.195	BB	604737	5453427	54.49%	3.065%
5	6.556	6.495	6.600	BB	505570	4901450	48.97%	2.755%
6	7.187	7.139	7.235	BB	529446	4970712	49.66%	2.793%
7	8.354	8.289	8.402	BB	477430	4882699	48.79%	2.744%
8	8.472	8.417	8.510	BB	556109	5504828	55.00%	3.094%
9	8.770	8.707	8.817	BB	590212	5526465	55.22%	3.106%
10	9.555	9.490	9.612	BB	547646	5590292	55.86%	3.142%
11	9.957	9.890	10.004	BB	461372	4983600	49.79%	2.801%
12	10.960	10.877	11.000	BV	517867	5445467	54.41%	3.060%
13	11.035	11.000	11.050	PBA	492607	4990682	49.86%	2.805%
14	11.401	11.337	11.440	BB	446907	4975696	49.71%	2.796%
15	11.726	11.667	11.769	BB	471226	5016735	50.12%	2.819%
16	12.712	12.642	12.744	BV	426415	5134921	51.31%	2.886%
17	12.782	12.744	12.822	VB	473042	5450212	54.46%	3.063%
18	13.082	13.009	13.110	BV	475840	5347864	53.43%	3.005%
19	13.157	13.110	13.200	VB	331809	3861482	38.58%	2.170%
20	13.325	13.254	13.379	BB	412383	4937020	49.33%	2.775%
21	13.912	13.842	13.959	BB	409351	4897705	48.94%	2.752%
22	14.963	14.894	14.982	BV	394353	5210055	52.06%	2.928%
23	15.010	14.982	15.069	VB	756364	10008578	100.00%	5.625%
24	16.040	15.974	16.089	BB	367294	4784492	47.80%	2.689%
25	16.522	16.452	16.537	BV	358129	5100671	50.96%	2.867%
26	16.557	16.537	16.585	VV	417097	5104974	51.01%	2.869%
27	16.904	16.825	16.939	BV	368516	4901599	48.97%	2.755%
28	16.988	16.939	17.039	VB	361838	4749112	47.45%	2.669%
29	17.879	17.814	17.937	BB	339259	4631669	46.28%	2.603%
30	18.279	18.194	18.294	BV	301770	3181963	31.79%	1.788%
31	18.538	18.442	18.592	BB	348418	4978499	49.74%	2.798%
32	18.712	18.634	18.760	BB	321955	4418890	44.15%	2.483%
33	19.496	19.440	19.539	BB	285385	4147827	41.44%	2.331%
34	20.236	20.170	20.279	BV	250061	3618863	36.16%	2.034%
35	21.015	20.940	21.070	BB	177720	3235533	32.33%	1.818%
36	21.997	21.767	22.117	BB	113250	3010048	30.07%	1.692%

37 22.487 22.340 22.644 BB rteres 9509 510920 5.10% 0.287%
Sum of corrected areas: 177938711

Aliphatic EPH 040225.M Tue Apr 08 03:22:08 2025

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	GST2MS	SDG No.:	Q1736
Lab Sample ID:	Q1736-02MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	80.5
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
04/07/25 09:40	04/07/25 17:30	PB167477

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	111	E	1	1.13	4.96	mg/kg	FC068502.D
Total EPH	Total EPH	111			1.13	4.96	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 concentration for the sample is reported as the Total EPH.

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	GST2MS	SDG No.:	Q1736
Lab Sample ID:	Q1736-02MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	80.5
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068502.D	1	04/07/25	04/07/25	PB167477

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	111	E	1.13	4.96	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	56.5	E	1.46	2.48	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	42.9		40 - 140	86%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	39.9		40 - 140	80%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1736-02MS	Acq On:	07 Apr 2025 17:30
Client Sample ID:	GST2MS	Operator:	YP/AJ
Data file:	FC068502.D	Misc:	
Instrument:	FID_C	ALS Vial:	15
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.349	6.652	27436774	241.402	300	ug/ml
Aliphatic C12-C16	6.653	10.053	35128627	310.965	200	ug/ml
Aliphatic C16-C21	10.054	13.420	40249527	365.128	300	ug/ml
Aliphatic C21-C28	13.421	17.087	47368512	429.271	400	ug/ml
Aliphatic C28-C40	17.088	22.097	55673647	683.756	600	ug/ml
Aliphatic EPH	3.349	22.097	205857087	2030		ug/ml
ortho-Terphenyl (SURR)	11.727	11.727	5146164	39.91		ug/ml
1-chlorooctadecane (SURR)	13.158	13.158	3943089	42.86		ug/ml
Aliphatic C9-C28	3.349	17.087	150183440	1350	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
 Data File : FC068502.D
 Signal(s) : FID1A.ch
 Acq On : 07 Apr 2025 17:30
 Operator : YP/AJ
 Sample : Q1736-02MS
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 GST2MS

Integration File: autoint1.e
 Quant Time: Apr 08 02:35:35 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Mon Apr 07 16:09:59 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)	11.727	5146164	39.908 ug/ml
Spiked Amount 50.000		Recovery =	79.82%
12) S 1-chlorooctadecane (S...	13.158	3943089	42.865 ug/ml
Spiked Amount 50.000		Recovery =	85.73%
Target Compounds			
1) T n-Nonane (C9)	3.465	4875280	43.751 ug/ml
2) T n-Decane (C10)	4.536	5158084	44.297 ug/ml
3) T A~Naphthalene (C11.7)	6.130	5874268	46.968 ug/ml
4) T n-Dodecane (C12)	6.557	5267306	46.575 ug/ml
5) T A~2-methylnaphthalene...	7.188	5352196	44.725 ug/ml
6) T n-Tetradecane (C14)	8.355	5232787	46.887 ug/ml
7) T n-Hexadecane (C16)	9.957	5290154	46.271 ug/ml
8) T n-Octadecane (C18)	11.402	5240139	45.703 ug/ml
10) T n-Eicosane (C20)	12.713	5333151	48.754 ug/ml
11) T n-Heneicosane (C21)	13.326	5085493	47.681 ug/ml
13) T n-Docosane (C22)	13.912	5014096	46.442 ug/ml
14) T n-Tetracosane (C24)	15.011	10129364	90.868 ug/ml
15) T n-Hexacosane (C26)	16.040	4773391	42.917 ug/ml
16) T n-Octacosane (C28)	16.990	4630495	41.820 ug/ml
17) T n-Tricontane (C30)	17.880	4550517	41.165 ug/ml
18) T n-Dotriacontane (C32)	18.713	4453308	42.780 ug/ml
19) T n-Tetratriacontane (C34)	19.498	4498977	50.102 ug/ml
20) T n-Hexatriacontane (C36)	20.240	4404073	58.830 ug/ml
21) T n-Octatriacontane (C38)	21.020	4480852	71.671 ug/ml
22) T n-Tetracontane (C40)	22.005	4466916	95.610 ug/ml

(f)=RT Delta > 1/2 Window

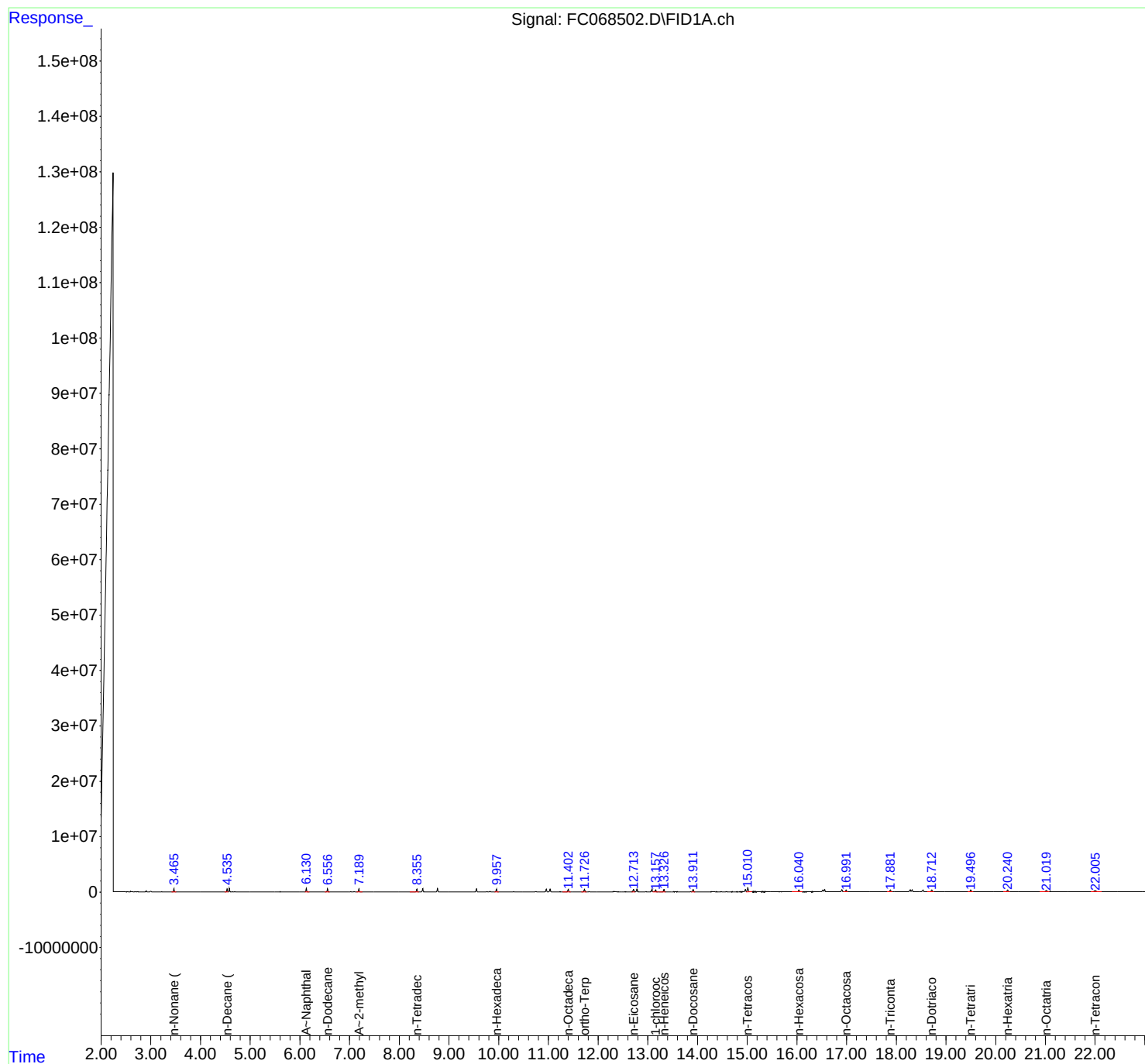
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
Data File : FC068502.D
Signal(s) : FID1A.ch
Acq On : 07 Apr 2025 17:30
Operator : YP/AJ
Sample : Q1736-02MS
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
GST2MS

Integration File: autoint1.e
Quant Time: Apr 08 02:35:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Mon Apr 07 16:09:59 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\FC040725AL\
 Data File : FC068502.D
 Signal(s) : FID1A.ch
 Acq On : 07 Apr 2025 17:30
 Sample : Q1736-02MS
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.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	2.381	2.321	2.407	BV	7453	57859	0.57%	0.026%
2	2.420	2.407	2.449	PV	8454	49149	0.48%	0.022%
3	2.477	2.449	2.511	PV	24058	204658	2.01%	0.093%
4	2.535	2.511	2.553	PV	4384	32791	0.32%	0.015%
5	2.561	2.553	2.581	PV	402	3049	0.03%	0.001%
6	2.592	2.581	2.664	PV	93664	901695	8.84%	0.411%
7	2.684	2.664	2.708	PV	16076	130285	1.28%	0.059%
8	2.731	2.708	2.774	VV	30626	261050	2.56%	0.119%
9	2.784	2.774	2.794	PV	219	1579	0.02%	0.001%
10	2.809	2.794	2.838	VV	1327	12602	0.12%	0.006%
11	2.845	2.838	2.879	VV	250	3878	0.04%	0.002%
12	2.906	2.879	2.969	PV	202005	1503757	14.74%	0.685%
13	2.995	2.969	3.029	VV	114521	1350500	13.24%	0.615%
14	3.046	3.029	3.081	VV	1528	13656	0.13%	0.006%
15	3.094	3.081	3.109	VV	111	936	0.01%	0.000%
16	3.131	3.109	3.142	VV	161	1513	0.01%	0.001%
17	3.156	3.142	3.165	VV	277	2403	0.02%	0.001%
18	3.171	3.165	3.193	VV	242	2259	0.02%	0.001%
19	3.220	3.193	3.243	VV	3877	32402	0.32%	0.015%
20	3.254	3.243	3.271	VV	469	4136	0.04%	0.002%
21	3.292	3.271	3.331	VV	265	5222	0.05%	0.002%
22	3.364	3.331	3.434	PV	618	12157	0.12%	0.006%
23	3.465	3.434	3.545	VV	583285	4880284	47.83%	2.223%
24	3.592	3.545	3.631	PV	358	6091	0.06%	0.003%
25	3.667	3.631	3.694	VV	415	8625	0.08%	0.004%
26	3.713	3.694	3.722	VV	250	2649	0.03%	0.001%
27	3.760	3.722	3.821	VV	1830	30458	0.30%	0.014%
28	3.840	3.821	3.864	VV	186	3469	0.03%	0.002%
29	3.877	3.864	3.931	VV	166	2671	0.03%	0.001%
30	3.962	3.931	3.999	VV	419	6982	0.07%	0.003%
31	4.014	3.999	4.024	VV	123	1182	0.01%	0.001%
32	4.046	4.024	4.076	PV	329	4515	0.04%	0.002%
33	4.104	4.076	4.124	VV	3206	26041	0.26%	0.012%
34	4.151	4.124	4.202	VV	771	19352	0.19%	0.009%
35	4.219	4.202	4.244	VV	288	6027	0.06%	0.003%
36	4.249	4.244	4.284	VV	199	3399	0.03%	0.002%

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37	4.301	4.284	4.317	VV	566	6305	0.06%	0.003%
38	4.333	4.317	4.351	VV	602	6932	0.07%	0.003%
39	4.362	4.351	4.379	VV	471	4457	0.04%	0.002%
40	4.397	4.379	4.412	VV	222	2831	0.03%	0.001%
41	4.438	4.412	4.474	VV	126	2896	0.03%	0.001%
42	4.491	4.474	4.500	VV	100	1363	0.01%	0.001%
43	4.536	4.500	4.558	VV	575735	5160953	50.58%	2.351%
44	4.581	4.558	4.624	VV	640823	5579364	54.68%	2.541%
45	4.642	4.624	4.668	VV	5630	51351	0.50%	0.023%
46	4.688	4.668	4.728	VV	9860	89132	0.87%	0.041%
47	4.745	4.728	4.758	VV	228	2893	0.03%	0.001%
48	4.765	4.758	4.773	VV	150	1427	0.01%	0.001%
49	4.787	4.773	4.806	VV	311	4159	0.04%	0.002%
50	4.824	4.806	4.836	VV	325	3566	0.03%	0.002%
51	4.870	4.836	4.897	VV	262	6637	0.07%	0.003%
52	4.908	4.897	4.979	VV	198	5845	0.06%	0.003%
53	5.012	4.979	5.028	VV	198	3361	0.03%	0.002%
54	5.040	5.028	5.055	VV	200	2018	0.02%	0.001%
55	5.062	5.055	5.093	VV	140	2725	0.03%	0.001%
56	5.109	5.093	5.154	VV	223	5761	0.06%	0.003%
57	5.174	5.154	5.204	VV	256	5185	0.05%	0.002%
58	5.211	5.204	5.244	VV	262	3400	0.03%	0.002%
59	5.256	5.244	5.264	VV	200	1834	0.02%	0.001%
60	5.281	5.264	5.324	VV	262	5236	0.05%	0.002%
61	5.391	5.324	5.455	PV	3226	36049	0.35%	0.016%
62	5.466	5.455	5.481	VV	189	2210	0.02%	0.001%
63	5.490	5.481	5.507	VV	136	1426	0.01%	0.001%
64	5.527	5.507	5.554	VV	166	3310	0.03%	0.002%
65	5.571	5.554	5.588	VV	1621	16226	0.16%	0.007%
66	5.601	5.588	5.663	VV	3921	40959	0.40%	0.019%
67	5.683	5.663	5.724	VV	440	7874	0.08%	0.004%
68	5.729	5.724	5.735	VV	171	881	0.01%	0.000%
69	5.746	5.735	5.784	VV	149	3639	0.04%	0.002%
70	5.804	5.784	5.829	VV	394	7267	0.07%	0.003%
71	5.836	5.829	5.867	VV	233	4061	0.04%	0.002%
72	5.877	5.867	5.907	VV	295	4709	0.05%	0.002%
73	5.944	5.907	5.954	VV	317	7505	0.07%	0.003%
74	5.973	5.954	6.008	VV	343	8343	0.08%	0.004%
75	6.018	6.008	6.043	VV	251	4445	0.04%	0.002%
76	6.085	6.043	6.100	VV	1491	21715	0.21%	0.010%
77	6.130	6.100	6.168	VV	652856	5886895	57.70%	2.681%
78	6.174	6.168	6.188	VV	1073	10908	0.11%	0.005%
79	6.198	6.188	6.251	VV	755	20469	0.20%	0.009%
80	6.272	6.251	6.314	VV	588	15147	0.15%	0.007%
81	6.323	6.314	6.370	VV	379	9846	0.10%	0.004%
82	6.400	6.370	6.421	VV	1971	27138	0.27%	0.012%
83	6.431	6.421	6.477	VV	555	12807	0.13%	0.006%
84	6.497	6.477	6.524	VV	298	6423	0.06%	0.003%
85	6.557	6.524	6.607	VV	550974	5276894	51.72%	2.404%
86	6.626	6.607	6.661	VV	2326	26095	0.26%	0.012%
87	6.675	6.661	6.687	VV	217	2991	0.03%	0.001%
88	6.706	6.687	6.739	VV	575	9355	0.09%	0.004%
89	6.759	6.739	6.791	VV	234	5313	0.05%	0.002%

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90	6.844	6.791	6.864	VV	456	12666	0.12%	0.006%
91	6.880	6.864	6.901	VV	360	5786	0.06%	0.003%
92	6.975	6.901	6.990	VV	472	12603	0.12%	0.006%
93	7.025	6.990	7.058	VV	6462	68357	0.67%	0.031%
94	7.092	7.058	7.144	VV	15017	151967	1.49%	0.069%
95	7.188	7.144	7.298	VV	557215	5372524	52.66%	2.447%
96	7.324	7.298	7.340	VV	2050	24522	0.24%	0.011%
97	7.375	7.340	7.391	VV	3034	43657	0.43%	0.020%
98	7.401	7.391	7.435	VV	1330	19889	0.19%	0.009%
99	7.451	7.435	7.463	VV	1311	13582	0.13%	0.006%
100	7.478	7.463	7.504	VV	1868	22502	0.22%	0.010%
101	7.524	7.504	7.535	VV	562	6763	0.07%	0.003%
102	7.547	7.535	7.564	VV	564	7539	0.07%	0.003%
103	7.575	7.564	7.593	VV	566	6261	0.06%	0.003%
104	7.604	7.593	7.618	VV	228	2564	0.03%	0.001%
105	7.659	7.618	7.687	VV	737	12878	0.13%	0.006%
106	7.703	7.687	7.751	VV	481	9384	0.09%	0.004%
107	7.775	7.751	7.796	VV	883	12800	0.13%	0.006%
108	7.814	7.796	7.861	VV	306	8300	0.08%	0.004%
109	7.904	7.861	7.920	VV	545	11004	0.11%	0.005%
110	7.938	7.920	7.952	VV	1197	14665	0.14%	0.007%
111	7.962	7.952	8.021	VV	685	16315	0.16%	0.007%
112	8.047	8.021	8.081	VV	1770	24094	0.24%	0.011%
113	8.104	8.081	8.158	VV	1212	20000	0.20%	0.009%
114	8.172	8.158	8.184	VV	178	2916	0.03%	0.001%
115	8.217	8.184	8.231	VV	295	6113	0.06%	0.003%
116	8.248	8.231	8.277	VV	703	12812	0.13%	0.006%
117	8.355	8.277	8.396	VV	495285	5233933	51.30%	2.384%
118	8.415	8.396	8.431	VV	298	4601	0.05%	0.002%
119	8.473	8.431	8.521	VV	598693	5863816	57.47%	2.671%
120	8.540	8.521	8.555	VV	367	5341	0.05%	0.002%
121	8.580	8.555	8.640	VV	629	11512	0.11%	0.005%
122	8.650	8.640	8.694	VV	120	2428	0.02%	0.001%
123	8.718	8.694	8.738	PV	477	4837	0.05%	0.002%
124	8.770	8.738	8.804	VV	602958	5892336	57.75%	2.684%
125	8.827	8.804	8.867	VV	524	12001	0.12%	0.005%
126	8.886	8.867	8.930	VV	398	7159	0.07%	0.003%
127	8.959	8.930	8.994	VV	873	12072	0.12%	0.005%
128	9.037	8.994	9.055	VV	968	12719	0.12%	0.006%
129	9.089	9.055	9.128	VV	610	12846	0.13%	0.006%
130	9.135	9.128	9.147	VV	183	1506	0.01%	0.001%
131	9.174	9.147	9.238	VV	970	20561	0.20%	0.009%
132	9.245	9.238	9.278	VV	146	3124	0.03%	0.001%
133	9.282	9.278	9.319	VV	166	2519	0.02%	0.001%
134	9.371	9.335	9.398	PV	219	4421	0.04%	0.002%
135	9.436	9.398	9.451	VV	218	4479	0.04%	0.002%
136	9.475	9.451	9.486	VV	290	3863	0.04%	0.002%
137	9.509	9.486	9.519	VV	874	10785	0.11%	0.005%
138	9.555	9.519	9.583	VV	569751	5949691	58.31%	2.710%
139	9.594	9.583	9.631	VV	696	11963	0.12%	0.005%
140	9.639	9.631	9.663	VV	279	4143	0.04%	0.002%
141	9.695	9.663	9.707	VV	484	8391	0.08%	0.004%

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142	9.730	9.707	9.748	VV	1814	27608	0.27%	0.013%
143	9.765	9.748	9.800	VV	9238	98106	0.96%	0.045%
144	9.827	9.800	9.873	VV	64085	654300	6.41%	0.298%
145	9.890	9.873	9.918	VV	921	12082	0.12%	0.006%
146	9.957	9.918	10.010	VV	496463	5293456	51.88%	2.411%
147	10.022	10.010	10.034	VV	163	1906	0.02%	0.001%
148	10.055	10.034	10.161	VV	414	10175	0.10%	0.005%
149	10.174	10.161	10.201	VV	95	911	0.01%	0.000%
150	10.237	10.201	10.264	PV	186	3406	0.03%	0.002%
151	10.302	10.264	10.331	VV	6115	68320	0.67%	0.031%
152	10.369	10.331	10.381	VV	279	6150	0.06%	0.003%
153	10.400	10.381	10.424	VV	272	5310	0.05%	0.002%
154	10.434	10.424	10.451	VV	184	2494	0.02%	0.001%
155	10.470	10.451	10.497	VV	177	3165	0.03%	0.001%
156	10.561	10.497	10.607	VV	406	10256	0.10%	0.005%
157	10.649	10.607	10.668	VV	842	13272	0.13%	0.006%
158	10.691	10.668	10.716	VV	1038	16031	0.16%	0.007%
159	10.746	10.716	10.782	VV	11287	162207	1.59%	0.074%
160	10.797	10.782	10.816	VV	305	4262	0.04%	0.002%
161	10.837	10.816	10.888	VV	249	3704	0.04%	0.002%
162	10.960	10.888	10.996	PV	545381	5744405	56.30%	2.617%
163	11.036	10.996	11.090	VV	534180	5622992	55.11%	2.561%
164	11.108	11.090	11.144	VV	991	14834	0.15%	0.007%
165	11.150	11.144	11.159	VV	204	1733	0.02%	0.001%
166	11.203	11.159	11.218	VV	1113	15581	0.15%	0.007%
167	11.238	11.218	11.311	VV	3666	39715	0.39%	0.018%
168	11.330	11.311	11.351	PV	393	5513	0.05%	0.003%
169	11.402	11.351	11.444	VV	455555	5232505	51.28%	2.383%
170	11.478	11.444	11.524	PV	441	7291	0.07%	0.003%
171	11.566	11.524	11.577	VV	316	4150	0.04%	0.002%
172	11.591	11.577	11.626	VV	249	3373	0.03%	0.002%
173	11.727	11.626	11.771	PV	477697	5156217	50.54%	2.349%
174	11.818	11.771	11.871	VV	4361	94465	0.93%	0.043%
175	11.887	11.871	11.921	VV	1357	23601	0.23%	0.011%
176	11.935	11.921	11.981	VV	560	13560	0.13%	0.006%
177	12.002	11.981	12.028	VV	1052	15753	0.15%	0.007%
178	12.060	12.028	12.095	VV	1054	27263	0.27%	0.012%
179	12.111	12.095	12.139	VV	878	15636	0.15%	0.007%
180	12.167	12.139	12.193	VV	924	19518	0.19%	0.009%
181	12.222	12.193	12.235	VV	532	10849	0.11%	0.005%
182	12.318	12.235	12.388	VV	78101	1017794	9.98%	0.464%
183	12.404	12.388	12.425	VV	2815	47019	0.46%	0.021%
184	12.433	12.425	12.481	VV	1409	37478	0.37%	0.017%
185	12.499	12.481	12.511	VV	945	16163	0.16%	0.007%
186	12.552	12.511	12.587	VV	2801	65511	0.64%	0.030%
187	12.599	12.587	12.616	VV	456	6056	0.06%	0.003%
188	12.653	12.616	12.678	VV	928	19635	0.19%	0.009%
189	12.713	12.678	12.745	VV	442992	5342762	52.37%	2.434%
190	12.783	12.745	12.860	VV	511789	5721415	56.08%	2.606%
191	12.878	12.860	12.897	VV	310	4118	0.04%	0.002%
192	12.921	12.897	12.934	VV	180	2528	0.02%	0.001%
193	12.964	12.934	13.006	VV	6157	70500	0.69%	0.032%
194	13.020	13.006	13.040	VV	287	3724	0.04%	0.002%

					rteres			
195	13.083	13.040	13.106	VV	489743	5522206	54.12%	2.515%
196	13.158	13.106	13.227	VV	323893	3953979	38.75%	1.801%
197	13.272	13.227	13.287	VV	487	8168	0.08%	0.004%
198	13.326	13.287	13.359	VV	423819	5104784	50.03%	2.325%
199	13.371	13.359	13.379	VV	749	8430	0.08%	0.004%
200	13.402	13.379	13.439	VV	1018	28836	0.28%	0.013%
201	13.443	13.439	13.478	VV	744	13394	0.13%	0.006%
202	13.550	13.478	13.651	VV	18975	327728	3.21%	0.149%
203	13.670	13.651	13.681	VV	737	12237	0.12%	0.006%
204	13.699	13.681	13.721	VV	841	16132	0.16%	0.007%
205	13.751	13.721	13.794	VV	1213	28442	0.28%	0.013%
206	13.805	13.794	13.827	VV	246	4739	0.05%	0.002%
207	13.861	13.827	13.877	VV	2798	36769	0.36%	0.017%
208	13.912	13.877	14.012	VV	413736	5027882	49.28%	2.290%
209	14.038	14.012	14.062	PV	1168	14390	0.14%	0.007%
210	14.088	14.062	14.106	VV	606	8195	0.08%	0.004%
211	14.141	14.106	14.161	VV	282	7202	0.07%	0.003%
212	14.168	14.161	14.186	VV	330	3557	0.03%	0.002%
213	14.209	14.186	14.230	VV	567	9638	0.09%	0.004%
214	14.310	14.230	14.384	VV	5908	189463	1.86%	0.086%
215	14.388	14.384	14.395	VV	1425	5781	0.06%	0.003%
216	14.412	14.395	14.453	VV	949	29306	0.29%	0.013%
217	14.476	14.453	14.549	VV	2239	57825	0.57%	0.026%
218	14.578	14.549	14.616	VV	3016	52382	0.51%	0.024%
219	14.639	14.616	14.660	VV	681	13971	0.14%	0.006%
220	14.693	14.660	14.734	VV	1478	33265	0.33%	0.015%
221	14.790	14.734	14.824	VV	1325	45082	0.44%	0.021%
222	14.854	14.824	14.864	VV	1322	23505	0.23%	0.011%
223	14.880	14.864	14.895	VV	1242	21669	0.21%	0.010%
224	14.964	14.895	14.983	VV	428952	5493447	53.84%	2.502%
225	15.011	14.983	15.114	VV	710366	10202910	100.00%	4.647%
226	15.125	15.114	15.134	VV	849	9917	0.10%	0.005%
227	15.158	15.134	15.178	VV	1100	23765	0.23%	0.011%
228	15.201	15.178	15.244	VV	2501	62082	0.61%	0.028%
229	15.255	15.244	15.304	VV	1114	35103	0.34%	0.016%
230	15.325	15.304	15.338	VV	823	16015	0.16%	0.007%
231	15.348	15.338	15.363	VV	789	10990	0.11%	0.005%
232	15.398	15.363	15.481	VV	16865	362188	3.55%	0.165%
233	15.495	15.481	15.504	VV	938	12037	0.12%	0.005%
234	15.534	15.504	15.572	VV	2237	59319	0.58%	0.027%
235	15.615	15.572	15.646	VV	1729	45883	0.45%	0.021%
236	15.666	15.646	15.694	VV	775	18990	0.19%	0.009%
237	15.721	15.694	15.747	VV	766	21161	0.21%	0.010%
238	15.770	15.747	15.787	VV	733	15764	0.15%	0.007%
239	15.802	15.787	15.821	VV	716	13082	0.13%	0.006%
240	15.868	15.821	15.907	VV	1602	51120	0.50%	0.023%
241	15.928	15.907	15.977	VV	904	28246	0.28%	0.013%
242	16.040	15.977	16.121	VV	358419	4789930	46.95%	2.182%
243	16.137	16.121	16.157	VV	317	4580	0.04%	0.002%
244	16.211	16.157	16.224	VV	672	14007	0.14%	0.006%
245	16.246	16.224	16.305	VV	984	19792	0.19%	0.009%
246	16.343	16.305	16.371	PV	523	11232	0.11%	0.005%

rteres								
247	16.418	16.371	16.471	VV	1406	38919	0.38%	0.018%
248	16.523	16.471	16.539	VV	343734	5166235	50.63%	2.353%
249	16.559	16.539	16.585	VV	425913	5151867	50.49%	2.347%
250	16.601	16.585	16.634	VV	2596	38096	0.37%	0.017%
251	16.652	16.634	16.667	VV	335	4263	0.04%	0.002%
252	16.697	16.667	16.735	VV	309	8503	0.08%	0.004%
253	16.765	16.735	16.796	VV	2380	29817	0.29%	0.014%
254	16.906	16.796	16.938	PV	361362	4920251	48.22%	2.241%
255	16.990	16.938	17.024	VV	361524	4669444	45.77%	2.127%
256	17.040	17.024	17.085	VV	2458	37003	0.36%	0.017%
257	17.195	17.085	17.206	PV	190	8741	0.09%	0.004%
258	17.250	17.206	17.276	VV	456	10126	0.10%	0.005%
259	17.317	17.276	17.344	PV	1812	27131	0.27%	0.012%
260	17.363	17.344	17.401	VV	697	13528	0.13%	0.006%
261	17.436	17.401	17.468	VV	2293	38076	0.37%	0.017%
262	17.483	17.468	17.494	PV	105	817	0.01%	0.000%
263	17.583	17.494	17.630	PV	585	21353	0.21%	0.010%
264	17.671	17.630	17.690	PV	451	7307	0.07%	0.003%
265	17.719	17.690	17.727	PV	392	4447	0.04%	0.002%
266	17.768	17.727	17.799	VV	3853	58538	0.57%	0.027%
267	17.880	17.799	17.921	VV	331685	4558826	44.68%	2.077%
268	17.967	17.921	17.991	VV	726	20111	0.20%	0.009%
269	18.035	17.991	18.056	VV	2376	38729	0.38%	0.018%
270	18.066	18.056	18.096	VV	1031	18768	0.18%	0.009%
271	18.118	18.096	18.171	VV	940	26468	0.26%	0.012%
272	18.178	18.171	18.184	VV	632	4220	0.04%	0.002%
273	18.280	18.184	18.296	VV	376679	5577100	54.66%	2.540%
274	18.320	18.296	18.375	VV	385251	5013507	49.14%	2.284%
275	18.409	18.375	18.465	VV	3605	110230	1.08%	0.050%
276	18.539	18.465	18.645	VV	356589	5221924	51.18%	2.379%
277	18.713	18.645	18.755	VV	313618	4568947	44.78%	2.081%
278	18.834	18.755	18.856	VV	3934	157390	1.54%	0.072%
279	18.878	18.856	18.918	VV	3818	114623	1.12%	0.052%
280	18.924	18.918	18.938	VV	2661	30509	0.30%	0.014%
281	19.010	18.938	19.025	VV	3169	152718	1.50%	0.070%
282	19.072	19.025	19.098	VV	11080	283763	2.78%	0.129%
283	19.104	19.098	19.194	VV	7836	297774	2.92%	0.136%
284	19.230	19.194	19.255	VV	4651	152626	1.50%	0.070%
285	19.305	19.255	19.324	VV	4929	184221	1.81%	0.084%
286	19.409	19.324	19.424	VV	5244	284974	2.79%	0.130%
287	19.433	19.424	19.444	VV	5052	57739	0.57%	0.026%
288	19.498	19.444	19.551	VV	307575	4834165	47.38%	2.202%
289	19.605	19.551	19.636	VV	8342	362188	3.55%	0.165%
290	19.675	19.636	19.698	VV	8364	280427	2.75%	0.128%
291	19.745	19.698	19.758	VV	8024	273508	2.68%	0.125%
292	19.777	19.758	19.830	VV	8071	342360	3.36%	0.156%
293	19.871	19.830	19.908	VV	10323	417658	4.09%	0.190%
294	19.914	19.908	19.939	VV	8836	157796	1.55%	0.072%
295	19.983	19.939	19.997	VV	9925	312641	3.06%	0.142%
296	20.026	19.997	20.063	VV	9543	372224	3.65%	0.170%
297	20.101	20.063	20.118	VV	14139	336979	3.30%	0.153%
298	20.138	20.118	20.152	VV	11564	228533	2.24%	0.104%
299	20.164	20.152	20.173	VV	10929	133615	1.31%	0.061%

rteres								
300	20.240	20.173	20.284	VV	308902	5089919	49.89%	2.318%
301	20.300	20.284	20.311	VV	11429	180471	1.77%	0.082%
302	20.344	20.311	20.358	VV	11865	320997	3.15%	0.146%
303	20.378	20.358	20.394	VV	14464	295371	2.89%	0.135%
304	20.402	20.394	20.442	VV	13912	365314	3.58%	0.166%
305	20.457	20.442	20.501	VV	12266	405820	3.98%	0.185%
306	20.526	20.501	20.539	VV	10555	230106	2.26%	0.105%
307	20.548	20.539	20.564	VV	9860	151765	1.49%	0.069%
308	20.633	20.564	20.662	VV	12950	665460	6.52%	0.303%
309	20.708	20.662	20.801	VV	11443	853218	8.36%	0.389%
310	20.809	20.801	20.819	VV	8767	96509	0.95%	0.044%
311	20.858	20.819	20.912	VV	9113	471181	4.62%	0.215%
312	20.937	20.912	20.950	VV	8612	186339	1.83%	0.085%
313	21.020	20.950	21.084	VV	241821	5053159	49.53%	2.302%
314	21.095	21.084	21.121	VV	24945	198609	1.95%	0.090%
315	21.139	21.121	21.201	VV	7401	322542	3.16%	0.147%
316	21.237	21.201	21.250	VV	7194	196868	1.93%	0.090%
317	21.263	21.250	21.278	VV	6867	110565	1.08%	0.050%
318	21.297	21.278	21.320	VV	6804	164661	1.61%	0.075%
319	21.387	21.378	21.403	VV	5594	77928	0.76%	0.035%
320	21.454	21.403	21.467	VV	5190	191214	1.87%	0.087%
321	21.476	21.467	21.530	VV	4847	158308	1.55%	0.072%
322	21.747	21.738	21.774	VV	2658	53852	0.53%	0.025%
323	21.820	21.774	21.831	VV	2616	80726	0.79%	0.037%
324	21.850	21.831	21.871	VV	2410	51837	0.51%	0.024%
325	21.889	21.871	21.907	VV	2094	36557	0.36%	0.017%
326	22.005	21.907	22.133	VV	172603	4547026	44.57%	2.071%
Sum of corrected areas:					219542653			

Aliphatic EPH 040225.M Tue Apr 08 03:40:24 2025

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	GST2MSD	SDG No.:	Q1736
Lab Sample ID:	Q1736-02MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	80.5
Sample Wt/Vol:	30.04	Units:	g
Soil Aliquot Vol:			uL
Prep Method :		Test:	EPH_F2

Prep Date :	Date Analyzed :	Prep Batch ID
04/07/25 09:40	04/07/25 18:08	PB167477

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	109	E	1	1.13	4.96	mg/kg	FC068503.D
Total EPH	Total EPH	109			1.13	4.96	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C28 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C28 concentration for the sample is reported as the Total EPH.

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	GST2MSD	SDG No.:	Q1736
Lab Sample ID:	Q1736-02MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	80.5
Sample Wt/Vol:	30.04 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068503.D	1	04/07/25	04/07/25	PB167477

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	109	E	1.13	4.96	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	56.9	E	1.46	2.48	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	42.3		40 - 140	85%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	39.3		40 - 140	79%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1736-02MSD	Acq On:	07 Apr 2025 18:08
Client Sample ID:	GST2MSD	Operator:	YP/AJ
Data file:	FC068503.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	3.349	6.652	26521674	233.35	300	ug/ml
Aliphatic C12-C16	6.653	10.053	33962049	300.638	200	ug/ml
Aliphatic C16-C21	10.054	13.420	39116334	354.849	300	ug/ml
Aliphatic C21-C28	13.421	17.087	46787993	424.011	400	ug/ml
Aliphatic C28-C40	17.088	22.097	56036693	688.215	600	ug/ml
Aliphatic EPH	3.349	22.097	202424743	2000		ug/ml
ortho-Terphenyl (SURR)	11.727	11.727	5069084	39.31		ug/ml
1-chlorooctadecane (SURR)	13.159	13.159	3889005	42.28		ug/ml
Aliphatic C9-C28	3.349	17.087	146388050	1310	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
 Data File : FC068503.D
 Signal(s) : FID1A.ch
 Acq On : 07 Apr 2025 18:08
 Operator : YP/AJ
 Sample : Q1736-02MSD
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 GST2MSD

Integration File: autoint1.e
 Quant Time: Apr 08 02:36:19 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
 Quant Title : GC Extractables
 QLast Update : Mon Apr 07 16:09:59 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)	11.727	5069084	39.310 ug/ml
Spiked Amount 50.000		Recovery =	78.62%
12) S 1-chlorooctadecane (S...	13.159	3889005	42.277 ug/ml
Spiked Amount 50.000		Recovery =	84.55%
Target Compounds			
1) T n-Nonane (C9)	3.465	4737387	42.513 ug/ml
2) T n-Decane (C10)	4.536	5003949	42.973 ug/ml
3) T A~Naphthalene (C11.7)	6.130	5698233	45.561 ug/ml
4) T n-Dodecane (C12)	6.557	5094992	45.052 ug/ml
5) T A~2-methylnaphthalene...	7.188	5191429	43.382 ug/ml
6) T n-Tetradecane (C14)	8.355	5065625	45.389 ug/ml
7) T n-Hexadecane (C16)	9.958	5114334	44.734 ug/ml
8) T n-Octadecane (C18)	11.402	5070721	44.226 ug/ml
10) T n-Eicosane (C20)	12.713	5180022	47.354 ug/ml
11) T n-Heneicosane (C21)	13.325	4954719	46.455 ug/ml
13) T n-Docosane (C22)	13.913	4896287	45.351 ug/ml
14) T n-Tetracosane (C24)	15.011	9986153	89.583 ug/ml
15) T n-Hexacosane (C26)	16.040	4708871	42.337 ug/ml
16) T n-Octacosane (C28)	16.990	4595493	41.504 ug/ml
17) T n-Tricontane (C30)	17.881	4519854	40.888 ug/ml
18) T n-Dotriacontane (C32)	18.714	4438837	42.641 ug/ml
19) T n-Tetratriacontane (C34)	19.499	4497802	50.089 ug/ml
20) T n-Hexatriacontane (C36)	20.239	4371394	58.393 ug/ml
21) T n-Octatriacontane (C38)	21.020	4443413	71.072 ug/ml
22) T n-Tetracontane (C40)	22.003	4356763	93.252 ug/ml

(f)=RT Delta > 1/2 Window

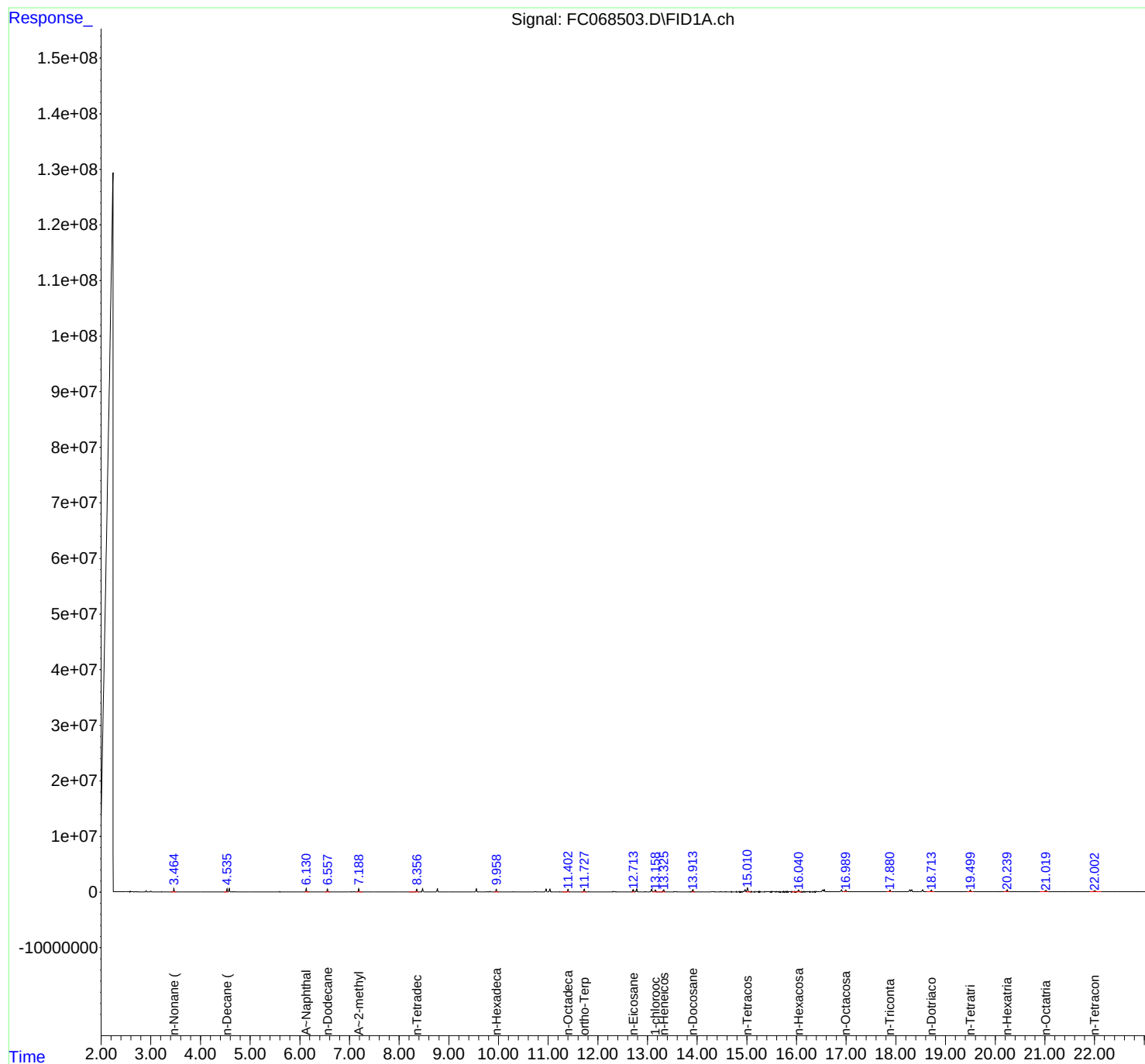
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040725AL\
Data File : FC068503.D
Signal(s) : FID1A.ch
Acq On : 07 Apr 2025 18:08
Operator : YP/AJ
Sample : Q1736-02MSD
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
GST2MSD

Integration File: autoint1.e
Quant Time: Apr 08 02:36:19 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.M
Quant Title : GC Extractables
QLast Update : Mon Apr 07 16:09:59 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\FC040725AL\
 Data File : FC068503.D
 Signal(s) : FID1A.ch
 Acq On : 07 Apr 2025 18:08
 Sample : Q1736-02MSD
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 040225.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	2.380	2.363	2.406	PV	7966	72187	0.72%	0.033%
2	2.418	2.406	2.448	PV	8233	49085	0.49%	0.023%
3	2.476	2.448	2.512	PV	22757	199045	1.98%	0.092%
4	2.534	2.512	2.552	PV	4291	31626	0.31%	0.015%
5	2.560	2.552	2.576	VV	414	3240	0.03%	0.002%
6	2.591	2.576	2.665	PV	81838	884055	8.78%	0.410%
7	2.682	2.665	2.707	PV	15490	126283	1.25%	0.058%
8	2.730	2.707	2.793	VV	29576	252930	2.51%	0.117%
9	2.808	2.793	2.881	PV	1232	15240	0.15%	0.007%
10	2.905	2.881	2.975	PV	198220	1462739	14.54%	0.678%
11	2.995	2.975	3.029	VV	109004	1312416	13.04%	0.608%
12	3.045	3.029	3.070	VV	1523	13479	0.13%	0.006%
13	3.089	3.070	3.110	PV	584	3162	0.03%	0.001%
14	3.128	3.110	3.145	VV	147	2344	0.02%	0.001%
15	3.155	3.145	3.191	VV	305	5085	0.05%	0.002%
16	3.219	3.191	3.241	VV	3680	31687	0.31%	0.015%
17	3.253	3.241	3.271	VV	444	4228	0.04%	0.002%
18	3.294	3.271	3.306	VV	283	3182	0.03%	0.001%
19	3.319	3.306	3.335	VV	98	1277	0.01%	0.001%
20	3.363	3.335	3.408	VV	566	10488	0.10%	0.005%
21	3.422	3.408	3.433	PV	132	1420	0.01%	0.001%
22	3.465	3.433	3.538	VV	584071	4740028	47.10%	2.196%
23	3.592	3.538	3.630	VV	372	7825	0.08%	0.004%
24	3.664	3.630	3.694	VV	321	7759	0.08%	0.004%
25	3.712	3.694	3.725	VV	288	3101	0.03%	0.001%
26	3.759	3.725	3.867	VV	1809	31080	0.31%	0.014%
27	3.878	3.867	3.895	VV	153	1386	0.01%	0.001%
28	3.902	3.895	3.948	PV	47	1064	0.01%	0.000%
29	3.962	3.948	4.027	VV	399	6425	0.06%	0.003%
30	4.044	4.027	4.085	PV	301	4484	0.04%	0.002%
31	4.104	4.085	4.126	VV	3066	24849	0.25%	0.012%
32	4.152	4.126	4.196	VV	650	14961	0.15%	0.007%
33	4.205	4.196	4.212	VV	276	2197	0.02%	0.001%
34	4.219	4.212	4.241	VV	253	4064	0.04%	0.002%
35	4.247	4.241	4.285	VV	184	3664	0.04%	0.002%
36	4.301	4.285	4.321	VV	550	6407	0.06%	0.003%

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37	4.333	4.321	4.355	VV	536	6479	0.06%	0.003%
38	4.363	4.355	4.382	VV	420	3965	0.04%	0.002%
39	4.400	4.382	4.429	VV	169	2676	0.03%	0.001%
40	4.441	4.429	4.467	PV	478	2547	0.03%	0.001%
41	4.486	4.467	4.500	VV	110	1298	0.01%	0.001%
42	4.536	4.500	4.558	VV	564276	5005387	49.74%	2.319%
43	4.581	4.558	4.624	VV	623215	5410841	53.77%	2.507%
44	4.642	4.624	4.668	VV	5401	49234	0.49%	0.023%
45	4.688	4.668	4.728	VV	9537	85815	0.85%	0.040%
46	4.737	4.728	4.748	VV	185	1524	0.02%	0.001%
47	4.752	4.748	4.759	VV	221	1019	0.01%	0.000%
48	4.788	4.759	4.808	VV	297	5268	0.05%	0.002%
49	4.823	4.808	4.846	VV	318	3585	0.04%	0.002%
50	4.856	4.846	4.861	VV	230	1413	0.01%	0.001%
51	4.871	4.861	4.931	VV	317	6277	0.06%	0.003%
52	4.956	4.931	5.005	VV	152	4458	0.04%	0.002%
53	5.019	5.005	5.029	VV	185	1775	0.02%	0.001%
54	5.036	5.029	5.055	VV	114	1454	0.01%	0.001%
55	5.073	5.055	5.091	VV	150	1519	0.02%	0.001%
56	5.112	5.091	5.161	PV	158	3810	0.04%	0.002%
57	5.168	5.161	5.228	VV	155	4116	0.04%	0.002%
58	5.235	5.228	5.243	VV	90	786	0.01%	0.000%
59	5.254	5.243	5.268	VV	170	1370	0.01%	0.001%
60	5.278	5.268	5.301	VV	240	2424	0.02%	0.001%
61	5.311	5.301	5.342	VV	97	1198	0.01%	0.001%
62	5.356	5.342	5.365	PV	70	364	0.00%	0.000%
63	5.392	5.365	5.438	VV	3017	28102	0.28%	0.013%
64	5.459	5.438	5.502	VV	86	1736	0.02%	0.001%
65	5.509	5.502	5.545	VV	36	731	0.01%	0.000%
66	5.572	5.545	5.588	PV	1547	14764	0.15%	0.007%
67	5.601	5.588	5.658	VV	3603	34494	0.34%	0.016%
68	5.684	5.658	5.782	VV	320	6463	0.06%	0.003%
69	5.799	5.782	5.851	PV	287	6714	0.07%	0.003%
70	5.863	5.851	5.869	VV	148	1299	0.01%	0.001%
71	5.878	5.869	5.898	VV	217	2274	0.02%	0.001%
72	5.949	5.898	5.975	VV	271	7530	0.07%	0.003%
73	5.987	5.975	6.048	VV	248	6022	0.06%	0.003%
74	6.085	6.048	6.100	VV	1456	18585	0.18%	0.009%
75	6.130	6.100	6.168	VV	631092	5706818	56.71%	2.644%
76	6.174	6.168	6.189	VV	992	9970	0.10%	0.005%
77	6.198	6.189	6.253	VV	613	15584	0.15%	0.007%
78	6.271	6.253	6.318	VV	482	11213	0.11%	0.005%
79	6.328	6.318	6.338	VV	329	3027	0.03%	0.001%
80	6.347	6.338	6.358	VV	252	2713	0.03%	0.001%
81	6.401	6.358	6.428	VV	1926	27615	0.27%	0.013%
82	6.436	6.428	6.474	VV	410	7319	0.07%	0.003%
83	6.494	6.474	6.521	VV	188	3934	0.04%	0.002%
84	6.557	6.521	6.607	VV	528209	5100665	50.69%	2.363%
85	6.626	6.607	6.665	VV	2188	22298	0.22%	0.010%
86	6.707	6.665	6.728	VV	423	7037	0.07%	0.003%
87	6.733	6.728	6.743	VV	128	1011	0.01%	0.000%
88	6.758	6.743	6.774	VV	156	1906	0.02%	0.001%
89	6.841	6.774	6.875	VV	370	9973	0.10%	0.005%

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90	6.879	6.875	6.908	VV	214	2698	0.03%	0.001%
91	6.914	6.908	6.931	VV	150	1706	0.02%	0.001%
92	6.938	6.931	6.949	VV	178	1200	0.01%	0.001%
93	6.975	6.949	6.994	VV	318	4386	0.04%	0.002%
94	7.026	6.994	7.064	VV	6328	67161	0.67%	0.031%
95	7.093	7.064	7.144	VV	14404	141398	1.41%	0.066%
96	7.188	7.144	7.301	VV	550699	5204356	51.72%	2.411%
97	7.324	7.301	7.341	VV	1850	20859	0.21%	0.010%
98	7.376	7.341	7.392	VV	2809	38836	0.39%	0.018%
99	7.402	7.392	7.438	VV	1277	17832	0.18%	0.008%
100	7.452	7.438	7.463	VV	1188	11344	0.11%	0.005%
101	7.478	7.463	7.505	VV	1748	20058	0.20%	0.009%
102	7.525	7.505	7.535	VV	476	5362	0.05%	0.002%
103	7.548	7.535	7.564	VV	458	5954	0.06%	0.003%
104	7.576	7.564	7.598	VV	388	4991	0.05%	0.002%
105	7.609	7.598	7.625	VV	158	1822	0.02%	0.001%
106	7.632	7.625	7.642	VV	182	1331	0.01%	0.001%
107	7.661	7.642	7.683	VV	704	7726	0.08%	0.004%
108	7.702	7.683	7.749	VV	351	7064	0.07%	0.003%
109	7.775	7.749	7.861	VV	808	16265	0.16%	0.008%
110	7.903	7.861	7.918	VV	509	7877	0.08%	0.004%
111	7.939	7.918	8.024	VV	1050	23983	0.24%	0.011%
112	8.047	8.024	8.080	VV	1569	20604	0.20%	0.010%
113	8.104	8.080	8.158	VV	1094	16573	0.16%	0.008%
114	8.168	8.158	8.196	VV	189	2659	0.03%	0.001%
115	8.215	8.196	8.225	VV	247	2896	0.03%	0.001%
116	8.248	8.225	8.278	VV	678	12400	0.12%	0.006%
117	8.355	8.278	8.398	VV	486442	5060786	50.29%	2.344%
118	8.412	8.398	8.430	VV	233	3473	0.03%	0.002%
119	8.473	8.430	8.521	VV	579793	5690171	56.54%	2.636%
120	8.540	8.521	8.554	VV	345	4559	0.05%	0.002%
121	8.582	8.554	8.632	VV	540	10059	0.10%	0.005%
122	8.645	8.632	8.659	PV	90	951	0.01%	0.000%
123	8.724	8.659	8.738	VV	273	5454	0.05%	0.003%
124	8.771	8.738	8.806	VV	570376	5718421	56.82%	2.649%
125	8.828	8.806	8.874	VV	504	11720	0.12%	0.005%
126	8.888	8.874	8.931	VV	347	5580	0.06%	0.003%
127	8.960	8.931	8.995	VV	790	11754	0.12%	0.005%
128	9.012	8.995	9.020	VV	180	1835	0.02%	0.001%
129	9.037	9.020	9.056	VV	945	9882	0.10%	0.005%
130	9.091	9.056	9.119	VV	521	10039	0.10%	0.005%
131	9.128	9.119	9.158	VV	154	1937	0.02%	0.001%
132	9.175	9.158	9.278	VV	938	19966	0.20%	0.009%
133	9.304	9.278	9.328	VV	205	3215	0.03%	0.001%
134	9.378	9.328	9.401	VV	183	4700	0.05%	0.002%
135	9.433	9.401	9.448	VV	260	4363	0.04%	0.002%
136	9.475	9.448	9.485	VV	236	3545	0.04%	0.002%
137	9.511	9.485	9.520	VV	818	10766	0.11%	0.005%
138	9.555	9.520	9.584	VV	563992	5780996	57.45%	2.678%
139	9.593	9.584	9.621	VV	671	10283	0.10%	0.005%
140	9.631	9.621	9.661	VV	296	5619	0.06%	0.003%
141	9.695	9.661	9.707	VV	488	8587	0.09%	0.004%

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142	9.731	9.707	9.748	VV	1855	27340	0.27%	0.013%
143	9.765	9.748	9.800	VV	8877	96029	0.95%	0.044%
144	9.828	9.800	9.872	VV	60340	617248	6.13%	0.286%
145	9.891	9.872	9.913	VV	829	12430	0.12%	0.006%
146	9.958	9.913	10.024	VV	472382	5121073	50.89%	2.372%
147	10.059	10.024	10.091	VV	424	9729	0.10%	0.005%
148	10.107	10.091	10.205	VV	194	5773	0.06%	0.003%
149	10.237	10.205	10.266	PV	201	3751	0.04%	0.002%
150	10.302	10.266	10.338	VV	5891	64946	0.65%	0.030%
151	10.345	10.338	10.361	VV	235	2223	0.02%	0.001%
152	10.375	10.361	10.387	VV	206	2720	0.03%	0.001%
153	10.401	10.387	10.424	VV	260	3944	0.04%	0.002%
154	10.471	10.424	10.495	VV	247	5774	0.06%	0.003%
155	10.501	10.495	10.531	VV	167	1610	0.02%	0.001%
156	10.565	10.531	10.616	VV	383	10347	0.10%	0.005%
157	10.650	10.616	10.669	VV	792	12090	0.12%	0.006%
158	10.691	10.669	10.721	VV	1003	16087	0.16%	0.007%
159	10.747	10.721	10.821	VV	11156	164180	1.63%	0.076%
160	10.833	10.821	10.882	VV	218	3753	0.04%	0.002%
161	10.893	10.882	10.897	PV	114	522	0.01%	0.000%
162	10.961	10.897	10.998	VV	524559	5598870	55.64%	2.594%
163	11.036	10.998	11.087	VV	516303	5492429	54.58%	2.544%
164	11.108	11.087	11.165	VV	995	16947	0.17%	0.008%
165	11.172	11.165	11.180	VV	158	1120	0.01%	0.001%
166	11.202	11.180	11.218	VV	1079	12855	0.13%	0.006%
167	11.237	11.218	11.278	VV	3716	39021	0.39%	0.018%
168	11.328	11.278	11.351	PV	386	6194	0.06%	0.003%
169	11.401	11.351	11.439	VV	465562	5064136	50.32%	2.346%
170	11.477	11.439	11.508	VV	454	8184	0.08%	0.004%
171	11.565	11.508	11.579	VV	322	5070	0.05%	0.002%
172	11.591	11.579	11.621	VV	311	3728	0.04%	0.002%
173	11.727	11.621	11.772	PV	462175	5079482	50.47%	2.353%
174	11.819	11.772	11.873	VV	4265	86540	0.86%	0.040%
175	11.886	11.873	11.920	VV	854	15777	0.16%	0.007%
176	11.932	11.920	11.977	VV	492	7641	0.08%	0.004%
177	12.002	11.977	12.025	VV	894	10168	0.10%	0.005%
178	12.060	12.025	12.095	PV	756	14561	0.14%	0.007%
179	12.112	12.095	12.138	VV	589	8306	0.08%	0.004%
180	12.165	12.138	12.201	VV	607	9634	0.10%	0.004%
181	12.318	12.201	12.388	VV	76515	959208	9.53%	0.444%
182	12.404	12.388	12.468	VV	2517	63783	0.63%	0.030%
183	12.478	12.468	12.484	VV	800	7390	0.07%	0.003%
184	12.495	12.484	12.511	VV	822	12139	0.12%	0.006%
185	12.552	12.511	12.591	VV	2604	58008	0.58%	0.027%
186	12.601	12.591	12.623	VV	332	4157	0.04%	0.002%
187	12.653	12.623	12.674	VV	787	13469	0.13%	0.006%
188	12.713	12.674	12.745	VV	446665	5186113	51.53%	2.402%
189	12.783	12.745	12.840	VV	505809	5596212	55.61%	2.592%
190	12.873	12.840	12.903	VV	180	2978	0.03%	0.001%
191	12.917	12.903	12.932	VV	139	1229	0.01%	0.001%
192	12.965	12.932	13.011	PV	5851	66670	0.66%	0.031%
193	13.023	13.011	13.037	VV	132	1737	0.02%	0.001%
194	13.084	13.037	13.107	VV	489853	5419988	53.86%	2.511%

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195	13.159	13.107	13.232	VV	323577	3892187	38.68%	1.803%
196	13.273	13.232	13.286	PV	467	6077	0.06%	0.003%
197	13.325	13.286	13.359	VV	399269	4970238	49.39%	2.302%
198	13.399	13.359	13.438	VV	1054	38308	0.38%	0.018%
199	13.445	13.438	13.475	VV	766	14235	0.14%	0.007%
200	13.550	13.475	13.657	VV	18534	339216	3.37%	0.157%
201	13.668	13.657	13.684	VV	841	12443	0.12%	0.006%
202	13.699	13.684	13.718	VV	983	16474	0.16%	0.008%
203	13.750	13.718	13.808	VV	1507	40613	0.40%	0.019%
204	13.862	13.808	13.877	VV	2967	46895	0.47%	0.022%
205	13.913	13.877	13.958	VV	407486	4913428	48.82%	2.276%
206	13.963	13.958	13.991	VV	417	6230	0.06%	0.003%
207	13.997	13.991	14.018	VV	246	2991	0.03%	0.001%
208	14.039	14.018	14.065	VV	1184	16773	0.17%	0.008%
209	14.087	14.065	14.111	VV	707	11506	0.11%	0.005%
210	14.142	14.111	14.187	VV	351	13540	0.13%	0.006%
211	14.210	14.187	14.238	VV	581	11934	0.12%	0.006%
212	14.309	14.238	14.383	VV	5633	185378	1.84%	0.086%
213	14.418	14.383	14.450	VV	898	31260	0.31%	0.014%
214	14.476	14.450	14.527	VV	2198	51004	0.51%	0.024%
215	14.540	14.527	14.552	VV	644	9431	0.09%	0.004%
216	14.577	14.552	14.617	VV	3019	51058	0.51%	0.024%
217	14.636	14.617	14.662	VV	722	15212	0.15%	0.007%
218	14.693	14.662	14.725	VV	1422	31249	0.31%	0.014%
219	14.791	14.725	14.816	VV	1193	41824	0.42%	0.019%
220	14.855	14.816	14.896	VV	1232	49268	0.49%	0.023%
221	14.963	14.896	14.983	VV	394348	5428466	53.94%	2.515%
222	15.011	14.983	15.131	VV	732236	10063431	100.00%	4.662%
223	15.157	15.131	15.175	VV	1075	22136	0.22%	0.010%
224	15.201	15.175	15.248	VV	2467	61728	0.61%	0.029%
225	15.264	15.248	15.341	VV	1018	43940	0.44%	0.020%
226	15.398	15.341	15.501	VV	16819	367372	3.65%	0.170%
227	15.534	15.501	15.578	VV	2012	57056	0.57%	0.026%
228	15.616	15.578	15.648	VV	1703	41510	0.41%	0.019%
229	15.671	15.648	15.698	VV	720	17749	0.18%	0.008%
230	15.778	15.698	15.823	VV	704	40903	0.41%	0.019%
231	15.867	15.823	15.905	VV	1530	45669	0.45%	0.021%
232	15.925	15.905	15.985	VV	834	29312	0.29%	0.014%
233	16.040	15.985	16.148	VV	361582	4733358	47.04%	2.193%
234	16.166	16.148	16.188	VV	286	5340	0.05%	0.002%
235	16.246	16.188	16.296	VV	891	25522	0.25%	0.012%
236	16.345	16.296	16.384	PV	474	11407	0.11%	0.005%
237	16.418	16.384	16.462	VV	1419	30910	0.31%	0.014%
238	16.522	16.462	16.539	VV	343297	5153537	51.21%	2.387%
239	16.557	16.539	16.636	VV	432132	5099950	50.68%	2.363%
240	16.709	16.636	16.728	VV	280	7261	0.07%	0.003%
241	16.767	16.728	16.813	PV	2356	29717	0.30%	0.014%
242	16.904	16.813	16.939	VV	369698	4880643	48.50%	2.261%
243	16.990	16.939	17.084	VV	344601	4679114	46.50%	2.168%
244	17.130	17.084	17.171	VV	257	10888	0.11%	0.005%
245	17.246	17.171	17.285	VV	444	15829	0.16%	0.007%
246	17.316	17.285	17.344	PV	1834	26147	0.26%	0.012%

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247	17.368	17.344	17.399	VV	695	13558	0.13%	0.006%
248	17.437	17.399	17.471	VV	2202	35110	0.35%	0.016%
249	17.579	17.471	17.638	PV	504	17955	0.18%	0.008%
250	17.666	17.638	17.695	VV	339	5985	0.06%	0.003%
251	17.768	17.695	17.800	PV	3787	63730	0.63%	0.030%
252	17.881	17.800	17.922	VV	321534	4538456	45.10%	2.102%
253	17.969	17.922	17.991	VV	803	24636	0.24%	0.011%
254	18.040	17.991	18.098	VV	1705	62243	0.62%	0.029%
255	18.120	18.098	18.151	VV	1019	20105	0.20%	0.009%
256	18.279	18.151	18.298	VV	356760	5614998	55.80%	2.601%
257	18.318	18.298	18.371	VV	377344	4903991	48.73%	2.272%
258	18.411	18.371	18.481	VV	3486	125884	1.25%	0.058%
259	18.538	18.481	18.637	VV	367533	5171644	51.39%	2.396%
260	18.713	18.637	18.771	VV	315185	4574475	45.46%	2.119%
261	18.833	18.771	18.854	VV	3810	129326	1.29%	0.060%
262	18.875	18.854	18.930	VV	4808	127647	1.27%	0.059%
263	19.007	18.930	19.035	VV	2797	162554	1.62%	0.075%
264	19.073	19.035	19.171	VV	10923	487424	4.84%	0.226%
265	19.189	19.171	19.204	VV	3615	70260	0.70%	0.033%
266	19.230	19.204	19.258	VV	4629	125466	1.25%	0.058%
267	19.302	19.258	19.324	VV	4516	162378	1.61%	0.075%
268	19.498	19.324	19.558	VV	312002	5159878	51.27%	2.390%
269	19.605	19.558	19.641	VV	7852	337565	3.35%	0.156%
270	19.676	19.641	19.701	VV	7764	260349	2.59%	0.121%
271	19.732	19.701	19.768	VV	8059	305948	3.04%	0.142%
272	19.789	19.768	19.810	VV	8692	204007	2.03%	0.095%
273	19.867	19.810	19.902	VV	10004	492079	4.89%	0.228%
274	19.930	19.902	19.947	VV	9049	243662	2.42%	0.113%
275	20.098	19.947	20.114	VV	10844	949840	9.44%	0.440%
276	20.140	20.114	20.175	VV	11632	397375	3.95%	0.184%
277	20.239	20.175	20.311	VV	300297	5240419	52.07%	2.428%
278	20.382	20.311	20.544	VV	15308	1680025	16.69%	0.778%
279	20.632	20.544	20.696	VV	15451	1162179	11.55%	0.538%
280	20.711	20.696	20.788	VV	11808	576060	5.72%	0.267%
281	20.800	20.788	20.818	VV	9068	161770	1.61%	0.075%
282	20.835	20.818	20.857	VV	9097	205095	2.04%	0.095%
283	20.873	20.857	20.928	VV	8741	349175	3.47%	0.162%
284	21.019	20.928	21.071	VV	248977	5067603	50.36%	2.348%
285	21.126	21.071	21.183	VV	7478	461132	4.58%	0.214%
286	21.202	21.183	21.241	VV	6348	206873	2.06%	0.096%
287	21.261	21.241	21.308	VV	5971	232205	2.31%	0.108%
288	21.350	21.308	21.391	VV	5767	264522	2.63%	0.123%
289	21.449	21.391	21.513	VV	5567	358760	3.56%	0.166%
290	21.594	21.513	21.664	VV	4671	395864	3.93%	0.183%
291	21.690	21.664	21.821	VV	3922	288403	2.87%	0.134%
292	21.840	21.821	21.928	VV	2462	110781	1.10%	0.051%
293	22.003	21.928	22.148	VV	175678	4434435	44.06%	2.054%
Sum of corrected areas:					215869701			

Aliphatic EPH 040225.M Tue Apr 08 03:38:42 2025

Manual Integration Report

Sequence:

FC040225AL

Instrument

FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
5 PPM ALIPHATIC HC	FC068491.D	n-Octacosane (C28)	yogesh	4/3/2025 7:45:42 AM	mohammad	4/4/2025 7:54:14	Peak Integrated by Software
5 PPM ALIPHATIC HC	FC068491.D	n-Octadecane (C18)	yogesh	4/3/2025 7:45:42 AM	mohammad	4/4/2025 7:54:14	Peak Integrated by Software
5 PPM ALIPHATIC HC	FC068491.D	n-Tetracontane (C40)	yogesh	4/3/2025 7:45:42 AM	mohammad	4/4/2025 7:54:14	Peak Integrated by Software
5 PPM ALIPHATIC HC	FC068491.D	n-Tricontane (C30)	yogesh	4/3/2025 7:45:42 AM	mohammad	4/4/2025 7:54:14	Peak Integrated by Software

Manual Integration Report

Sequence:

FC040725AL

Instrument

FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM ALIPHATIC HC	FC068497.D	n-Octatriacontane (C38)	yogesh	4/8/2025 7:51:49 AM	mohammad	4/9/2025 2:58:48	Peak Integrated by Software
PB167477BS	FC068499.D	n-Tetracontane (C40)	yogesh	4/8/2025 7:51:55 AM	mohammad	4/9/2025 2:58:48	Peak Integrated by Software
20 PPM ALIPHATIC HC	FC068506.D	n-Hexatriacontane (C36)	yogesh	4/8/2025 7:51:53 AM	mohammad	4/9/2025 2:58:48	Peak Integrated by Software
20 PPM ALIPHATIC HC	FC068506.D	n-Octatriacontane (C38)	yogesh	4/8/2025 7:51:53 AM	mohammad	4/9/2025 2:58:48	Peak Integrated by Software



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

Manual Integration Report

Sequence:	FC040825AL	Instrument	FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM ALIPHATIC HC	FC068509.D	n-Octatriacontane (C38)	yogesh	4/9/2025 1:39:58 PM	mohammad	4/10/2025 5:30:40	Peak Integrated by Software

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC040225AL

Review By	yogesh	Review On	4/2/2025 1:54:54 PM
Supervise By	mohammad	Supervise On	4/4/2025 7:54:14 AM
SubDirectory	FC040225AL	HP Acquire Method	HP Processing Method FC040225AL
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	FC068485.D	02 Apr 2025 14:05	YP/AJ	Ok
2	I.BLK	FC068486.D	02 Apr 2025 14:42	YP/AJ	Ok
3	100 PPM ALIPHATIC HC STD1	FC068487.D	02 Apr 2025 15:55	YP/AJ	Ok
4	50 PPM ALIPHATIC HC STD2	FC068488.D	02 Apr 2025 16:32	YP/AJ	Ok
5	20 PPM ALIPHATIC HC STD3	FC068489.D	02 Apr 2025 17:09	YP/AJ	Ok
6	10 PPM ALIPHATIC HC STD4	FC068490.D	02 Apr 2025 17:45	YP/AJ	Ok
7	5 PPM ALIPHATIC HC STD5	FC068491.D	02 Apr 2025 19:00	YP/AJ	Ok,M
8	20 PPM ALIPHATIC HC STD ICV	FC068492.D	02 Apr 2025 20:13	YP/AJ	Ok
9	I.BLK	FC068493.D	02 Apr 2025 21:26	YP/AJ	Ok
10	20 PPM ALIPHATIC HC STD	FC068494.D	02 Apr 2025 22:04	YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC040725AL

Review By	yogesh	Review On	4/7/2025 3:21:12 PM
Supervise By	mohammad	Supervise On	4/9/2025 2:58:48 AM
SubDirectory	FC040725AL	HP Acquire Method	HP Processing Method FC040225AL
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	FC068495.D	07 Apr 2025 10:25	YP/AJ	Ok
2	I.BLK	FC068496.D	07 Apr 2025 11:03	YP/AJ	Ok
3	20 PPM ALIPHATIC HC STD	FC068497.D	07 Apr 2025 14:23	YP/AJ	Ok,M
4	PB167477BL	FC068498.D	07 Apr 2025 15:00	YP/AJ	Ok
5	PB167477BS	FC068499.D	07 Apr 2025 15:38	YP/AJ	Ok,M
6	PB167477BSD	FC068500.D	07 Apr 2025 16:15	YP/AJ	Ok
7	Q1736-02	FC068501.D	07 Apr 2025 16:52	YP/AJ	Ok
8	Q1736-02MS	FC068502.D	07 Apr 2025 17:30	YP/AJ	Ok
9	Q1736-02MSD	FC068503.D	07 Apr 2025 18:08	YP/AJ	Ok
10	Q1736-01	FC068504.D	07 Apr 2025 18:45	YP/AJ	Dilution
11	I.BLK	FC068505.D	07 Apr 2025 20:37	YP/AJ	Ok
12	20 PPM ALIPHATIC HC STD	FC068506.D	07 Apr 2025 21:15	YP/AJ	Ok,M

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC040825AL

Review By	yogesh	Review On	4/8/2025 10:07:57 AM
Supervise By	mohammad	Supervise On	4/10/2025 5:30:40 AM
SubDirectory	FC040825AL	HP Acquire Method	HP Processing Method FC040225AL
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	FC068507.D	08 Apr 2025 07:39	YP/AJ	Ok
2	I.BLK	FC068508.D	08 Apr 2025 08:15	YP/AJ	Ok
3	20 PPM ALIPHATIC HC STD	FC068509.D	08 Apr 2025 08:52	YP/AJ	Ok,M
4	Q1736-01DL	FC068510.D	08 Apr 2025 09:30	YP/AJ	Ok
5	I.BLK	FC068511.D	08 Apr 2025 10:46	YP/AJ	Ok
6	20 PPM ALIPHATIC HC STD	FC068512.D	08 Apr 2025 11:24	YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC040225AL

Review By	yogesh	Review On	4/2/2025 1:54:54 PM
Supervise By	mohammad	Supervise On	4/4/2025 7:54:14 AM
SubDirectory	FC040225AL	HP Acquire Method	HP Processing Method FC040225AL

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	FC068485.D	02 Apr 2025 14:05		YP/AJ	Ok
2	I.BLK	I.BLK	FC068486.D	02 Apr 2025 14:42		YP/AJ	Ok
3	100 PPM ALIPHATIC HC	100 PPM ALIPHATIC HC	FC068487.D	02 Apr 2025 15:55		YP/AJ	Ok
4	50 PPM ALIPHATIC HC	50 PPM ALIPHATIC HC	FC068488.D	02 Apr 2025 16:32		YP/AJ	Ok
5	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068489.D	02 Apr 2025 17:09		YP/AJ	Ok
6	10 PPM ALIPHATIC HC	10 PPM ALIPHATIC HC	FC068490.D	02 Apr 2025 17:45		YP/AJ	Ok
7	5 PPM ALIPHATIC HC	5 PPM ALIPHATIC HC	FC068491.D	02 Apr 2025 19:00		YP/AJ	Ok,M
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068492.D	02 Apr 2025 20:13		YP/AJ	Ok
9	I.BLK	I.BLK	FC068493.D	02 Apr 2025 21:26		YP/AJ	Ok
10	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068494.D	02 Apr 2025 22:04		YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC040725AL

Review By	yogesh	Review On	4/7/2025 3:21:12 PM
Supervise By	mohammad	Supervise On	4/9/2025 2:58:48 AM
SubDirectory	FC040725AL	HP Acquire Method	HP Processing Method FC040225AL

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	FC068495.D	07 Apr 2025 10:25		YP/AJ	Ok
2	I.BLK	I.BLK	FC068496.D	07 Apr 2025 11:03		YP/AJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068497.D	07 Apr 2025 14:23		YP/AJ	Ok,M
4	PB167477BL	PB167477BL	FC068498.D	07 Apr 2025 15:00		YP/AJ	Ok
5	PB167477BS	PB167477BS	FC068499.D	07 Apr 2025 15:38		YP/AJ	Ok,M
6	PB167477BSD	PB167477BSD	FC068500.D	07 Apr 2025 16:15		YP/AJ	Ok
7	Q1736-02	GST2	FC068501.D	07 Apr 2025 16:52		YP/AJ	Ok
8	Q1736-02MS	GST2MS	FC068502.D	07 Apr 2025 17:30	FC068501.D	YP/AJ	Ok
9	Q1736-02MSD	GST2MSD	FC068503.D	07 Apr 2025 18:08	FC068501.D!FC068502.D	YP/AJ	Ok
10	Q1736-01	GST1	FC068504.D	07 Apr 2025 18:45	need 2x dilution	YP/AJ	Dilution
11	I.BLK	I.BLK	FC068505.D	07 Apr 2025 20:37		YP/AJ	Ok
12	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068506.D	07 Apr 2025 21:15		YP/AJ	Ok,M

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC040825AL

Review By	yogesh	Review On	4/8/2025 10:07:57 AM
Supervise By	mohammad	Supervise On	4/10/2025 5:30:40 AM
SubDirectory	FC040825AL	HP Acquire Method	HP Processing Method FC040225AL
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	FC068507.D	08 Apr 2025 07:39		YP/AJ	Ok
2	I.BLK	I.BLK	FC068508.D	08 Apr 2025 08:15		YP/AJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068509.D	08 Apr 2025 08:52		YP/AJ	Ok,M
4	Q1736-01DL	GST1DL	FC068510.D	08 Apr 2025 09:30		YP/AJ	Ok
5	I.BLK	I.BLK	FC068511.D	08 Apr 2025 10:46		YP/AJ	Ok
6	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068512.D	08 Apr 2025 11:24		YP/AJ	Ok

M : Manual Integration



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 4/7/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 04/04/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:25
Out Date: 04/05/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135307

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
Q1729-05	SVOC-GPC-BLANK	1	1.00	1.00	2.00	2.00	100.0	
Q1729-06	PEST-GPC-BLANK	2	1.00	1.00	2.00	2.00	100.0	
Q1729-07	PEST-GPC-BLANK-SPIKE	3	1.00	1.00	2.00	2.00	100.0	
Q1729-08	PCB-GPC-BLANK	4	1.00	1.00	2.00	2.00	100.0	
Q1729-09	PCB-GPC-BLANK-SPIKE	5	1.00	1.00	2.00	2.00	100.0	
Q1729-10	SVOC-GPC2-BLANK	6	1.00	1.00	2.00	2.00	100.0	
Q1729-11	PEST-GPC2-BLANK	7	1.00	1.00	2.00	2.00	100.0	
Q1729-12	PEST-GPC2-BLANK-SPIKE	8	1.00	1.00	2.00	2.00	100.0	
Q1729-13	PCB-GPC2-BLANK	9	1.00	1.00	2.00	2.00	100.0	
Q1729-14	PCB-GPC2-BLANK-SPIKE	10	1.00	1.00	2.00	2.00	100.0	
Q1730-01	OU4-VSL-15-040325	11	1.14	10.58	11.72	11.39	96.9	
Q1730-03	OU4-VSL-16-040325	12	1.15	10.28	11.43	10.86	94.5	
Q1730-05	OU4-VSL-17-040325	13	1.16	11.32	12.48	11.62	92.4	
Q1730-07	OU4-PCS-TC-21-040325	14	1.18	10.92	12.1	10.9	89.0	
Q1730-09	OU4-PCS-TC-22-040325	15	1.16	11.79	12.95	11.87	90.8	
Q1730-11	OU4-PCS-TC-23-040325	16	1.19	11.24	12.43	11.41	90.9	
Q1730-13	OU4-PCS-TC-24-040325	17	1.18	10.42	11.6	10.69	91.3	
Q1730-15	OU4-PCS-TC-25-040325	18	1.14	11.13	12.27	11.43	92.5	
Q1730-17	OU4-PCS-TC-26-040325	19	1.15	10.84	11.99	11.13	92.1	
Q1730-19	OU4-CF-15-040325	20	1.15	10.74	11.89	11.23	93.9	
Q1732-01	TT-8	21	1.15	10.40	11.55	10.48	89.7	
Q1732-02	TT-8-EPH	22	1.15	10.33	11.48	10.34	89.0	
Q1732-03	TT-8-VOC	23	1.19	10.01	11.2	10.11	89.1	
Q1733-01	ETGI-328	24	1.18	10.19	11.37	8.37	70.6	
Q1733-02	ETGI-328-E2	25	1.18	10.29	11.47	8.27	68.9	
Q1734-01	HEH6237-1-1	26	1.00	1.00	2.00	2.00	100.0	pile
Q1734-02	HEH6237-1-2	27	1.00	1.00	2.00	2.00	100.0	pile
Q1734-03	STJ23-1-1	28	1.00	1.00	2.00	2.00	100.0	pile



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 4/7/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 04/04/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:25
Out Date: 04/05/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135307

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
Q1734-04	STJ23-1-2	29	1.00	1.00	2.00	2.00	100.0	pilc
Q1734-05	HIA989S-1-1	30	1.00	1.00	2.00	2.00	100.0	pilc
Q1734-06	HIA989S-1-2	31	1.00	1.00	2.00	2.00	100.0	pilc
Q1734-07	HED302R-1-1	32	1.00	1.00	2.00	2.00	100.0	pilc
Q1734-08	HED302R-1-2	33	1.00	1.00	2.00	2.00	100.0	pilc
Q1734-09	HED302R-2-1	34	1.00	1.00	2.00	2.00	100.0	pilc
Q1734-10	HED302R-2-2	35	1.00	1.00	2.00	2.00	100.0	pilc
Q1735-01	50660-50661-50662-5663-COMP	36	1.18	10.92	12.1	10.42	84.6	
Q1736-01	GST1	37	1.18	10.04	11.22	9.07	78.6	
Q1736-02	GST2	38	1.18	10.93	12.11	9.98	80.5	
Q1737-01	RT3069	39	1.19	11.58	12.77	11.34	87.7	
Q1738-01	OK-02-040425	40	1.16	10.34	11.5	10.06	86.1	
Q1738-02	OK-02-040425-E2	41	1.19	10.54	11.73	10.37	87.1	

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

WORKLIST(Hardcopy Internal Chain)

VB 135307

WorkList Name : %1-040425

WorkList ID : 188724

Department : Wet-Chemistry

Date : 04-04-2025 08:12:22

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1736-01	GST1	Solid	Percent Solids	Cool 4 deg C	GENV01	L21	04/04/2025	Chemtech -SO
Q1736-02	GST2	Solid	Percent Solids	Cool 4 deg C	GENV01	L21	04/04/2025	Chemtech -SO
Q1730-01	OU4-VSL-15-040325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L31	04/03/2025	Chemtech -SO
Q1730-03	OU4-VSL-16-040325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L31	04/03/2025	Chemtech -SO
Q1730-05	OU4-VSL-17-040325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L31	04/03/2025	Chemtech -SO
Q1730-07	OU4-PCS-TC-21-040325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L31	04/03/2025	Chemtech -SO
Q1730-09	OU4-PCS-TC-22-040325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L31	04/03/2025	Chemtech -SO
Q1730-11	OU4-PCS-TC-23-040325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L31	04/03/2025	Chemtech -SO
Q1730-13	OU4-PCS-TC-24-040325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L31	04/03/2025	Chemtech -SO
Q1730-15	OU4-PCS-TC-25-040325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L31	04/03/2025	Chemtech -SO
Q1730-17	OU4-PCS-TC-26-040325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L31	04/03/2025	Chemtech -SO
Q1730-19	OU4-CF-15-040325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L31	04/03/2025	Chemtech -SO
Q1729-05	SVOC-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	NOBI03	L31	04/03/2025	Chemtech -SO
Q1729-06	PEST-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	04/04/2025	Chemtech -SO
Q1729-07	PEST-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	04/04/2025	Chemtech -SO
Q1729-08	PCB-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	04/04/2025	Chemtech -SO
Q1729-09	PCB-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	04/04/2025	Chemtech -SO
Q1729-10	SVOC-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	04/04/2025	Chemtech -SO
Q1729-11	PEST-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	04/04/2025	Chemtech -SO
Q1729-12	PEST-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	04/04/2025	Chemtech -SO
Q1729-13	PCB-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	04/04/2025	Chemtech -SO

Date/Time 04/04/25 15:20

Raw Sample Received by: JB 0001

Raw Sample Relinquished by: JB 0001

Date/Time 04/04/25

Raw Sample Received by: JB 0001

Raw Sample Relinquished by: JB 0001

WORKLIST(Hardcopy Internal Chain)

107135307

WorkList Name : %1-040425

WorkList ID : 188724

Department : Wet-Chemistry

Date : 04-04-2025 08:12:22

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1729-14	PCB-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	04/04/2025	Chemtech -SO
Q1732-01	TT-8	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/04/2025	Chemtech -SO
Q1732-02	TT-8-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/04/2025	Chemtech -SO
Q1732-03	TT-8-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/04/2025	Chemtech -SO
Q1733-01	ETGI-328	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/04/2025	Chemtech -SO
Q1733-02	ETGI-328-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I31	04/04/2025	Chemtech -SO
Q1734-01	HEH6237-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I31	04/04/2025	Chemtech -SO
Q1734-08	HED302R-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/04/2025	Chemtech -SO
Q1734-09	HED302R-2-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/04/2025	Chemtech -SO
Q1734-10	HED302R-2-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/04/2025	Chemtech -SO
Q1735-01	50660-50661-50662-5663-COM	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/04/2025	Chemtech -SO
Q1737-01	RT3069	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/04/2025	Chemtech -SO
Q1734-02	HEH6237-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/04/2025	Chemtech -SO
Q1734-03	STJ23-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/04/2025	Chemtech -SO
Q1734-04	STJ23-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/04/2025	Chemtech -SO
Q1734-05	HIA989S-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/04/2025	Chemtech -SO
Q1734-06	HIA989S-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/04/2025	Chemtech -SO
Q1734-07	HED302R-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/04/2025	Chemtech -SO
Q1738-01	OK-02-040425	Solid	Percent Solids	Cool 4 deg C	PSEG05	L31	04/04/2025	Chemtech -SO
Q1738-02	OK-02-040425-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	L31	04/04/2025	Chemtech -SO

Date/Time 04/04/25 15:20

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 04/04/25 17:15

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

SOP ID: MNJDEP-EPH-7

Clean Up SOP #: N/A

Matrix: Solid

Weigh By: EH

Balance check: RJ

Balance ID: EX-SC-2

pH Strip Lot#: N/A

Extraction By: RJ

Filter By: RJ

pH Meter ID: N/A

Hood ID: 3,7

Extraction Start Date: 04/07/2025

Extraction Start Time: 09:40

Extraction End Date: 04/07/2025

Extraction End Time: 12:40

Concentration By: EH

Supervisor By: rajesh

Extraction Method: ☐ Separatory Funnel

☐ Continous Liquid/Liquid

☐ Sonication

☐ Waste Dilution

☒ Soxhlet

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	100 PPM	PP24207
Surrogate	1.0ML	100 PPM	PP24432
Fractionation Surrogate	1.0ML	100 PPM	PP24403
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	EP2591
Baked Na2SO4	N/A	EP2597
Sand	N/A	E2865
Hexane	N/A	E3916
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
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

N/A

KD Bath ID: N/A

KD Bath Temperature: N/A

Envap ID: NEVAP-02

Envap Temperature: 40 °C

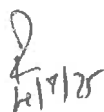
Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/07/25	RP (Ext. 265)	Y-P Pest IP CB.
12:45	Preparation Group	Analysis Group

Analytical Method: MNJDEP-EPH-7

Concentration Date: 04/07/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB167477BL	PB167477BL	EPH_F2	30.01	N/A	ritesh	Evelyn	2			U3-1
PB167477BS	PB167477BS	EPH_F2	30.02	N/A	ritesh	Evelyn	2			2
PB167477BSD	PB167477BSD	EPH_F2	30.02	N/A	ritesh	Evelyn	2			3
Q1736-01	GST1	EPH_F2	30.03	N/A	ritesh	Evelyn	2			4
Q1736-02	GST2	EPH_F2	30.01	N/A	ritesh	Evelyn	2			5
Q1736-02MS	GST2MS	EPH_F2	30.05	N/A	ritesh	Evelyn	2			6
Q1736-02MS D	GST2MSD	EPH_F2	30.04	N/A	ritesh	Evelyn	2			U2-1

* Extracts relinquished on the same date as received.



WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1736

WorkList ID : 188762

Department : Extraction

Date : 04-07-2025 08:19:46

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1732-01	TT-8	Solid	EPH_NF	Cool 4 deg C	PSEG03	L31	04/04/2025	NJEPH
Q1732-02	TT-8-EPH	Solid	EPH_NF	Cool 4 deg C	PSEG03	L31	04/04/2025	NJEPH
Q1733-01	ETGI-328	Solid	EPH_NF	Cool 4 deg C	PSEG03	I31	04/04/2025	NJEPH
Q1733-02	ETGI-328-E2	Solid	EPH_NF	Cool 4 deg C	PSEG03	I31	04/04/2025	NJEPH
Q1736-01	GST1	Solid	EPH_F2	Cool 4 deg C	GENV01	L21	04/04/2025	NJEPH
Q1736-02	GST2	Solid	EPH_F2	Cool 4 deg C	GENV01	L21	04/04/2025	NJEPH
Q1737-01	RT3069	Solid	EPH_NF	Cool 4 deg C	PSEG03	L31	04/04/2025	NJEPH
Q1738-01	OK-02-040425	Solid	EPH_NF	Cool 4 deg C	PSEG05	L31	04/04/2025	NJEPH
Q1738-02	OK-02-040425-E2	Solid	EPH_NF	Cool 4 deg C	PSEG05	L31	04/04/2025	NJEPH

Date/Time 04/07/25 9:35
 Raw Sample Received by: RJ Gekker
 Raw Sample Relinquished by: RJ Gekker

Date/Time 04/07/25 10:00
 Raw Sample Received by: RJ Gekker
 Raw Sample Relinquished by: RJ Gekker

Prep Standard - Chemical Standard Summary

Order ID : Q1736

Test : EPH_F2

Prepbatch ID : PB167477,

Sequence ID/Qc Batch ID: FC040725AL,FC040825AL,

Standard ID :

EP2591,EP2597,PP24170,PP24174,PP24175,PP24176,PP24177,PP24178,PP24179,PP24207,PP24403,PP24432,

Chemical ID :

E2865,E3551,E3876,E3878,E3914,E3915,E3916,P12363,P12981,P12983,P12985,P12986,P12987,P12988,P13279,P13638,P13639,P13640,P13641,P13642,P13644,P13650,P13653,P13655,P13658,P13659,P13671,P13715,P13717,P13755,P13757,P13759,P13760,P13802,P13803,P13809,P13828,P13836,P13840,P13842,P13846,P13855,P13858,P13859,P13860,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	EP2591	02/26/2025	08/14/2025	RUPESHKUMAR SHAH	None	None	Riteshkumar Patel 02/26/2025

FROM 8000.00000ml of E3876 + 8000.00000ml of E3878 = 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	EP2597	03/28/2025	07/01/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	Evelyn Huang 03/28/2025

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	PP24207	02/26/2025	08/26/2025	Yogesh Patel	None	None	Ankita Jodhani
								02/27/2025

FROM 5.00000ml of P13638 + 5.00000ml of P13639 + 5.00000ml of P13640 + 5.00000ml of P13641 + 5.00000ml of P13642 + 5.00000ml of P13644 + 5.00000ml of P13715 + 5.00000ml of P13717 + 5.00000ml of P13802 + 5.00000ml of P13803 + 5.00000ml of P13809 + 5.00000ml of P13828 + 5.00000ml of P13836 + 5.00000ml of P13840 + 5.00000ml of P13842 + 5.00000ml of P13846 + 5.00000ml of P13855 + 5.00000ml of P13858 + 5.00000ml of P13859 + 5.00000ml of P13860 = Final Quantity: 100.000 ml



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

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

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

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-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	08/25/2025	02/25/2025 /	02/12/2025 / Rajesh	E3876

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	08/14/2025	02/14/2025 / Rajesh	12/27/2024 / Rajesh	E3878

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	09/19/2025	03/19/2025 / RUPESH	03/13/2025 / RUPESH	E3914

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	09/26/2025	03/26/2025 / Rajesh	03/19/2025 / RUPESH	E3915

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	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 #
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	10/01/2025	04/01/2025 / Abdul	12/20/2023 / Yogesh	P12985

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0204989	10/01/2025	04/01/2025 / Abdul	12/20/2023 / Yogesh	P12986

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0204989	10/01/2025	04/01/2025 / Abdul	12/20/2023 / Yogesh	P12987

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0204989	10/01/2025	04/01/2025 / Abdul	12/20/2023 / Yogesh	P12988

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	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0211112	08/26/2025	02/26/2025 / yogesh	10/16/2024 / yogesh	P13638

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0211112	08/26/2025	02/26/2025 / yogesh	10/16/2024 / yogesh	P13639

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0211112	08/26/2025	02/26/2025 / yogesh	10/16/2024 / yogesh	P13640

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	A0211112	08/26/2025	02/26/2025 / yogesh	10/16/2024 / yogesh	P13641

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0211112	08/26/2025	02/26/2025 / yogesh	10/16/2024 / yogesh	P13642

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0211112	08/26/2025	02/26/2025 / yogesh	10/16/2024 / yogesh	P13644

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	10/01/2025	04/01/2025 / Abdul	10/16/2024 / yogesh	P13653

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	10/01/2025	04/01/2025 / Abdul	10/16/2024 / yogesh	P13655

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	10/01/2025	04/01/2025 / Abdul	10/16/2024 / yogesh	P13658

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	10/01/2025	04/01/2025 / Abdul	10/16/2024 / yogesh	P13659

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	08/26/2025	02/26/2025 / yogesh	10/24/2024 / yogesh	P13715

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	08/26/2025	02/26/2025 / yogesh	10/24/2024 / yogesh	P13717

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	09/20/2025	03/20/2025 / Abdul	11/01/2024 / yogesh	P13755

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	09/20/2025	03/20/2025 / Abdul	11/01/2024 / yogesh	P13757

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	09/20/2025	03/20/2025 / Abdul	11/01/2024 / yogesh	P13759

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	09/20/2025	03/20/2025 / Abdul	11/01/2024 / yogesh	P13760

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	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13802

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	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13803

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	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13809

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	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13828

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13836

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13840

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13842

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13846

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13855

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	A0217838	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13858

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13859

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	08/26/2025	02/26/2025 / yogesh	12/09/2024 / yogesh	P13860

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

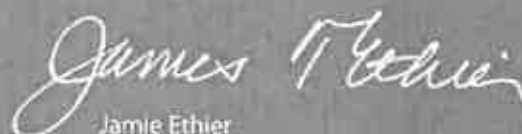
Certificate of Analysis

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

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



Material No.: 9266-A4
Batch No.: 24K1762005
Manufactured Date: 2024-10-08
Expiration Date: 2026-01-07
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	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	0.5 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	0.0
Chloride (Cl)	$\leq 10 \text{ ppm}$	$< 5 \text{ ppm}$
Water (by KF, coulometric)	$\leq 0.02 \%$	0.01 %

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

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

E 3878

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC

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

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

Recd by RS on 3/14/25



E3914

Harout Sahagian - Quality Control Manager - Fair Lawn

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

Recd. by RS on 3/19/25

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E3915

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

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.



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Calibration Standard

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

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

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

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

P12361
↓
P12370 } Y.P.
031/6/23

CERTIFIED VALUES

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

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

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

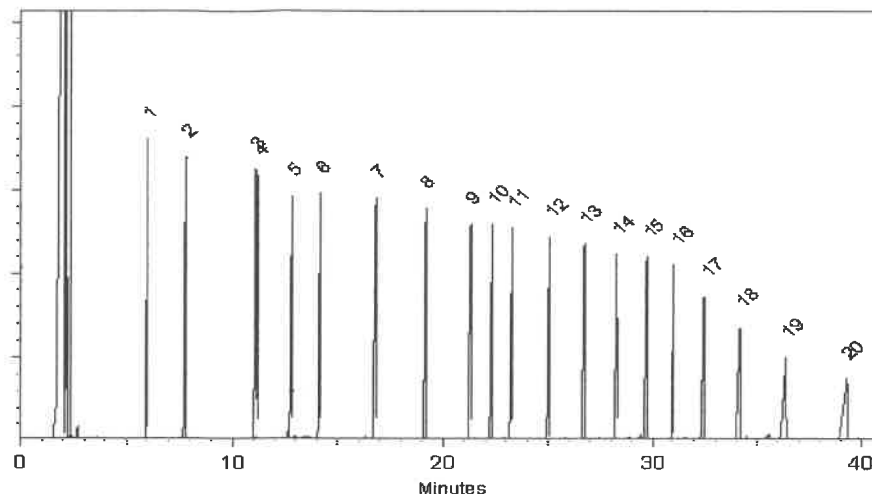
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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


Morgan Craighead - Mix Technician

Date Mixed: 10-Oct-2022 Balance: 1128360905


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 20-Oct-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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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:

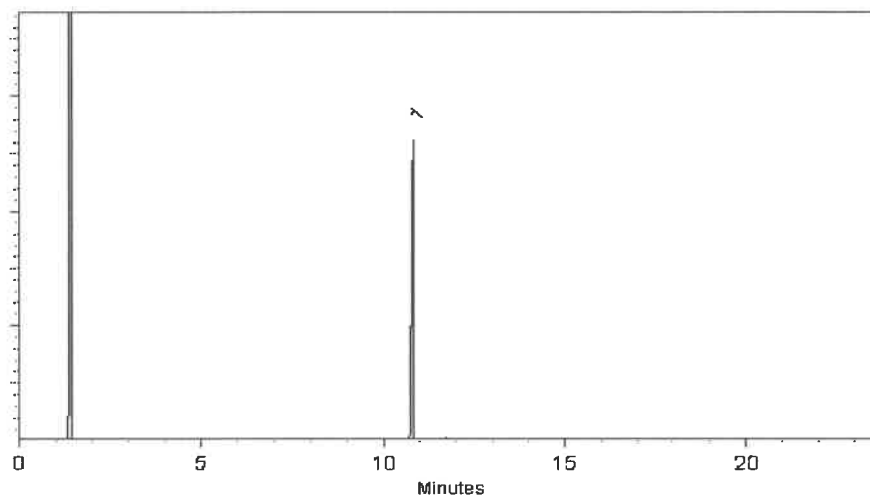
FID

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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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:

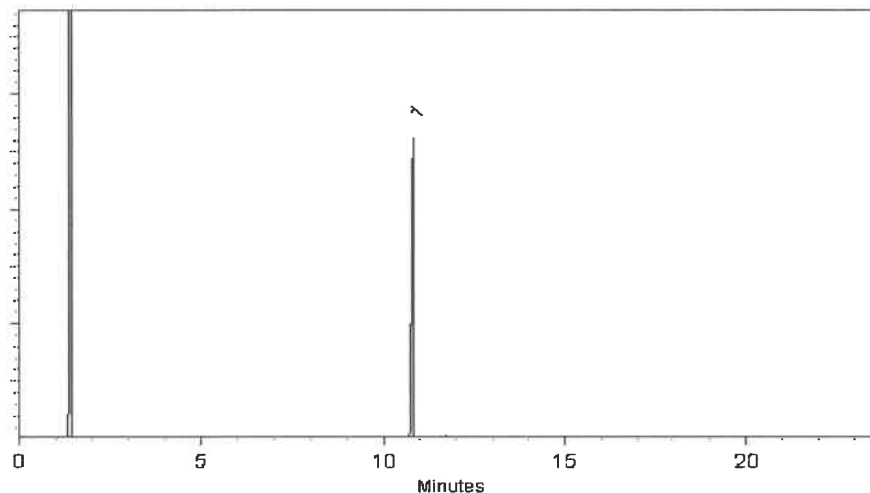
FID

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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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:

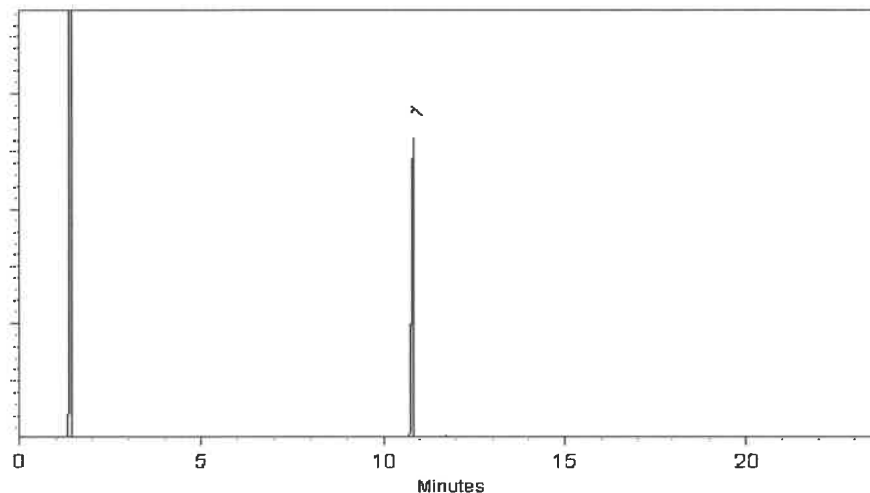
FID

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

Certified Uncertainty Value Notes:

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

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

Manufacturing Notes:

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

Handling Notes:

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 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:

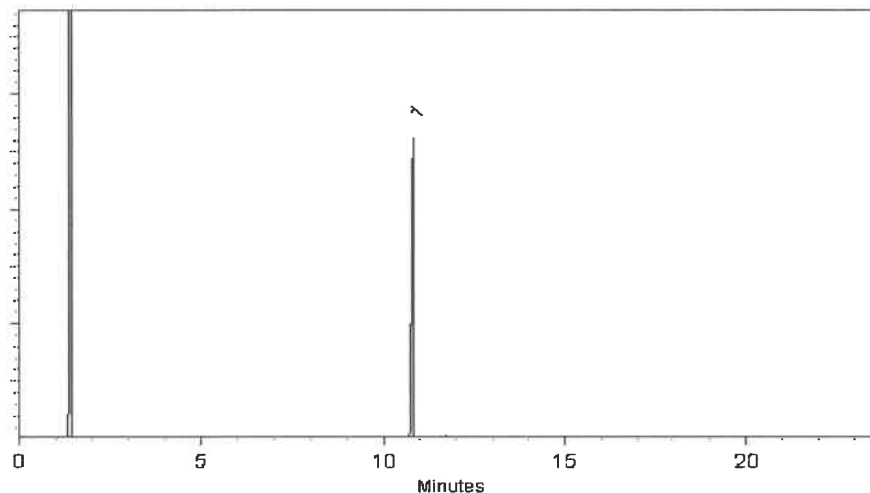
FID

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.
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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.

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

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

Manufacturing Notes:

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Handling Notes:

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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

Catalog No.: 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:

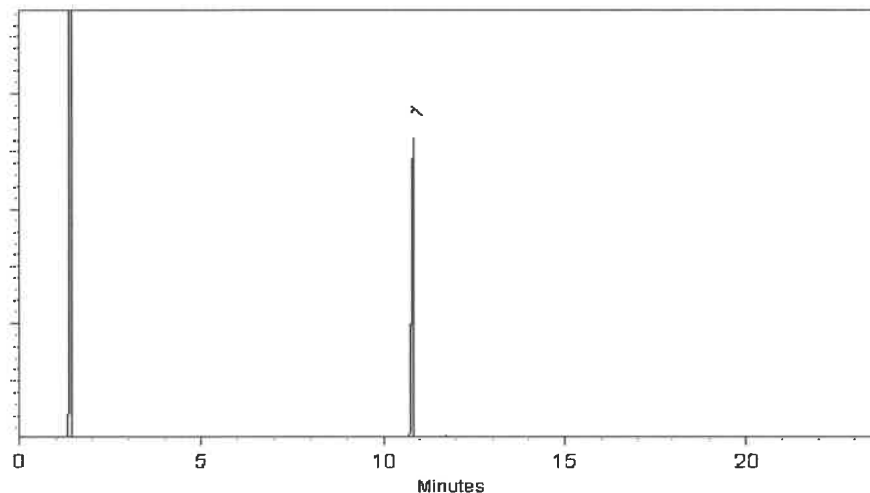
FID

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.
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Purity Notes:

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- Purity values are rounded to the nearest whole number.

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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:

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

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

Description: 1-Chlorooctadecane Standard

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

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

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

Ship: Ambient

P12960
↓
P12991 } Y.P.
12/21/2023

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

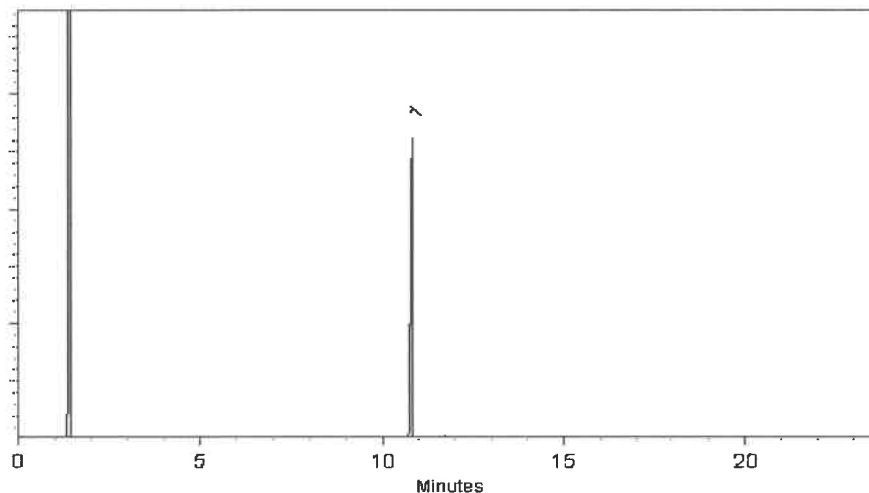
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Peter Robbins - Operations Technician I

Date Mixed: 02-Dec-2023

Balance Serial # B345965662

Christie Mills - Operations Lead Tech - ARM QC

Date Passed: 08-Dec-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

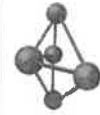
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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



CERTIFIED WEIGHT REPORT

Part Number: 95999

Lot Number: 040524

Description: NJ EPH Aliphatic n-Hydrocarbons - Revised
20 components

Expiration Date: 040534

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 1000

NIST Test ID#: 6UTB

Weight(s) shown below were combined and diluted to (mL):

CAUTION: Sonicate Before Use

Solvent(s):
Cyclohexane

Lot#
28930

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

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By:	Anthony Mahoney	040524	DATE
Reviewed By:	Pedro L. Rentas	040524	DATE

Compound		Part Number	(RM#)	Lot Number	DIL Factor	Initial Vol. (mL)	Initial Conc. (µg/mL)	Nominal Conc. (µg/mL)	Purity (%)	Purity Uncertainty	Pipette	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information	
																(Solvent Safety Info. On Attached pg.)	
																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
2.	Naphthalene	(0222)	MKB28680V	NA	NA	NA	NA	1000	100	0.2	NA	0.02502	0.02511	1003.7	5.7	91-20-3	10 ppm (50mg/m ³ 8H) orl-rat 1630mg/kg
3.	n-Nonane	95708	120222	1.00	25.00	1000.7	1000.7	1000	NA	0.013	NA	NA	NA	1000.0	4.2	111-84-2	200 ppm (1050mg/m ³ 8H) orl-rat 490mg/kg
4.	n-Decane	95708	120222	1.00	25.00	1000.9	1000.9	1000	NA	0.013	NA	NA	NA	1000.2	4.2	124-18-5	ivn-mus 218mg/kg
5.	n-Dodecane	95708	120222	1.00	25.00	1000.7	1000.7	1000	NA	0.013	NA	NA	NA	1000.0	4.2	112-40-3	N/A
6.	n-Tetradecane	95708	120222	1.00	25.00	1002.1	1002.1	1000	NA	0.013	NA	NA	NA	1001.3	4.2	629-59-4	ivn-mus 3494mg/kg
7.	n-Hexadecane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	0.013	NA	NA	NA	999.7	4.2	544-76-3	N/A
8.	n-Octadecane	95708	120222	1.00	25.00	1001.0	1001.0	1000	NA	0.013	NA	NA	NA	1000.3	4.1	583-45-3	N/A
9.	n-Eicosane	95708	120222	1.00	25.00	1001.0	1001.0	1000	NA	0.013	NA	NA	NA	1000.3	4.2	112-95-8	N/A
10.	n-Henicosane	95708	120222	1.00	25.00	1002.4	1002.4	1000	NA	0.013	NA	NA	NA	1001.6	4.2	629-94-7	N/A
11.	n-Docosane	95708	120222	1.00	25.00	1001.9	1001.9	1000	NA	0.013	NA	NA	NA	1001.2	4.2	629-97-0	N/A
12.	n-Tetracosane	95708	120222	1.00	25.00	1000.8	1000.8	1000	NA	0.013	NA	NA	NA	1000.1	4.2	646-31-1	N/A
13.	n-Hexacosane	95708	120222	1.00	25.00	1001.2	1001.2	1000	NA	0.013	NA	NA	NA	1000.4	4.2	630-01-3	N/A
14.	n-Octacosane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	0.013	NA	NA	NA	999.8	4.2	630-02-4	N/A
15.	n-Triacontane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	0.013	NA	NA	NA	999.8	4.2	638-68-6	N/A
16.	n-Dotriacontane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	0.013	NA	NA	NA	999.8	4.3	544-85-4	ivn-mus 100mg/kg
17.	n-Tetracontane	95708	120222	1.00	25.00	1000.4	1000.4	1000	NA	0.013	NA	NA	NA	999.7	4.2	14167-59-0	N/A
18.	n-Hexatriacontane	95708	120222	1.00	25.00	1001.5	1001.5	1000	NA	0.013	NA	NA	NA	1000.8	4.2	630-06-8	N/A
19.	n-Octatriacontane	95708	120222	1.00	25.00	1000.3	1000.3	1000	NA	0.013	NA	NA	NA	999.6	4.3	7184-86-6	N/A
20.	n-Tetracontane	95708	120222	1.00	25.00	1000.6	1000.6	1000	NA	0.013	NA	NA	NA	999.9	4.3	4181-95-7	N/A

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



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0211112

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

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

P13625
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P13644 } 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	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

* 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:

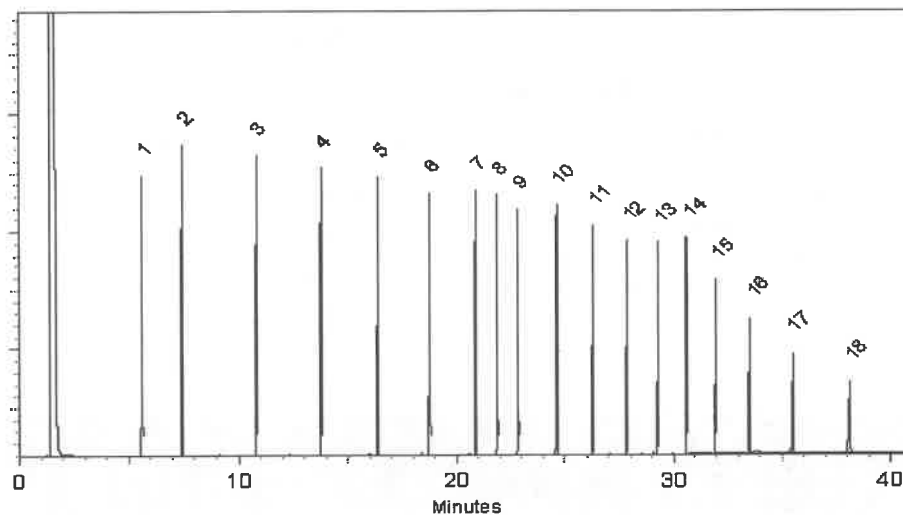
FID

Split Vent:

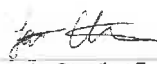
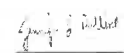
2 ml/min.

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.


Laith Clemente - Operations Technician I**Date Mixed:** 07-May-2024**Balance Serial #** 1128360905
Jennifer Pollino - Operations Tech III - ARM QC**Date Passed:** 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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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. : 30542 **Lot No.:** A0211112

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

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

P13625
↓
P13644 } 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	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

* 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:

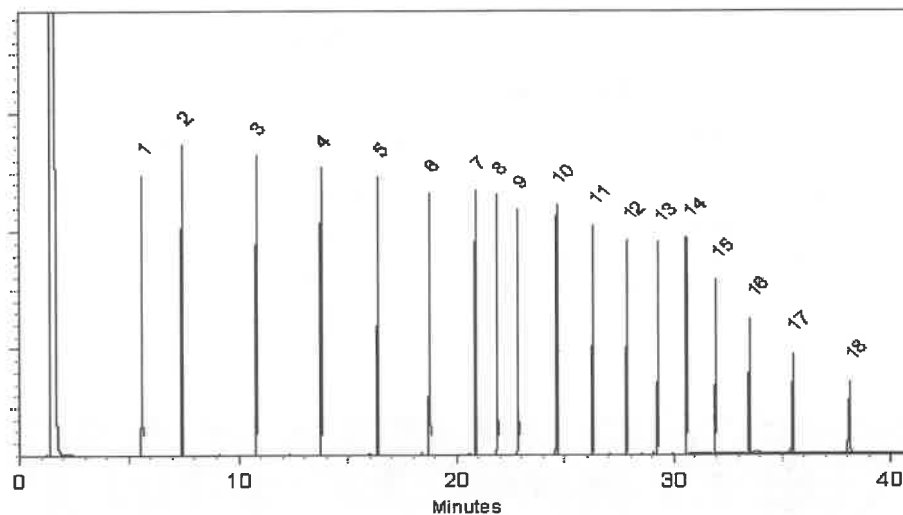
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Split Vent:

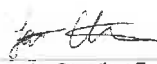
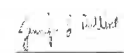
2 ml/min.

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.


Laith Clemente - Operations Technician I**Date Mixed:** 07-May-2024**Balance Serial #** 1128360905
Jennifer Pollino - Operations Tech III - ARM QC**Date Passed:** 09-May-2024

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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.:** A0211112

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

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

P13625
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P13644 } 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	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

* 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:

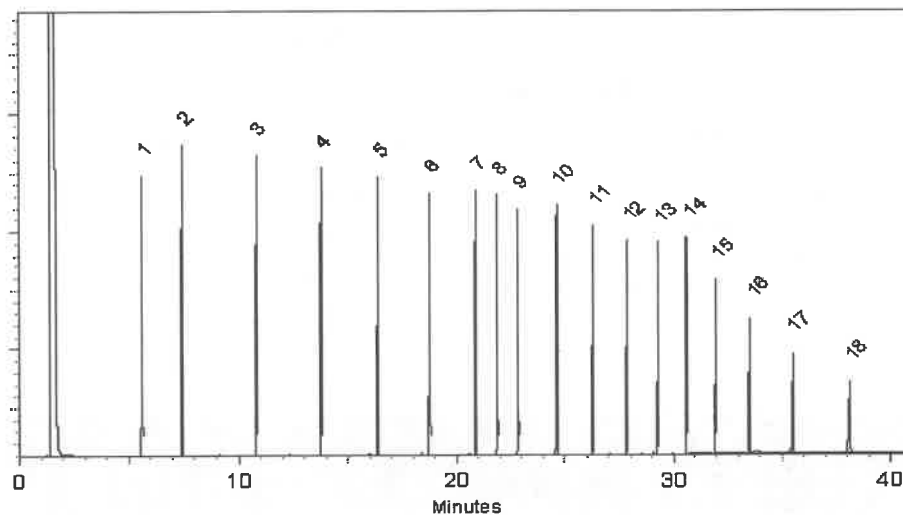
FID

Split Vent:

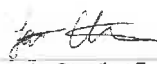
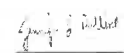
2 ml/min.

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.


Laith Clemente - Operations Technician I**Date Mixed:** 07-May-2024**Balance Serial #** 1128360905
Jennifer Pollino - Operations Tech III - ARM QC**Date Passed:** 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0211112

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

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

P13625
↓
P13644 } 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	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

* 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:

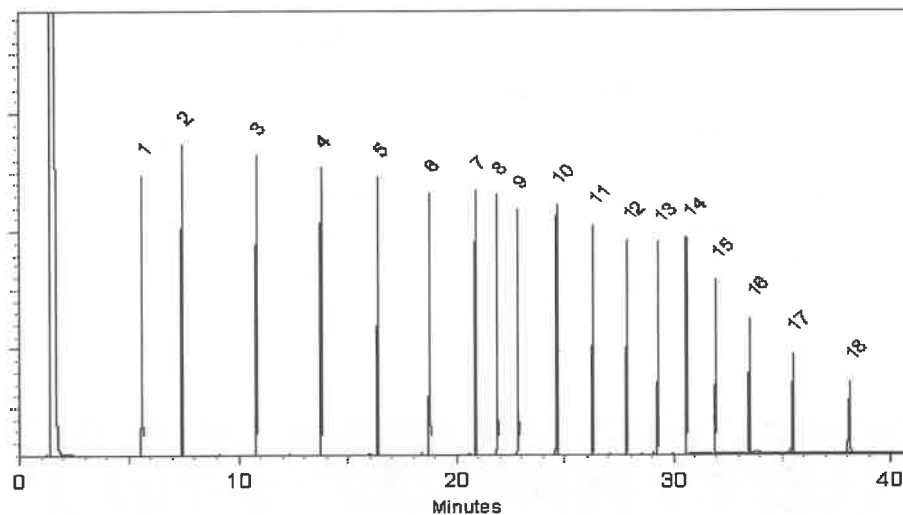
FID

Split Vent:

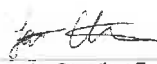
2 ml/min.

Inj. Vol

1µl

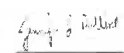


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024

Balance Serial # 1128360905


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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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.:** A0211112

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

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

P13625
↓
P13644 } 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	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

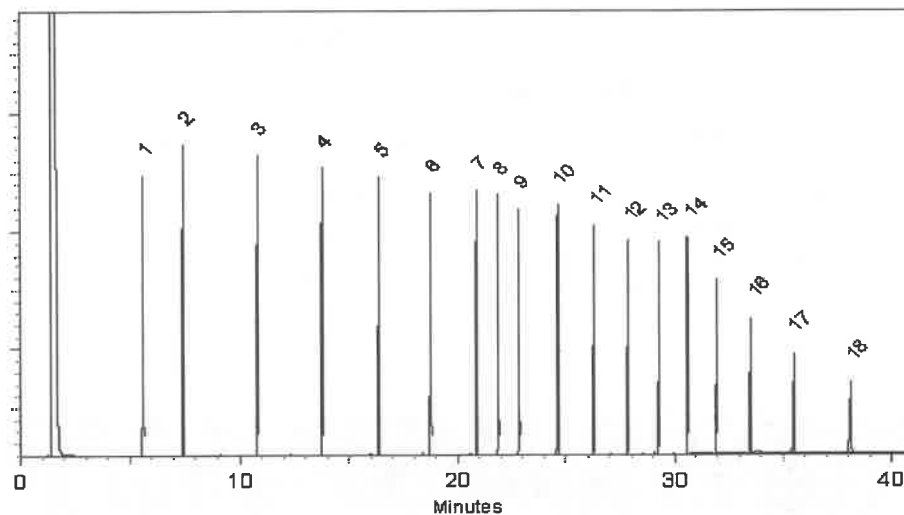
FID

Split Vent:

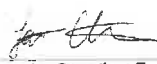
2 ml/min.

Inj. Vol

1µl

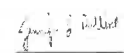


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Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024

Balance Serial # 1128360905


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

Manufacturing Notes:

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

Handling Notes:

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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.:** A0211112

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

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

P13625
↓
P13644 } 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	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

* 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:

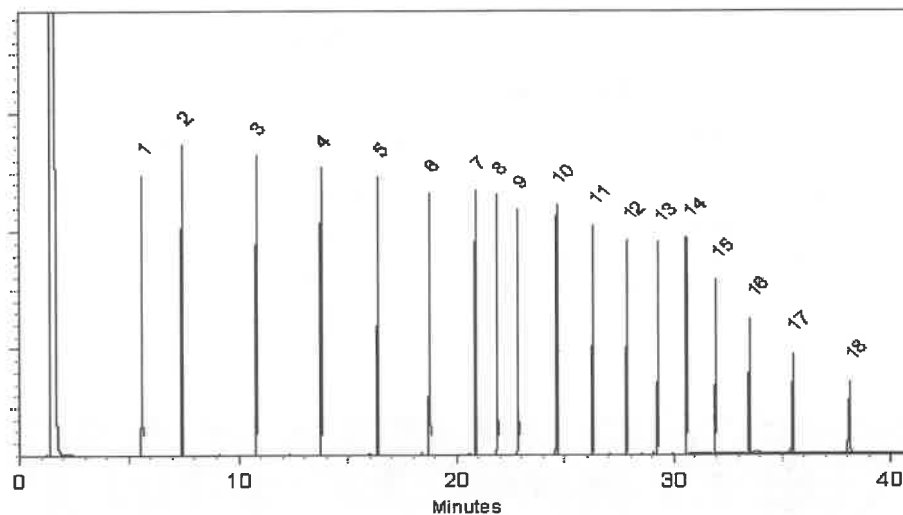
FID

Split Vent:

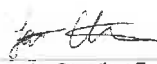
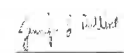
2 ml/min.

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.


Laith Clemente - Operations Technician I**Date Mixed:** 07-May-2024**Balance Serial #** 1128360905
Jennifer Pollino - Operations Tech III - ARM QC**Date Passed:** 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

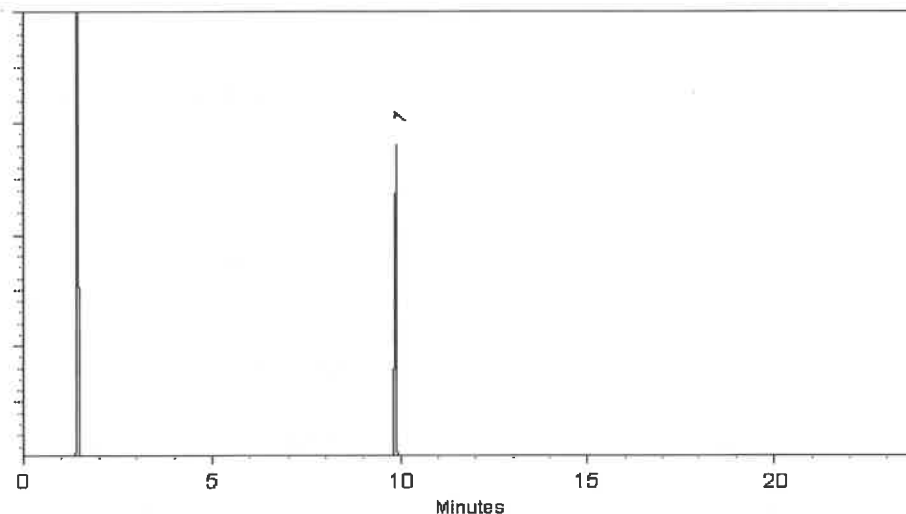
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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Manufacturing Notes:

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Handling Notes:

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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:

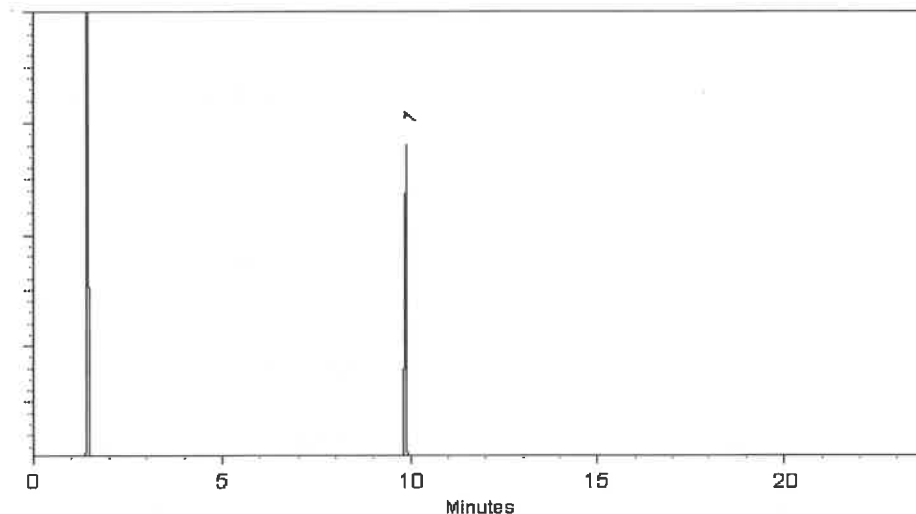
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Manufacturing Notes:

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Handling Notes:

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

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

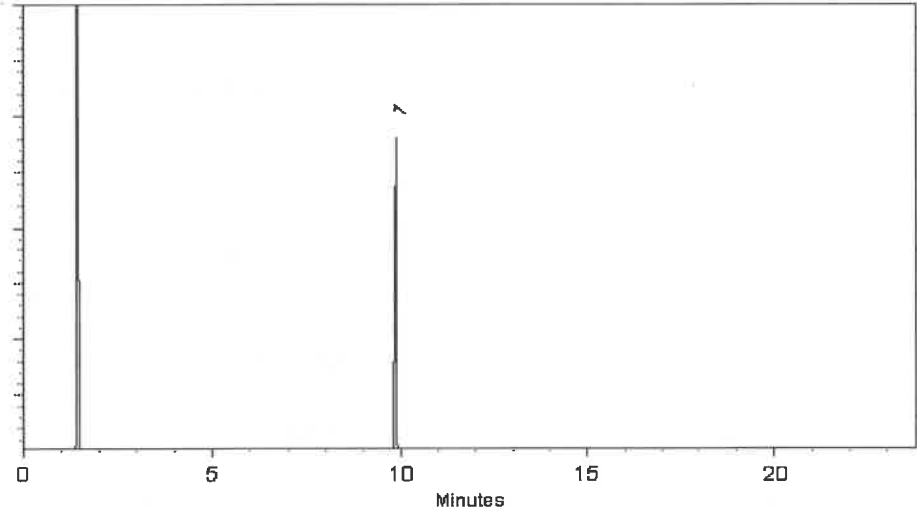
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

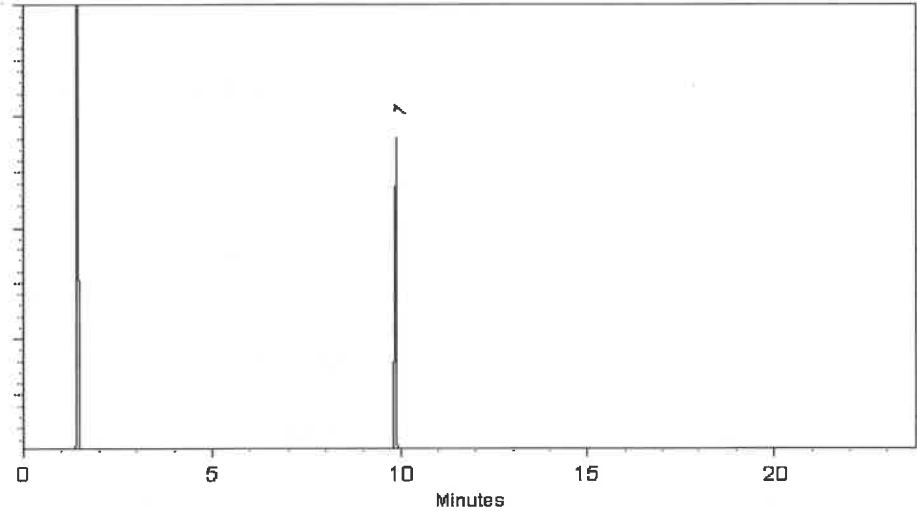
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

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Expiration Date : April 30, 2028 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

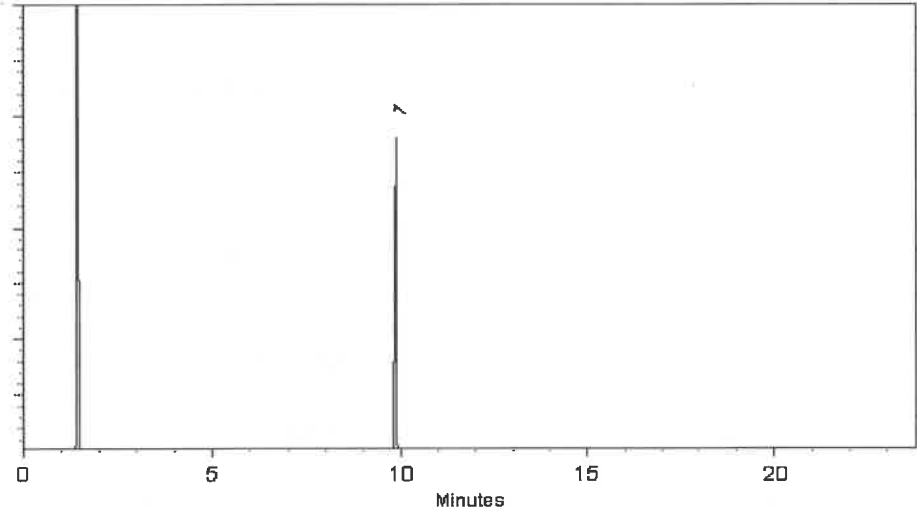
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

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P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

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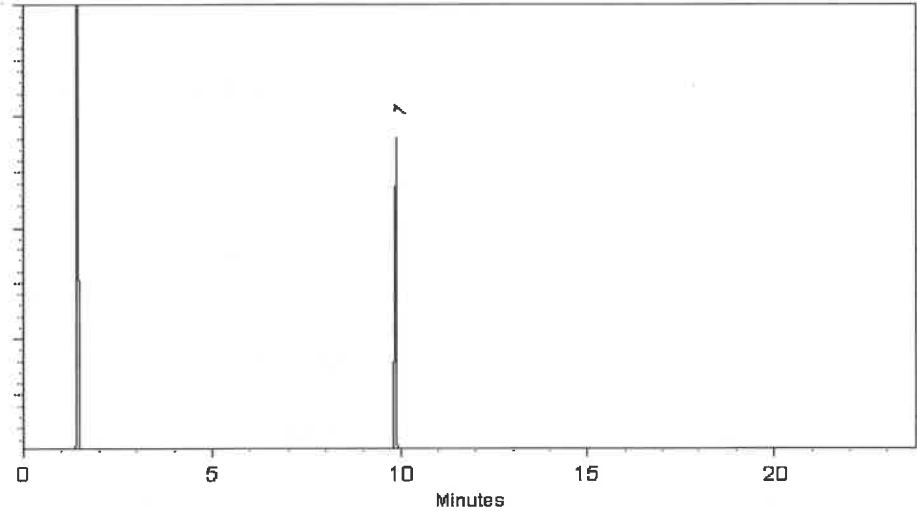
FID

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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Catalog No. : 30543

Lot No.: A0211254

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : April 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13408
↓
P13716 } Y.P.
10/26/24

CERTIFIED VALUES

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

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

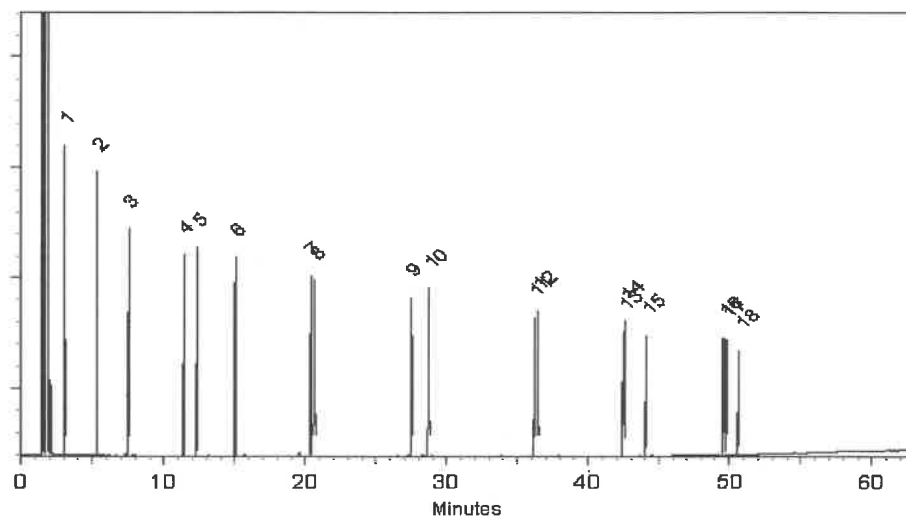
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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

Michael Maye
Michael Maye - Operations Tech I

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

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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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.: A0217838

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : September 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

p137A } 7.P
↓
p13727 } 10/24/24

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%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKQC4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

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	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* 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.)

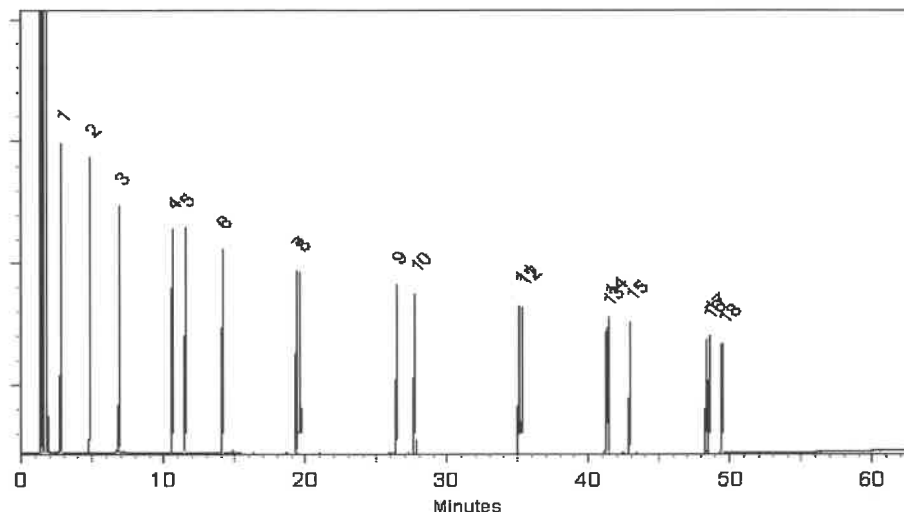
Inj. Temp:
250°C

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.

Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-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. : 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
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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:

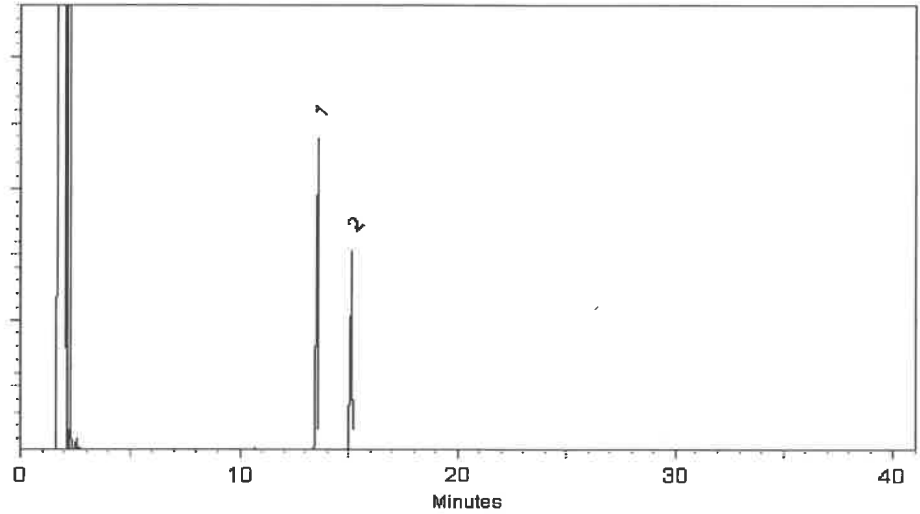
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



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

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

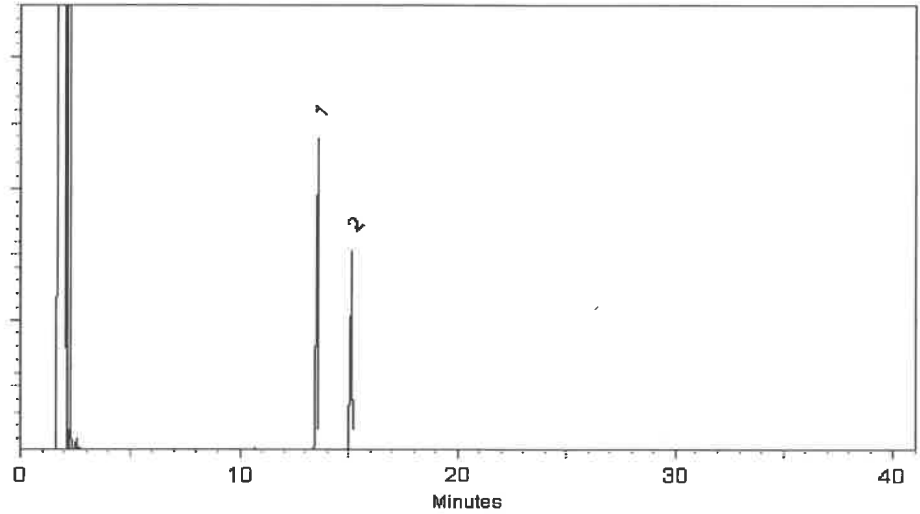
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



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

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

Manufacturing Notes:

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

Handling Notes:

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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:

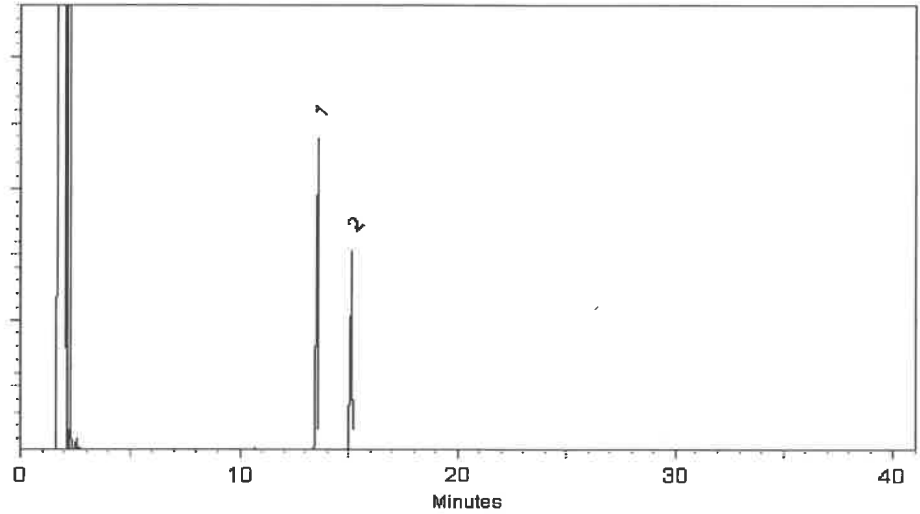
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



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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:

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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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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. : 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:

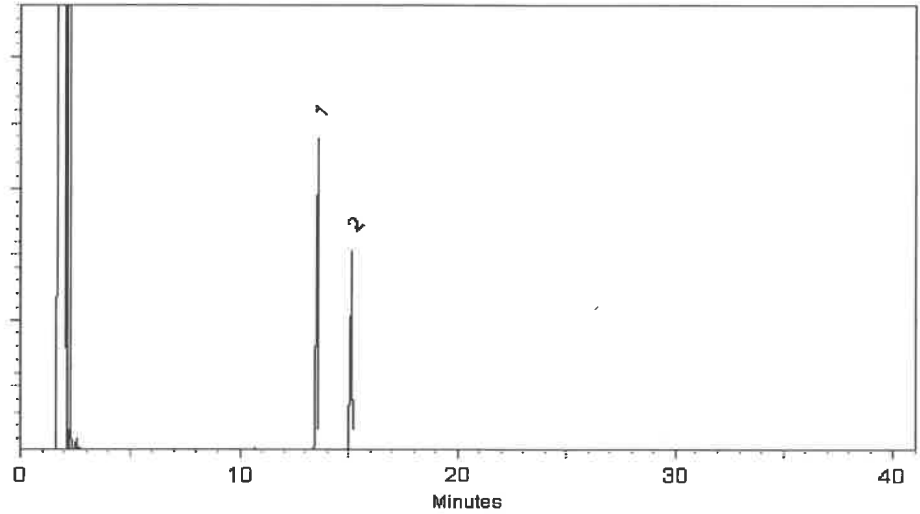
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



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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:

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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:

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

Handling Notes:

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



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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

P13800
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P13829 } YIP
12/09/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

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

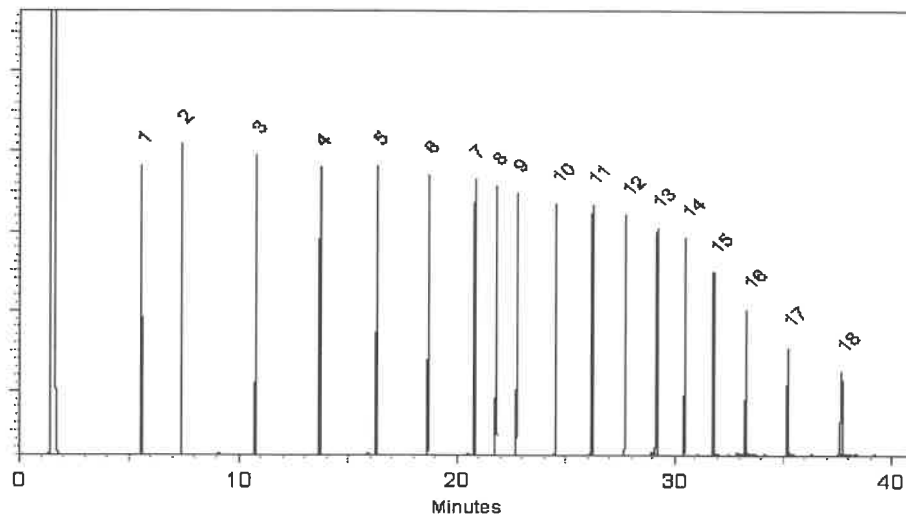
Inj. Temp:
 250°C

Det. Temp:
 330°C

Det. Type:
 FID

Split Vent:
 2 ml/min.

Inj. Vol
 1µl



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

Penelope S. Riglin
 Penelope Riglin - Operations Tech I

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

Jennifer Pollino
 Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

P13800
↓
P13829 } YIP
12/09/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

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

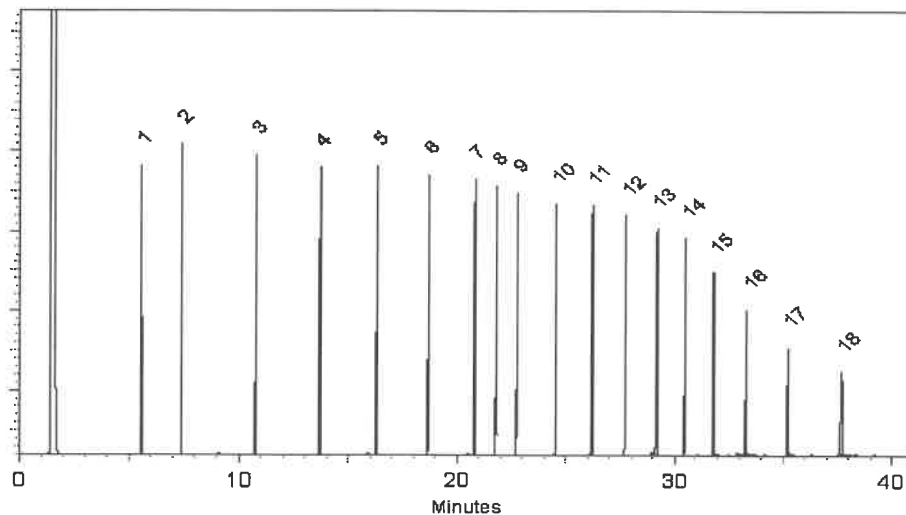
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Penelope S. Riglin
Penelope Riglin - Operations Tech I

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

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

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

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

Manufacturing Notes:

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

P13800
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P13829 } YIP
12/09/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

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

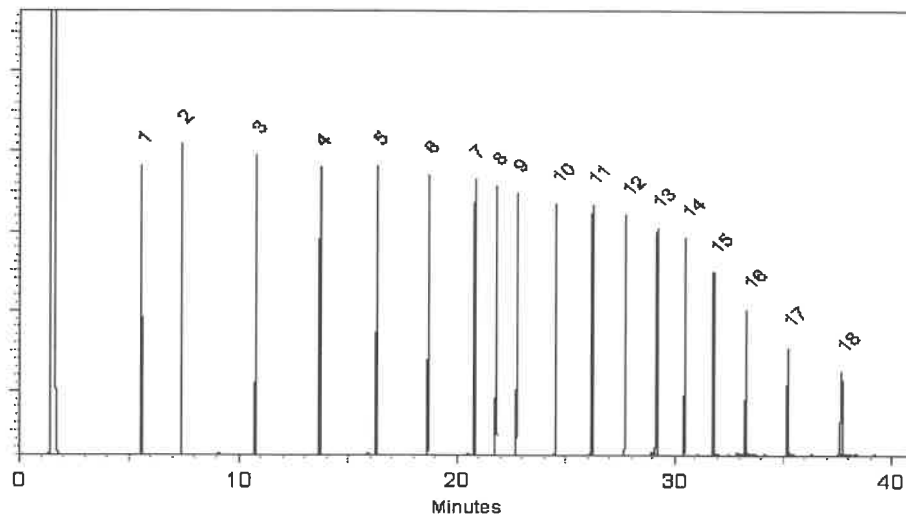
Inj. Temp:
 250°C

Det. Temp:
 330°C

Det. Type:
 FID

Split Vent:
 2 ml/min.

Inj. Vol
 1µl



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Penelope S. Riglin
 Penelope Riglin - Operations Tech I

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

Jennifer Pollino
 Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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Manufacturing Notes:

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

Handling Notes:

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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

P13800
↓
P13829 } YIP
12/09/24

CERTIFIED VALUES

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

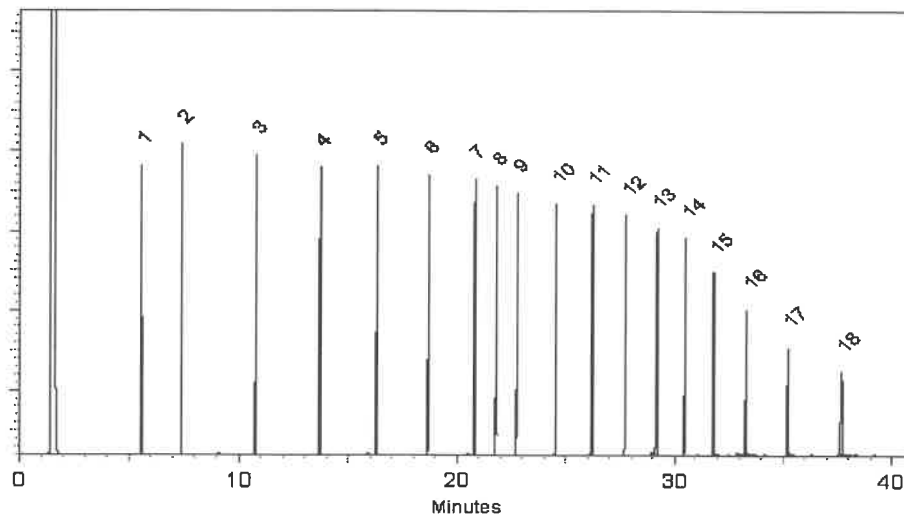
Inj. Temp:
250°C

Det. Temp:
330°C

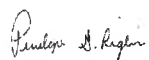
Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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Penelope Riglin - Operations Tech I

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


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:

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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.



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

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

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

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

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

P13835
2
P13860 } Y-P.
12/09/12

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%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

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	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* 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.)

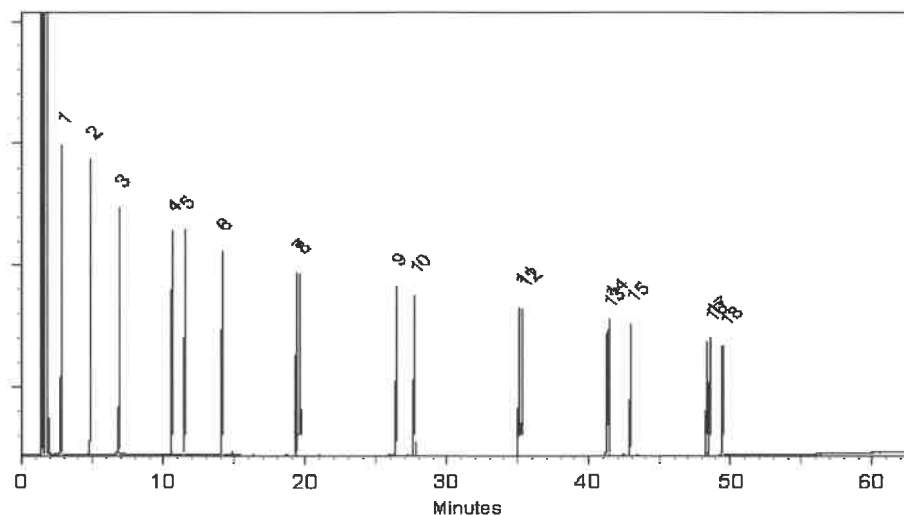
Inj. Temp:
250°C

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.

Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-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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$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

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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chromatographic plus



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Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

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

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

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

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

P13835
2
P13860 } Y-P.
12/09/12

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%	201.6 µg/mL	+/- 9.0835
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3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

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	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* 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.)

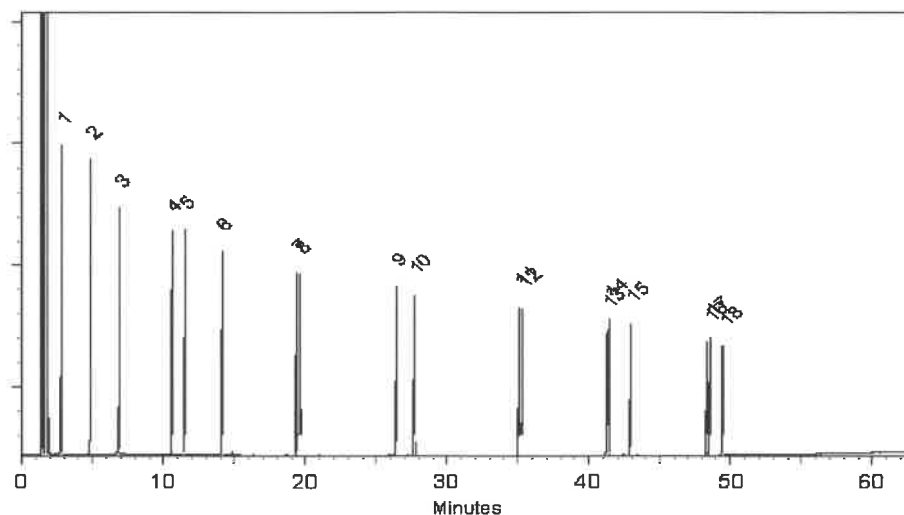
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-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.
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chromatographic plus



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Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

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

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

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

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

P13835
2
P13860 } Y-P.
12/09/12

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%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
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7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

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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.)

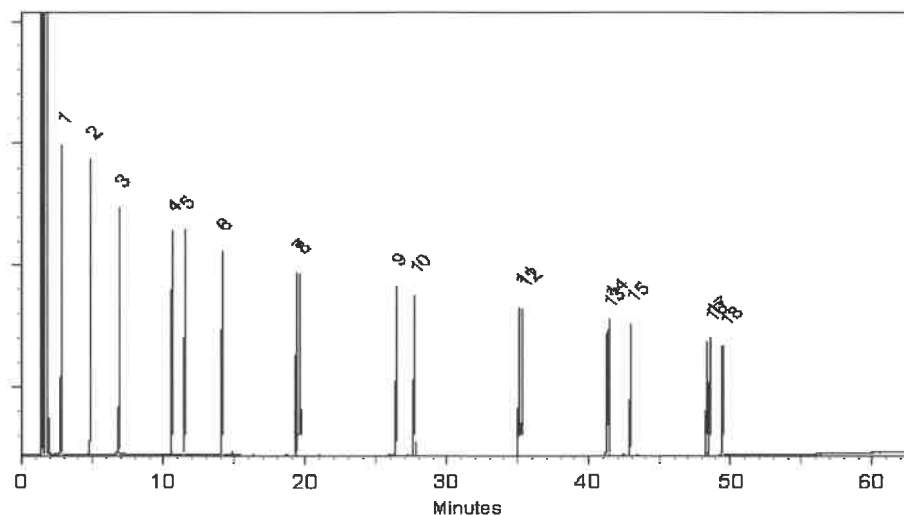
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Purity Notes:

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Catalog No. : 30543 **Lot No.:** A0217838

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

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

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

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

P13835
2
P13860 } Y-P.
12/09/12

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
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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:
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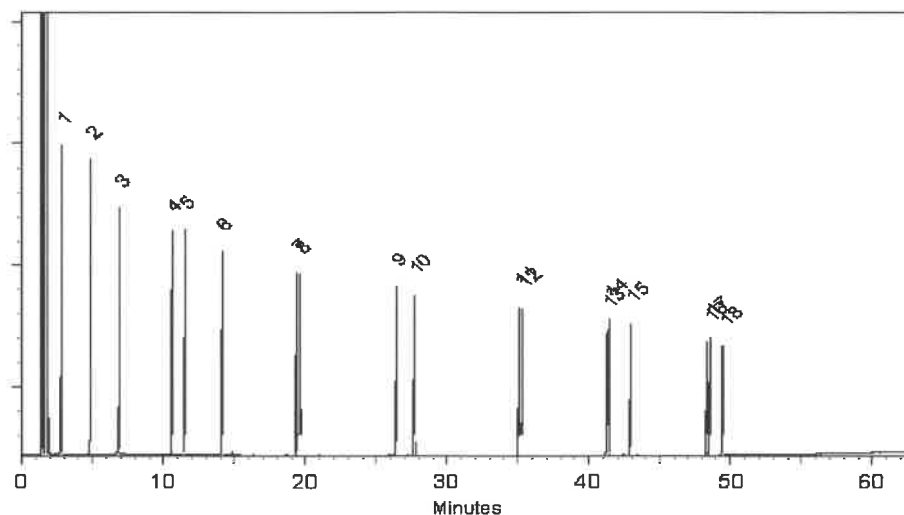
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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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. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

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

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

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

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

P13835
2
P13860 } Y-P.
12/09/12

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%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

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	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* 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.)

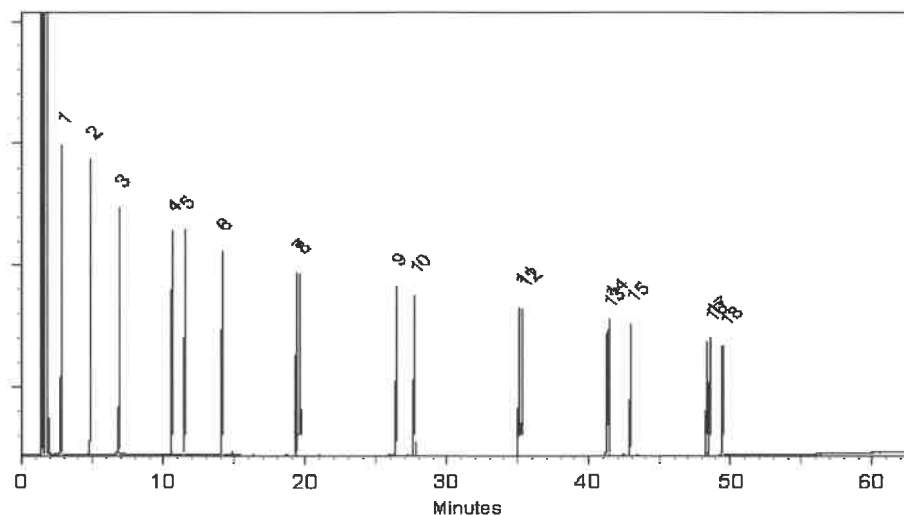
Inj. Temp:
250°C

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.

Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-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:

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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.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

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

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

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

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

P13835
2
P13860 } Y-P.
12/09/12

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%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

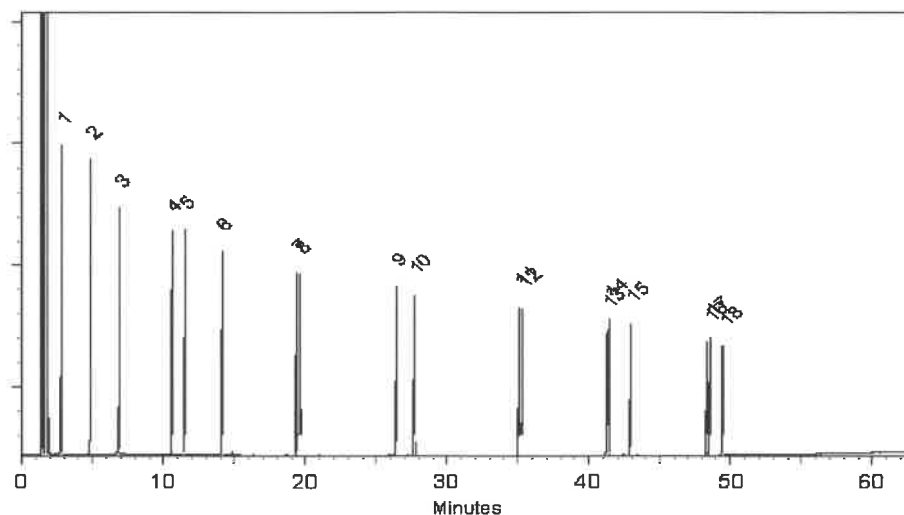
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0 µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* 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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Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-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.

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Manufacturing Notes:

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Handling Notes:

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chromatographic plus



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Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

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

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

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

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

P13835
2
P13860 } Y-P.
12/09/12

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%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

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	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* 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.)

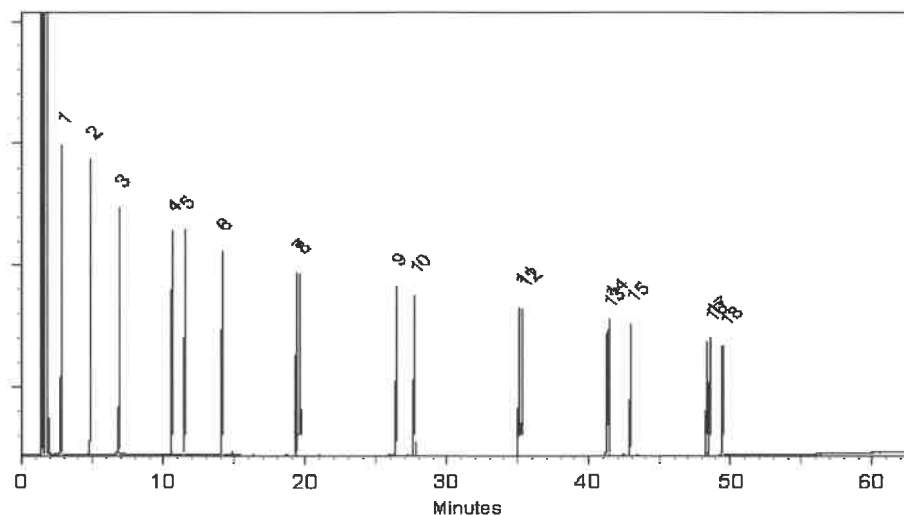
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-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.
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chromatographic plus



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Catalog No. : 30543 **Lot No.:** A0217838

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

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

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

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

P13835
2
P13860 } Y-P.
12/09/12

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
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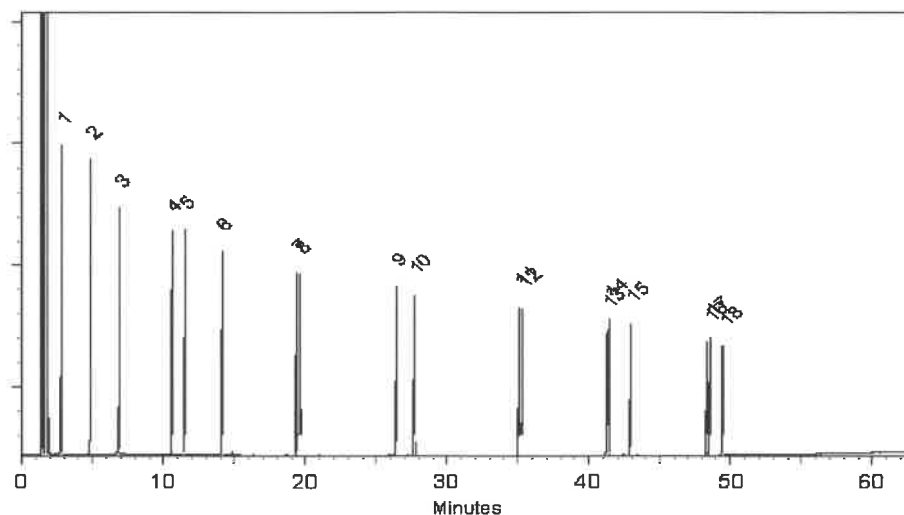
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* Expanded Uncertainty displayed in same units as Grav. Conc.

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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Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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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.

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



Material No.: 9262-03
Batch No.: 24G1962003
Manufactured Date: 2024-05-23
Expiration Date: 2025-08-22
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	3
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	1
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	$\geq 99.5 \%$	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	98 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	$\leq 0.05 \%$	< 0.01 %

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

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production



SHIPPING DOCUMENTS

CLIENT INFORMATION

COMPANY: Geop Inc
ADDRESS: 8 CARRIAGE
CITY: Juccasville STATE: NJ ZIP: 07876
ATTENTION:
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Stockton
PROJECT NO.: LOCATION: NJ
PROJECT MANAGER: GL
e-mail:
PHONE: 973 294 1771 FAX:

CLIENT BILLING INFORMATION

BILL TO: Geop Inc PO#:
ADDRESS: 8 CARRIAGE
CITY: Juccasville STATE: NJ ZIP: 07876
ATTENTION: PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) STANDARD 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 Excel
☒ EDD FORMAT MS Excel

PCB's
TRC Metals
EDH Cat 2
1,4 Dioxane

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										COMMENTS
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	GST1	S01	X	X	4/4/25	1230	1	X	X	X	X						
2.	GST2	S01	X	X	4/4/25	1248	1	X	X	X	X						
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER: 1. <u>MA</u>	DATE/TIME: <u>4/4/25</u>	RECEIVED BY: 1. <u>[Signature]</u> <u>4/4/25</u> <u>1234</u>	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP <u>2.8</u> °C Comments: <u>(Adjust FACTOR H)</u> <u>IR gun #1</u>
RELINQUISHED BY SAMPLER: 2.	DATE/TIME:	RECEIVED BY: 2.	
RELINQUISHED BY SAMPLER: 3.	DATE/TIME:	RECEIVED BY: 3.	

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

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488