

Cover Page

Order ID : Q1675

Project ID : Stockton

Client : G Environmental

Lab Sample Number

Q1675-01
Q1675-02
Q1675-03
Q1675-05
Q1675-06
Q1675-07
Q1675-08
Q1675-09
Q1675-10
Q1675-11
Q1675-12
Q1675-13
Q1675-14
Q1675-15
Q1675-16
Q1675-17
Q1675-18
Q1675-19
Q1675-20
Q1675-21

Client Sample Number

P1
P2
P3
P5
P6
T1
T2
T3
T4
T5
T6
D1
D2
D3
D4
D5
K1P
K1
K2
K3

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: 4/8/2025



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 # Q1675

Test Name: EPH_NF

A. Number of Samples and Date of Receipt:

20 Solid samples were received on 03/28/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: EPH_F2, EPH_NF, SVOCMS Group1, VOC-TCLVOA-10 and VOCMS Group1. This data package contains results for EPH_NF.

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_NFs 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 .

Samples D2 and D5 were diluted due to high concentrations.

E. Additional Comments:

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

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 #: Q1675

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 04/08/2025

LAB CHRONICLE

OrderID:	Q1675	OrderDate:	3/28/2025 11:22:41 AM
Client:	G Environmental	Project:	Stockton
Contact:	Gary Landis	Location:	I31,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1675-01	P1	Solid	EPH_F2	NJEPH	03/27/25	03/31/25	03/31/25	03/28/25
Q1675-02	P2	Solid	EPH_F2	NJEPH	03/27/25	03/31/25	03/31/25	03/28/25
Q1675-03	P3	Solid	EPH_F2	NJEPH	03/27/25	03/31/25	03/31/25	03/28/25
Q1675-05	P5	Solid	EPH_F2	NJEPH	03/27/25	03/31/25	03/31/25	03/28/25
			EPH_F2	NJEPH		03/31/25	04/01/25	
Q1675-05DL	P5DL	Solid	EPH_F2	NJEPH	03/27/25	03/31/25	04/01/25	03/28/25
Q1675-06	P6	Solid	EPH_F2	NJEPH	03/27/25	03/31/25	03/31/25	03/28/25
Q1675-13	D1	Solid	EPH_NF	NJEPH	03/27/25	03/31/25	03/31/25	03/28/25
Q1675-14	D2	Solid	EPH_NF	NJEPH	03/27/25	03/31/25	03/31/25	03/28/25
Q1675-14DL	D2DL	Solid	EPH_NF	NJEPH	03/27/25	03/31/25	04/01/25	03/28/25
Q1675-15	D3	Solid	EPH_NF	NJEPH	03/27/25	03/31/25	03/31/25	03/28/25
Q1675-16	D4	Solid			03/27/25			03/28/25

LAB CHRONICLE

			EPH_NF	NJEPH		03/31/25	03/31/25	
Q1675-17	D5	Solid			03/27/25			03/28/25
			EPH_NF	NJEPH		03/31/25	03/31/25	
Q1675-17DL	D5DL	Solid			03/27/25			03/28/25
			EPH_NF	NJEPH		03/31/25	04/01/25	
Q1675-18	K1P	Solid			03/28/25			03/28/25
			EPH_F2	NJEPH		03/31/25	03/31/25	
			EPH_F2	NJEPH		03/31/25	04/01/25	
Q1675-18DL	K1PDL	Solid			03/28/25			03/28/25
			EPH_F2	NJEPH		03/31/25	04/01/25	
Q1675-19	K1	Solid			03/28/25			03/28/25
			EPH_F2	NJEPH		03/31/25	03/31/25	
Q1675-20	K2	Solid			03/28/25			03/28/25
			EPH_F2	NJEPH		03/31/25	03/31/25	
Q1675-21	K3	Solid			03/28/25			03/28/25
			EPH_F2	NJEPH		03/31/25	03/31/25	



QC SUMMARY

SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: GENV01
Lab Code: CHEM CASE No.: Q1675 SAS No.: Q1675 SDG No.: Q1675
Run Number: FC033125AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)	ortho-Terphenyl (SURR)		TOT OUT
PB167381BL	71	71		0
PB167381BS	73	74		0
PB167381BSD	71	72		0
RT5358MS	66	67		0
RT5358MSD	67	67		0
D1	53	51		0
D2	68	68		0
D3	49	51		0
D4	66	67		0
D5	51	59		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.: Q1675 SAS No.: Q1675 SDG No.: Q1675
Run Number: FC040125AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)	ortho-Terphenyl (SURR)		TOT OUT
D2DL	66	75		0
D5DL	51	57		0

QC LIMITS

1-chlorooctadecane (SURR)

(40-140)

ortho-Terphenyl (SURR)

(40-140)

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

SOIL EPH SURROGATE RECOVERY

QC LIMITS

1-chlorooctadecane (SURR)

(40-140)

ortho-Terphenyl (SURR)

(40-140)

Column to be used to flag recovery values

* Values outside of contract required QC Limits

D Surrogate diluted out

SOLID EPH_NF MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** G Environmental
Lab Code: CHEM **Cas No:** Q1675 **SAS No :** Q1675 **SDG No:** Q1675
Sample No : Q1674-01MS **Datafile:** FC068452.D
Client ID : RT5358MS

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C28-C40	33.6	3.59	30.7	81		(40-140)
Aliphatic C9-C28	112.1	6.25	76.6	63		(40-140)

SOLID EPH_NF MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** G Environmental
Lab Code: CHEM **Cas No:** Q1675 **SAS No :** Q1675 **SDG No:** Q1675
Sample No : Q1674-01MSD **Datafile:** FC068453.D
Client ID : RT5358MSD

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	33.6	3.59	27.3	71		13.4 (40-140) 25
Aliphatic C9-C28	112.1	6.25	75.9	62		1.1 (40-140) 25

4B
METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167381BL

Lab Name: CHEMTECH

Contract: GENV01

Lab Code: CHEM Case No.: Q1675

SAS No.: Q1675 SDG NO.: Q1675

Instrument ID: FID_C

Lab Sample ID: PB167381BL

Matrix: (soil/water) Solid

Date Extracted: 3/31/2025 8:56:00 A

Level: (low/med) low

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

EPA SAMPLE NO.	LAB SAMPLE ID
PB167381BS	PB167381BS
PB167381BSD	PB167381BSD
RT5358MS	Q1674-01MS
RT5358MSD	Q1674-01MSD
D1	Q1675-13
D2	Q1675-14
D3	Q1675-15
D4	Q1675-16
D5	Q1675-17

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	G Environmental	Date Collected:	03/27/25
Project:	Stockton	Date Received:	03/28/25
Client Sample ID:	D1	SDG No.:	Q1675
Lab Sample ID:	Q1675-13	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	81.6
Sample Wt/Vol:	30.04	Units:	g
Soil Aliquot Vol:			uL
Prep Method :		Final Vol:	2000
		Test:	EPH_NF

Prep Date :	Date Analyzed :	Prep Batch ID
03/31/25 08:56	03/31/25 20:08	PB167381

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C28-C40	Aliphatic C28-C40	3.84		1	1.44	2.45	mg/kg FC068455.D
Aliphatic C9-C28	Aliphatic C9-C28	43.7		1	1.11	4.89	mg/kg FC068455.D
Total AliphaticEPH	Total AliphaticEPH	47.6			2.55	7.34	mg/kg
Total EPH	Total EPH	47.6			2.55	7.34	mg/kg

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	03/27/25
Project:	Stockton	Date Received:	03/28/25
Client Sample ID:	D1	SDG No.:	Q1675
Lab Sample ID:	Q1675-13	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	81.6
Sample Wt/Vol:	30.04 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068455.D	1	03/31/25	03/31/25	PB167381

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	43.7		1.11	4.89	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	3.84		1.44	2.45	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	26.5		40 - 140	53%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	25.7		40 - 140	51%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1675-13	Acq On:	31 Mar 2025 20:08
Client Sample ID:	D1	Operator:	YP/AJ
Data file:	FC068455.D	Misc:	
Instrument:	FID_C	ALS Vial:	21
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.098	6.359	9512836	58.606	300	ug/ml
Aliphatic C12-C16	6.360	9.743	37827096	224.901	200	ug/ml
Aliphatic C16-C21	9.744	13.097	37767946	220.208	300	ug/ml
Aliphatic C21-C28	13.098	16.748	5485240	32.482	400	ug/ml
Aliphatic C28-C40	16.749	21.546	6412384	47.09	600	ug/ml
Aliphatic EPH	3.098	21.546	97005502	583.287		ug/ml
ortho-Terphenyl (SURR)	11.386	11.386	5108416	25.72		ug/ml
1-chlorooctadecane (SURR)	12.828	12.828	3955469	26.53		ug/ml
Aliphatic C9-C28	3.098	16.748	90593118	536.197	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068455.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 20:08
Operator : YP/AJ
Sample : Q1675-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
D1

Integration File: autoint1.e
Quant Time: Apr 01 03:20:39 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.386	5108416	25.718 ug/ml
Spiked Amount	50.000	Recovery	= 51.44%
12) S 1-chlorooctadecane (S...	12.828	3955469	26.533 ug/ml
Spiked Amount	50.000	Recovery	= 53.07%

Target Compounds

(f)=RT Delta > 1/2 Window

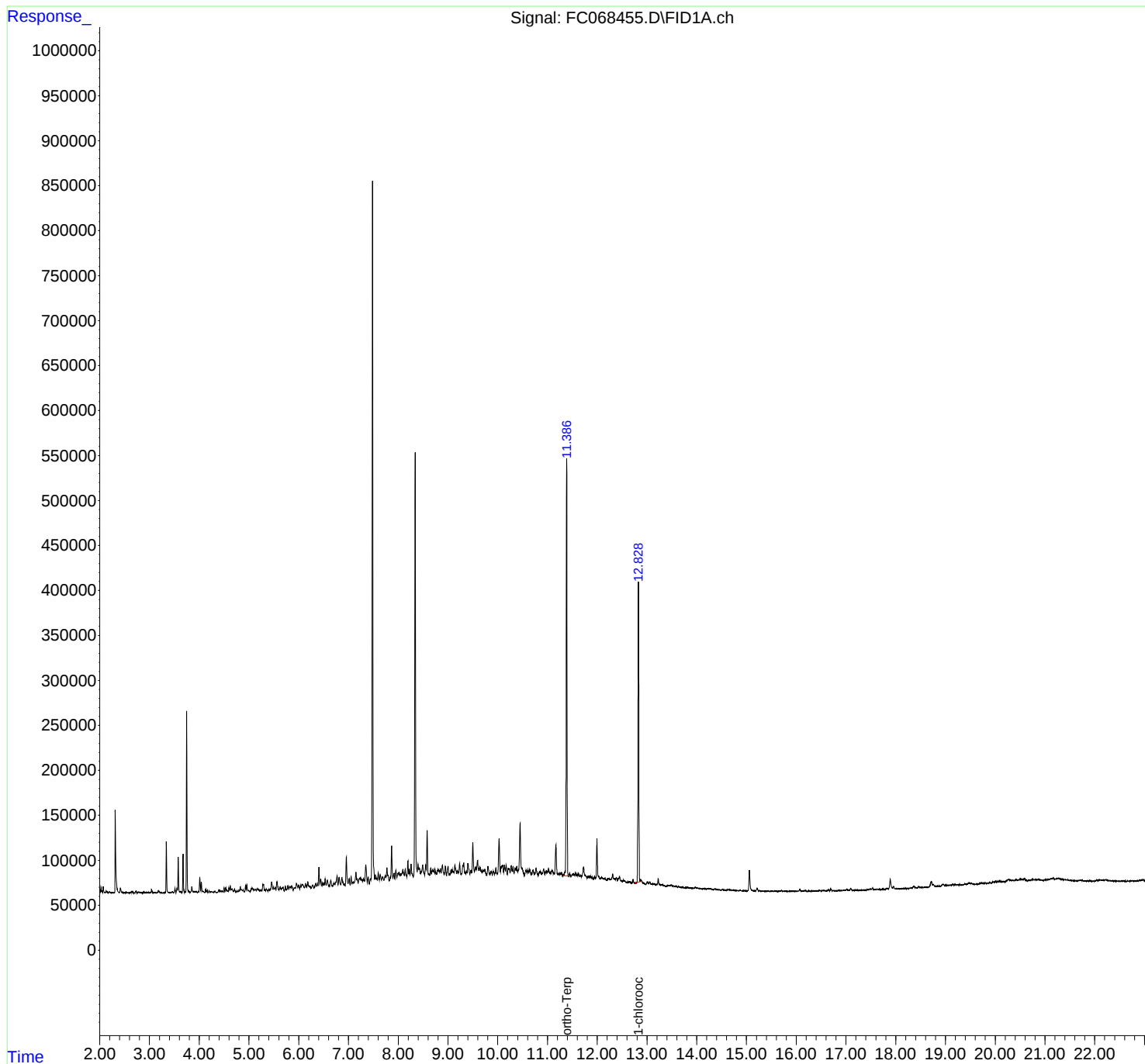
(m)=manual int.

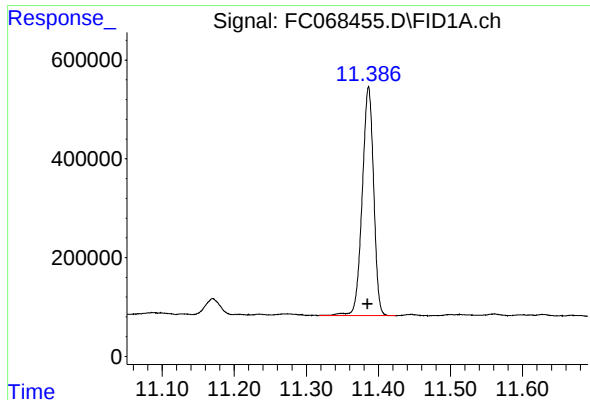
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068455.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 20:08
Operator : YP/AJ
Sample : Q1675-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
D1

Integration File: autoint1.e
Quant Time: Apr 01 03:20:39 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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

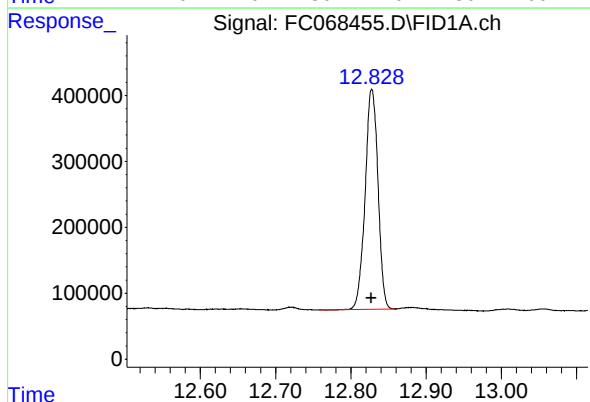




#9 ortho-Terphenyl (SURR)

R.T.: 11.386 min
Delta R.T.: 0.001 min
Response: 5108416
Conc: 25.72 ug/ml

Instrument :
FID_C
ClientSampleId :
D1



#12 1-chlorooctadecane (SURR)

R.T.: 12.828 min
Delta R.T.: 0.001 min
Response: 3955469
Conc: 26.53 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
 Data File : FC068455.D
 Signal(s) : FID1A.ch
 Acq On : 31 Mar 2025 20:08
 Sample : Q1675-13
 Misc :
 ALS Vial : 21 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	2.416	2.354	2.444	BV	3656	7818	0.12%	0.007%
2	2.453	2.444	2.487	PV	439	4795	0.08%	0.004%
3	2.505	2.487	2.519	PV	173	2078	0.03%	0.002%
4	2.537	2.519	2.607	PV	865	11728	0.19%	0.011%
5	2.635	2.607	2.645	VV	1549	14466	0.23%	0.013%
6	2.657	2.645	2.679	VV	1993	18972	0.30%	0.018%
7	2.686	2.679	2.701	VV	171	1275	0.02%	0.001%
8	2.724	2.701	2.764	PV	1922	31521	0.50%	0.029%
9	2.778	2.764	2.789	VV	1360	12890	0.21%	0.012%
10	2.797	2.789	2.811	VV	995	10858	0.17%	0.010%
11	2.820	2.811	2.865	VV	791	11977	0.19%	0.011%
12	2.896	2.865	2.914	VV	1265	17810	0.28%	0.016%
13	2.943	2.914	2.958	VV	998	15878	0.25%	0.015%
14	2.978	2.958	2.992	VV	757	11965	0.19%	0.011%
15	3.011	2.992	3.025	VV	645	9629	0.15%	0.009%
16	3.043	3.025	3.106	VV	3840	55316	0.88%	0.051%
17	3.123	3.106	3.144	VV	499	8029	0.13%	0.007%
18	3.178	3.144	3.221	VV	2984	45260	0.72%	0.042%
19	3.235	3.221	3.258	VV	377	5060	0.08%	0.005%
20	3.282	3.258	3.293	PV	400	4490	0.07%	0.004%
21	3.308	3.293	3.318	VV	791	7959	0.13%	0.007%
22	3.339	3.318	3.378	VV	55493	476544	7.60%	0.440%
23	3.387	3.378	3.408	VV	930	10263	0.16%	0.009%
24	3.421	3.408	3.433	VV	654	6769	0.11%	0.006%
25	3.463	3.433	3.483	VV	1102	22440	0.36%	0.021%
26	3.513	3.483	3.532	VV	5080	60429	0.96%	0.056%
27	3.578	3.532	3.606	VV	39917	410641	6.55%	0.379%
28	3.626	3.606	3.658	VV	1602	33879	0.54%	0.031%
29	3.675	3.658	3.708	VV	43271	365607	5.83%	0.338%
30	3.718	3.708	3.726	VV	1329	11601	0.19%	0.011%
31	3.748	3.726	3.817	VV	200776	1672728	26.69%	1.544%
32	3.852	3.817	3.897	VV	7087	109826	1.75%	0.101%
33	3.912	3.897	3.931	VV	1553	28021	0.45%	0.026%
34	3.940	3.931	3.963	VV	1420	19905	0.32%	0.018%
35	3.982	3.963	3.991	VV	1852	20613	0.33%	0.019%
36	4.012	3.991	4.030	VV	17577	194744	3.11%	0.180%

					rters			
37	4.043	4.030	4.065	VV	12264	124789	1.99%	0.115%
38	4.075	4.065	4.114	VV	1825	34298	0.55%	0.032%
39	4.129	4.114	4.144	VV	4332	38531	0.61%	0.036%
40	4.159	4.144	4.181	VV	2892	34913	0.56%	0.032%
41	4.198	4.181	4.221	VV	2153	32587	0.52%	0.030%
42	4.251	4.221	4.272	VV	1589	34335	0.55%	0.032%
43	4.282	4.272	4.297	VV	929	11099	0.18%	0.010%
44	4.315	4.297	4.337	VV	2070	26140	0.42%	0.024%
45	4.361	4.337	4.374	VV	647	11748	0.19%	0.011%
46	4.394	4.374	4.426	VV	3637	68245	1.09%	0.063%
47	4.441	4.426	4.458	VV	2342	37071	0.59%	0.034%
48	4.468	4.458	4.484	VV	1990	26164	0.42%	0.024%
49	4.500	4.484	4.515	VV	5563	57254	0.91%	0.053%
50	4.533	4.515	4.581	VV	5892	125487	2.00%	0.116%
51	4.597	4.581	4.609	VV	5626	61863	0.99%	0.057%
52	4.625	4.609	4.642	VV	7573	101423	1.62%	0.094%
53	4.660	4.642	4.691	VV	4650	93451	1.49%	0.086%
54	4.710	4.691	4.738	VV	4759	71636	1.14%	0.066%
55	4.765	4.738	4.782	VV	2163	44400	0.71%	0.041%
56	4.801	4.782	4.812	VV	3583	44360	0.71%	0.041%
57	4.827	4.812	4.871	VV	6813	132643	2.12%	0.122%
58	4.884	4.871	4.908	VV	3387	49701	0.79%	0.046%
59	4.932	4.908	4.945	VV	8363	94747	1.51%	0.087%
60	4.958	4.945	5.021	VV	9137	165589	2.64%	0.153%
61	5.050	5.021	5.060	VV	4907	72592	1.16%	0.067%
62	5.072	5.060	5.089	VV	4827	73718	1.18%	0.068%
63	5.101	5.089	5.121	VV	4354	69464	1.11%	0.064%
64	5.136	5.121	5.150	VV	3838	54467	0.87%	0.050%
65	5.167	5.150	5.181	VV	4984	71001	1.13%	0.066%
66	5.191	5.181	5.213	VV	3975	65759	1.05%	0.061%
67	5.225	5.213	5.241	VV	3370	47339	0.76%	0.044%
68	5.293	5.241	5.314	VV	9768	230321	3.67%	0.213%
69	5.323	5.314	5.333	VV	3271	34402	0.55%	0.032%
70	5.350	5.333	5.382	VV	4264	93490	1.49%	0.086%
71	5.400	5.382	5.412	VV	3638	53345	0.85%	0.049%
72	5.456	5.412	5.482	VV	12014	263501	4.20%	0.243%
73	5.493	5.482	5.509	VV	5965	77332	1.23%	0.071%
74	5.528	5.509	5.542	VV	6270	95772	1.53%	0.088%
75	5.563	5.542	5.603	VV	12407	257516	4.11%	0.238%
76	5.627	5.603	5.653	VV	6660	137579	2.20%	0.127%
77	5.686	5.653	5.707	VV	6369	145025	2.31%	0.134%
78	5.733	5.707	5.750	VV	7340	111888	1.79%	0.103%
79	5.783	5.750	5.800	VV	8089	157168	2.51%	0.145%
80	5.825	5.800	5.841	VV	7009	146701	2.34%	0.135%
81	5.857	5.841	5.891	VV	7650	183205	2.92%	0.169%
82	5.914	5.891	5.931	VV	5519	111135	1.77%	0.103%
83	5.956	5.931	5.983	VV	10587	238709	3.81%	0.220%
84	6.000	5.983	6.021	VV	8383	157792	2.52%	0.146%
85	6.038	6.021	6.048	VV	7822	103596	1.65%	0.096%
86	6.078	6.048	6.116	VV	9453	315472	5.03%	0.291%
87	6.136	6.116	6.161	VV	9792	202334	3.23%	0.187%
88	6.184	6.161	6.254	VV	12231	431643	6.89%	0.398%
89	6.276	6.254	6.305	VV	8502	210859	3.36%	0.195%

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90	6.343	6.305	6.362	VV	10359	262429	4.19%	0.242%
91	6.379	6.362	6.388	VV	9914	130608	2.08%	0.121%
92	6.407	6.388	6.428	VV	28176	404092	6.45%	0.373%
93	6.442	6.428	6.465	VV	15295	267342	4.27%	0.247%
94	6.478	6.465	6.490	VV	11311	145404	2.32%	0.134%
95	6.504	6.490	6.515	VV	9700	132132	2.11%	0.122%
96	6.532	6.515	6.552	VV	15218	253243	4.04%	0.234%
97	6.574	6.552	6.601	VV	13998	315522	5.03%	0.291%
98	6.609	6.601	6.621	VV	8452	92084	1.47%	0.085%
99	6.645	6.621	6.676	VV	13508	333709	5.32%	0.308%
100	6.714	6.676	6.731	VV	10467	296241	4.73%	0.273%
101	6.771	6.731	6.792	VV	18661	475569	7.59%	0.439%
102	6.812	6.792	6.844	VV	16971	386295	6.16%	0.357%
103	6.869	6.844	6.907	VV	16693	457074	7.29%	0.422%
104	6.919	6.907	6.933	VV	9818	135296	2.16%	0.125%
105	6.958	6.933	6.993	VV	39246	700353	11.17%	0.647%
106	7.014	6.993	7.034	VV	15492	296893	4.74%	0.274%
107	7.055	7.034	7.072	VV	17492	300208	4.79%	0.277%
108	7.082	7.072	7.090	VV	11117	111638	1.78%	0.103%
109	7.102	7.090	7.111	VV	11361	142682	2.28%	0.132%
110	7.152	7.111	7.169	VV	22642	539441	8.61%	0.498%
111	7.177	7.169	7.196	VV	15239	217861	3.48%	0.201%
112	7.226	7.196	7.234	VV	15803	324334	5.17%	0.299%
113	7.244	7.234	7.287	VV	15990	460408	7.35%	0.425%
114	7.303	7.287	7.328	VV	15203	337713	5.39%	0.312%
115	7.349	7.328	7.379	VV	30588	658420	10.51%	0.608%
116	7.397	7.379	7.420	VV	17122	322760	5.15%	0.298%
117	7.541	7.528	7.581	VV	19755	523588	8.35%	0.483%
118	7.601	7.581	7.621	VV	22056	420172	6.70%	0.388%
119	7.640	7.621	7.664	VV	19738	438204	6.99%	0.405%
120	7.688	7.664	7.712	VV	17362	450668	7.19%	0.416%
121	7.738	7.712	7.753	VV	18051	403381	6.44%	0.372%
122	7.775	7.753	7.820	VV	27478	781117	12.46%	0.721%
123	7.868	7.820	7.896	VV	51370	1077314	17.19%	0.995%
124	7.915	7.896	7.933	VV	21178	408975	6.53%	0.378%
125	7.954	7.933	7.975	VV	24852	510276	8.14%	0.471%
126	8.009	7.975	8.034	VV	21522	713292	11.38%	0.659%
127	8.053	8.034	8.064	VV	20214	353341	5.64%	0.326%
128	8.095	8.064	8.124	VV	25718	788252	12.58%	0.728%
129	8.142	8.124	8.174	VV	25900	618507	9.87%	0.571%
130	8.195	8.174	8.212	VV	34889	595363	9.50%	0.550%
131	8.224	8.212	8.240	VV	26123	380852	6.08%	0.352%
132	8.260	8.240	8.304	VV	31183	887431	14.16%	0.819%
133	8.398	8.382	8.413	VV	31311	513120	8.19%	0.474%
134	8.425	8.413	8.447	VV	27079	506805	8.09%	0.468%
135	8.493	8.447	8.531	VV	30717	1198953	19.13%	1.107%
136	8.554	8.531	8.564	VV	30520	511396	8.16%	0.472%
137	8.583	8.564	8.608	VV	68223	1043456	16.65%	0.963%
138	8.617	8.608	8.638	VV	20547	359925	5.74%	0.332%
139	8.654	8.638	8.668	VV	27162	427651	6.82%	0.395%
140	8.699	8.668	8.712	VV	24274	608484	9.71%	0.562%
141	8.725	8.712	8.741	VV	25980	413051	6.59%	0.381%

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142	8.753	8.741	8.770	VV	23584	375891	6.00%	0.347%
143	8.803	8.770	8.833	VV	25989	890590	14.21%	0.822%
144	8.848	8.833	8.862	VV	26322	421914	6.73%	0.390%
145	8.889	8.862	8.921	VV	30402	879199	14.03%	0.812%
146	8.949	8.921	8.971	VV	29212	708613	11.31%	0.654%
147	9.002	8.971	9.023	VV	28766	725081	11.57%	0.669%
148	9.033	9.023	9.044	VV	20579	260288	4.15%	0.240%
149	9.061	9.044	9.073	VV	24622	388803	6.20%	0.359%
150	9.087	9.073	9.120	VV	25148	652541	10.41%	0.602%
151	9.141	9.120	9.176	VV	30462	844507	13.47%	0.780%
152	9.190	9.176	9.206	VV	23664	407961	6.51%	0.377%
153	9.236	9.206	9.261	VV	31876	823023	13.13%	0.760%
154	9.317	9.261	9.344	VV	32322	1267766	20.23%	1.170%
155	9.374	9.344	9.384	VV	22780	522264	8.33%	0.482%
156	9.402	9.384	9.441	VV	32112	876383	13.98%	0.809%
157	9.461	9.441	9.476	VV	23727	465231	7.42%	0.430%
158	9.501	9.476	9.532	VV	55549	1131827	18.06%	1.045%
159	9.555	9.532	9.569	VV	27556	578061	9.22%	0.534%
160	9.595	9.569	9.619	VV	35058	876903	13.99%	0.810%
161	9.643	9.619	9.684	VV	27603	963306	15.37%	0.889%
162	9.719	9.684	9.726	VV	24186	596048	9.51%	0.550%
163	9.744	9.726	9.780	VV	25648	729685	11.64%	0.674%
164	9.806	9.780	9.841	VV	28715	849484	13.55%	0.784%
165	9.869	9.841	9.894	VV	23288	688981	10.99%	0.636%
166	9.913	9.894	9.934	VV	22920	522239	8.33%	0.482%
167	9.964	9.934	9.998	VV	27180	853053	13.61%	0.788%
168	10.029	9.998	10.054	VV	59232	1249005	19.93%	1.153%
169	10.096	10.054	10.119	VV	29457	1048966	16.74%	0.968%
170	10.136	10.119	10.154	VV	30220	556258	8.88%	0.514%
171	10.171	10.154	10.193	VV	29992	592464	9.45%	0.547%
172	10.214	10.193	10.225	VV	26881	460942	7.35%	0.426%
173	10.233	10.225	10.250	VV	26246	373912	5.97%	0.345%
174	10.272	10.250	10.292	VV	29551	634950	10.13%	0.586%
175	10.309	10.292	10.327	VV	28381	530222	8.46%	0.490%
176	10.352	10.327	10.365	VV	27040	560874	8.95%	0.518%
177	10.382	10.365	10.404	VV	28078	600094	9.57%	0.554%
178	10.451	10.404	10.536	VV	76530	2595283	41.41%	2.396%
179	10.571	10.536	10.591	VV	24433	724834	11.56%	0.669%
180	10.608	10.591	10.625	VV	24146	474275	7.57%	0.438%
181	10.645	10.625	10.671	VV	25122	628210	10.02%	0.580%
182	10.707	10.671	10.736	VV	24317	854650	13.64%	0.789%
183	10.771	10.736	10.809	VV	26421	964318	15.39%	0.890%
184	10.846	10.809	10.891	VV	22740	1037944	16.56%	0.958%
185	10.925	10.891	10.947	VV	25656	752064	12.00%	0.694%
186	10.976	10.947	10.990	VV	23386	564676	9.01%	0.521%
187	11.019	10.990	11.058	VV	23964	912339	14.56%	0.842%
188	11.087	11.058	11.142	VV	24091	1105866	17.64%	1.021%
189	11.170	11.142	11.222	VV	52372	1409102	22.48%	1.301%
190	11.235	11.222	11.251	VV	20864	345950	5.52%	0.319%
191	11.273	11.251	11.317	VV	21459	779967	12.44%	0.720%
192	11.386	11.317	11.424	VV	480188	6267506	100.00%	5.786%
193	11.445	11.424	11.484	VV	20153	666999	10.64%	0.616%
194	11.500	11.484	11.537	VV	20141	608981	9.72%	0.562%

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195	11.560	11.537	11.581	VV	21460	511687	8.16%	0.472%
196	11.599	11.581	11.617	VV	19235	402297	6.42%	0.371%
197	11.628	11.617	11.657	VV	20147	450284	7.18%	0.416%
198	11.669	11.657	11.689	VV	18564	340623	5.43%	0.314%
199	11.725	11.689	11.797	VV	27826	1299294	20.73%	1.200%
200	11.817	11.797	11.837	VV	17617	396619	6.33%	0.366%
201	11.854	11.837	11.889	VV	17537	530366	8.46%	0.490%
202	11.897	11.889	11.923	VV	16054	308488	4.92%	0.285%
203	11.945	11.923	11.968	VV	17060	422027	6.73%	0.390%
204	11.996	11.968	12.071	VV	59513	1441293	23.00%	1.331%
205	12.093	12.071	12.140	VV	16262	628532	10.03%	0.580%
206	12.156	12.140	12.191	VV	15154	429383	6.85%	0.396%
207	12.215	12.191	12.241	VV	14635	425782	6.79%	0.393%
208	12.248	12.241	12.280	VV	14247	332580	5.31%	0.307%
209	12.310	12.280	12.332	VV	19433	513701	8.20%	0.474%
210	12.340	12.332	12.362	VV	14790	258081	4.12%	0.238%
211	12.386	12.362	12.411	VV	15518	416812	6.65%	0.385%
212	12.448	12.411	12.514	VV	17238	851123	13.58%	0.786%
213	12.530	12.514	12.542	VV	12978	208135	3.32%	0.192%
214	12.554	12.542	12.598	VV	12338	373085	5.95%	0.344%
215	12.622	12.598	12.637	VV	11099	252793	4.03%	0.233%
216	12.655	12.637	12.695	VV	11409	369336	5.89%	0.341%
217	12.721	12.695	12.769	VV	13867	481128	7.68%	0.444%
218	12.828	12.769	12.860	VV	344857	4537776	72.40%	4.189%
219	12.879	12.860	12.976	VV	13491	733178	11.70%	0.677%
220	13.008	12.976	13.033	VV	10963	329320	5.25%	0.304%
221	13.056	13.033	13.081	VV	11048	282757	4.51%	0.261%
222	13.091	13.081	13.101	VV	8726	102655	1.64%	0.095%
223	13.121	13.101	13.139	VV	8987	194227	3.10%	0.179%
224	13.153	13.139	13.178	VV	8919	196514	3.14%	0.181%
225	13.224	13.178	13.294	VV	14550	627699	10.02%	0.579%
226	13.310	13.294	13.381	VV	8291	360967	5.76%	0.333%
227	13.424	13.381	13.448	VV	7221	266949	4.26%	0.246%
228	13.460	13.448	13.474	VV	7189	110968	1.77%	0.102%
229	13.494	13.474	13.524	VV	7597	207227	3.31%	0.191%
230	13.534	13.524	13.556	VV	6615	118113	1.88%	0.109%
231	13.585	13.556	13.605	VV	6595	175124	2.79%	0.162%
232	13.629	13.605	13.685	VV	5788	254514	4.06%	0.235%
233	13.704	13.685	13.746	VV	4962	172699	2.76%	0.159%
234	13.811	13.746	13.849	VV	4930	273825	4.37%	0.253%
235	13.873	13.849	13.911	VV	4203	148807	2.37%	0.137%
236	13.928	13.911	13.948	VV	4132	86675	1.38%	0.080%
237	13.971	13.948	13.997	VV	4784	126153	2.01%	0.116%
238	14.015	13.997	14.039	VV	4211	97419	1.55%	0.090%
239	14.048	14.039	14.113	VV	3734	147122	2.35%	0.136%
240	14.141	14.113	14.184	VV	3564	134078	2.14%	0.124%
241	14.207	14.184	14.228	VV	3456	83119	1.33%	0.077%
242	14.238	14.228	14.251	VV	3317	44789	0.71%	0.041%
243	14.263	14.251	14.341	VV	3418	151405	2.42%	0.140%
244	14.365	14.341	14.405	VV	3308	102335	1.63%	0.094%
245	14.414	14.405	14.475	VV	2363	88383	1.41%	0.082%
246	14.520	14.475	14.570	VV	2485	111996	1.79%	0.103%

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247	14.588	14.570	14.597	VV	1789	27146	0.43%	0.025%
248	14.608	14.597	14.623	VV	1850	27542	0.44%	0.025%
249	14.645	14.623	14.666	VV	2584	54194	0.86%	0.050%
250	14.680	14.666	14.707	VV	1926	41890	0.67%	0.039%
251	14.726	14.707	14.778	VV	1741	62731	1.00%	0.058%
252	14.794	14.778	14.804	VV	1279	19988	0.32%	0.018%
253	14.823	14.804	14.850	VV	1292	32091	0.51%	0.030%
254	14.872	14.850	14.896	VV	1703	34704	0.55%	0.032%
255	14.904	14.896	14.924	VV	976	16376	0.26%	0.015%
256	14.927	14.924	15.011	VV	1016	42386	0.68%	0.039%
257	15.057	15.011	15.176	VV	23688	428204	6.83%	0.395%
258	15.213	15.176	15.239	VV	3898	73408	1.17%	0.068%
259	15.254	15.239	15.297	VV	971	23722	0.38%	0.022%
260	15.314	15.297	15.369	VV	493	14550	0.23%	0.013%
261	15.382	15.369	15.390	VV	304	2840	0.05%	0.003%
262	15.403	15.390	15.431	VV	325	6548	0.10%	0.006%
263	15.445	15.431	15.478	VV	376	7572	0.12%	0.007%
264	15.511	15.478	15.547	VV	496	12917	0.21%	0.012%
265	15.578	15.547	15.629	VV	795	19952	0.32%	0.018%
266	15.699	15.629	15.748	VV	1093	24554	0.39%	0.023%
267	15.768	15.748	15.826	VV	286	5599	0.09%	0.005%
268	15.881	15.826	15.911	PV	174	4949	0.08%	0.005%
269	15.918	15.911	15.964	VV	202	2760	0.04%	0.003%
270	15.981	15.964	16.001	VV	367	4725	0.08%	0.004%
271	16.071	16.001	16.112	VV	2434	49722	0.79%	0.046%
272	16.121	16.112	16.132	VV	338	3517	0.06%	0.003%
273	16.183	16.132	16.220	VV	1486	28491	0.45%	0.026%
274	16.259	16.220	16.282	VV	595	10717	0.17%	0.010%
275	16.317	16.282	16.364	PV	455	9013	0.14%	0.008%
276	16.370	16.364	16.406	VV	117	3081	0.05%	0.003%
277	16.480	16.406	16.511	VV	625	21728	0.35%	0.020%
278	16.544	16.511	16.621	VV	731	25360	0.40%	0.023%
279	16.648	16.621	16.671	VV	1559	22717	0.36%	0.021%
280	16.693	16.671	16.754	VV	2474	38439	0.61%	0.035%
281	16.768	16.754	16.778	PV	130	1034	0.02%	0.001%
282	16.789	16.778	16.828	VV	129	1441	0.02%	0.001%
283	16.865	16.828	16.875	PV	179	3517	0.06%	0.003%
284	16.932	16.875	16.941	VV	305	8246	0.13%	0.008%
285	16.959	16.941	16.988	VV	304	7179	0.11%	0.007%
286	17.013	16.988	17.071	VV	1429	36409	0.58%	0.034%
287	17.097	17.071	17.140	VV	2426	40304	0.64%	0.037%
288	17.184	17.140	17.218	VV	390	12496	0.20%	0.012%
289	17.223	17.218	17.248	VV	202	2307	0.04%	0.002%
290	17.254	17.248	17.274	VV	99	981	0.02%	0.001%
291	17.296	17.274	17.329	PV	125	1803	0.03%	0.002%
292	17.351	17.329	17.363	VV	148	1093	0.02%	0.001%
293	17.382	17.363	17.395	VV	112	1241	0.02%	0.001%
294	17.432	17.395	17.441	VV	225	3260	0.05%	0.003%
295	17.489	17.441	17.514	VV	1265	27481	0.44%	0.025%
296	17.532	17.514	17.568	VV	2029	32134	0.51%	0.030%
297	17.625	17.568	17.678	VV	652	22950	0.37%	0.021%
298	17.697	17.678	17.714	VV	284	5029	0.08%	0.005%
299	17.740	17.714	17.785	VV	841	14969	0.24%	0.014%

					rteres			
300	17.827	17.785	17.850	VV	820	19117	0.31%	0.018%
301	17.889	17.850	17.934	VV	11143	209607	3.34%	0.194%
302	17.956	17.934	18.003	VV	3295	60814	0.97%	0.056%
303	18.014	18.003	18.037	VV	420	6961	0.11%	0.006%
304	18.048	18.037	18.088	VV	358	6535	0.10%	0.006%
305	18.129	18.088	18.138	VV	286	5039	0.08%	0.005%
306	18.162	18.138	18.190	VV	457	7915	0.13%	0.007%
307	18.202	18.190	18.231	PV	344	5320	0.08%	0.005%
308	18.239	18.231	18.287	VV	284	6387	0.10%	0.006%
309	18.313	18.287	18.334	VV	714	15012	0.24%	0.014%
310	18.364	18.334	18.425	VV	2710	66466	1.06%	0.061%
311	18.461	18.425	18.491	VV	1396	36816	0.59%	0.034%
312	18.506	18.491	18.547	VV	980	24145	0.39%	0.022%
313	18.554	18.547	18.568	VV	748	6684	0.11%	0.006%
314	18.612	18.568	18.647	VV	798	29903	0.48%	0.028%
315	18.716	18.647	18.747	VV	6705	193245	3.08%	0.178%
316	18.756	18.747	18.798	VV	3443	70827	1.13%	0.065%
317	18.808	18.798	18.838	VV	1547	33414	0.53%	0.031%
318	18.866	18.838	18.897	VV	1590	46615	0.74%	0.043%
319	18.949	18.897	18.986	VV	3127	116886	1.86%	0.108%
320	18.996	18.986	19.018	VV	2273	40351	0.64%	0.037%
321	19.027	19.018	19.057	VV	2108	45440	0.73%	0.042%
322	19.083	19.057	19.098	VV	2064	47377	0.76%	0.044%
323	19.147	19.098	19.172	VV	2921	99404	1.59%	0.092%
324	19.200	19.172	19.211	VV	2390	53910	0.86%	0.050%
325	19.225	19.211	19.232	VV	2303	26670	0.43%	0.025%
326	19.239	19.232	19.255	VV	2434	29084	0.46%	0.027%
327	19.293	19.255	19.311	VV	2192	63458	1.01%	0.059%
328	19.332	19.311	19.344	VV	1964	32470	0.52%	0.030%
329	19.399	19.344	19.428	VV	2817	110932	1.77%	0.102%
330	19.461	19.428	19.481	VV	3344	94153	1.50%	0.087%
331	19.486	19.481	19.505	VV	3581	45422	0.72%	0.042%
332	19.521	19.505	19.587	VV	3356	125575	2.00%	0.116%
333	19.597	19.587	19.628	VV	1965	44110	0.70%	0.041%
334	19.635	19.628	19.641	VV	1695	13568	0.22%	0.013%
335	19.737	19.641	19.755	VV	3338	167339	2.67%	0.154%
336	19.795	19.755	19.861	VV	3027	167824	2.68%	0.155%
337	19.897	19.861	19.918	VV	3349	96656	1.54%	0.089%
338	19.952	19.918	19.975	VV	3946	114208	1.82%	0.105%
339	20.032	19.975	20.048	VV	4117	161212	2.57%	0.149%
340	20.061	20.048	20.070	VV	4052	49716	0.79%	0.046%
341	20.085	20.070	20.125	VV	4144	122333	1.95%	0.113%
342	20.135	20.125	20.142	VV	3692	35816	0.57%	0.033%
343	20.169	20.142	20.198	VV	3778	116516	1.86%	0.108%
344	20.267	20.198	20.294	VV	5838	274702	4.38%	0.254%
345	20.310	20.294	20.344	VV	5101	139921	2.23%	0.129%
346	20.351	20.344	20.384	VV	4765	101521	1.62%	0.094%
347	20.424	20.384	20.464	VV	5520	229588	3.66%	0.212%
348	20.496	20.464	20.527	VV	5615	194111	3.10%	0.179%
349	20.590	20.527	20.650	VV	5633	352478	5.62%	0.325%
350	20.683	20.650	20.707	VV	4039	128448	2.05%	0.119%
351	20.725	20.707	20.784	VV	4651	202906	3.24%	0.187%

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352	20.801	20.784	20.861	VV	4465	194154	3.10%	0.179%	
353	20.870	20.861	20.906	VV	4386	106999	1.71%	0.099%	
354	20.918	20.906	20.964	VV	3794	124951	1.99%	0.115%	
355	21.027	20.964	21.044	VV	3805	170344	2.72%	0.157%	
356	21.076	21.044	21.089	VV	3956	99788	1.59%	0.092%	
357	21.164	21.089	21.198	VV	5070	301727	4.81%	0.279%	
358	21.215	21.198	21.223	VV	4288	63868	1.02%	0.059%	
359	21.233	21.223	21.239	VV	4393	40647	0.65%	0.038%	
360	21.257	21.239	21.342	VV	4765	253882	4.05%	0.234%	
361	21.354	21.342	21.393	VV	3389	90963	1.45%	0.084%	
362	21.415	21.393	21.432	VV	3132	66588	1.06%	0.061%	
363	21.447	21.432	21.459	VV	2860	43510	0.69%	0.040%	
364	21.464	21.459	21.488	VV	2532	39496	0.63%	0.036%	
365	21.499	21.488	21.512	VV	2143	30470	0.49%	0.028%	
366	21.519	21.512	21.580	VV	2054	66196	1.06%	0.061%	
367	21.598	21.580	21.619	VV	1384	29998	0.48%	0.028%	
368	21.636	21.619	21.655	VV	1431	28449	0.45%	0.026%	
369	21.691	21.655	21.701	VV	1645	39928	0.64%	0.037%	
370	21.721	21.701	21.778	VV	1917	60337	0.96%	0.056%	
371	21.800	21.778	21.830	VV	924	24230	0.39%	0.022%	
372	21.850	21.830	21.911	VV	1025	30545	0.49%	0.028%	
373	21.921	21.911	21.954	VV	565	6497	0.10%	0.006%	
374	21.979	21.954	21.988	PV	223	2834	0.05%	0.003%	
375	22.051	21.988	22.060	PV	799	14488	0.23%	0.013%	
376	22.086	22.060	22.104	VV	893	15960	0.25%	0.015%	
377	22.121	22.104	22.148	VV	787	12954	0.21%	0.012%	
378	22.163	22.148	22.174	VV	255	2676	0.04%	0.002%	
					Sum of corrected areas:				108318656

Aliphatic EPH 032625.M Tue Apr 01 04:47:06 2025

Report of Analysis

Client:	G Environmental	Date Collected:	03/27/25
Project:	Stockton	Date Received:	03/28/25
Client Sample ID:	D2	SDG No.:	Q1675
Lab Sample ID:	Q1675-14	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	95.4
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:		Final Vol:	2000 uL
Prep Method :		Test:	EPH_NF

Prep Date :	Date Analyzed :	Prep Batch ID
03/31/25 08:56	03/31/25 20:45	PB167381

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C28-C40	Aliphatic C28-C40	4.58		1	1.23	2.09	mg/kg FC068456.D
Aliphatic C9-C28	Aliphatic C9-C28	328		10	9.51	41.9	mg/kg FC068465.D
Total AliphaticEPH	Total AliphaticEPH	332			10.7	44.0	mg/kg
Total EPH	Total EPH	332			10.7	44.0	mg/kg

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	03/27/25
Project:	Stockton	Date Received:	03/28/25
Client Sample ID:	D2	SDG No.:	Q1675
Lab Sample ID:	Q1675-14	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	95.4
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:		Final Vol:	2000 uL
Prep Method :		Test:	EPH_NF

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068456.D	1	03/31/25	03/31/25	PB167381

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	303	E	0.95	4.19	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	4.58		1.23	2.09	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	33.8		40 - 140	68%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	34.0		40 - 140	68%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1675-14	Acq On:	31 Mar 2025 20:45
Client Sample ID:	D2	Operator:	YP/AJ
Data file:	FC068456.D	Misc:	
Instrument:	FID_C	ALS Vial:	22
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.098	6.359	60976914	375.661	300	ug/ml
Aliphatic C12-C16	6.360	9.743	307191644	1830	200	ug/ml
Aliphatic C16-C21	9.744	13.097	312787023	1820	300	ug/ml
Aliphatic C21-C28	13.098	16.748	55475174	328.508	400	ug/ml
Aliphatic C28-C40	16.749	21.546	8941509	65.663	600	ug/ml
Aliphatic EPH	3.098	21.546	745372264	4420		ug/ml
ortho-Terphenyl (SURR)	11.391	11.391	6750631	33.99		ug/ml
1-chlorooctadecane (SURR)	12.832	12.832	5043806	33.83		ug/ml
Aliphatic C9-C28	3.098	16.748	736430755	4350	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068456.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 20:45
Operator : YP/AJ
Sample : Q1675-14
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
D2

Integration File: autoint1.e
Quant Time: Apr 01 03:20:55 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.391	6750631	33.986 ug/ml
Spiked Amount	50.000	Recovery	= 67.97%
12) S 1-chlorooctadecane (S...	12.832	5043806	33.834 ug/ml
Spiked Amount	50.000	Recovery	= 67.67%

Target Compounds

(f)=RT Delta > 1/2 Window

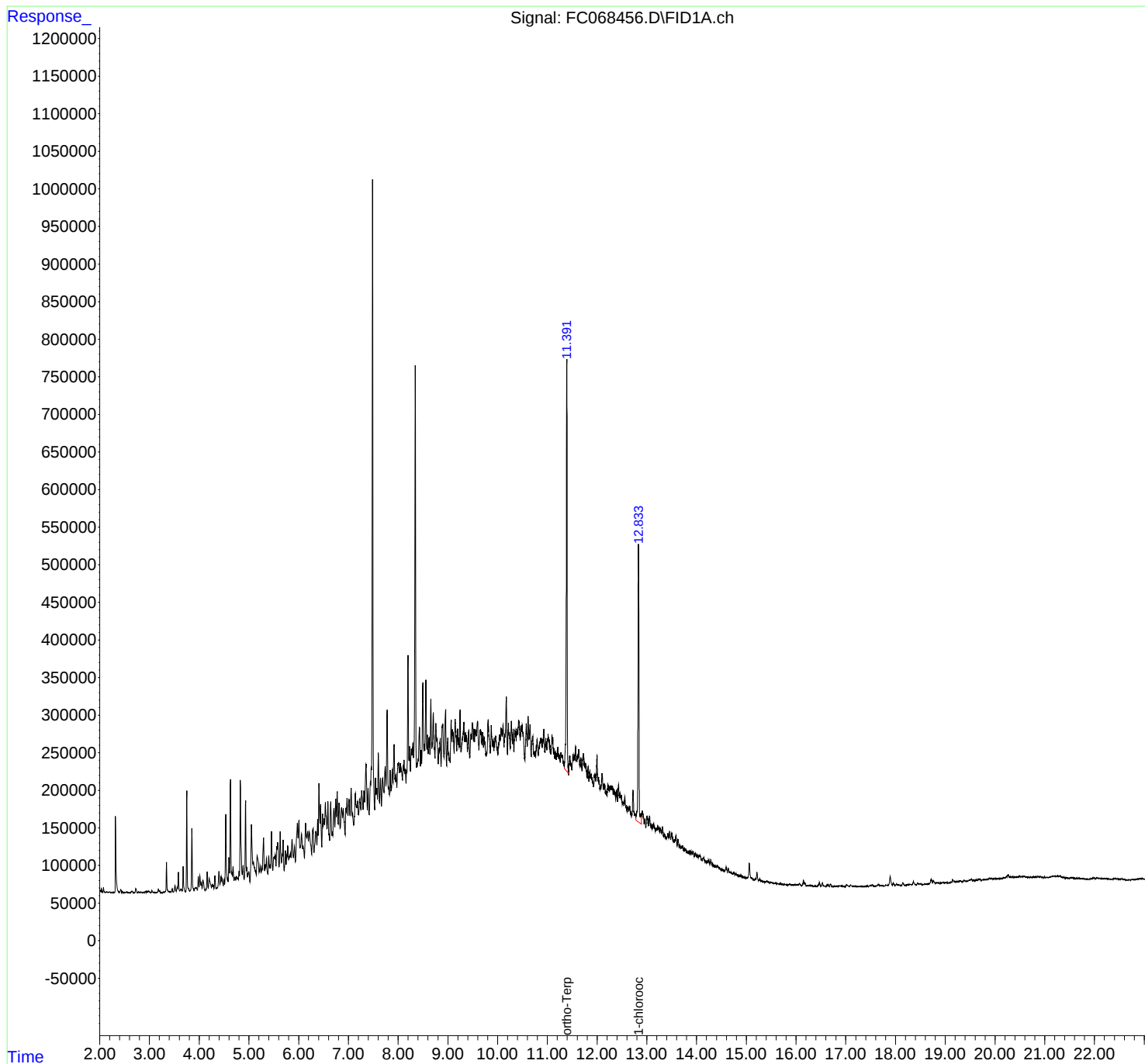
(m)=manual int.

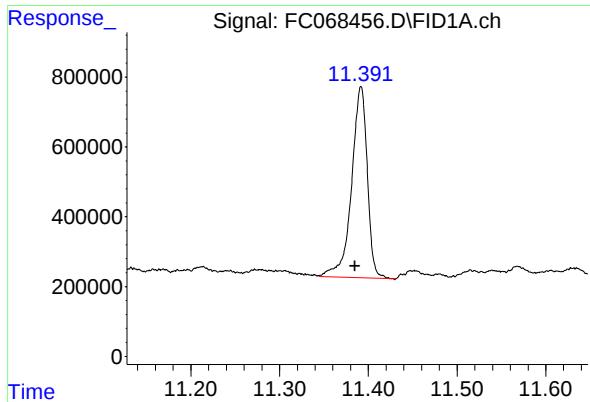
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068456.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 20:45
Operator : YP/AJ
Sample : Q1675-14
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
D2

Integration File: autoint1.e
Quant Time: Apr 01 03:20:55 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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

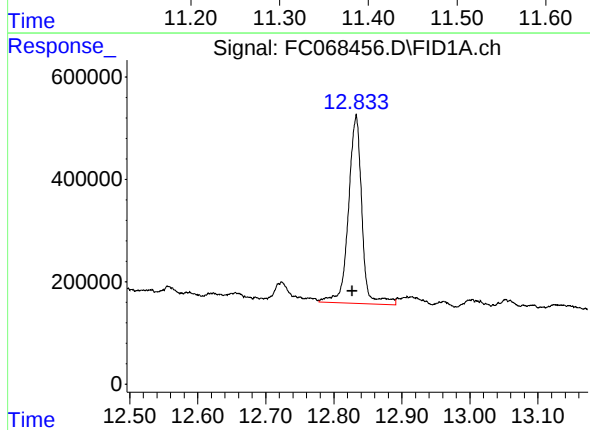




#9 ortho-Terphenyl (SURR)

R.T.: 11.391 min
Delta R.T.: 0.006 min
Response: 6750631
Conc: 33.99 ug/ml

Instrument :
FID_C
ClientSampleId :
D2



#12 1-chlorooctadecane (SURR)

R.T.: 12.832 min
Delta R.T.: 0.005 min
Response: 5043806
Conc: 33.83 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
 Data File : FC068456.D
 Signal(s) : FID1A.ch
 Acq On : 31 Mar 2025 20:45
 Sample : Q1675-14
 Misc :
 ALS Vial : 22 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	2.318	2.305	2.400	PV	91560	938188	6.29%	0.122%
2	2.422	2.400	2.512	PV	3844	54655	0.37%	0.007%
3	2.539	2.512	2.607	PV	870	15757	0.11%	0.002%
4	2.638	2.607	2.648	VV	2149	20100	0.13%	0.003%
5	2.658	2.648	2.704	VV	1943	21714	0.15%	0.003%
6	2.726	2.704	2.768	PV	5716	79970	0.54%	0.010%
7	2.783	2.768	2.810	VV	1283	18083	0.12%	0.002%
8	2.824	2.810	2.865	VV	743	15684	0.11%	0.002%
9	2.898	2.865	2.911	VV	967	12594	0.08%	0.002%
10	2.926	2.911	2.934	VV	1787	15819	0.11%	0.002%
11	2.945	2.934	2.959	VV	2441	23867	0.16%	0.003%
12	2.978	2.959	2.992	VV	2110	30386	0.20%	0.004%
13	3.001	2.992	3.023	VV	1709	17451	0.12%	0.002%
14	3.051	3.023	3.082	VV	2867	38715	0.26%	0.005%
15	3.096	3.082	3.114	VV	636	8435	0.06%	0.001%
16	3.180	3.114	3.197	VV	5207	75485	0.51%	0.010%
17	3.208	3.197	3.263	VV	2967	38000	0.25%	0.005%
18	3.285	3.263	3.299	PV	1002	11708	0.08%	0.002%
19	3.343	3.299	3.382	VV	39381	394031	2.64%	0.051%
20	3.393	3.382	3.415	VV	2101	30561	0.20%	0.004%
21	3.423	3.415	3.434	VV	1527	13850	0.09%	0.002%
22	3.456	3.434	3.484	VV	4934	71495	0.48%	0.009%
23	3.514	3.484	3.536	VV	9475	149373	1.00%	0.019%
24	3.582	3.536	3.608	VV	27316	370658	2.48%	0.048%
25	3.628	3.608	3.639	VV	4565	64918	0.43%	0.008%
26	3.647	3.639	3.660	VV	4159	43070	0.29%	0.006%
27	3.678	3.660	3.721	VV	34777	370805	2.48%	0.048%
28	3.750	3.721	3.809	VV	133302	1230267	8.24%	0.159%
29	3.854	3.809	3.898	VV	84802	946380	6.34%	0.123%
30	3.942	3.898	3.963	VV	6612	207121	1.39%	0.027%
31	3.983	3.963	3.999	VV	21557	252573	1.69%	0.033%
32	4.015	3.999	4.059	VV	22300	467114	3.13%	0.061%
33	4.078	4.059	4.119	VV	16146	329062	2.20%	0.043%
34	4.161	4.119	4.181	VV	27676	380485	2.55%	0.049%
35	4.202	4.181	4.247	VV	18694	478968	3.21%	0.062%
36	4.261	4.247	4.273	VV	10487	135532	0.91%	0.018%

					rteres			
37	4.284	4.273	4.297	VV	9886	118250	0.79%	0.015%
38	4.316	4.297	4.341	VV	22353	314122	2.10%	0.041%
39	4.397	4.341	4.418	VV	27527	573295	3.84%	0.074%
40	4.441	4.418	4.454	VV	21309	349224	2.34%	0.045%
41	4.464	4.454	4.485	VV	18283	256154	1.72%	0.033%
42	4.500	4.485	4.512	VV	16502	215582	1.44%	0.028%
43	4.535	4.512	4.581	VV	103866	1542903	10.34%	0.200%
44	4.599	4.581	4.610	VV	46395	538265	3.61%	0.070%
45	4.629	4.610	4.668	VV	149342	2028632	13.59%	0.263%
46	4.682	4.668	4.702	VV	34227	512243	3.43%	0.066%
47	4.723	4.702	4.735	VV	20278	355628	2.38%	0.046%
48	4.750	4.735	4.786	VV	21233	575162	3.85%	0.075%
49	4.802	4.786	4.810	VV	28055	318602	2.13%	0.041%
50	4.829	4.810	4.866	VV	148613	2198535	14.73%	0.285%
51	4.883	4.866	4.904	VV	35242	594338	3.98%	0.077%
52	4.933	4.904	4.970	VV	121490	1825981	12.23%	0.237%
53	4.997	4.970	5.020	VV	27155	684149	4.58%	0.089%
54	5.052	5.020	5.081	VV	90060	1815809	12.16%	0.235%
55	5.091	5.081	5.147	VV	40438	1273495	8.53%	0.165%
56	5.167	5.147	5.207	VV	48008	1359793	9.11%	0.176%
57	5.227	5.207	5.243	VV	35269	659734	4.42%	0.085%
58	5.259	5.243	5.267	VV	33096	424379	2.84%	0.055%
59	5.294	5.267	5.315	VV	72234	1382206	9.26%	0.179%
60	5.329	5.315	5.339	VV	36452	477830	3.20%	0.062%
61	5.353	5.339	5.380	VV	44895	828470	5.55%	0.107%
62	5.399	5.380	5.415	VV	48057	750114	5.03%	0.097%
63	5.424	5.415	5.434	VV	35703	389592	2.61%	0.050%
64	5.454	5.434	5.481	VV	80157	1402283	9.39%	0.182%
65	5.509	5.481	5.520	VV	46288	988837	6.62%	0.128%
66	5.530	5.520	5.545	VV	49232	659278	4.42%	0.085%
67	5.579	5.545	5.607	VV	65411	1945937	13.04%	0.252%
68	5.629	5.607	5.656	VV	79680	1555574	10.42%	0.202%
69	5.688	5.656	5.709	VV	69256	1526170	10.22%	0.198%
70	5.735	5.709	5.750	VV	54405	1008225	6.75%	0.131%
71	5.782	5.750	5.802	VV	61025	1520920	10.19%	0.197%
72	5.835	5.802	5.846	VV	51448	1252987	8.39%	0.162%
73	5.868	5.846	5.894	VV	69622	1624134	10.88%	0.210%
74	5.916	5.894	5.935	VV	60032	1250775	8.38%	0.162%
75	5.975	5.935	5.989	VV	91370	2234015	14.97%	0.290%
76	6.006	5.989	6.027	VV	94902	1764448	11.82%	0.229%
77	6.059	6.027	6.115	VV	76558	3258384	21.83%	0.422%
78	6.141	6.115	6.161	VV	90677	1964396	13.16%	0.255%
79	6.182	6.161	6.197	VV	79767	1648535	11.04%	0.214%
80	6.215	6.197	6.261	VV	79288	2581147	17.29%	0.335%
81	6.290	6.261	6.310	VV	83581	2005799	13.44%	0.260%
82	6.346	6.310	6.367	VV	79441	2361127	15.82%	0.306%
83	6.382	6.367	6.393	VV	95678	1241709	8.32%	0.161%
84	6.410	6.393	6.430	VV	143731	2422532	16.23%	0.314%
85	6.442	6.430	6.465	VV	114854	1920507	12.87%	0.249%
86	6.482	6.465	6.495	VV	102867	1527593	10.23%	0.198%
87	6.512	6.495	6.521	VV	96367	1477341	9.90%	0.191%
88	6.538	6.521	6.571	VV	118448	2988111	20.02%	0.387%
89	6.590	6.571	6.623	VV	118924	2776166	18.60%	0.360%

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90	6.645	6.623	6.669	VV	119020	2592309	17.37%	0.336%
91	6.677	6.669	6.685	VV	79327	739743	4.96%	0.096%
92	6.710	6.685	6.728	VV	109878	2461020	16.49%	0.319%
93	6.745	6.728	6.759	VV	122920	1965260	13.17%	0.255%
94	6.776	6.759	6.794	VV	132187	2352913	15.76%	0.305%
95	6.814	6.794	6.836	VV	116873	2532709	16.97%	0.328%
96	6.862	6.836	6.883	VV	111300	2799482	18.75%	0.363%
97	6.897	6.883	6.933	VV	109700	2914863	19.53%	0.378%
98	6.974	6.933	6.993	VV	123093	3759011	25.18%	0.487%
99	7.014	6.993	7.033	VV	121742	2666675	17.86%	0.346%
100	7.057	7.033	7.108	VV	137291	4864068	32.59%	0.630%
101	7.140	7.108	7.170	VV	129994	4104680	27.50%	0.532%
102	7.184	7.170	7.208	VV	119303	2535294	16.98%	0.329%
103	7.229	7.208	7.255	VV	122492	3198746	21.43%	0.415%
104	7.269	7.255	7.296	VV	132768	3041681	20.38%	0.394%
105	7.313	7.296	7.327	VV	133442	2255688	15.11%	0.292%
106	7.354	7.327	7.382	VV	168396	4645389	31.12%	0.602%
107	7.396	7.382	7.417	VV	135800	2479747	16.61%	0.321%
108	7.546	7.527	7.559	VV	148380	2513815	16.84%	0.326%
109	7.571	7.559	7.584	VV	136838	1983781	13.29%	0.257%
110	7.603	7.584	7.626	VV	182327	3685843	24.69%	0.478%
111	7.646	7.626	7.666	VV	150470	3177657	21.29%	0.412%
112	7.688	7.666	7.714	VV	149737	3871716	25.94%	0.502%
113	7.740	7.714	7.757	VV	164777	3856191	25.83%	0.500%
114	7.780	7.757	7.823	VV	241646	6656009	44.59%	0.863%
115	7.841	7.823	7.858	VV	158985	3010304	20.17%	0.390%
116	7.883	7.858	7.897	VV	160301	3508132	23.50%	0.455%
117	7.919	7.897	7.945	VV	193961	4697041	31.47%	0.609%
118	7.958	7.945	7.975	VV	153719	2675237	17.92%	0.347%
119	8.008	7.975	8.031	VV	169339	5440633	36.45%	0.705%
120	8.045	8.031	8.087	VV	167910	5384111	36.07%	0.698%
121	8.118	8.087	8.135	VV	172327	4663612	31.24%	0.604%
122	8.143	8.135	8.158	VV	160729	2130921	14.28%	0.276%
123	8.199	8.158	8.219	VV	310837	7314737	49.00%	0.948%
124	8.229	8.219	8.247	VV	192040	3083281	20.66%	0.400%
125	8.268	8.247	8.281	VV	187573	3591506	24.06%	0.465%
126	8.297	8.281	8.311	VV	196577	3423975	22.94%	0.444%
127	8.429	8.385	8.450	VV	216465	7302612	48.92%	0.946%
128	8.464	8.450	8.475	VV	185176	2613153	17.51%	0.339%
129	8.497	8.475	8.536	VV	275436	7748240	51.91%	1.004%
130	8.559	8.536	8.578	VV	278998	5801998	38.87%	0.752%
131	8.587	8.578	8.605	VV	206477	3112500	20.85%	0.403%
132	8.621	8.605	8.641	VV	202524	4204001	28.16%	0.545%
133	8.659	8.641	8.678	VV	254358	4748610	31.81%	0.615%
134	8.708	8.678	8.741	VV	235532	7685792	51.49%	0.996%
135	8.761	8.741	8.806	VV	222228	7741333	51.86%	1.003%
136	8.847	8.806	8.865	VV	201293	6482690	43.43%	0.840%
137	8.894	8.865	8.923	VV	218048	7021014	47.04%	0.910%
138	8.953	8.923	8.976	VV	239950	6395702	42.85%	0.829%
139	8.997	8.976	9.044	VV	201088	7424643	49.74%	0.962%
140	9.067	9.044	9.081	VV	225051	4483588	30.04%	0.581%
141	9.092	9.081	9.125	VV	212062	5318376	35.63%	0.689%

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142	9.149	9.125	9.180	VV	226121	6741172	45.16%	0.874%
143	9.198	9.180	9.229	VV	214067	5904747	39.56%	0.765%
144	9.246	9.229	9.267	VV	239740	4824657	32.32%	0.625%
145	9.322	9.267	9.341	VV	221276	9032284	60.51%	1.171%
146	9.355	9.341	9.366	VV	208605	3011142	20.17%	0.390%
147	9.376	9.366	9.395	VV	204322	3417750	22.90%	0.443%
148	9.419	9.395	9.445	VV	211413	5835495	39.09%	0.756%
149	9.466	9.445	9.476	VV	206357	3786707	25.37%	0.491%
150	9.496	9.476	9.537	VV	220616	7661231	51.33%	0.993%
151	9.551	9.537	9.575	VV	212804	4644735	31.12%	0.602%
152	9.598	9.575	9.624	VV	223040	6187024	41.45%	0.802%
153	9.652	9.624	9.685	VV	211122	7473538	50.07%	0.969%
154	9.700	9.685	9.718	VV	207866	3997889	26.78%	0.518%
155	9.733	9.718	9.767	VV	201697	5657282	37.90%	0.733%
156	9.808	9.767	9.854	VV	224811	10277318	68.85%	1.332%
157	9.875	9.854	9.900	VV	218754	5513007	36.93%	0.714%
158	9.911	9.900	9.925	VV	200197	2907694	19.48%	0.377%
159	9.961	9.925	10.008	VV	204093	9614479	64.41%	1.246%
160	10.040	10.008	10.053	VV	203855	5279221	35.37%	0.684%
161	10.072	10.053	10.095	VV	213265	5236151	35.08%	0.679%
162	10.110	10.095	10.128	VV	217136	4179836	28.00%	0.542%
163	10.175	10.128	10.199	VV	252621	9159308	61.36%	1.187%
164	10.218	10.199	10.258	VV	220352	7094757	47.53%	0.919%
165	10.278	10.258	10.300	VV	220845	5227014	35.02%	0.677%
166	10.314	10.300	10.330	VV	211392	3580002	23.98%	0.464%
167	10.349	10.330	10.375	VV	211299	5551636	37.19%	0.719%
168	10.391	10.375	10.405	VV	213639	3689566	24.72%	0.478%
169	10.426	10.405	10.456	VV	224386	6583955	44.11%	0.853%
170	10.474	10.456	10.483	VV	214930	3494847	23.41%	0.453%
171	10.494	10.483	10.548	VV	218070	7756151	51.96%	1.005%
172	10.578	10.548	10.596	VV	219948	5701270	38.19%	0.739%
173	10.614	10.596	10.638	VV	229551	5333246	35.73%	0.691%
174	10.652	10.638	10.678	VV	218445	4811354	32.23%	0.624%
175	10.706	10.678	10.737	VV	204695	6763901	45.31%	0.877%
176	10.749	10.737	10.765	VV	184075	3006131	20.14%	0.390%
177	10.793	10.765	10.821	VV	197562	6381380	42.75%	0.827%
178	10.867	10.821	10.897	VV	200826	8761187	58.69%	1.135%
179	10.928	10.897	10.955	VV	209679	6844330	45.85%	0.887%
180	10.971	10.955	10.995	VV	201007	4612891	30.90%	0.598%
181	11.017	10.995	11.075	VV	203743	9280257	62.17%	1.203%
182	11.095	11.075	11.125	VV	204347	5896380	39.50%	0.764%
183	11.134	11.125	11.148	VV	184072	2501219	16.76%	0.324%
184	11.167	11.148	11.178	VV	181040	3218897	21.56%	0.417%
185	11.212	11.178	11.232	VV	188428	5839149	39.12%	0.757%
186	11.241	11.232	11.257	VV	177119	2568089	17.20%	0.333%
187	11.277	11.257	11.345	VV	180333	9106943	61.01%	1.180%
188	11.391	11.345	11.431	VV	705833	14926829	100.00%	1.934%
189	11.451	11.431	11.493	VV	176636	6173719	41.36%	0.800%
190	11.516	11.493	11.530	VV	178785	3811180	25.53%	0.494%
191	11.541	11.530	11.555	VV	177586	2606353	17.46%	0.338%
192	11.568	11.555	11.588	VV	189717	3604286	24.15%	0.467%
193	11.606	11.588	11.616	VV	177093	2971896	19.91%	0.385%
194	11.632	11.616	11.659	VV	184127	4452831	29.83%	0.577%

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195	11.675	11.659	11.696	VV	173410	3764066	25.22%	0.488%
196	11.725	11.696	11.808	VV	180498	11032469	73.91%	1.430%
197	11.819	11.808	11.834	VV	162225	2478957	16.61%	0.321%
198	11.853	11.834	11.866	VV	155553	2830874	18.97%	0.367%
199	11.880	11.866	11.929	VV	151970	5583430	37.41%	0.724%
200	11.957	11.929	11.974	VV	152316	3889382	26.06%	0.504%
201	11.998	11.974	12.060	VV	176748	7792514	52.20%	1.010%
202	12.100	12.060	12.144	VV	150911	7017693	47.01%	0.909%
203	12.153	12.144	12.198	VV	136379	4184273	28.03%	0.542%
204	12.221	12.198	12.238	VV	137903	3215849	21.54%	0.417%
205	12.274	12.238	12.288	VV	136130	4011190	26.87%	0.520%
206	12.299	12.288	12.374	VV	136959	6736483	45.13%	0.873%
207	12.394	12.374	12.411	VV	130675	2739999	18.36%	0.355%
208	12.430	12.411	12.515	VV	138566	7683204	51.47%	0.996%
209	12.530	12.515	12.540	VV	115262	1756517	11.77%	0.228%
210	12.557	12.540	12.607	VV	121573	4470080	29.95%	0.579%
211	12.621	12.607	12.639	VV	108422	2024627	13.56%	0.262%
212	12.655	12.639	12.697	VV	109362	3603411	24.14%	0.467%
213	12.723	12.697	12.778	VV	128593	5194655	34.80%	0.673%
214	12.832	12.778	12.864	VV	450002	9470914	63.45%	1.227%
215	12.873	12.864	12.891	VV	98727	1575338	10.55%	0.204%
216	12.912	12.891	12.946	VV	100482	3150053	21.10%	0.408%
217	12.961	12.946	12.980	VV	92633	1795493	12.03%	0.233%
218	13.002	12.980	13.031	VV	95108	2774502	18.59%	0.360%
219	13.053	13.031	13.110	VV	94495	4090133	27.40%	0.530%
220	13.126	13.110	13.175	VV	85715	3204898	21.47%	0.415%
221	13.198	13.175	13.211	VV	80266	1711998	11.47%	0.222%
222	13.224	13.211	13.258	VV	82306	2215724	14.84%	0.287%
223	13.267	13.258	13.294	VV	79934	1687941	11.31%	0.219%
224	13.313	13.294	13.335	VV	81829	1851922	12.41%	0.240%
225	13.355	13.335	13.390	VV	71619	2293552	15.37%	0.297%
226	13.424	13.390	13.443	VV	72637	2221228	14.88%	0.288%
227	13.460	13.443	13.478	VV	75350	1498627	10.04%	0.194%
228	13.501	13.478	13.528	VV	72548	2038719	13.66%	0.264%
229	13.585	13.528	13.608	VV	70182	3090185	20.70%	0.400%
230	13.627	13.608	13.650	VV	64392	1489084	9.98%	0.193%
231	13.662	13.650	13.685	VV	57238	1175523	7.88%	0.152%
232	13.720	13.685	13.751	VV	56331	2117503	14.19%	0.274%
233	13.762	13.751	13.840	VV	51938	2621385	17.56%	0.340%
234	13.849	13.840	13.856	VV	47467	452663	3.03%	0.059%
235	13.875	13.856	13.914	VV	49165	1651209	11.06%	0.214%
236	13.930	13.914	13.948	VV	48655	953402	6.39%	0.124%
237	13.976	13.948	14.001	VV	46843	1421329	9.52%	0.184%
238	14.010	14.001	14.038	VV	43225	931591	6.24%	0.121%
239	14.047	14.038	14.062	VV	43057	612185	4.10%	0.079%
240	14.072	14.062	14.111	VV	43454	1193058	7.99%	0.155%
241	14.135	14.111	14.201	VV	40164	2010251	13.47%	0.261%
242	14.212	14.201	14.225	VV	36241	496072	3.32%	0.064%
243	14.240	14.225	14.265	VV	36857	850291	5.70%	0.110%
244	14.284	14.265	14.305	VV	37551	822441	5.51%	0.107%
245	14.314	14.305	14.345	VV	32855	736974	4.94%	0.096%
246	14.371	14.345	14.391	VV	29951	809095	5.42%	0.105%

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247	14.406	14.391	14.565	VV	29688	2680026	17.95%	0.347%
248	14.597	14.565	14.619	VV	27414	790115	5.29%	0.102%
249	14.638	14.619	14.709	VV	25895	1164365	7.80%	0.151%
250	14.717	14.709	14.733	VV	19241	279747	1.87%	0.036%
251	14.753	14.733	14.776	VV	20697	492457	3.30%	0.064%
252	14.791	14.776	14.818	VV	19062	448035	3.00%	0.058%
253	14.823	14.818	14.857	VV	17074	375833	2.52%	0.049%
254	14.874	14.857	14.890	VV	16099	314104	2.10%	0.041%
255	14.900	14.890	15.002	VV	15884	961802	6.44%	0.125%
256	15.058	15.002	15.162	VV	32417	1472578	9.87%	0.191%
257	15.213	15.162	15.242	VV	20421	612742	4.10%	0.079%
258	15.269	15.242	15.291	VV	11357	295111	1.98%	0.038%
259	15.308	15.291	15.332	VV	9611	213641	1.43%	0.028%
260	15.346	15.332	15.375	VV	8144	197166	1.32%	0.026%
261	15.406	15.375	15.481	VV	8613	479682	3.21%	0.062%
262	15.498	15.481	15.561	VV	6651	292674	1.96%	0.038%
263	15.590	15.561	15.652	VV	6098	292699	1.96%	0.038%
264	15.660	15.652	15.741	VV	5173	247909	1.66%	0.032%
265	15.757	15.741	15.818	VV	4269	173544	1.16%	0.022%
266	15.878	15.818	15.961	VV	4363	295230	1.98%	0.038%
267	15.979	15.961	16.001	VV	3483	78093	0.52%	0.010%
268	16.019	16.001	16.047	VV	3791	90708	0.61%	0.012%
269	16.070	16.047	16.125	VV	5125	156783	1.05%	0.020%
270	16.148	16.125	16.168	VV	9580	156738	1.05%	0.020%
271	16.178	16.168	16.241	VV	5130	124378	0.83%	0.016%
272	16.283	16.241	16.389	VV	2753	163445	1.09%	0.021%
273	16.402	16.389	16.414	VV	1350	19437	0.13%	0.003%
274	16.468	16.414	16.503	VV	6332	152169	1.02%	0.020%
275	16.528	16.503	16.598	VV	5289	130218	0.87%	0.017%
276	16.647	16.598	16.671	VV	2959	85494	0.57%	0.011%
277	16.693	16.671	16.745	VV	4047	79401	0.53%	0.010%
278	16.768	16.745	16.798	VV	1064	28896	0.19%	0.004%
279	16.809	16.798	16.843	VV	967	25929	0.17%	0.003%
280	16.863	16.843	16.905	VV	1363	44509	0.30%	0.006%
281	16.915	16.905	16.922	VV	1208	11138	0.07%	0.001%
282	16.942	16.922	16.982	VV	1232	32728	0.22%	0.004%
283	17.023	16.982	17.075	VV	2578	77946	0.52%	0.010%
284	17.097	17.075	17.134	VV	2630	47729	0.32%	0.006%
285	17.150	17.134	17.164	VV	732	10180	0.07%	0.001%
286	17.184	17.164	17.220	VV	1494	26823	0.18%	0.003%
287	17.250	17.220	17.291	VV	572	14141	0.09%	0.002%
288	17.308	17.291	17.328	VV	291	3151	0.02%	0.000%
289	17.415	17.328	17.441	PV	579	15641	0.10%	0.002%
290	17.491	17.441	17.515	VV	1627	40263	0.27%	0.005%
291	17.532	17.515	17.581	VV	2517	45477	0.30%	0.006%
292	17.653	17.581	17.722	VV	2514	91615	0.61%	0.012%
293	17.745	17.722	17.778	VV	861	16904	0.11%	0.002%
294	17.810	17.778	17.848	PV	1273	35428	0.24%	0.005%
295	17.892	17.848	17.933	VV	12502	255292	1.71%	0.033%
296	17.956	17.933	17.986	VV	3999	71637	0.48%	0.009%
297	18.019	17.986	18.119	VV	2346	85253	0.57%	0.011%
298	18.146	18.119	18.194	VV	3972	67903	0.45%	0.009%
299	18.245	18.194	18.265	VV	668	18891	0.13%	0.002%

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300	18.288	18.265	18.305	VV	1258	22913	0.15%	0.003%
301	18.315	18.305	18.330	VV	1080	14850	0.10%	0.002%
302	18.361	18.330	18.411	VV	4480	93050	0.62%	0.012%
303	18.444	18.411	18.478	VV	2056	55795	0.37%	0.007%
304	18.492	18.478	18.545	VV	1718	41268	0.28%	0.005%
305	18.579	18.545	18.601	VV	833	18440	0.12%	0.002%
306	18.654	18.601	18.674	VV	1610	44243	0.30%	0.006%
307	18.718	18.674	18.742	VV	6607	157563	1.06%	0.020%
308	18.763	18.742	18.801	VV	4802	119127	0.80%	0.015%
309	18.835	18.801	18.888	VV	2592	104737	0.70%	0.014%
310	18.902	18.888	18.914	VV	1845	24160	0.16%	0.003%
311	18.956	18.914	18.991	VV	2501	91024	0.61%	0.012%
312	19.039	18.991	19.081	VV	2015	96885	0.65%	0.013%
313	19.150	19.081	19.171	VV	5202	152963	1.02%	0.020%
314	19.188	19.171	19.214	VV	3739	82725	0.55%	0.011%
315	19.229	19.214	19.268	VV	3107	91217	0.61%	0.012%
316	19.309	19.268	19.337	VV	3638	125788	0.84%	0.016%
317	19.377	19.337	19.425	VV	4509	170646	1.14%	0.022%
318	19.433	19.425	19.442	VV	2911	27784	0.19%	0.004%
319	19.494	19.442	19.504	VV	4397	138824	0.93%	0.018%
320	19.523	19.504	19.596	VV	5609	231800	1.55%	0.030%
321	19.695	19.596	19.733	VV	5022	336209	2.25%	0.044%
322	19.763	19.733	19.778	VV	4852	114206	0.77%	0.015%
323	19.798	19.778	19.816	VV	4536	98478	0.66%	0.013%
324	19.827	19.816	19.858	VV	4478	108420	0.73%	0.014%
325	19.890	19.858	19.909	VV	6117	163631	1.10%	0.021%
326	19.928	19.909	19.955	VV	5274	133703	0.90%	0.017%
327	19.998	19.955	20.011	VV	5248	166261	1.11%	0.022%
328	20.023	20.011	20.052	VV	5173	123153	0.83%	0.016%
329	20.075	20.052	20.141	VV	5094	263043	1.76%	0.034%
330	20.266	20.141	20.292	VV	9981	613238	4.11%	0.079%
331	20.314	20.292	20.378	VV	7139	341978	2.29%	0.044%
332	20.431	20.378	20.448	VV	6397	257721	1.73%	0.033%
333	20.500	20.448	20.524	VV	7113	301740	2.02%	0.039%
334	20.542	20.524	20.561	VV	6886	146573	0.98%	0.019%
335	20.590	20.561	20.651	VV	7100	345328	2.31%	0.045%
336	20.664	20.651	20.681	VV	5631	97451	0.65%	0.013%
337	20.701	20.681	20.728	VV	5573	151077	1.01%	0.020%
338	20.763	20.728	20.771	VV	5826	142023	0.95%	0.018%
339	20.798	20.771	20.808	VV	5907	124025	0.83%	0.016%
340	20.829	20.808	20.841	VV	5863	114246	0.77%	0.015%
341	20.844	20.841	20.855	VV	5796	45288	0.30%	0.006%
342	20.869	20.855	20.898	VV	6020	149552	1.00%	0.019%
343	20.906	20.898	20.978	VV	5775	245289	1.64%	0.032%
344	20.994	20.978	21.068	VV	5211	248623	1.67%	0.032%
345	21.079	21.068	21.084	VV	4407	41024	0.27%	0.005%
346	21.188	21.084	21.219	VV	6028	431406	2.89%	0.056%
347	21.253	21.219	21.272	VV	6069	180707	1.21%	0.023%
348	21.289	21.272	21.354	VV	5913	254884	1.71%	0.033%
349	21.364	21.354	21.430	VV	4032	155051	1.04%	0.020%
350	21.440	21.430	21.476	VV	3088	73905	0.50%	0.010%
351	21.551	21.476	21.615	VV	2979	211385	1.42%	0.027%

						rteres		
352	21.647	21.615	21.723	VV	2205	114337	0.77%	0.015%
353	21.761	21.723	21.812	VV	1440	60971	0.41%	0.008%
354	21.823	21.812	21.885	VV	752	16783	0.11%	0.002%
355	21.967	21.885	21.985	PV	1639	52482	0.35%	0.007%
356	21.996	21.985	22.018	VV	1409	22127	0.15%	0.003%
357	22.039	22.018	22.048	VV	1346	19221	0.13%	0.002%
358	22.061	22.048	22.081	VV	1477	24672	0.17%	0.003%
359	22.091	22.081	22.101	VV	1194	12390	0.08%	0.002%
360	22.110	22.101	22.141	VV	1043	18719	0.13%	0.002%
361	22.146	22.141	22.174	VV	549	7440	0.05%	0.001%
					Sum of corrected areas:	771641951		

Aliphatic EPH 032625.M Tue Apr 01 04:48:11 2025

Report of Analysis

Client:	G Environmental	Date Collected:	03/27/25
Project:	Stockton	Date Received:	03/28/25
Client Sample ID:	D2DL	SDG No.:	Q1675
Lab Sample ID:	Q1675-14DL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	95.4
Sample Wt/Vol:	30.06 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068465.D	10	03/31/25	04/01/25	PB167381

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	328		9.51	41.9	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	12.3	U	12.3	20.9	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	3.28		40 - 140	66%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	3.75		40 - 140	75%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1675-14DL	Acq On:	01 Apr 2025 08:12
Client Sample ID:	D2DL	Operator:	YP/AJ
Data file:	FC068465.D	Misc:	
Instrument:	FID_C	ALS Vial:	11
Dilution Factor:	10	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.097	6.359	6670891	41.097	300	ug/ml
Aliphatic C12-C16	6.360	9.742	33394449	198.547	200	ug/ml
Aliphatic C16-C21	9.743	13.096	34013395	198.317	300	ug/ml
Aliphatic C21-C28	13.097	16.749	5569956	32.984	400	ug/ml
Aliphatic C28-C40	16.750	21.544	880656	6.467	600	ug/ml
Aliphatic EPH	3.097	21.544	80529347	477.412		ug/ml
ortho-Terphenyl (SURR)	11.381	11.381	744143	3.75		ug/ml
1-chlorooctadecane (SURR)	12.824	12.824	489435	3.28		ug/ml
Aliphatic C9-C28	3.097	16.749	79648691	470.945	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040125AL\
Data File : FC068465.D
Signal(s) : FID1A.ch
Acq On : 01 Apr 2025 08:12
Operator : YP/AJ
Sample : Q1675-14DL 10X
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
D2DL

Integration File: autoint1.e
Quant Time: Apr 02 02:56:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.381	744143	3.746 ug/ml
Spiked Amount	50.000	Recovery =	7.49%
12) S 1-chlorooctadecane (S...	12.824	489435	3.283 ug/ml
Spiked Amount	50.000	Recovery =	6.57%

Target Compounds

(f)=RT Delta > 1/2 Window

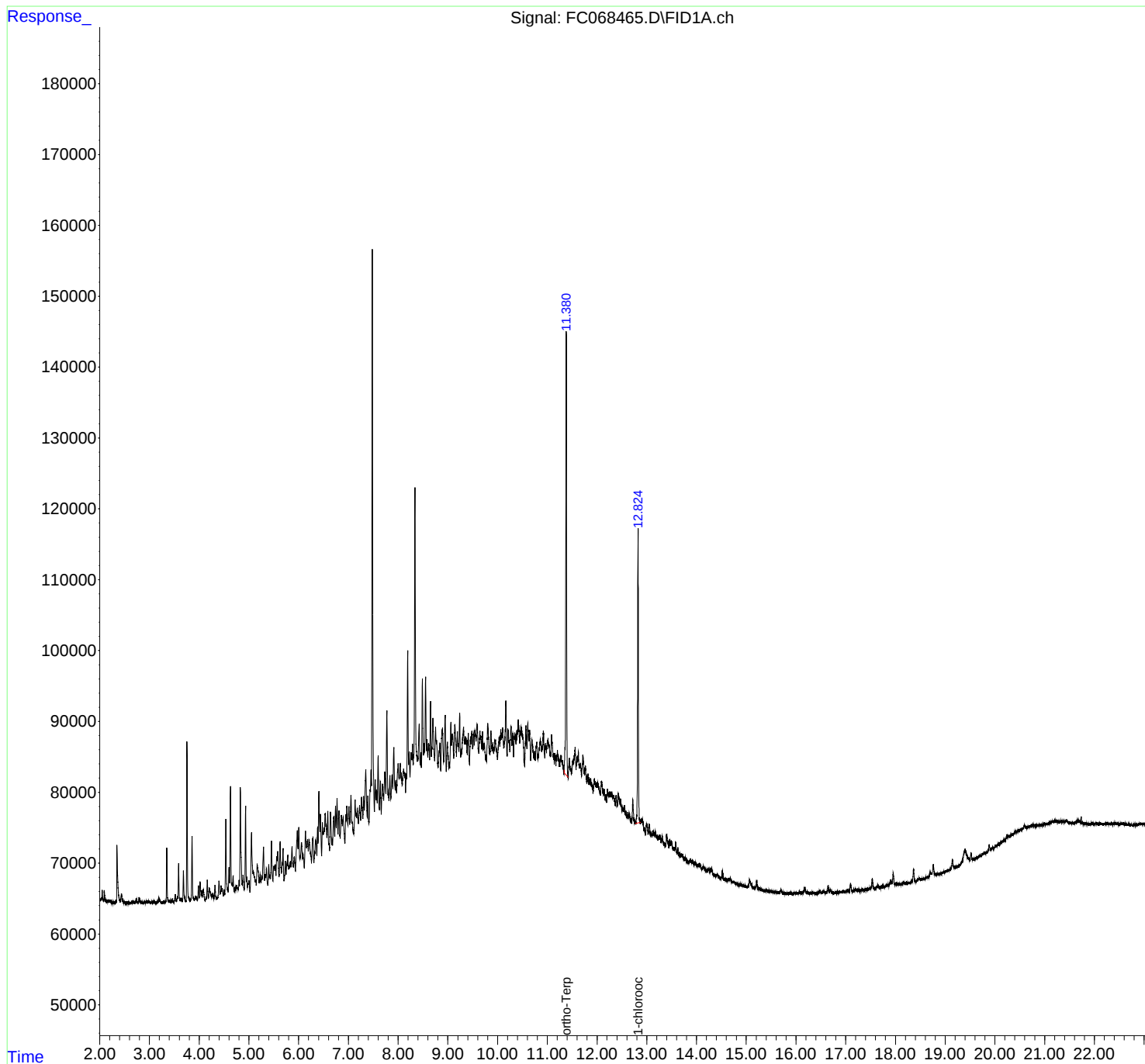
(m)=manual int.

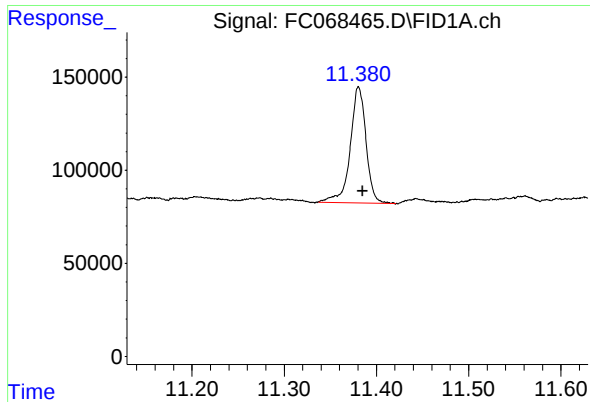
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040125AL\
Data File : FC068465.D
Signal(s) : FID1A.ch
Acq On : 01 Apr 2025 08:12
Operator : YP/AJ
Sample : Q1675-14DL 10X
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
D2DL

Integration File: autoint1.e
Quant Time: Apr 02 02:56:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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

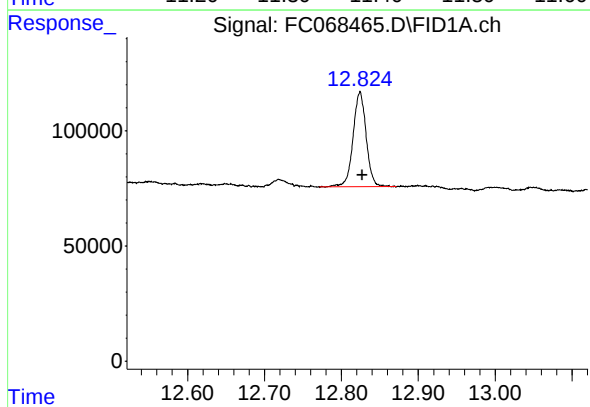




#9 ortho-Terphenyl (SURR)

R.T.: 11.381 min
Delta R.T.: -0.004 min
Response: 744143
Conc: 3.75 ug/ml

Instrument :
FID_C
ClientSampleId :
D2DL



#12 1-chlorooctadecane (SURR)

R.T.: 12.824 min
Delta R.T.: -0.003 min
Response: 489435
Conc: 3.28 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040125AL\
Data File : FC068465.D
Signal(s) : FID1A.ch
Acq On : 01 Apr 2025 08:12
Sample : Q1675-14DL 10X
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	2.349	2.304	2.421	BV	7909	98680	6.00%	0.118%
2	2.436	2.421	2.456	VV	1213	16486	1.00%	0.020%
3	2.463	2.456	2.504	VV	518	5326	0.32%	0.006%
4	2.513	2.504	2.531	VV	136	1009	0.06%	0.001%
5	2.550	2.531	2.571	VV	226	2165	0.13%	0.003%
6	2.580	2.571	2.594	VV	69	530	0.03%	0.001%
7	2.650	2.594	2.714	PV	297	9897	0.60%	0.012%
8	2.735	2.714	2.774	VV	586	10480	0.64%	0.013%
9	2.789	2.774	2.868	VV	808	13560	0.82%	0.016%
10	2.905	2.868	2.919	VV	202	3489	0.21%	0.004%
11	2.933	2.919	2.941	VV	270	2353	0.14%	0.003%
12	2.954	2.941	2.965	VV	334	2836	0.17%	0.003%
13	2.984	2.965	2.998	VV	253	3857	0.23%	0.005%
14	3.006	2.998	3.044	VV	228	3433	0.21%	0.004%
15	3.053	3.044	3.071	VV	215	2032	0.12%	0.002%
16	3.086	3.071	3.112	VV	217	2898	0.18%	0.003%
17	3.121	3.112	3.148	VV	122	1241	0.08%	0.001%
18	3.188	3.148	3.274	VV	736	15697	0.95%	0.019%
19	3.349	3.274	3.392	PV	7748	75034	4.56%	0.090%
20	3.401	3.392	3.420	VV	373	4094	0.25%	0.005%
21	3.431	3.420	3.441	VV	268	2644	0.16%	0.003%
22	3.461	3.441	3.492	VV	545	7801	0.47%	0.009%
23	3.520	3.492	3.544	VV	1150	16938	1.03%	0.020%
24	3.586	3.544	3.621	VV	5466	68247	4.15%	0.082%
25	3.632	3.621	3.664	VV	638	12081	0.73%	0.014%
26	3.684	3.664	3.731	VV	4429	52593	3.20%	0.063%
27	3.755	3.731	3.814	VV	22560	208152	12.66%	0.249%
28	3.857	3.814	3.906	VV	9431	108162	6.58%	0.130%
29	3.946	3.906	3.965	VV	748	20248	1.23%	0.024%
30	3.986	3.965	4.002	VV	2385	27907	1.70%	0.033%
31	4.019	4.002	4.040	VV	2883	42418	2.58%	0.051%
32	4.050	4.040	4.064	VV	1647	18105	1.10%	0.022%
33	4.080	4.064	4.122	VV	1794	36227	2.20%	0.043%
34	4.164	4.122	4.183	VV	3153	43848	2.67%	0.053%
35	4.204	4.183	4.247	VV	2024	50450	3.07%	0.060%
36	4.262	4.247	4.274	VV	1194	16483	1.00%	0.020%

					rteres			
37	4.285	4.274	4.299	VV	959	11850	0.72%	0.014%
38	4.318	4.299	4.343	VV	2396	33150	2.02%	0.040%
39	4.354	4.343	4.364	VV	650	7559	0.46%	0.009%
40	4.399	4.364	4.420	VV	2942	52266	3.18%	0.063%
41	4.443	4.420	4.486	VV	2256	63706	3.88%	0.076%
42	4.502	4.486	4.514	VV	1703	22075	1.34%	0.026%
43	4.536	4.514	4.582	VV	11690	166311	10.12%	0.199%
44	4.600	4.582	4.611	VV	4973	56803	3.46%	0.068%
45	4.630	4.611	4.668	VV	16239	217956	13.26%	0.261%
46	4.682	4.668	4.702	VV	3656	53695	3.27%	0.064%
47	4.725	4.702	4.736	VV	2099	37211	2.26%	0.045%
48	4.751	4.736	4.787	VV	2343	60315	3.67%	0.072%
49	4.802	4.787	4.810	VV	3000	33729	2.05%	0.040%
50	4.829	4.810	4.867	VV	16198	240687	14.64%	0.288%
51	4.883	4.867	4.904	VV	3714	61609	3.75%	0.074%
52	4.933	4.904	4.971	VV	13460	197002	11.98%	0.236%
53	4.999	4.971	5.020	VV	2975	71847	4.37%	0.086%
54	5.052	5.020	5.082	VV	9666	196792	11.97%	0.236%
55	5.090	5.082	5.147	VV	4322	133732	8.13%	0.160%
56	5.168	5.147	5.206	VV	5208	141688	8.62%	0.170%
57	5.227	5.206	5.244	VV	3771	72999	4.44%	0.087%
58	5.259	5.244	5.266	VV	3569	43907	2.67%	0.053%
59	5.294	5.266	5.315	VV	7728	147943	9.00%	0.177%
60	5.329	5.315	5.338	VV	3819	48768	2.97%	0.058%
61	5.353	5.338	5.380	VV	4642	88162	5.36%	0.106%
62	5.399	5.380	5.414	VV	5114	79498	4.84%	0.095%
63	5.424	5.414	5.433	VV	3743	40429	2.46%	0.048%
64	5.454	5.433	5.481	VV	8541	149884	9.12%	0.180%
65	5.510	5.481	5.520	VV	4983	104919	6.38%	0.126%
66	5.531	5.520	5.544	VV	5198	65589	3.99%	0.079%
67	5.578	5.544	5.605	VV	6988	203292	12.37%	0.244%
68	5.627	5.605	5.655	VV	8397	165776	10.08%	0.199%
69	5.686	5.655	5.708	VV	7407	162167	9.86%	0.194%
70	5.734	5.708	5.748	VV	5653	104127	6.33%	0.125%
71	5.781	5.748	5.800	VV	6436	162648	9.89%	0.195%
72	5.811	5.800	5.818	VV	4985	50376	3.06%	0.060%
73	5.833	5.818	5.845	VV	5517	85157	5.18%	0.102%
74	5.866	5.845	5.892	VV	7657	169099	10.29%	0.203%
75	5.914	5.892	5.935	VV	6305	138437	8.42%	0.166%
76	5.973	5.935	5.987	VV	9984	237035	14.42%	0.284%
77	6.004	5.987	6.024	VV	10287	184925	11.25%	0.222%
78	6.057	6.024	6.081	VV	8123	234360	14.26%	0.281%
79	6.088	6.081	6.113	VV	6553	113097	6.88%	0.135%
80	6.139	6.113	6.161	VV	9816	220962	13.44%	0.265%
81	6.179	6.161	6.195	VV	8615	163774	9.96%	0.196%
82	6.212	6.195	6.258	VV	8636	275620	16.77%	0.330%
83	6.287	6.258	6.308	VV	8947	217816	13.25%	0.261%
84	6.342	6.308	6.365	VV	8551	251772	15.31%	0.302%
85	6.381	6.365	6.390	VV	10310	128828	7.84%	0.154%
86	6.408	6.390	6.427	VV	15415	264651	16.10%	0.317%
87	6.440	6.427	6.462	VV	12062	204546	12.44%	0.245%
88	6.479	6.462	6.492	VV	10962	166546	10.13%	0.199%
89	6.534	6.492	6.568	VV	12226	475566	28.93%	0.570%

					rteres			
90	6.587	6.568	6.620	VV	12607	296598	18.04%	0.355%
91	6.642	6.620	6.682	VV	12518	355332	21.61%	0.426%
92	6.707	6.682	6.725	VV	11805	266488	16.21%	0.319%
93	6.742	6.725	6.756	VV	13333	207932	12.65%	0.249%
94	6.773	6.756	6.792	VV	14289	256909	15.63%	0.308%
95	6.811	6.792	6.834	VV	12598	276012	16.79%	0.331%
96	6.860	6.834	6.878	VV	11942	282377	17.18%	0.338%
97	6.893	6.878	6.930	VV	11676	321332	19.55%	0.385%
98	6.949	6.930	6.957	VV	12027	168311	10.24%	0.202%
99	6.970	6.957	6.989	VV	13231	238900	14.53%	0.286%
100	7.011	6.989	7.028	VV	13206	273169	16.62%	0.327%
101	7.053	7.028	7.105	VV	14843	533784	32.47%	0.639%
102	7.136	7.105	7.167	VV	14018	447291	27.21%	0.536%
103	7.180	7.167	7.201	VV	12776	242600	14.76%	0.291%
104	7.226	7.201	7.248	VV	13221	341233	20.76%	0.409%
105	7.266	7.248	7.291	VV	14451	337762	20.54%	0.405%
106	7.307	7.291	7.321	VV	14443	237379	14.44%	0.284%
107	7.350	7.321	7.377	VV	18391	513642	31.24%	0.615%
108	7.392	7.377	7.412	VV	14676	269759	16.41%	0.323%
109	7.541	7.523	7.556	VV	16951	292163	17.77%	0.350%
110	7.567	7.556	7.579	VV	15336	208939	12.71%	0.250%
111	7.599	7.579	7.624	VV	20307	428882	26.09%	0.514%
112	7.642	7.624	7.662	VV	16664	325805	19.82%	0.390%
113	7.683	7.662	7.710	VV	16329	430917	26.21%	0.516%
114	7.733	7.710	7.753	VV	17904	419487	25.52%	0.502%
115	7.775	7.753	7.816	VV	26616	700669	42.62%	0.839%
116	7.836	7.816	7.855	VV	17502	360167	21.91%	0.431%
117	7.879	7.855	7.893	VV	17549	376138	22.88%	0.451%
118	7.914	7.893	7.941	VV	21383	512997	31.20%	0.614%
119	7.954	7.941	7.970	VV	16764	279916	17.03%	0.335%
120	8.001	7.970	8.024	VV	19163	576663	35.08%	0.691%
121	8.041	8.024	8.081	VV	18949	602260	36.63%	0.721%
122	8.112	8.081	8.151	VV	18357	729851	44.39%	0.874%
123	8.193	8.151	8.212	VV	34972	810651	49.31%	0.971%
124	8.223	8.212	8.241	VV	20877	328539	19.98%	0.394%
125	8.262	8.241	8.275	VV	20600	404651	24.61%	0.485%
126	8.290	8.275	8.305	VV	21614	363888	22.13%	0.436%
127	8.423	8.385	8.445	VV	24631	771217	46.91%	0.924%
128	8.457	8.445	8.471	VV	20543	302989	18.43%	0.363%
129	8.489	8.471	8.513	VV	31031	626642	38.12%	0.751%
130	8.553	8.513	8.572	VV	31134	842862	51.27%	1.010%
131	8.581	8.572	8.596	VV	22344	316921	19.28%	0.380%
132	8.615	8.596	8.634	VV	21946	475099	28.90%	0.569%
133	8.653	8.634	8.671	VV	28056	520612	31.67%	0.624%
134	8.700	8.671	8.734	VV	25309	843574	51.31%	1.010%
135	8.755	8.734	8.803	VV	24207	885169	53.84%	1.060%
136	8.840	8.803	8.858	VV	21774	667492	40.60%	0.800%
137	8.889	8.858	8.918	VV	23902	776500	47.23%	0.930%
138	8.947	8.918	8.970	VV	25975	691749	42.08%	0.829%
139	8.991	8.970	9.036	VV	22101	793362	48.26%	0.950%
140	9.061	9.036	9.075	VV	24746	501247	30.49%	0.600%
141	9.088	9.075	9.118	VV	23207	574998	34.98%	0.689%

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142	9.143	9.118	9.174	VV	24579	754557	45.90%	0.904%
143	9.192	9.174	9.220	VV	23364	614759	37.39%	0.736%
144	9.238	9.220	9.260	VV	26012	537093	32.67%	0.643%
145	9.315	9.260	9.337	VV	24046	1028053	62.53%	1.231%
146	9.350	9.337	9.360	VV	22698	314008	19.10%	0.376%
147	9.369	9.360	9.390	VV	22509	384518	23.39%	0.461%
148	9.412	9.390	9.433	VV	23038	557550	33.91%	0.668%
149	9.483	9.433	9.501	VV	23452	894536	54.41%	1.071%
150	9.517	9.501	9.530	VV	23320	390548	23.76%	0.468%
151	9.545	9.530	9.568	VV	23593	522062	31.76%	0.625%
152	9.590	9.568	9.621	VV	24444	729290	44.36%	0.874%
153	9.647	9.621	9.682	VV	23504	820704	49.92%	0.983%
154	9.697	9.682	9.716	VV	23385	449536	27.34%	0.538%
155	9.737	9.716	9.759	VV	21861	547272	33.29%	0.656%
156	9.768	9.759	9.779	VV	20164	230679	14.03%	0.276%
157	9.801	9.779	9.848	VV	24421	912815	55.52%	1.093%
158	9.868	9.848	9.892	VV	23551	585712	35.63%	0.702%
159	9.905	9.892	9.918	VV	21861	334348	20.34%	0.400%
160	9.949	9.918	9.998	VV	22103	1018598	61.96%	1.220%
161	10.031	9.998	10.048	VV	22617	640789	38.98%	0.768%
162	10.064	10.048	10.081	VV	23605	456829	27.79%	0.547%
163	10.101	10.081	10.121	VV	23763	549645	33.43%	0.658%
164	10.167	10.121	10.194	VV	27733	1025457	62.38%	1.228%
165	10.211	10.194	10.247	VV	23616	703649	42.80%	0.843%
166	10.271	10.247	10.291	VV	24026	596927	36.31%	0.715%
167	10.306	10.291	10.322	VV	23259	411083	25.00%	0.492%
168	10.349	10.322	10.368	VV	23030	620743	37.76%	0.744%
169	10.415	10.368	10.446	VV	24930	1084756	65.98%	1.299%
170	10.468	10.446	10.541	VV	24081	1271776	77.36%	1.523%
171	10.570	10.541	10.589	VV	24077	636804	38.73%	0.763%
172	10.608	10.589	10.630	VV	24565	568814	34.60%	0.681%
173	10.644	10.630	10.667	VV	23377	485397	29.53%	0.581%
174	10.691	10.667	10.734	VV	22265	837690	50.95%	1.003%
175	10.745	10.734	10.756	VV	20477	269964	16.42%	0.323%
176	10.787	10.756	10.808	VV	21847	640202	38.94%	0.767%
177	10.857	10.808	10.893	VV	22283	1070960	65.14%	1.283%
178	10.922	10.893	10.946	VV	23390	699647	42.56%	0.838%
179	10.969	10.946	10.984	VV	21642	480378	29.22%	0.575%
180	11.015	10.984	11.064	VV	22496	1018237	61.94%	1.220%
181	11.086	11.064	11.142	VV	22750	969519	58.97%	1.161%
182	11.153	11.142	11.191	VV	20010	585647	35.62%	0.701%
183	11.205	11.191	11.249	VV	20589	683371	41.57%	0.819%
184	11.272	11.249	11.334	VV	19999	967783	58.87%	1.159%
185	11.381	11.334	11.421	VV	79557	1644013	100.00%	1.969%
186	11.444	11.421	11.482	VV	19506	673034	40.94%	0.806%
187	11.509	11.482	11.517	VV	19170	386652	23.52%	0.463%
188	11.560	11.517	11.587	VV	21088	813180	49.46%	0.974%
189	11.625	11.587	11.651	VV	20333	736723	44.81%	0.882%
190	11.670	11.651	11.690	VV	18906	431471	26.24%	0.517%
191	11.716	11.690	11.749	VV	19597	656378	39.93%	0.786%
192	11.767	11.749	11.795	VV	18314	474821	28.88%	0.569%
193	11.812	11.795	11.830	VV	17191	350203	21.30%	0.419%
194	11.840	11.830	11.860	VV	16613	293421	17.85%	0.351%

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195	11.871	11.860	11.920	VV	16687	574676	34.96%	0.688%
196	11.947	11.920	11.958	VV	16599	361393	21.98%	0.433%
197	11.964	11.958	11.984	VV	16228	248937	15.14%	0.298%
198	12.014	11.984	12.070	VV	16015	788220	47.94%	0.944%
199	12.089	12.070	12.131	VV	16241	569438	34.64%	0.682%
200	12.145	12.131	12.162	VV	14937	267172	16.25%	0.320%
201	12.177	12.162	12.192	VV	14302	253965	15.45%	0.304%
202	12.212	12.192	12.231	VV	14901	333530	20.29%	0.400%
203	12.250	12.231	12.281	VV	14787	434002	26.40%	0.520%
204	12.294	12.281	12.332	VV	14740	440210	26.78%	0.527%
205	12.337	12.332	12.367	VV	14149	279621	17.01%	0.335%
206	12.385	12.367	12.404	VV	14125	299718	18.23%	0.359%
207	12.427	12.404	12.498	VV	14476	765871	46.59%	0.917%
208	12.507	12.498	12.533	VV	12494	255678	15.55%	0.306%
209	12.551	12.533	12.598	VV	12712	463654	28.20%	0.555%
210	12.618	12.598	12.638	VV	11776	273384	16.63%	0.327%
211	12.650	12.638	12.698	VV	11651	396151	24.10%	0.475%
212	12.719	12.698	12.781	VV	13595	565649	34.41%	0.678%
213	12.824	12.781	12.884	VV	51506	1133163	68.93%	1.357%
214	12.899	12.884	12.942	VV	10823	358282	21.79%	0.429%
215	12.954	12.942	12.974	VV	9593	183417	11.16%	0.220%
216	13.000	12.974	13.024	VV	10150	288038	17.52%	0.345%
217	13.049	13.024	13.078	VV	10083	297916	18.12%	0.357%
218	13.085	13.078	13.104	VV	9002	140371	8.54%	0.168%
219	13.125	13.104	13.154	VV	9202	265860	16.17%	0.318%
220	13.172	13.154	13.227	VV	9163	369468	22.47%	0.443%
221	13.250	13.227	13.284	VV	8295	284178	17.29%	0.340%
222	13.308	13.284	13.374	VV	8445	410051	24.94%	0.491%
223	13.399	13.374	13.443	VV	8677	319936	19.46%	0.383%
224	13.459	13.443	13.478	VV	7866	155956	9.49%	0.187%
225	13.494	13.478	13.531	VV	7756	229417	13.95%	0.275%
226	13.537	13.531	13.559	VV	6748	111960	6.81%	0.134%
227	13.580	13.559	13.609	VV	7483	202620	12.32%	0.243%
228	13.627	13.609	13.648	VV	6751	142734	8.68%	0.171%
229	13.656	13.648	13.678	VV	5933	104207	6.34%	0.125%
230	13.692	13.678	13.703	VV	5772	85074	5.17%	0.102%
231	13.715	13.703	13.753	VV	5801	164754	10.02%	0.197%
232	13.773	13.753	13.831	VV	5428	235741	14.34%	0.282%
233	13.875	13.831	13.910	VV	5035	228583	13.90%	0.274%
234	13.922	13.910	13.947	VV	4893	103082	6.27%	0.123%
235	13.967	13.947	14.047	VV	4637	262698	15.98%	0.315%
236	14.064	14.047	14.108	VV	4453	151508	9.22%	0.181%
237	14.134	14.108	14.191	VV	4158	189293	11.51%	0.227%
238	14.207	14.191	14.222	VV	3545	65039	3.96%	0.078%
239	14.241	14.222	14.264	VV	3729	88461	5.38%	0.106%
240	14.304	14.264	14.390	VV	3746	241240	14.67%	0.289%
241	14.411	14.390	14.436	VV	2913	76355	4.64%	0.091%
242	14.449	14.436	14.485	VV	2713	74037	4.50%	0.089%
243	14.518	14.485	14.555	VV	3372	111860	6.80%	0.134%
244	14.565	14.555	14.595	VV	2281	52926	3.22%	0.063%
245	14.605	14.595	14.627	VV	2259	42368	2.58%	0.051%
246	14.646	14.627	14.658	VV	2319	41529	2.53%	0.050%

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247	14.677	14.658	14.726	VV	2395	83668	5.09%	0.100%
248	14.735	14.726	14.753	VV	1868	29477	1.79%	0.035%
249	14.759	14.753	14.814	VV	1840	62150	3.78%	0.074%
250	14.828	14.814	14.860	VV	1639	39731	2.42%	0.048%
251	14.869	14.860	14.898	VV	1445	32101	1.95%	0.038%
252	14.904	14.898	14.925	VV	1383	22027	1.34%	0.026%
253	14.938	14.925	14.956	VV	1359	22758	1.38%	0.027%
254	14.961	14.956	14.977	VV	1232	15822	0.96%	0.019%
255	14.986	14.977	15.032	VV	1263	36838	2.24%	0.044%
256	15.066	15.032	15.135	VV	2105	90816	5.52%	0.109%
257	15.143	15.135	15.168	VV	1020	18486	1.12%	0.022%
258	15.210	15.168	15.338	VV	2008	97076	5.90%	0.116%
259	15.357	15.338	15.375	VV	645	12315	0.75%	0.015%
260	15.405	15.375	15.428	VV	628	17677	1.08%	0.021%
261	15.437	15.428	15.482	VV	584	15763	0.96%	0.019%
262	15.491	15.482	15.554	VV	432	15975	0.97%	0.019%
263	15.564	15.554	15.571	VV	321	3282	0.20%	0.004%
264	15.590	15.571	15.658	VV	389	14574	0.89%	0.017%
265	15.669	15.658	15.678	VV	298	3201	0.19%	0.004%
266	15.699	15.678	15.769	VV	676	15994	0.97%	0.019%
267	15.775	15.769	15.819	VV	221	3675	0.22%	0.004%
268	15.835	15.819	15.864	VV	170	3364	0.20%	0.004%
269	15.882	15.864	15.938	VV	193	4564	0.28%	0.005%
270	15.965	15.938	15.994	VV	141	3760	0.23%	0.005%
271	16.008	15.994	16.048	VV	183	4102	0.25%	0.005%
272	16.075	16.048	16.133	VV	275	8720	0.53%	0.010%
273	16.178	16.133	16.220	VV	818	20693	1.26%	0.025%
274	16.239	16.220	16.277	VV	221	5526	0.34%	0.007%
275	16.293	16.277	16.318	VV	189	3145	0.19%	0.004%
276	16.340	16.318	16.362	VV	188	3264	0.20%	0.004%
277	16.371	16.362	16.408	VV	156	2186	0.13%	0.003%
278	16.478	16.408	16.521	PV	444	10847	0.66%	0.013%
279	16.550	16.521	16.584	VV	314	6868	0.42%	0.008%
280	16.601	16.584	16.624	VV	195	3395	0.21%	0.004%
281	16.646	16.624	16.678	VV	1012	15876	0.97%	0.019%
282	16.690	16.678	16.791	VV	460	9305	0.57%	0.011%
283	16.802	16.791	16.840	VV	149	2362	0.14%	0.003%
284	16.860	16.840	16.898	VV	220	3281	0.20%	0.004%
285	16.942	16.898	16.986	VV	234	6575	0.40%	0.008%
286	17.029	16.986	17.067	PV	311	8809	0.54%	0.011%
287	17.097	17.067	17.134	VV	1140	18523	1.13%	0.022%
288	17.144	17.134	17.163	VV	167	1995	0.12%	0.002%
289	17.202	17.163	17.221	VV	289	6501	0.40%	0.008%
290	17.237	17.221	17.274	VV	247	4017	0.24%	0.005%
291	17.319	17.274	17.404	VV	170	6991	0.43%	0.008%
292	17.419	17.404	17.427	VV	110	909	0.06%	0.001%
293	17.448	17.427	17.469	VV	128	2312	0.14%	0.003%
294	17.532	17.469	17.571	VV	1477	28520	1.73%	0.034%
295	17.576	17.571	17.593	VV	129	913	0.06%	0.001%
296	17.648	17.593	17.670	PV	420	10099	0.61%	0.012%
297	17.680	17.670	17.721	VV	219	4632	0.28%	0.006%
298	17.739	17.721	17.796	VV	212	4951	0.30%	0.006%
299	17.821	17.796	17.832	VV	286	4474	0.27%	0.005%

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300	17.899	17.832	17.924	VV	778	22106	1.34%	0.026%
301	17.954	17.924	17.998	VV	1735	35102	2.14%	0.042%
302	18.012	17.998	18.038	VV	433	7002	0.43%	0.008%
303	18.052	18.038	18.099	VV	228	5785	0.35%	0.007%
304	18.105	18.099	18.113	VV	117	869	0.05%	0.001%
305	18.161	18.113	18.201	VV	314	9324	0.57%	0.011%
306	18.211	18.201	18.225	VV	198	1939	0.12%	0.002%
307	18.257	18.225	18.287	VV	124	3091	0.19%	0.004%
308	18.363	18.287	18.408	PV	1843	33818	2.06%	0.041%
309	18.469	18.408	18.514	PV	281	12133	0.74%	0.015%
310	18.524	18.514	18.534	VV	231	1629	0.10%	0.002%
311	18.542	18.534	18.547	VV	142	809	0.05%	0.001%
312	18.564	18.547	18.579	VV	87	1768	0.11%	0.002%
313	18.653	18.579	18.671	PV	214	8960	0.55%	0.011%
314	18.703	18.671	18.727	VV	735	16929	1.03%	0.020%
315	18.759	18.727	18.794	VV	1599	33286	2.02%	0.040%
316	18.802	18.794	18.827	VV	339	4219	0.26%	0.005%
317	18.865	18.827	18.882	VV	211	5665	0.34%	0.007%
318	18.901	18.882	18.914	VV	106	1825	0.11%	0.002%
319	19.066	18.914	19.073	VV	275	16770	1.02%	0.020%
320	19.144	19.073	19.192	VV	1602	42368	2.58%	0.051%
321	19.201	19.192	19.234	VV	399	9882	0.60%	0.012%
322	19.255	19.234	19.265	VV	456	7597	0.46%	0.009%
323	19.403	19.265	19.492	VV	2534	165457	10.06%	0.198%
324	19.520	19.492	19.558	VV	1614	41109	2.50%	0.049%
325	19.762	19.558	19.770	VV	1065	106028	6.45%	0.127%
326	19.793	19.770	19.810	VV	1178	26466	1.61%	0.032%
327	19.823	19.810	19.830	VV	1120	12742	0.78%	0.015%
328	19.842	19.830	19.848	VV	1119	11501	0.70%	0.014%
329	19.883	19.848	19.904	VV	2012	51279	3.12%	0.061%
330	19.958	19.904	19.984	VV	1498	67334	4.10%	0.081%

Sum of corrected areas: 83485551

Aliphatic EPH 032625.M Wed Apr 02 04:29:34 2025

Report of Analysis

Client:	G Environmental	Date Collected:	03/27/25
Project:	Stockton	Date Received:	03/28/25
Client Sample ID:	D3	SDG No.:	Q1675
Lab Sample ID:	Q1675-15	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	95.4
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
03/31/25 08:56	03/31/25 21:23	PB167381

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C28-C40	Aliphatic C28-C40	3.71		1	1.24	2.09	mg/kg	FC068457.D
Aliphatic C9-C28	Aliphatic C9-C28	37.0		1	0.95	4.20	mg/kg	FC068457.D
Total AliphaticEPH	Total AliphaticEPH	40.8			2.19	6.29	mg/kg	
Total EPH	Total EPH	40.8			2.19	6.29	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	03/27/25
Project:	Stockton	Date Received:	03/28/25
Client Sample ID:	D3	SDG No.:	Q1675
Lab Sample ID:	Q1675-15	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	95.4
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068457.D	1	03/31/25	03/31/25	PB167381

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	37.0		0.95	4.20	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	3.71		1.24	2.09	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	24.4		40 - 140	49%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	25.3		40 - 140	51%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1675-15	Acq On:	31 Mar 2025 21:23
Client Sample ID:	D3	Operator:	YP/AJ
Data file:	FC068457.D	Misc:	
Instrument:	FID_C	ALS Vial:	23
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.098	6.359	5067853	31.222	300	ug/ml
Aliphatic C12-C16	6.360	9.743	34321501	204.059	200	ug/ml
Aliphatic C16-C21	9.744	13.097	43507987	253.675	300	ug/ml
Aliphatic C21-C28	13.098	16.748	7158371	42.39	400	ug/ml
Aliphatic C28-C40	16.749	21.546	7236870	53.145	600	ug/ml
Aliphatic EPH	3.098	21.546	97292582	584.491		ug/ml
ortho-Terphenyl (SURR)	11.387	11.387	5021222	25.28		ug/ml
1-chlorooctadecane (SURR)	12.828	12.828	3644058	24.44		ug/ml
Aliphatic C9-C28	3.098	16.748	90055712	531.346	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
 Data File : FC068457.D
 Signal(s) : FID1A.ch
 Acq On : 31 Mar 2025 21:23
 Operator : YP/AJ
 Sample : Q1675-15
 Misc :
 ALS Vial : 23 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 D3

Integration File: autoint1.e
 Quant Time: Apr 01 03:21:15 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:35:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.387	5021222	25.279 ug/ml
Spiked Amount	50.000	Recovery	= 50.56%
12) S 1-chlorooctadecane (S...	12.828	3644058	24.445 ug/ml
Spiked Amount	50.000	Recovery	= 48.89%

Target Compounds

(f)=RT Delta > 1/2 Window

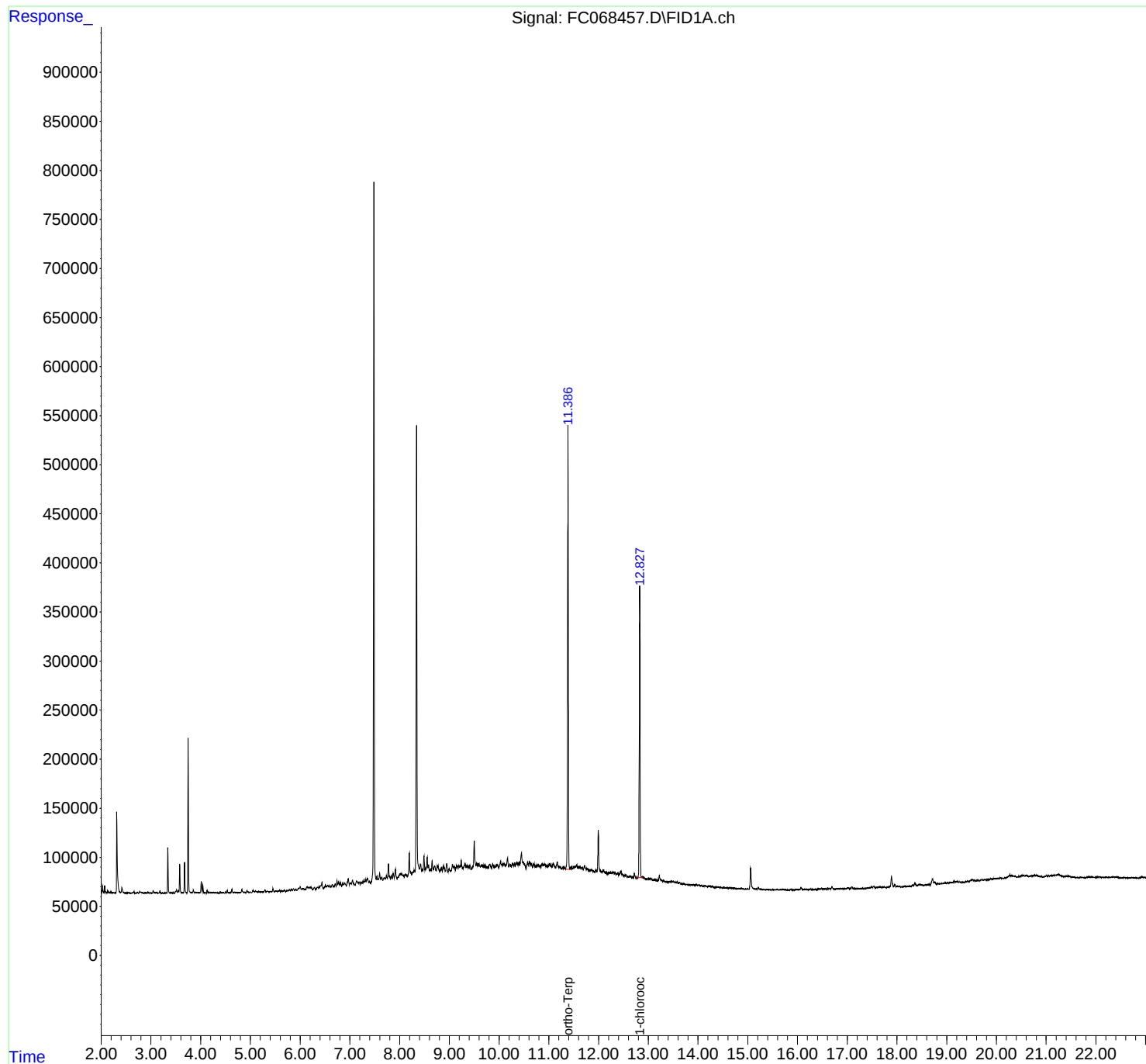
(m)=manual int.

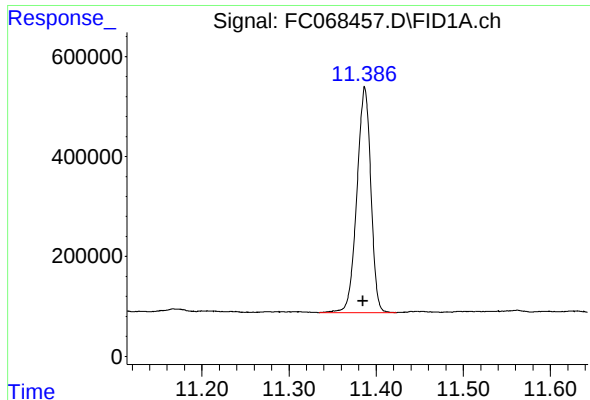
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068457.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 21:23
Operator : YP/AJ
Sample : Q1675-15
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
D3

Integration File: autoint1.e
Quant Time: Apr 01 03:21:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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

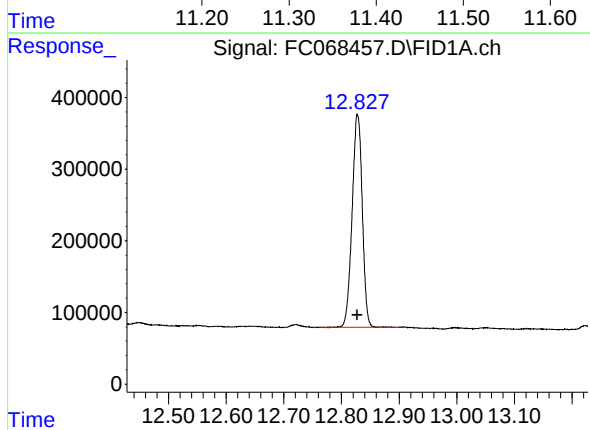




#9 ortho-Terphenyl (SURR)

R.T.: 11.387 min
Delta R.T.: 0.002 min
Response: 5021222
Conc: 25.28 ug/ml

Instrument :
FID_C
ClientSampleId :
D3



#12 1-chlorooctadecane (SURR)

R.T.: 12.828 min
Delta R.T.: 0.000 min
Response: 3644058
Conc: 24.44 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068457.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 21:23
Sample : Q1675-15
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	2.416	2.371	2.497	BV	4071	43967	0.71%	0.041%
2	2.507	2.497	2.521	PV	166	764	0.01%	0.001%
3	2.537	2.521	2.588	PV	327	4202	0.07%	0.004%
4	2.658	2.588	2.708	PV	1801	20627	0.33%	0.019%
5	2.724	2.708	2.757	PV	750	12173	0.20%	0.011%
6	2.776	2.757	2.855	VV	1881	37478	0.60%	0.035%
7	2.887	2.855	2.916	VV	463	10891	0.18%	0.010%
8	2.943	2.916	3.027	VV	817	23775	0.38%	0.022%
9	3.044	3.027	3.078	VV	2732	32600	0.53%	0.030%
10	3.088	3.078	3.115	VV	464	8367	0.13%	0.008%
11	3.122	3.115	3.137	VV	390	4247	0.07%	0.004%
12	3.150	3.137	3.160	VV	284	3590	0.06%	0.003%
13	3.179	3.160	3.221	VV	2175	28955	0.47%	0.027%
14	3.234	3.221	3.261	VV	276	3796	0.06%	0.004%
15	3.275	3.261	3.295	PV	410	4732	0.08%	0.004%
16	3.306	3.295	3.317	VV	373	3484	0.06%	0.003%
17	3.340	3.317	3.399	VV	45129	384894	6.20%	0.355%
18	3.418	3.399	3.477	VV	445	12617	0.20%	0.012%
19	3.514	3.477	3.533	VV	3402	55840	0.90%	0.052%
20	3.551	3.533	3.561	VV	3093	32762	0.53%	0.030%
21	3.579	3.561	3.654	VV	29789	269610	4.34%	0.249%
22	3.676	3.654	3.719	VV	31625	272398	4.39%	0.251%
23	3.748	3.719	3.831	VV	156815	1288475	20.75%	1.189%
24	3.852	3.831	3.873	VV	3106	38109	0.61%	0.035%
25	3.880	3.873	3.964	VV	833	30893	0.50%	0.029%
26	3.981	3.964	3.990	VV	511	6332	0.10%	0.006%
27	4.012	3.990	4.030	VV	11707	129148	2.08%	0.119%
28	4.044	4.030	4.110	VV	8113	88119	1.42%	0.081%
29	4.129	4.110	4.146	VV	3107	27194	0.44%	0.025%
30	4.159	4.146	4.178	VV	866	9457	0.15%	0.009%
31	4.198	4.178	4.238	VV	492	10302	0.17%	0.010%
32	4.250	4.238	4.270	VV	695	8685	0.14%	0.008%
33	4.285	4.270	4.298	VV	382	4280	0.07%	0.004%
34	4.315	4.298	4.366	VV	808	11792	0.19%	0.011%
35	4.396	4.366	4.423	VV	1100	15640	0.25%	0.014%
36	4.441	4.423	4.485	VV	483	10110	0.16%	0.009%

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37	4.500	4.485	4.513	PV	718	6074	0.10%	0.006%
38	4.534	4.513	4.560	VV	1957	23677	0.38%	0.022%
39	4.573	4.560	4.581	VV	339	3136	0.05%	0.003%
40	4.597	4.581	4.611	VV	906	10025	0.16%	0.009%
41	4.628	4.611	4.649	VV	3926	42465	0.68%	0.039%
42	4.660	4.649	4.670	VV	570	6721	0.11%	0.006%
43	4.682	4.670	4.696	VV	625	7730	0.12%	0.007%
44	4.709	4.696	4.752	VV	529	12449	0.20%	0.011%
45	4.827	4.752	4.869	VV	3728	68107	1.10%	0.063%
46	4.883	4.869	4.906	VV	958	13795	0.22%	0.013%
47	4.932	4.906	4.947	VV	2828	32492	0.52%	0.030%
48	4.956	4.947	4.973	VV	1112	12777	0.21%	0.012%
49	4.990	4.973	5.020	VV	649	14114	0.23%	0.013%
50	5.052	5.020	5.085	VV	2474	49325	0.79%	0.046%
51	5.104	5.085	5.148	VV	1657	43416	0.70%	0.040%
52	5.167	5.148	5.180	VV	1414	21173	0.34%	0.020%
53	5.190	5.180	5.211	VV	1183	17797	0.29%	0.016%
54	5.219	5.211	5.240	VV	868	13390	0.22%	0.012%
55	5.294	5.240	5.314	VV	3268	65071	1.05%	0.060%
56	5.329	5.314	5.340	VV	1670	21625	0.35%	0.020%
57	5.350	5.340	5.384	VV	1621	29543	0.48%	0.027%
58	5.399	5.384	5.434	VV	1602	35972	0.58%	0.033%
59	5.453	5.434	5.481	VV	4257	61087	0.98%	0.056%
60	5.504	5.481	5.522	VV	1847	38879	0.63%	0.036%
61	5.533	5.522	5.545	VV	1823	21070	0.34%	0.019%
62	5.586	5.545	5.607	VV	2140	63482	1.02%	0.059%
63	5.626	5.607	5.654	VV	2075	47866	0.77%	0.044%
64	5.685	5.654	5.706	VV	2584	60861	0.98%	0.056%
65	5.733	5.706	5.748	VV	2329	43888	0.71%	0.041%
66	5.783	5.748	5.801	VV	3077	78612	1.27%	0.073%
67	5.827	5.801	5.847	VV	3248	79066	1.27%	0.073%
68	5.868	5.847	5.894	VV	3966	87225	1.40%	0.080%
69	5.916	5.894	5.935	VV	3502	69968	1.13%	0.065%
70	6.002	5.935	6.023	VV	5892	218051	3.51%	0.201%
71	6.059	6.023	6.078	VV	4205	123798	1.99%	0.114%
72	6.089	6.078	6.114	VV	3651	71852	1.16%	0.066%
73	6.139	6.114	6.161	VV	5990	135340	2.18%	0.125%
74	6.179	6.161	6.195	VV	5458	105709	1.70%	0.098%
75	6.214	6.195	6.260	VV	5476	172155	2.77%	0.159%
76	6.290	6.260	6.311	VV	5371	129920	2.09%	0.120%
77	6.345	6.311	6.367	VV	5453	152689	2.46%	0.141%
78	6.381	6.367	6.393	VV	6688	85531	1.38%	0.079%
79	6.438	6.393	6.466	VV	10314	295952	4.77%	0.273%
80	6.512	6.466	6.540	VV	7220	258522	4.16%	0.239%
81	6.556	6.540	6.569	VV	7294	114985	1.85%	0.106%
82	6.584	6.569	6.622	VV	6787	194949	3.14%	0.180%
83	6.644	6.622	6.664	VV	7805	169385	2.73%	0.156%
84	6.674	6.664	6.685	VV	6692	79443	1.28%	0.073%
85	6.706	6.685	6.724	VV	8925	177476	2.86%	0.164%
86	6.743	6.724	6.758	VV	11629	187504	3.02%	0.173%
87	6.775	6.758	6.793	VV	11042	195127	3.14%	0.180%
88	6.811	6.793	6.834	VV	10003	210085	3.38%	0.194%
89	6.859	6.834	6.878	VV	9171	212127	3.42%	0.196%

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90	6.897	6.878	6.931	VV	9811	265532	4.28%	0.245%
91	6.968	6.931	6.990	VV	13969	365769	5.89%	0.338%
92	7.009	6.990	7.024	VV	9510	183681	2.96%	0.170%
93	7.054	7.024	7.101	VV	12600	444206	7.15%	0.410%
94	7.136	7.101	7.168	VV	11708	391351	6.30%	0.361%
95	7.182	7.168	7.208	VV	10748	235289	3.79%	0.217%
96	7.225	7.208	7.248	VV	10391	232641	3.75%	0.215%
97	7.264	7.248	7.276	VV	11498	176982	2.85%	0.163%
98	7.282	7.276	7.290	VV	10613	90595	1.46%	0.084%
99	7.308	7.290	7.321	VV	13382	216347	3.48%	0.200%
100	7.351	7.321	7.382	VV	14206	445701	7.18%	0.411%
101	7.395	7.382	7.410	VV	11364	178901	2.88%	0.165%
102	7.543	7.527	7.577	VV	15390	419357	6.75%	0.387%
103	7.599	7.577	7.625	VV	19559	449583	7.24%	0.415%
104	7.644	7.625	7.664	VV	15212	330367	5.32%	0.305%
105	7.688	7.664	7.711	VV	14653	385073	6.20%	0.355%
106	7.735	7.711	7.754	VV	16540	385387	6.21%	0.356%
107	7.777	7.754	7.819	VV	29019	731156	11.78%	0.675%
108	7.836	7.819	7.852	VV	16784	301776	4.86%	0.278%
109	7.872	7.852	7.894	VV	18699	407283	6.56%	0.376%
110	7.916	7.894	7.951	VV	22947	604004	9.73%	0.557%
111	8.011	7.951	8.028	VV	18782	771389	12.42%	0.712%
112	8.042	8.028	8.090	VV	18825	649509	10.46%	0.599%
113	8.115	8.090	8.152	VV	17915	633628	10.20%	0.585%
114	8.195	8.152	8.242	VV	40000	1211896	19.52%	1.118%
115	8.262	8.242	8.273	VV	20526	360864	5.81%	0.333%
116	8.292	8.273	8.309	VV	22338	450660	7.26%	0.416%
117	8.422	8.399	8.446	VV	28277	713591	11.49%	0.659%
118	8.460	8.446	8.471	VV	23611	338581	5.45%	0.312%
119	8.491	8.471	8.513	VV	36625	710096	11.44%	0.655%
120	8.555	8.513	8.571	VV	35147	952857	15.35%	0.879%
121	8.582	8.571	8.607	VV	27673	533124	8.59%	0.492%
122	8.624	8.607	8.635	VV	22928	374493	6.03%	0.346%
123	8.654	8.635	8.686	VV	31660	777539	12.52%	0.718%
124	8.705	8.686	8.737	VV	26548	742290	11.95%	0.685%
125	8.757	8.737	8.801	VV	26675	938903	15.12%	0.866%
126	8.844	8.801	8.860	VV	24981	805413	12.97%	0.743%
127	8.883	8.860	8.919	VV	26114	828270	13.34%	0.764%
128	8.948	8.919	8.972	VV	28510	782377	12.60%	0.722%
129	8.991	8.972	9.024	VV	23458	696098	11.21%	0.642%
130	9.063	9.024	9.081	VV	27974	809225	13.03%	0.747%
131	9.093	9.081	9.122	VV	25326	606660	9.77%	0.560%
132	9.160	9.122	9.174	VV	26633	796436	12.83%	0.735%
133	9.192	9.174	9.206	VV	26695	476366	7.67%	0.440%
134	9.215	9.206	9.225	VV	26557	291604	4.70%	0.269%
135	9.240	9.225	9.271	VV	31990	758422	12.21%	0.700%
136	9.317	9.271	9.336	VV	28806	1006535	16.21%	0.929%
137	9.354	9.336	9.365	VV	26440	447104	7.20%	0.413%
138	9.373	9.365	9.388	VV	26050	358574	5.78%	0.331%
139	9.414	9.388	9.436	VV	26594	724639	11.67%	0.669%
140	9.502	9.436	9.533	VV	51588	1783222	28.72%	1.646%
141	9.550	9.533	9.569	VV	28459	589787	9.50%	0.544%

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142	9.596	9.569	9.623	VV	28739	891415	14.36%	0.823%
143	9.643	9.623	9.658	VV	27305	544723	8.77%	0.503%
144	9.666	9.658	9.758	VV	26519	1543144	24.85%	1.424%
145	9.766	9.758	9.778	VV	24757	299997	4.83%	0.277%
146	9.811	9.778	9.854	VV	27748	1186030	19.10%	1.095%
147	9.870	9.854	9.915	VV	28131	947547	15.26%	0.874%
148	9.952	9.915	10.000	VV	27945	1328521	21.40%	1.226%
149	10.030	10.000	10.064	VV	30308	1075762	17.33%	0.993%
150	10.085	10.064	10.098	VV	27732	553530	8.91%	0.511%
151	10.106	10.098	10.127	VV	28522	469886	7.57%	0.434%
152	10.171	10.127	10.198	VV	34229	1219804	19.65%	1.126%
153	10.215	10.198	10.247	VV	27937	789627	12.72%	0.729%
154	10.271	10.247	10.291	VV	29022	719690	11.59%	0.664%
155	10.308	10.291	10.324	VV	28172	546872	8.81%	0.505%
156	10.346	10.324	10.378	VV	28929	886571	14.28%	0.818%
157	10.449	10.378	10.544	VV	38772	2947761	47.48%	2.720%
158	10.573	10.544	10.590	VV	30021	749491	12.07%	0.692%
159	10.610	10.590	10.635	VV	30522	756261	12.18%	0.698%
160	10.647	10.635	10.673	VV	28639	623366	10.04%	0.575%
161	10.696	10.673	10.734	VV	28215	967068	15.58%	0.892%
162	10.748	10.734	10.761	VV	26324	424595	6.84%	0.392%
163	10.786	10.761	10.813	VV	27267	807684	13.01%	0.745%
164	10.858	10.813	10.889	VV	28016	1203569	19.38%	1.111%
165	10.909	10.889	10.954	VV	27147	1046519	16.85%	0.966%
166	10.972	10.954	10.988	VV	26195	517308	8.33%	0.477%
167	11.017	10.988	11.061	VV	27842	1164779	18.76%	1.075%
168	11.088	11.061	11.122	VV	28535	968898	15.60%	0.894%
169	11.130	11.122	11.140	VV	24733	260649	4.20%	0.241%
170	11.169	11.140	11.255	VV	29640	1756228	28.28%	1.621%
171	11.276	11.255	11.298	VV	23973	616116	9.92%	0.569%
172	11.307	11.298	11.334	VV	24049	512483	8.25%	0.473%
173	11.387	11.334	11.423	VV	472633	6209049	100.00%	5.730%
174	11.447	11.423	11.475	VV	24702	745925	12.01%	0.688%
175	11.561	11.475	11.579	VV	26958	1535122	24.72%	1.417%
176	11.596	11.579	11.610	VV	24933	452400	7.29%	0.417%
177	11.628	11.610	11.660	VV	25251	722629	11.64%	0.667%
178	11.672	11.660	11.695	VV	24277	483540	7.79%	0.446%
179	11.720	11.695	11.798	VV	25981	1438490	23.17%	1.327%
180	11.815	11.798	11.830	VV	21822	411170	6.62%	0.379%
181	11.851	11.830	11.923	VV	21964	1157793	18.65%	1.068%
182	11.951	11.923	11.971	VV	21531	594214	9.57%	0.548%
183	11.996	11.971	12.065	VV	62063	1605791	25.86%	1.482%
184	12.090	12.065	12.135	VV	21290	848262	13.66%	0.783%
185	12.149	12.135	12.188	VV	19271	574193	9.25%	0.530%
186	12.214	12.188	12.267	VV	19215	877362	14.13%	0.810%
187	12.295	12.267	12.371	VV	19254	1130916	18.21%	1.044%
188	12.387	12.371	12.407	VV	18414	381854	6.15%	0.352%
189	12.448	12.407	12.541	VV	20085	1367010	22.02%	1.262%
190	12.551	12.541	12.571	VV	16191	279538	4.50%	0.258%
191	12.585	12.571	12.610	VV	15058	335627	5.41%	0.310%
192	12.642	12.610	12.697	VV	15061	752116	12.11%	0.694%
193	12.721	12.697	12.774	VV	17351	670503	10.80%	0.619%
194	12.828	12.774	12.865	VV	311373	4372131	70.42%	4.035%

rteres								
195	12.880	12.865	12.893	VV	14122	238759	3.85%	0.220%
196	12.907	12.893	12.976	VV	13905	625526	10.07%	0.577%
197	12.997	12.976	13.029	VV	12724	388399	6.26%	0.358%
198	13.051	13.029	13.107	VV	12871	544236	8.77%	0.502%
199	13.120	13.107	13.178	VV	11346	463228	7.46%	0.427%
200	13.189	13.178	13.194	VV	10812	105037	1.69%	0.097%
201	13.223	13.194	13.293	VV	15869	680294	10.96%	0.628%
202	13.308	13.293	13.396	VV	10199	575821	9.27%	0.531%
203	13.421	13.396	13.441	VV	9379	243239	3.92%	0.224%
204	13.459	13.441	13.479	VV	9767	207918	3.35%	0.192%
205	13.496	13.479	13.524	VV	9485	248576	4.00%	0.229%
206	13.533	13.524	13.568	VV	9077	222392	3.58%	0.205%
207	13.582	13.568	13.608	VV	9290	201011	3.24%	0.186%
208	13.625	13.608	13.748	VV	8417	594111	9.57%	0.548%
209	13.766	13.748	13.781	VV	6319	122951	1.98%	0.113%
210	13.790	13.781	13.838	VV	6316	203586	3.28%	0.188%
211	13.862	13.838	13.880	VV	5919	143869	2.32%	0.133%
212	13.894	13.880	13.911	VV	5794	105201	1.69%	0.097%
213	13.928	13.911	13.951	VV	5877	135420	2.18%	0.125%
214	13.972	13.951	13.993	VV	6464	144962	2.33%	0.134%
215	14.015	13.993	14.038	VV	5677	143129	2.31%	0.132%
216	14.069	14.038	14.107	VV	5336	202150	3.26%	0.187%
217	14.140	14.107	14.194	VV	5045	233124	3.75%	0.215%
218	14.208	14.194	14.223	VV	4447	73325	1.18%	0.068%
219	14.244	14.223	14.275	VV	4379	127883	2.06%	0.118%
220	14.288	14.275	14.344	VV	3985	152631	2.46%	0.141%
221	14.364	14.344	14.497	VV	3727	286393	4.61%	0.264%
222	14.519	14.497	14.561	VV	3223	108273	1.74%	0.100%
223	14.568	14.561	14.621	VV	2599	88176	1.42%	0.081%
224	14.645	14.621	14.666	VV	3012	69985	1.13%	0.065%
225	14.680	14.666	14.705	VV	2469	52066	0.84%	0.048%
226	14.723	14.705	14.734	VV	2218	37485	0.60%	0.035%
227	14.754	14.734	14.805	VV	2170	81551	1.31%	0.075%
228	14.813	14.805	14.851	VV	1753	45475	0.73%	0.042%
229	14.871	14.851	14.892	VV	2210	43878	0.71%	0.040%
230	14.900	14.892	14.944	VV	1523	44664	0.72%	0.041%
231	14.955	14.944	15.020	VV	1327	55395	0.89%	0.051%
232	15.057	15.020	15.159	VV	22480	432633	6.97%	0.399%
233	15.212	15.159	15.236	VV	3098	75296	1.21%	0.069%
234	15.254	15.236	15.288	VV	1230	30350	0.49%	0.028%
235	15.305	15.288	15.378	VV	757	30182	0.49%	0.028%
236	15.389	15.378	15.398	VV	551	5738	0.09%	0.005%
237	15.425	15.398	15.469	VV	629	21786	0.35%	0.020%
238	15.510	15.469	15.546	VV	563	19827	0.32%	0.018%
239	15.575	15.546	15.668	VV	960	32842	0.53%	0.030%
240	15.700	15.668	15.735	VV	700	16841	0.27%	0.016%
241	15.767	15.735	15.827	VV	341	10652	0.17%	0.010%
242	15.880	15.827	15.905	PV	468	9742	0.16%	0.009%
243	15.987	15.905	16.008	VV	387	11572	0.19%	0.011%
244	16.022	16.008	16.038	VV	437	6603	0.11%	0.006%
245	16.069	16.038	16.121	VV	2096	41898	0.67%	0.039%
246	16.180	16.121	16.209	VV	772	19185	0.31%	0.018%

					rteres			
247	16.258	16.209	16.298	PV	721	14713	0.24%	0.014%
248	16.309	16.298	16.355	VV	380	7302	0.12%	0.007%
249	16.375	16.355	16.388	VV	255	3650	0.06%	0.003%
250	16.401	16.388	16.415	VV	226	2622	0.04%	0.002%
251	16.482	16.415	16.514	VV	680	26112	0.42%	0.024%
252	16.548	16.514	16.593	VV	606	19750	0.32%	0.018%
253	16.648	16.593	16.669	VV	1407	33024	0.53%	0.030%
254	16.694	16.669	16.748	VV	2604	42852	0.69%	0.040%
255	16.767	16.748	16.781	VV	202	2537	0.04%	0.002%
256	16.812	16.781	16.833	VV	374	6963	0.11%	0.006%
257	16.862	16.833	16.918	VV	469	12846	0.21%	0.012%
258	16.958	16.918	16.978	VV	404	9059	0.15%	0.008%
259	17.014	16.978	17.068	VV	1258	30857	0.50%	0.028%
260	17.097	17.068	17.140	VV	1860	29743	0.48%	0.027%
261	17.186	17.140	17.201	VV	260	6511	0.10%	0.006%
262	17.206	17.201	17.294	VV	303	7329	0.12%	0.007%
263	17.311	17.294	17.323	PV	126	1412	0.02%	0.001%
264	17.364	17.323	17.388	VV	193	4719	0.08%	0.004%
265	17.488	17.388	17.508	VV	1360	42022	0.68%	0.039%
266	17.534	17.508	17.565	VV	1748	36783	0.59%	0.034%
267	17.625	17.565	17.633	VV	774	19849	0.32%	0.018%
268	17.652	17.633	17.697	VV	961	27929	0.45%	0.026%
269	17.709	17.697	17.721	VV	591	7046	0.11%	0.007%
270	17.740	17.721	17.775	VV	853	13864	0.22%	0.013%
271	17.831	17.775	17.845	VV	784	14126	0.23%	0.013%
272	17.888	17.845	17.934	VV	10990	206473	3.33%	0.191%
273	17.957	17.934	17.986	VV	2760	50288	0.81%	0.046%
274	18.016	17.986	18.075	VV	954	29192	0.47%	0.027%
275	18.088	18.075	18.108	VV	308	4072	0.07%	0.004%
276	18.163	18.108	18.195	PV	596	11667	0.19%	0.011%
277	18.222	18.195	18.231	VV	344	4646	0.07%	0.004%
278	18.271	18.231	18.281	VV	380	8968	0.14%	0.008%
279	18.361	18.281	18.411	VV	3466	103559	1.67%	0.096%
280	18.449	18.411	18.475	VV	1800	47974	0.77%	0.044%
281	18.492	18.475	18.535	VV	1237	35751	0.58%	0.033%
282	18.568	18.535	18.585	VV	814	19821	0.32%	0.018%
283	18.589	18.585	18.594	VV	706	3935	0.06%	0.004%
284	18.602	18.594	18.608	VV	794	5548	0.09%	0.005%
285	18.651	18.608	18.665	VV	1241	30253	0.49%	0.028%
286	18.714	18.665	18.740	VV	6520	169006	2.72%	0.156%
287	18.758	18.740	18.811	VV	3459	98944	1.59%	0.091%
288	18.818	18.811	18.838	VV	1634	23499	0.38%	0.022%
289	18.849	18.838	18.886	VV	1478	40188	0.65%	0.037%
290	18.968	18.886	18.988	VV	2245	106077	1.71%	0.098%
291	19.023	18.988	19.053	VV	2200	74540	1.20%	0.069%
292	19.074	19.053	19.098	VV	2057	52344	0.84%	0.048%
293	19.149	19.098	19.167	VV	3384	105718	1.70%	0.098%
294	19.194	19.167	19.209	VV	2905	67791	1.09%	0.063%
295	19.226	19.209	19.242	VV	2679	49686	0.80%	0.046%
296	19.252	19.242	19.268	VV	2468	35075	0.56%	0.032%
297	19.293	19.268	19.313	VV	2179	55477	0.89%	0.051%
298	19.330	19.313	19.350	VV	2013	41023	0.66%	0.038%
299	19.389	19.350	19.401	VV	2509	65335	1.05%	0.060%

					rteres			
300	19.429	19.401	19.445	VV	2662	63767	1.03%	0.059%
301	19.493	19.445	19.504	VV	3876	110384	1.78%	0.102%
302	19.523	19.504	19.565	VV	4202	132317	2.13%	0.122%
303	19.576	19.565	19.598	VV	3058	57947	0.93%	0.053%
304	19.622	19.598	19.654	VV	3170	97940	1.58%	0.090%
305	19.666	19.654	19.671	VV	3053	29064	0.47%	0.027%
306	19.709	19.671	19.741	VV	3476	137142	2.21%	0.127%
307	19.769	19.741	19.808	VV	3562	131283	2.11%	0.121%
308	19.821	19.808	19.841	VV	3592	65366	1.05%	0.060%
309	19.890	19.841	19.922	VV	4315	181811	2.93%	0.168%
310	19.961	19.922	19.981	VV	4174	139307	2.24%	0.129%
311	20.025	19.981	20.055	VV	4338	179006	2.88%	0.165%
312	20.071	20.055	20.147	VV	4667	231635	3.73%	0.214%
313	20.187	20.147	20.197	VV	4337	125048	2.01%	0.115%
314	20.266	20.197	20.291	VV	7250	327392	5.27%	0.302%
315	20.308	20.291	20.343	VV	6684	192090	3.09%	0.177%
316	20.352	20.343	20.415	VV	5885	225156	3.63%	0.208%
317	20.459	20.415	20.467	VV	5110	149435	2.41%	0.138%
318	20.479	20.467	20.491	VV	5357	76791	1.24%	0.071%
319	20.549	20.491	20.570	VV	5849	268064	4.32%	0.247%
320	20.591	20.570	20.660	VV	5930	283063	4.56%	0.261%
321	20.708	20.660	20.718	VV	5152	172045	2.77%	0.159%
322	20.735	20.718	20.744	VV	5362	79841	1.29%	0.074%
323	20.753	20.744	20.757	VV	5386	42283	0.68%	0.039%
324	20.775	20.757	20.789	VV	5507	103437	1.67%	0.095%
325	20.810	20.789	20.948	VV	5391	412037	6.64%	0.380%
326	21.024	20.948	21.031	VV	4477	198876	3.20%	0.184%
327	21.049	21.031	21.078	VV	4498	120272	1.94%	0.111%
328	21.094	21.078	21.131	VV	4653	140350	2.26%	0.130%
329	21.250	21.131	21.345	VV	5299	566476	9.12%	0.523%
330	21.359	21.345	21.375	VV	3135	53683	0.86%	0.050%
331	21.392	21.375	21.417	VV	3253	79857	1.29%	0.074%
332	21.438	21.417	21.503	VV	3414	146273	2.36%	0.135%
333	21.511	21.503	21.519	VV	2224	21430	0.35%	0.020%
334	21.526	21.519	21.594	VV	2058	75557	1.22%	0.070%
335	21.608	21.594	21.658	VV	1303	46414	0.75%	0.043%
336	21.698	21.658	21.711	VV	1297	38252	0.62%	0.035%
337	21.727	21.711	21.791	VV	1246	46372	0.75%	0.043%
338	21.866	21.791	21.887	VV	1312	58067	0.94%	0.054%
339	21.908	21.887	21.962	VV	1094	40672	0.66%	0.038%
340	21.971	21.962	21.978	VV	473	4323	0.07%	0.004%
341	21.986	21.978	21.992	VV	527	3721	0.06%	0.003%
342	22.052	21.992	22.063	VV	1049	30883	0.50%	0.029%
343	22.066	22.063	22.115	VV	843	17367	0.28%	0.016%
344	22.122	22.115	22.142	VV	367	4231	0.07%	0.004%
345	22.150	22.142	22.161	VV	330	2525	0.04%	0.002%

Sum of corrected areas: 108361439

Aliphatic EPH 032625.M Tue Apr 01 04:48:59 2025

Report of Analysis

Client:	G Environmental	Date Collected:	03/27/25
Project:	Stockton	Date Received:	03/28/25
Client Sample ID:	D4	SDG No.:	Q1675
Lab Sample ID:	Q1675-16	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.9
Sample Wt/Vol:	30.05	Units:	g
Soil Aliquot Vol:			uL
Prep Method :		Final Vol:	2000
		Test:	EPH_NF

Prep Date :	Date Analyzed :	Prep Batch ID
03/31/25 08:56	03/31/25 22:01	PB167381

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C28-C40	Aliphatic C28-C40	5.35		1	1.24	2.10	mg/kg FC068458.D
Aliphatic C9-C28	Aliphatic C9-C28	7.45		1	0.96	4.20	mg/kg FC068458.D
Total AliphaticEPH	Total AliphaticEPH	12.8			2.20	6.30	mg/kg
Total EPH	Total EPH	12.8			2.20	6.30	mg/kg

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	03/27/25
Project:	Stockton	Date Received:	03/28/25
Client Sample ID:	D4	SDG No.:	Q1675
Lab Sample ID:	Q1675-16	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.9
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068458.D	1	03/31/25	03/31/25	PB167381

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	7.45		0.96	4.20	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	5.35		1.24	2.10	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	32.8		40 - 140	66%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	33.3		40 - 140	67%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1675-16	Acq On:	31 Mar 2025 22:01
Client Sample ID:	D4	Operator:	YP/AJ
Data file:	FC068458.D	Misc:	
Instrument:	FID_C	ALS Vial:	24
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.098	6.359	2943120	18.132	300	ug/ml
Aliphatic C12-C16	6.360	9.743	1871536	11.127	200	ug/ml
Aliphatic C16-C21	9.744	13.097	7366150	42.949	300	ug/ml
Aliphatic C21-C28	13.098	16.748	5758222	34.099	400	ug/ml
Aliphatic C28-C40	16.749	21.546	10385706	76.269	600	ug/ml
Aliphatic EPH	3.098	21.546	28324734	182.575		ug/ml
ortho-Terphenyl (SURR)	11.387	11.387	6614146	33.3		ug/ml
1-chlorooctadecane (SURR)	12.829	12.829	4884405	32.76		ug/ml
Aliphatic C9-C28	3.098	16.748	17939028	106.307	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
 Data File : FC068458.D
 Signal(s) : FID1A.ch
 Acq On : 31 Mar 2025 22:01
 Operator : YP/AJ
 Sample : Q1675-16
 Misc :
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 D4

Integration File: autoint1.e
 Quant Time: Apr 01 03:21:30 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:35:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.387	6614146	33.299 ug/ml
Spiked Amount	50.000	Recovery	= 66.60%
12) S 1-chlorooctadecane (S...	12.829	4884405	32.765 ug/ml
Spiked Amount	50.000	Recovery	= 65.53%

Target Compounds

(f)=RT Delta > 1/2 Window

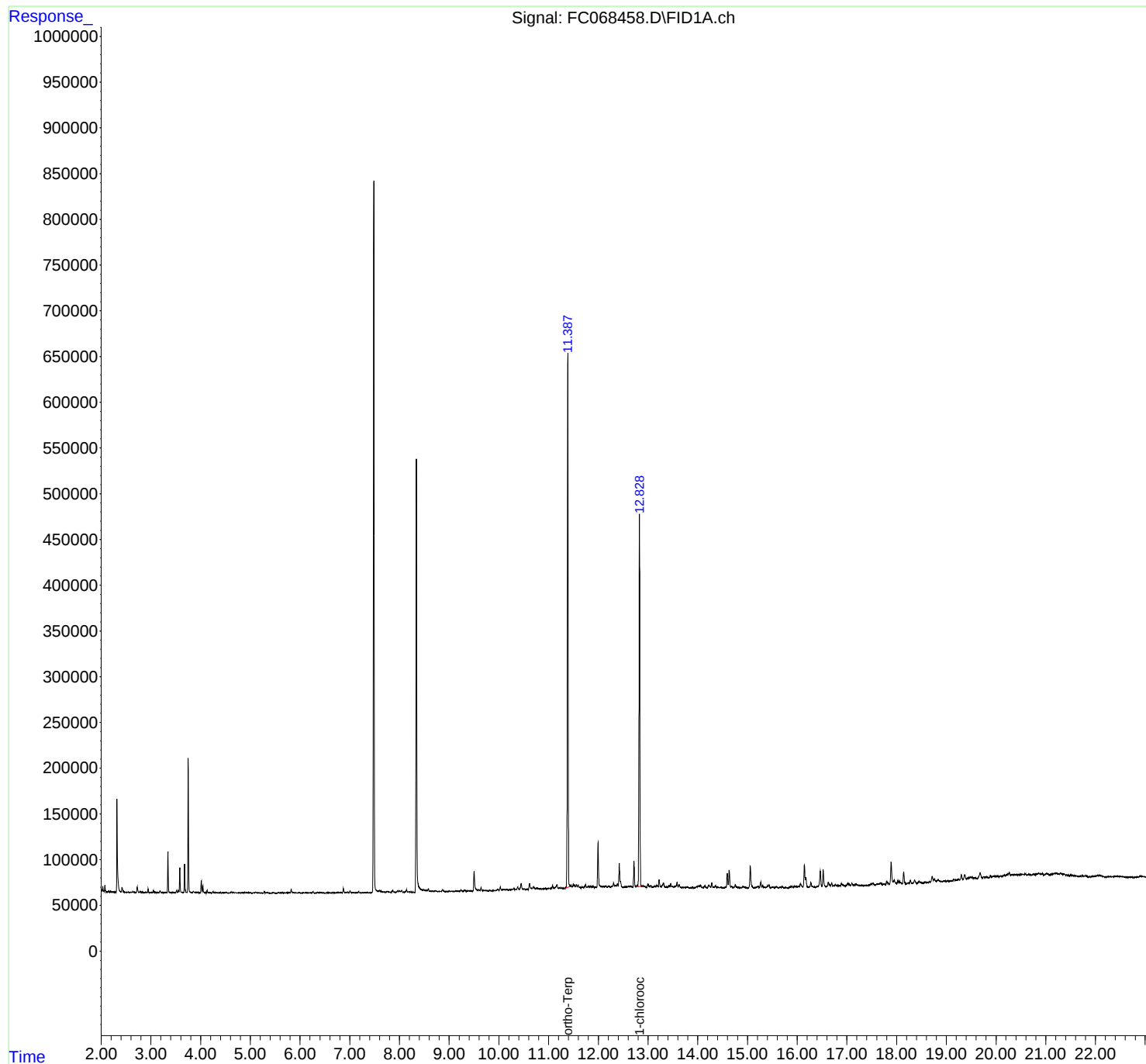
(m)=manual int.

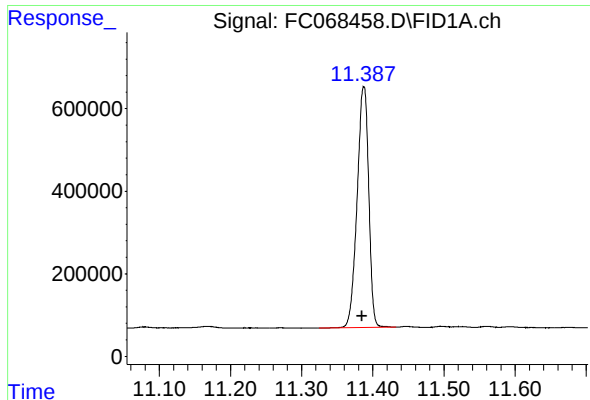
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068458.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 22:01
Operator : YP/AJ
Sample : Q1675-16
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
D4

Integration File: autoint1.e
Quant Time: Apr 01 03:21:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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

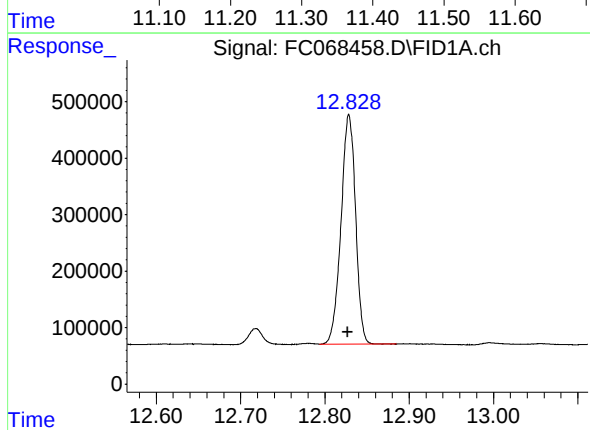




#9 ortho-Terphenyl (SURR)

R.T.: 11.387 min
Delta R.T.: 0.002 min
Response: 6614146
Conc: 33.30 ug/ml

Instrument :
FID_C
ClientSampleId :
D4



#12 1-chlorooctadecane (SURR)

R.T.: 12.829 min
Delta R.T.: 0.001 min
Response: 4884405
Conc: 32.76 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
 Data File : FC068458.D
 Signal(s) : FID1A.ch
 Acq On : 31 Mar 2025 22:01
 Sample : Q1675-16
 Misc :
 ALS Vial : 24 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	2.419	2.371	2.494	BV	4305	41974	0.61%	0.103%
2	2.508	2.494	2.528	PV	250	1939	0.03%	0.005%
3	2.538	2.528	2.573	VV	427	4725	0.07%	0.012%
4	2.584	2.573	2.613	PV	162	2469	0.04%	0.006%
5	2.637	2.613	2.651	VV	1272	11770	0.17%	0.029%
6	2.660	2.651	2.681	VV	544	4765	0.07%	0.012%
7	2.686	2.681	2.701	VV	75	676	0.01%	0.002%
8	2.724	2.701	2.768	PV	5971	73783	1.08%	0.180%
9	2.782	2.768	2.814	VV	916	16173	0.24%	0.039%
10	2.823	2.814	2.873	VV	497	9820	0.14%	0.024%
11	2.899	2.873	2.924	VV	558	8394	0.12%	0.021%
12	2.944	2.924	3.024	VV	4168	46259	0.68%	0.113%
13	3.049	3.024	3.157	VV	2012	35981	0.53%	0.088%
14	3.183	3.157	3.268	VV	2181	31276	0.46%	0.076%
15	3.285	3.268	3.297	PV	214	2846	0.04%	0.007%
16	3.308	3.297	3.324	VV	328	3389	0.05%	0.008%
17	3.342	3.324	3.406	VV	44673	359999	5.26%	0.879%
18	3.421	3.406	3.435	VV	268	2620	0.04%	0.006%
19	3.449	3.435	3.478	VV	392	4519	0.07%	0.011%
20	3.516	3.478	3.538	VV	2650	28396	0.42%	0.069%
21	3.553	3.538	3.563	VV	2801	26246	0.38%	0.064%
22	3.581	3.563	3.619	VV	27475	241868	3.54%	0.591%
23	3.626	3.619	3.651	VV	448	5495	0.08%	0.013%
24	3.677	3.651	3.727	VV	31091	274920	4.02%	0.671%
25	3.750	3.727	3.821	VV	144432	1213175	17.74%	2.963%
26	3.853	3.821	3.894	VV	1824	34420	0.50%	0.084%
27	3.906	3.894	3.928	VV	555	9805	0.14%	0.024%
28	3.944	3.928	3.987	VV	587	11318	0.17%	0.028%
29	4.014	3.987	4.032	VV	13070	137328	2.01%	0.335%
30	4.045	4.032	4.112	VV	7707	79957	1.17%	0.195%
31	4.130	4.112	4.191	VV	2903	30587	0.45%	0.075%
32	4.200	4.191	4.223	VV	378	3183	0.05%	0.008%
33	4.250	4.223	4.274	VV	1844	18295	0.27%	0.045%
34	4.288	4.274	4.305	VV	1084	10395	0.15%	0.025%
35	4.319	4.305	4.337	VV	539	6425	0.09%	0.016%
36	4.352	4.337	4.375	VV	319	4434	0.06%	0.011%

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37	4.397	4.375	4.427	PV	706	9912	0.14%	0.024%
38	4.442	4.427	4.485	VV	227	6252	0.09%	0.015%
39	4.502	4.485	4.517	VV	662	7039	0.10%	0.017%
40	4.526	4.517	4.564	VV	335	3392	0.05%	0.008%
41	4.600	4.564	4.610	VV	498	6189	0.09%	0.015%
42	4.625	4.610	4.645	VV	1097	13250	0.19%	0.032%
43	4.664	4.645	4.688	VV	764	11889	0.17%	0.029%
44	4.700	4.688	4.729	VV	590	8246	0.12%	0.020%
45	4.772	4.729	4.798	VV	446	6965	0.10%	0.017%
46	4.830	4.798	4.844	VV	292	4942	0.07%	0.012%
47	4.858	4.844	4.869	VV	355	3633	0.05%	0.009%
48	4.885	4.869	4.912	VV	637	10382	0.15%	0.025%
49	4.927	4.912	4.944	VV	530	7076	0.10%	0.017%
50	4.960	4.944	4.976	VV	847	9260	0.14%	0.023%
51	4.987	4.976	5.036	VV	385	5977	0.09%	0.015%
52	5.072	5.036	5.085	PV	264	5002	0.07%	0.012%
53	5.105	5.085	5.128	VV	1179	15150	0.22%	0.037%
54	5.150	5.128	5.216	VV	400	11486	0.17%	0.028%
55	5.232	5.216	5.258	VV	125	1975	0.03%	0.005%
56	5.281	5.258	5.304	VV	2048	23167	0.34%	0.057%
57	5.311	5.304	5.320	VV	466	4185	0.06%	0.010%
58	5.332	5.320	5.390	VV	537	11803	0.17%	0.029%
59	5.412	5.390	5.433	VV	165	1766	0.03%	0.004%
60	5.461	5.433	5.507	VV	375	8494	0.12%	0.021%
61	5.528	5.507	5.540	VV	174	2110	0.03%	0.005%
62	5.560	5.540	5.597	VV	528	10967	0.16%	0.027%
63	5.608	5.597	5.630	VV	295	3838	0.06%	0.009%
64	5.648	5.630	5.666	VV	462	5513	0.08%	0.013%
65	5.689	5.666	5.714	VV	314	6045	0.09%	0.015%
66	5.731	5.714	5.757	VV	381	5681	0.08%	0.014%
67	5.785	5.757	5.798	VV	391	7397	0.11%	0.018%
68	5.822	5.798	5.901	VV	4077	68682	1.00%	0.168%
69	5.916	5.901	5.938	VV	500	6880	0.10%	0.017%
70	5.983	5.938	6.031	VV	601	17393	0.25%	0.042%
71	6.039	6.031	6.052	VV	213	2439	0.04%	0.006%
72	6.076	6.052	6.089	VV	264	4980	0.07%	0.012%
73	6.108	6.089	6.231	VV	618	26021	0.38%	0.064%
74	6.259	6.231	6.319	VV	1551	21854	0.32%	0.053%
75	6.347	6.319	6.388	PV	815	14992	0.22%	0.037%
76	6.406	6.388	6.434	VV	918	13198	0.19%	0.032%
77	6.441	6.434	6.488	VV	328	5681	0.08%	0.014%
78	6.499	6.488	6.515	VV	207	2337	0.03%	0.006%
79	6.536	6.515	6.558	VV	643	8764	0.13%	0.021%
80	6.572	6.558	6.621	VV	331	8161	0.12%	0.020%
81	6.648	6.621	6.697	VV	489	10165	0.15%	0.025%
82	6.790	6.697	6.805	VV	798	28552	0.42%	0.070%
83	6.814	6.805	6.839	VV	561	7008	0.10%	0.017%
84	6.873	6.839	6.904	VV	4851	62499	0.91%	0.153%
85	6.921	6.904	6.938	VV	875	12254	0.18%	0.030%
86	6.958	6.938	6.983	VV	1463	19758	0.29%	0.048%
87	7.006	6.983	7.039	VV	2462	31505	0.46%	0.077%
88	7.053	7.039	7.108	VV	477	8089	0.12%	0.020%
89	7.116	7.108	7.121	VV	142	912	0.01%	0.002%

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90	7.179	7.121	7.208	VV	1799	25436	0.37%	0.062%
91	7.262	7.208	7.291	VV	243	8789	0.13%	0.021%
92	7.303	7.291	7.321	VV	211	2993	0.04%	0.007%
93	7.350	7.321	7.378	VV	657	10188	0.15%	0.025%
94	7.397	7.378	7.412	VV	171	1967	0.03%	0.005%
95	7.597	7.578	7.613	VV	2625	43402	0.63%	0.106%
96	7.623	7.613	7.684	VV	2069	50545	0.74%	0.123%
97	7.698	7.684	7.719	VV	862	15326	0.22%	0.037%
98	7.748	7.719	7.764	VV	1381	27319	0.40%	0.067%
99	7.775	7.764	7.788	VV	1126	14067	0.21%	0.034%
100	7.797	7.788	7.824	VV	847	12809	0.19%	0.031%
101	7.866	7.824	7.899	VV	2918	59324	0.87%	0.145%
102	7.918	7.899	7.931	VV	585	9364	0.14%	0.023%
103	7.963	7.931	7.978	VV	2433	34546	0.51%	0.084%
104	7.991	7.978	8.005	VV	1910	23602	0.35%	0.058%
105	8.014	8.005	8.031	VV	1463	19339	0.28%	0.047%
106	8.046	8.031	8.075	VV	2604	34707	0.51%	0.085%
107	8.144	8.075	8.178	VV	2802	58237	0.85%	0.142%
108	8.193	8.178	8.214	VV	1312	15885	0.23%	0.039%
109	8.233	8.214	8.251	VV	609	9323	0.14%	0.023%
110	8.258	8.251	8.273	VV	331	3923	0.06%	0.010%
111	8.294	8.273	8.306	VV	323	4782	0.07%	0.012%
112	8.490	8.476	8.537	VV	2910	81553	1.19%	0.199%
113	8.554	8.537	8.564	VV	2206	32495	0.48%	0.079%
114	8.581	8.564	8.611	VV	3943	63236	0.92%	0.154%
115	8.631	8.611	8.644	VV	1187	20481	0.30%	0.050%
116	8.654	8.644	8.667	VV	1217	14482	0.21%	0.035%
117	8.681	8.667	8.701	VV	1309	21947	0.32%	0.054%
118	8.718	8.701	8.743	VV	1624	30044	0.44%	0.073%
119	8.752	8.743	8.771	VV	925	13833	0.20%	0.034%
120	8.780	8.771	8.833	VV	906	28639	0.42%	0.070%
121	8.866	8.833	8.928	VV	2861	69471	1.02%	0.170%
122	8.948	8.928	8.970	VV	766	13822	0.20%	0.034%
123	9.004	8.970	9.022	VV	1088	19390	0.28%	0.047%
124	9.038	9.022	9.047	VV	794	9058	0.13%	0.022%
125	9.059	9.047	9.076	VV	804	11300	0.17%	0.028%
126	9.091	9.076	9.111	VV	726	11220	0.16%	0.027%
127	9.141	9.111	9.174	VV	1170	29062	0.42%	0.071%
128	9.185	9.174	9.193	VV	602	6422	0.09%	0.016%
129	9.238	9.193	9.272	VV	2224	53335	0.78%	0.130%
130	9.318	9.272	9.348	VV	1562	48853	0.71%	0.119%
131	9.370	9.348	9.386	VV	1174	21042	0.31%	0.051%
132	9.402	9.386	9.411	VV	1207	15156	0.22%	0.037%
133	9.422	9.411	9.457	VV	1145	25316	0.37%	0.062%
134	9.502	9.457	9.581	VV	22078	374278	5.47%	0.914%
135	9.595	9.581	9.621	VV	1932	39104	0.57%	0.096%
136	9.642	9.621	9.681	VV	4342	78991	1.15%	0.193%
137	9.703	9.681	9.730	VV	1307	34250	0.50%	0.084%
138	9.744	9.730	9.774	VV	1291	27312	0.40%	0.067%
139	9.808	9.774	9.841	VV	1117	37502	0.55%	0.092%
140	9.847	9.841	9.857	VV	833	8251	0.12%	0.020%
141	9.878	9.857	9.898	VV	921	21301	0.31%	0.052%

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142	9.932	9.898	9.944	VV	1152	28404	0.42%	0.069%
143	9.969	9.944	9.999	VV	2224	51852	0.76%	0.127%
144	10.029	9.999	10.054	VV	4362	86122	1.26%	0.210%
145	10.075	10.054	10.127	VV	1985	76823	1.12%	0.188%
146	10.142	10.127	10.152	VV	1793	25155	0.37%	0.061%
147	10.171	10.152	10.194	VV	2149	42030	0.61%	0.103%
148	10.221	10.194	10.248	VV	1860	52300	0.76%	0.128%
149	10.304	10.248	10.322	VV	2722	94151	1.38%	0.230%
150	10.340	10.322	10.352	VV	2194	36308	0.53%	0.089%
151	10.379	10.352	10.406	VV	4900	100111	1.46%	0.245%
152	10.449	10.406	10.479	VV	8317	184890	2.70%	0.452%
153	10.488	10.479	10.511	VV	2314	41019	0.60%	0.100%
154	10.520	10.511	10.538	VV	2275	32244	0.47%	0.079%
155	10.563	10.538	10.581	VV	2144	50248	0.73%	0.123%
156	10.616	10.581	10.670	VV	8407	208606	3.05%	0.509%
157	10.693	10.670	10.734	VV	4759	130571	1.91%	0.319%
158	10.746	10.734	10.758	VV	2965	40135	0.59%	0.098%
159	10.768	10.758	10.809	VV	3103	80713	1.18%	0.197%
160	10.832	10.809	10.864	VV	2489	75577	1.10%	0.185%
161	10.927	10.864	10.955	VV	2810	131337	1.92%	0.321%
162	11.011	10.955	11.031	VV	2972	119568	1.75%	0.292%
163	11.079	11.031	11.117	VV	5520	179210	2.62%	0.438%
164	11.167	11.117	11.206	VV	6600	216973	3.17%	0.530%
165	11.229	11.206	11.251	VV	3082	76894	1.12%	0.188%
166	11.270	11.251	11.300	VV	3196	79124	1.16%	0.193%
167	11.312	11.300	11.328	VV	2702	43340	0.63%	0.106%
168	11.387	11.328	11.432	VV	590663	6839778	100.00%	16.705%
169	11.447	11.432	11.478	VV	6369	137839	2.02%	0.337%
170	11.496	11.478	11.511	VV	6683	110950	1.62%	0.271%
171	11.523	11.511	11.543	VV	5872	98939	1.45%	0.242%
172	11.561	11.543	11.578	VV	6570	108704	1.59%	0.265%
173	11.593	11.578	11.661	VV	5735	192765	2.82%	0.471%
174	11.675	11.661	11.691	VV	3853	62209	0.91%	0.152%
175	11.746	11.691	11.771	VV	6173	202568	2.96%	0.495%
176	11.796	11.771	11.822	VV	4126	119962	1.75%	0.293%
177	11.842	11.822	11.866	VV	4317	105209	1.54%	0.257%
178	11.890	11.866	11.926	VV	4202	130930	1.91%	0.320%
179	11.947	11.926	11.965	VV	3696	79645	1.16%	0.195%
180	11.996	11.965	12.072	VV	52258	804792	11.77%	1.966%
181	12.090	12.072	12.110	VV	4310	89961	1.32%	0.220%
182	12.150	12.110	12.184	VV	4764	177765	2.60%	0.434%
183	12.205	12.184	12.242	VV	4450	132596	1.94%	0.324%
184	12.270	12.242	12.283	VV	4294	94826	1.39%	0.232%
185	12.309	12.283	12.329	VV	7724	153644	2.25%	0.375%
186	12.347	12.329	12.362	VV	5202	92176	1.35%	0.225%
187	12.383	12.362	12.400	VV	6876	122571	1.79%	0.299%
188	12.423	12.400	12.481	VV	29047	531723	7.77%	1.299%
189	12.499	12.481	12.508	VV	3235	50739	0.74%	0.124%
190	12.525	12.508	12.542	VV	3423	66299	0.97%	0.162%
191	12.561	12.542	12.578	VV	3787	71939	1.05%	0.176%
192	12.609	12.578	12.621	VV	4101	93724	1.37%	0.229%
193	12.641	12.621	12.690	VV	4181	149440	2.18%	0.365%
194	12.718	12.690	12.757	VV	31307	449667	6.57%	1.098%

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195	12.781	12.757	12.793	VV	5091	90024	1.32%	0.220%
196	12.829	12.793	12.884	VV	408646	5078418	74.25%	12.403%
197	12.899	12.884	12.919	VV	4359	83485	1.22%	0.204%
198	12.927	12.919	12.978	VV	3827	108532	1.59%	0.265%
199	12.996	12.978	13.034	VV	6195	146415	2.14%	0.358%
200	13.056	13.034	13.097	VV	4415	128041	1.87%	0.313%
201	13.145	13.097	13.164	VV	3700	132443	1.94%	0.323%
202	13.180	13.164	13.203	VV	4918	94308	1.38%	0.230%
203	13.223	13.203	13.264	VV	10876	200545	2.93%	0.490%
204	13.310	13.264	13.368	VV	7332	255258	3.73%	0.623%
205	13.379	13.368	13.396	VV	2835	44174	0.65%	0.108%
206	13.419	13.396	13.438	VV	4338	83130	1.22%	0.203%
207	13.457	13.438	13.480	VV	6371	107197	1.57%	0.262%
208	13.493	13.480	13.521	VV	3299	70782	1.03%	0.173%
209	13.583	13.521	13.608	VV	7648	215070	3.14%	0.525%
210	13.625	13.608	13.692	VV	4849	141261	2.07%	0.345%
211	13.712	13.692	13.736	VV	2219	51333	0.75%	0.125%
212	13.784	13.736	13.808	VV	2491	87552	1.28%	0.214%
213	13.817	13.808	13.878	VV	1846	64080	0.94%	0.157%
214	13.898	13.878	13.908	VV	1727	28864	0.42%	0.070%
215	13.927	13.908	13.946	VV	1680	36044	0.53%	0.088%
216	13.973	13.946	13.987	VV	2711	53836	0.79%	0.131%
217	14.014	13.987	14.034	VV	3605	86470	1.26%	0.211%
218	14.050	14.034	14.097	VV	4378	100668	1.47%	0.246%
219	14.144	14.097	14.181	VV	3544	106712	1.56%	0.261%
220	14.219	14.181	14.258	VV	4471	119568	1.75%	0.292%
221	14.282	14.258	14.318	VV	6845	121398	1.77%	0.297%
222	14.357	14.318	14.391	VV	3409	97571	1.43%	0.238%
223	14.403	14.391	14.424	VV	1810	30280	0.44%	0.074%
224	14.468	14.424	14.503	VV	1765	63592	0.93%	0.155%
225	14.519	14.503	14.531	VV	1290	18523	0.27%	0.045%
226	14.550	14.531	14.561	VV	1595	25013	0.37%	0.061%
227	14.592	14.561	14.612	VV	16819	230914	3.38%	0.564%
228	14.632	14.612	14.664	VV	19979	288413	4.22%	0.704%
229	14.680	14.664	14.719	VV	2590	58023	0.85%	0.142%
230	14.754	14.719	14.814	VV	4307	114360	1.67%	0.279%
231	14.828	14.814	14.851	VV	1169	22627	0.33%	0.055%
232	14.867	14.851	14.883	VV	1182	18544	0.27%	0.045%
233	14.908	14.883	14.918	VV	1874	30130	0.44%	0.074%
234	14.926	14.918	14.998	VV	1753	57391	0.84%	0.140%
235	15.055	14.998	15.119	VV	24274	411078	6.01%	1.004%
236	15.128	15.119	15.148	VV	1016	15474	0.23%	0.038%
237	15.156	15.148	15.164	VV	828	7635	0.11%	0.019%
238	15.209	15.164	15.239	VV	2225	62991	0.92%	0.154%
239	15.266	15.239	15.288	VV	6580	98625	1.44%	0.241%
240	15.304	15.288	15.334	VV	3203	51552	0.75%	0.126%
241	15.344	15.334	15.356	VV	925	11931	0.17%	0.029%
242	15.402	15.356	15.413	VV	2831	53307	0.78%	0.130%
243	15.429	15.413	15.474	VV	3108	61797	0.90%	0.151%
244	15.506	15.474	15.547	VV	1343	35723	0.52%	0.087%
245	15.591	15.547	15.622	VV	1638	41661	0.61%	0.102%
246	15.648	15.622	15.676	VV	945	22052	0.32%	0.054%

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247	15.700	15.676	15.737	VV	1830	35342	0.52%	0.086%
248	15.761	15.737	15.808	VV	638	14683	0.21%	0.036%
249	15.889	15.808	15.921	PV	1518	52096	0.76%	0.127%
250	15.939	15.921	15.954	VV	1534	21614	0.32%	0.053%
251	15.970	15.954	16.018	VV	1254	41904	0.61%	0.102%
252	16.067	16.018	16.104	VV	3985	104777	1.53%	0.256%
253	16.144	16.104	16.165	VV	24256	367995	5.38%	0.899%
254	16.174	16.165	16.234	VV	10964	145502	2.13%	0.355%
255	16.274	16.234	16.301	VV	4544	73364	1.07%	0.179%
256	16.314	16.301	16.380	VV	1185	22130	0.32%	0.054%
257	16.398	16.380	16.418	VV	748	10231	0.15%	0.025%
258	16.463	16.418	16.498	VV	17347	289608	4.23%	0.707%
259	16.522	16.498	16.578	VV	18694	264372	3.87%	0.646%
260	16.624	16.578	16.667	VV	5147	115004	1.68%	0.281%
261	16.693	16.667	16.719	VV	4351	69700	1.02%	0.170%
262	16.768	16.719	16.811	VV	2116	68226	1.00%	0.167%
263	16.832	16.811	16.847	VV	1153	19336	0.28%	0.047%
264	16.892	16.847	16.974	VV	2620	102846	1.50%	0.251%
265	17.019	16.974	17.074	VV	3219	105035	1.54%	0.257%
266	17.098	17.074	17.131	VV	3025	63146	0.92%	0.154%
267	17.144	17.131	17.154	VV	1170	13501	0.20%	0.033%
268	17.179	17.154	17.211	VV	2533	54651	0.80%	0.133%
269	17.224	17.211	17.264	VV	997	21393	0.31%	0.052%
270	17.294	17.264	17.318	VV	702	12202	0.18%	0.030%
271	17.368	17.318	17.381	PV	634	8786	0.13%	0.021%
272	17.420	17.381	17.439	VV	423	9558	0.14%	0.023%
273	17.487	17.439	17.504	VV	2101	42631	0.62%	0.104%
274	17.525	17.504	17.571	VV	2559	55625	0.81%	0.136%
275	17.620	17.571	17.634	VV	1562	37333	0.55%	0.091%
276	17.677	17.634	17.727	VV	2640	83197	1.22%	0.203%
277	17.750	17.727	17.774	VV	1461	25102	0.37%	0.061%
278	17.801	17.774	17.851	PV	4179	86766	1.27%	0.212%
279	17.889	17.851	17.923	VV	24529	397290	5.81%	0.970%
280	17.952	17.923	17.997	VV	4767	134540	1.97%	0.329%
281	18.024	17.997	18.042	VV	4333	70808	1.04%	0.173%
282	18.056	18.042	18.114	VV	3474	87822	1.28%	0.214%
283	18.141	18.114	18.204	VV	13811	219576	3.21%	0.536%
284	18.227	18.204	18.245	VV	1508	28443	0.42%	0.069%
285	18.278	18.245	18.328	VV	3487	84103	1.23%	0.205%
286	18.361	18.328	18.414	VV	4090	101186	1.48%	0.247%
287	18.458	18.414	18.481	VV	2275	62413	0.91%	0.152%
288	18.491	18.481	18.524	VV	1509	29448	0.43%	0.072%
289	18.581	18.524	18.600	VV	1835	50207	0.73%	0.123%
290	18.623	18.600	18.637	VV	1242	22295	0.33%	0.054%
291	18.660	18.637	18.676	VV	2277	36136	0.53%	0.088%
292	18.715	18.676	18.741	VV	7346	171466	2.51%	0.419%
293	18.760	18.741	18.798	VV	4316	111059	1.62%	0.271%
294	18.829	18.798	18.921	VV	3431	170889	2.50%	0.417%
295	18.956	18.921	18.988	VV	2285	74347	1.09%	0.182%
296	19.028	18.988	19.051	VV	1973	65170	0.95%	0.159%
297	19.152	19.051	19.174	VV	3661	166152	2.43%	0.406%
298	19.199	19.174	19.207	VV	2564	49297	0.72%	0.120%
299	19.249	19.207	19.268	VV	3297	104656	1.53%	0.256%

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300	19.301	19.268	19.335	VV	8297	194780	2.85%	0.476%
301	19.370	19.335	19.406	VV	8294	227294	3.32%	0.555%
302	19.455	19.406	19.464	VV	4614	145975	2.13%	0.357%
303	19.490	19.464	19.540	VV	5229	209646	3.07%	0.512%
304	19.551	19.540	19.560	VV	4088	49235	0.72%	0.120%
305	19.581	19.560	19.623	VV	4649	149095	2.18%	0.364%
306	19.679	19.623	19.724	VV	9400	349841	5.11%	0.854%
307	19.746	19.724	19.763	VV	5218	108774	1.59%	0.266%
308	19.776	19.763	19.794	VV	4736	84591	1.24%	0.207%
309	19.812	19.794	19.851	VV	4800	146219	2.14%	0.357%
310	19.891	19.851	19.914	VV	5843	179652	2.63%	0.439%
311	19.952	19.914	19.972	VV	5434	177535	2.60%	0.434%
312	20.031	19.972	20.058	VV	5432	258679	3.78%	0.632%
313	20.086	20.058	20.118	VV	5316	178454	2.61%	0.436%
314	20.129	20.118	20.138	VV	5241	60421	0.88%	0.148%
315	20.163	20.138	20.186	VV	6226	163790	2.39%	0.400%
316	20.265	20.186	20.307	VV	8375	476719	6.97%	1.164%
317	20.343	20.307	20.397	VV	6513	335664	4.91%	0.820%
318	20.409	20.397	20.441	VV	6344	156562	2.29%	0.382%
319	20.456	20.441	20.465	VV	5997	83084	1.21%	0.203%
320	20.594	20.465	20.620	VV	6508	567223	8.29%	1.385%
321	20.669	20.620	20.718	VV	6141	330804	4.84%	0.808%
322	20.752	20.718	20.778	VV	6077	201662	2.95%	0.493%
323	20.782	20.778	20.794	VV	5869	55325	0.81%	0.135%
324	20.852	20.794	20.896	VV	6693	369841	5.41%	0.903%
325	20.915	20.896	20.925	VV	5892	100529	1.47%	0.246%
326	20.937	20.925	20.968	VV	6040	137495	2.01%	0.336%
327	21.019	20.968	21.077	VV	6169	347791	5.08%	0.849%
328	21.189	21.077	21.196	VV	6039	375165	5.49%	0.916%
329	21.210	21.196	21.270	VV	6371	249672	3.65%	0.610%
330	21.295	21.270	21.345	VV	6222	244831	3.58%	0.598%
331	21.371	21.345	21.464	VV	5301	282104	4.12%	0.689%
332	21.479	21.464	21.487	VV	3257	43119	0.63%	0.105%
333	21.521	21.487	21.679	VV	3402	297498	4.35%	0.727%
334	21.732	21.679	21.759	VV	2304	101264	1.48%	0.247%
335	21.767	21.759	21.781	VV	2248	27129	0.40%	0.066%
336	21.800	21.781	21.874	VV	2104	82106	1.20%	0.201%
337	21.968	21.874	21.983	VV	1404	72756	1.06%	0.178%
338	21.995	21.983	22.001	VV	1471	14728	0.22%	0.036%
339	22.040	22.001	22.058	VV	1869	55539	0.81%	0.136%
340	22.068	22.058	22.185	VV	1984	87034	1.27%	0.213%
341	22.196	22.185	22.207	PV	150	1511	0.02%	0.004%
					Sum of corrected areas: 40943722			

Report of Analysis

Client:	G Environmental	Date Collected:	03/27/25
Project:	Stockton	Date Received:	03/28/25
Client Sample ID:	D5	SDG No.:	Q1675
Lab Sample ID:	Q1675-17	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.6
Sample Wt/Vol:	30.07	Units:	g
Soil Aliquot Vol:			uL
Prep Method :		Final Vol:	2000
		Test:	EPH_NF

Prep Date :	Date Analyzed :	Prep Batch ID
03/31/25 08:56	03/31/25 22:38	PB167381

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C28-C40	Aliphatic C28-C40	3.25		1	1.24	2.11	mg/kg FC068459.D
Aliphatic C9-C28	Aliphatic C9-C28	207		5	4.79	21.1	mg/kg FC068466.D
Total AliphaticEPH	Total AliphaticEPH	210			6.03	23.2	mg/kg
Total EPH	Total EPH	210			6.03	23.2	mg/kg

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	03/27/25
Project:	Stockton	Date Received:	03/28/25
Client Sample ID:	D5	SDG No.:	Q1675
Lab Sample ID:	Q1675-17	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.6
Sample Wt/Vol:	30.07 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068459.D	1	03/31/25	03/31/25	PB167381

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	222	E	0.96	4.21	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	3.25		1.24	2.11	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	25.7		40 - 140	51%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	29.5		40 - 140	59%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1675-17	Acq On:	31 Mar 2025 22:38
Client Sample ID:	D5	Operator:	YP/AJ
Data file:	FC068459.D	Misc:	
Instrument:	FID_C	ALS Vial:	25
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.098	6.359	59456922	366.296	300	ug/ml
Aliphatic C12-C16	6.360	9.743	221971621	1320	200	ug/ml
Aliphatic C16-C21	9.744	13.097	217705944	1270	300	ug/ml
Aliphatic C21-C28	13.098	16.748	33848676	200.442	400	ug/ml
Aliphatic C28-C40	16.749	21.546	6294231	46.223	600	ug/ml
Aliphatic EPH	3.098	21.546	539277394	3200		ug/ml
ortho-Terphenyl (SURR)	11.390	11.390	5852009	29.46		ug/ml
1-chlorooctadecane (SURR)	12.830	12.830	3825417	25.66		ug/ml
Aliphatic C9-C28	3.098	16.748	532983163	3160	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068459.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 22:38
Operator : YP/AJ
Sample : Q1675-17
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
D5

Integration File: autoint1.e
Quant Time: Apr 01 03:21:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.390	5852009	29.462 ug/ml
Spiked Amount	50.000	Recovery	= 58.92%
12) S 1-chlorooctadecane (S...	12.830	3825417	25.661 ug/ml
Spiked Amount	50.000	Recovery	= 51.32%

Target Compounds

(f)=RT Delta > 1/2 Window

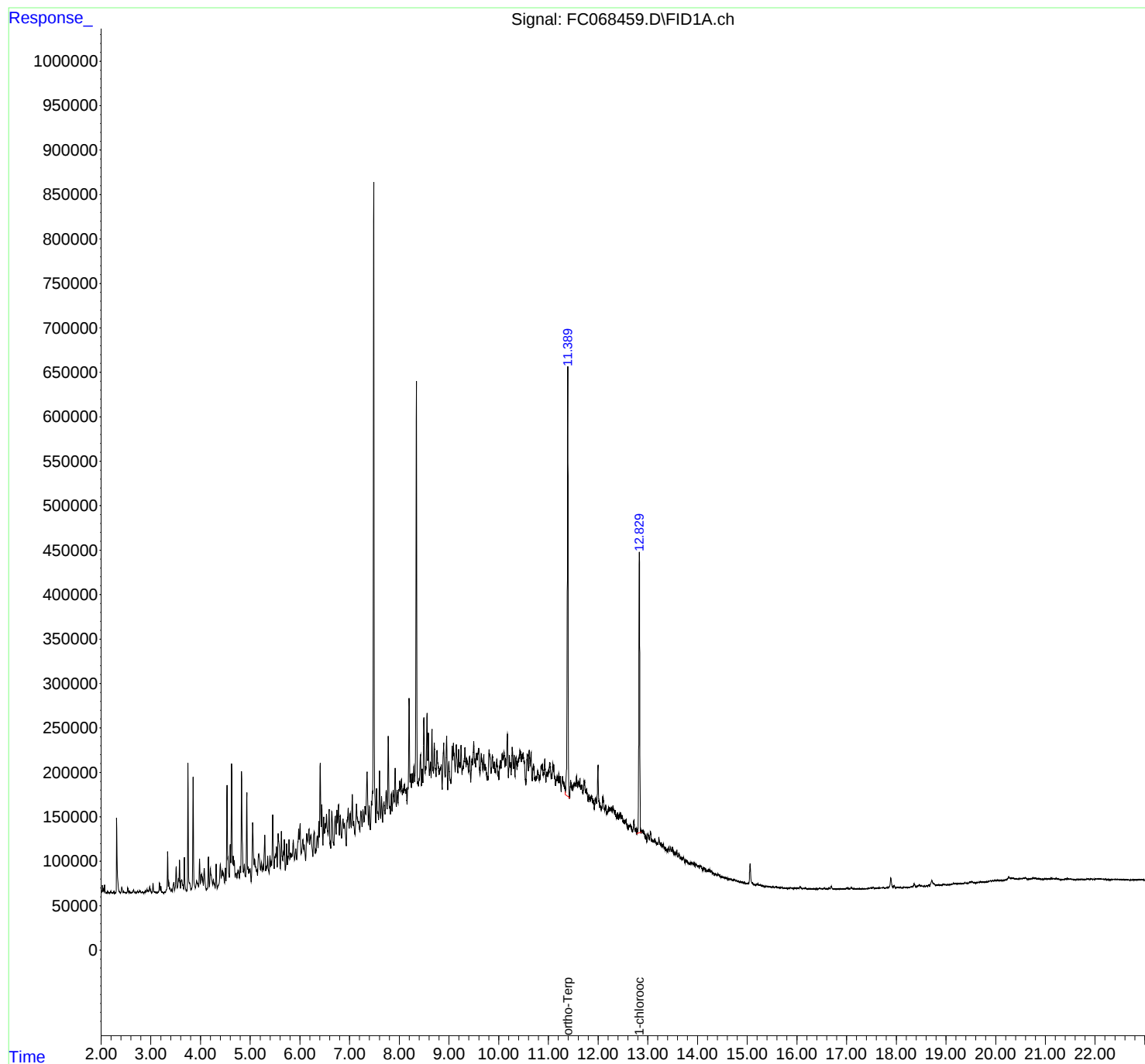
(m)=manual int.

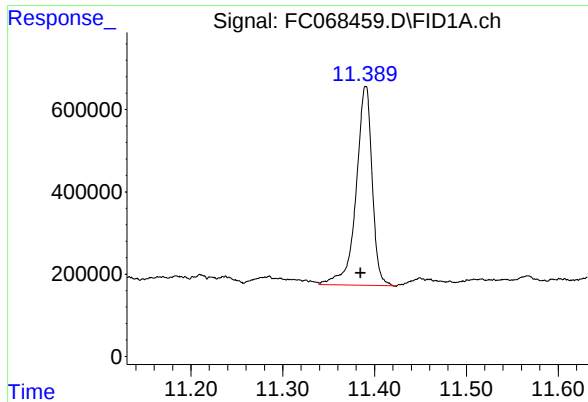
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068459.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 22:38
Operator : YP/AJ
Sample : Q1675-17
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
D5

Integration File: autoint1.e
Quant Time: Apr 01 03:21:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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

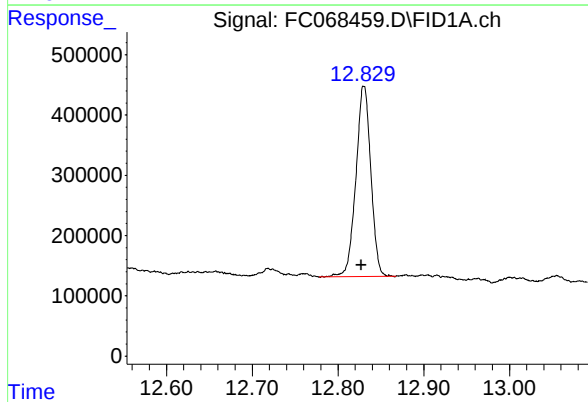




#9 ortho-Terphenyl (SURR)

R.T.: 11.390 min
Delta R.T.: 0.005 min
Response: 5852009
Conc: 29.46 ug/ml

Instrument :
FID_C
ClientSampleId :
D5



#12 1-chlorooctadecane (SURR)

R.T.: 12.830 min
Delta R.T.: 0.003 min
Response: 3825417
Conc: 25.66 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068459.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 22:38
Sample : Q1675-17
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	2.415	2.355	2.442	BV	4901	19091	0.17%	0.003%
2	2.455	2.442	2.514	PV	1089	17397	0.16%	0.003%
3	2.536	2.514	2.597	PV	5867	89105	0.80%	0.016%
4	2.653	2.597	2.681	VV	3907	70297	0.63%	0.013%
5	2.690	2.681	2.705	VV	984	7703	0.07%	0.001%
6	2.733	2.705	2.748	PV	2407	32686	0.29%	0.006%
7	2.775	2.748	2.809	VV	2966	59302	0.53%	0.011%
8	2.846	2.809	2.862	VV	1366	28052	0.25%	0.005%
9	2.895	2.862	2.907	VV	2661	40571	0.36%	0.007%
10	2.923	2.907	2.958	VV	4610	85500	0.76%	0.015%
11	2.978	2.958	3.019	VV	7650	125726	1.12%	0.023%
12	3.045	3.019	3.108	VV	11002	144298	1.29%	0.026%
13	3.175	3.108	3.192	VV	11748	165029	1.47%	0.030%
14	3.204	3.192	3.222	VV	7627	77960	0.70%	0.014%
15	3.231	3.222	3.260	VV	1348	16926	0.15%	0.003%
16	3.280	3.260	3.293	VV	1681	18748	0.17%	0.003%
17	3.339	3.293	3.411	VV	46409	672292	6.00%	0.120%
18	3.420	3.411	3.432	VV	3808	34860	0.31%	0.006%
19	3.461	3.432	3.479	VV	11949	207674	1.85%	0.037%
20	3.510	3.479	3.531	VV	29644	424748	3.79%	0.076%
21	3.578	3.531	3.597	VV	37102	609349	5.44%	0.109%
22	3.623	3.597	3.658	VV	14897	389187	3.47%	0.070%
23	3.675	3.658	3.727	VV	40046	460051	4.11%	0.082%
24	3.748	3.727	3.807	VV	145328	1457201	13.01%	0.261%
25	3.852	3.807	3.897	VV	129879	1482355	13.23%	0.265%
26	3.922	3.897	3.961	VV	13966	376711	3.36%	0.067%
27	3.981	3.961	3.999	VV	38087	471910	4.21%	0.084%
28	4.024	3.999	4.056	VV	21369	556857	4.97%	0.100%
29	4.075	4.056	4.117	VV	27495	502726	4.49%	0.090%
30	4.129	4.117	4.134	VV	5193	44452	0.40%	0.008%
31	4.159	4.134	4.178	VV	40298	473984	4.23%	0.085%
32	4.199	4.178	4.244	VV	27648	673700	6.01%	0.121%
33	4.258	4.244	4.294	VV	14867	312841	2.79%	0.056%
34	4.315	4.294	4.338	VV	32383	411082	3.67%	0.074%
35	4.399	4.338	4.417	VV	32110	739996	6.60%	0.132%
36	4.439	4.417	4.453	VV	25288	445629	3.98%	0.080%

					rteres			
37	4.462	4.453	4.483	VV	22225	328906	2.94%	0.059%
38	4.499	4.483	4.513	VV	27985	352913	3.15%	0.063%
39	4.534	4.513	4.580	VV	120633	1864918	16.64%	0.334%
40	4.598	4.580	4.608	VV	54469	633139	5.65%	0.113%
41	4.627	4.608	4.647	VV	143448	1838150	16.41%	0.329%
42	4.659	4.647	4.699	VV	40828	983378	8.78%	0.176%
43	4.717	4.699	4.734	VV	22081	417495	3.73%	0.075%
44	4.764	4.734	4.783	VV	24951	620070	5.53%	0.111%
45	4.827	4.783	4.863	VV	134770	2389448	21.33%	0.428%
46	4.882	4.863	4.901	VV	32326	576889	5.15%	0.103%
47	4.932	4.901	4.966	VV	112320	1681710	15.01%	0.301%
48	4.976	4.966	4.985	VV	26692	278713	2.49%	0.050%
49	4.997	4.985	5.019	VV	26998	445362	3.97%	0.080%
50	5.051	5.019	5.078	VV	78745	1534677	13.70%	0.275%
51	5.090	5.078	5.147	VV	37413	1201178	10.72%	0.215%
52	5.170	5.147	5.207	VV	43348	1251974	11.17%	0.224%
53	5.225	5.207	5.242	VV	34119	600778	5.36%	0.108%
54	5.257	5.242	5.266	VV	30384	405223	3.62%	0.073%
55	5.294	5.266	5.313	VV	65106	1182649	10.55%	0.212%
56	5.352	5.313	5.380	VV	40863	1183381	10.56%	0.212%
57	5.399	5.380	5.413	VV	41614	625168	5.58%	0.112%
58	5.454	5.413	5.483	VV	86872	1966116	17.55%	0.352%
59	5.529	5.483	5.544	VV	50859	1470298	13.12%	0.263%
60	5.563	5.544	5.606	VV	65681	1784200	15.92%	0.319%
61	5.628	5.606	5.655	VV	68688	1340508	11.96%	0.240%
62	5.687	5.655	5.707	VV	59556	1346799	12.02%	0.241%
63	5.733	5.707	5.749	VV	54346	978365	8.73%	0.175%
64	5.782	5.749	5.800	VV	59442	1331139	11.88%	0.238%
65	5.812	5.800	5.824	VV	44001	594897	5.31%	0.106%
66	5.836	5.824	5.845	VV	42644	527949	4.71%	0.095%
67	5.867	5.845	5.893	VV	58700	1364747	12.18%	0.244%
68	5.917	5.893	5.936	VV	49197	1079078	9.63%	0.193%
69	5.976	5.936	5.988	VV	70845	1729666	15.44%	0.310%
70	6.004	5.988	6.025	VV	77424	1364805	12.18%	0.244%
71	6.061	6.025	6.078	VV	59227	1641825	14.65%	0.294%
72	6.087	6.078	6.115	VV	53736	1032440	9.21%	0.185%
73	6.138	6.115	6.160	VV	65913	1483772	13.24%	0.266%
74	6.182	6.160	6.198	VV	70684	1441676	12.87%	0.258%
75	6.223	6.198	6.261	VV	64351	2091095	18.66%	0.374%
76	6.288	6.261	6.308	VV	68255	1600577	14.28%	0.287%
77	6.319	6.308	6.324	VV	47913	460905	4.11%	0.083%
78	6.350	6.324	6.366	VV	63251	1403678	12.53%	0.251%
79	6.382	6.366	6.391	VV	79675	1009432	9.01%	0.181%
80	6.409	6.391	6.429	VV	145131	2342629	20.91%	0.419%
81	6.441	6.429	6.464	VV	98652	1591440	14.20%	0.285%
82	6.479	6.464	6.495	VV	84534	1304306	11.64%	0.233%
83	6.536	6.495	6.567	VV	87737	3207505	28.63%	0.574%
84	6.588	6.567	6.621	VV	93194	2239561	19.99%	0.401%
85	6.644	6.621	6.683	VV	90624	2528119	22.56%	0.453%
86	6.711	6.683	6.729	VV	84240	1998911	17.84%	0.358%
87	6.745	6.729	6.758	VV	91903	1380206	12.32%	0.247%
88	6.776	6.758	6.794	VV	97970	1812905	16.18%	0.325%
89	6.814	6.794	6.840	VV	87285	1994607	17.80%	0.357%

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90	6.868	6.840	6.884	VV	81721	1937874	17.30%	0.347%
91	6.897	6.884	6.932	VV	77069	2003462	17.88%	0.359%
92	6.972	6.932	6.992	VV	94603	2801168	25.00%	0.501%
93	7.012	6.992	7.032	VV	88414	1941772	17.33%	0.348%
94	7.055	7.032	7.075	VV	109274	2266640	20.23%	0.406%
95	7.083	7.075	7.107	VV	79595	1386072	12.37%	0.248%
96	7.140	7.107	7.208	VV	98791	4846763	43.26%	0.868%
97	7.229	7.208	7.252	VV	90614	2196025	19.60%	0.393%
98	7.269	7.252	7.295	VV	92344	2134829	19.05%	0.382%
99	7.311	7.295	7.325	VV	95371	1646424	14.69%	0.295%
100	7.352	7.325	7.381	VV	134932	3521119	31.43%	0.630%
101	7.396	7.381	7.417	VV	95759	1809178	16.15%	0.324%
102	7.544	7.526	7.585	VV	116138	3265388	29.14%	0.585%
103	7.603	7.585	7.625	VV	135376	2570949	22.95%	0.460%
104	7.644	7.625	7.665	VV	106777	2229664	19.90%	0.399%
105	7.691	7.665	7.715	VV	100244	2705817	24.15%	0.484%
106	7.739	7.715	7.756	VV	112307	2535110	22.63%	0.454%
107	7.779	7.756	7.822	VV	174821	4653386	41.53%	0.833%
108	7.840	7.822	7.856	VV	110223	1980920	17.68%	0.355%
109	7.878	7.856	7.897	VV	113668	2569654	22.93%	0.460%
110	7.917	7.897	7.941	VV	138302	3075634	27.45%	0.551%
111	7.958	7.941	7.974	VV	113926	2117287	18.90%	0.379%
112	8.009	7.974	8.028	VV	124717	3678648	32.83%	0.659%
113	8.043	8.028	8.062	VV	126108	2446528	21.83%	0.438%
114	8.102	8.062	8.132	VV	119261	4782410	42.68%	0.856%
115	8.142	8.132	8.157	VV	115787	1630421	14.55%	0.292%
116	8.199	8.157	8.218	VV	217574	5251984	46.87%	0.940%
117	8.228	8.218	8.244	VV	129918	1983796	17.71%	0.355%
118	8.262	8.244	8.275	VV	132365	2353102	21.00%	0.421%
119	8.295	8.275	8.310	VV	141423	2709399	24.18%	0.485%
120	8.427	8.385	8.449	VV	154044	5108140	45.59%	0.914%
121	8.464	8.449	8.476	VV	137173	2055980	18.35%	0.368%
122	8.495	8.476	8.519	VV	194194	4116243	36.74%	0.737%
123	8.529	8.519	8.538	VV	139977	1550112	13.83%	0.277%
124	8.559	8.538	8.574	VV	200429	3668753	32.74%	0.657%
125	8.587	8.574	8.608	VV	177718	3121391	27.86%	0.559%
126	8.627	8.608	8.641	VV	144994	2722914	24.30%	0.487%
127	8.658	8.641	8.688	VV	182227	4231119	37.76%	0.757%
128	8.706	8.688	8.740	VV	165964	4599041	41.05%	0.823%
129	8.760	8.740	8.799	VV	157247	5046197	45.04%	0.903%
130	8.845	8.799	8.863	VV	141580	5216925	46.56%	0.934%
131	8.894	8.863	8.928	VV	163817	5507482	49.15%	0.986%
132	8.953	8.928	8.975	VV	174106	4172863	37.24%	0.747%
133	8.998	8.975	9.041	VV	145892	5141243	45.88%	0.920%
134	9.065	9.041	9.077	VV	163984	3140102	28.02%	0.562%
135	9.091	9.077	9.128	VV	165931	4593709	41.00%	0.822%
136	9.147	9.128	9.178	VV	165181	4473321	39.92%	0.801%
137	9.195	9.178	9.231	VV	159007	4622558	41.26%	0.827%
138	9.244	9.231	9.264	VV	163624	2943152	26.27%	0.527%
139	9.321	9.264	9.343	VV	161757	6958385	62.10%	1.246%
140	9.356	9.343	9.393	VV	148671	4274571	38.15%	0.765%
141	9.418	9.393	9.439	VV	152676	3885782	34.68%	0.696%

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142	9.464	9.439	9.478	VV	147718	3261353	29.11%	0.584%
143	9.500	9.478	9.538	VV	166056	5460314	48.73%	0.977%
144	9.553	9.538	9.575	VV	155021	3303716	29.49%	0.591%
145	9.598	9.575	9.623	VV	160400	4351368	38.84%	0.779%
146	9.649	9.623	9.681	VV	153862	5047626	45.05%	0.904%
147	9.701	9.681	9.718	VV	153483	3148142	28.10%	0.564%
148	9.729	9.718	9.765	VV	142444	3808075	33.99%	0.682%
149	9.808	9.765	9.845	VV	159117	6817588	60.85%	1.220%
150	9.873	9.845	9.898	VV	153075	4520545	40.35%	0.809%
151	9.910	9.898	9.938	VV	145515	3318525	29.62%	0.594%
152	9.961	9.938	10.006	VV	148484	5619533	50.15%	1.006%
153	10.031	10.006	10.050	VV	145147	3752543	33.49%	0.672%
154	10.069	10.050	10.088	VV	153940	3341714	29.82%	0.598%
155	10.106	10.088	10.126	VV	156086	3471259	30.98%	0.621%
156	10.139	10.126	10.155	VV	148880	2451518	21.88%	0.439%
157	10.175	10.155	10.197	VV	175943	3940030	35.16%	0.705%
158	10.217	10.197	10.252	VV	151574	4618769	41.22%	0.827%
159	10.275	10.252	10.296	VV	159426	3913469	34.93%	0.701%
160	10.312	10.296	10.330	VV	152337	2869993	25.61%	0.514%
161	10.348	10.330	10.369	VV	149808	3370560	30.08%	0.603%
162	10.429	10.369	10.455	VV	156727	7652600	68.30%	1.370%
163	10.493	10.455	10.544	VV	155796	7778113	69.42%	1.392%
164	10.576	10.544	10.594	VV	152308	4179250	37.30%	0.748%
165	10.613	10.594	10.631	VV	155800	3294516	29.40%	0.590%
166	10.652	10.631	10.678	VV	154812	3952510	35.28%	0.708%
167	10.701	10.678	10.741	VV	142160	5034107	44.93%	0.901%
168	10.749	10.741	10.758	VV	128454	1263634	11.28%	0.226%
169	10.784	10.758	10.814	VV	135215	4356686	38.88%	0.780%
170	10.825	10.814	10.831	VV	128895	1302155	11.62%	0.233%
171	10.860	10.831	10.875	VV	141412	3561216	31.78%	0.637%
172	10.879	10.875	10.895	VV	141975	1641766	14.65%	0.294%
173	10.928	10.895	10.951	VV	148222	4577824	40.86%	0.819%
174	10.974	10.951	10.991	VV	132920	3169616	28.29%	0.567%
175	11.028	10.991	11.055	VV	143560	5177407	46.21%	0.927%
176	11.064	11.055	11.073	VV	129719	1459297	13.02%	0.261%
177	11.090	11.073	11.146	VV	141295	5738974	51.22%	1.027%
178	11.185	11.146	11.198	VV	128880	3914481	34.94%	0.701%
179	11.211	11.198	11.228	VV	131727	2305360	20.57%	0.413%
180	11.237	11.228	11.258	VV	127363	2143644	19.13%	0.384%
181	11.284	11.258	11.340	VV	127758	5893062	52.59%	1.055%
182	11.390	11.340	11.423	VV	595768	11204670	100.00%	2.006%
183	11.450	11.423	11.488	VV	122987	4503789	40.20%	0.806%
184	11.514	11.488	11.550	VV	120540	4372001	39.02%	0.783%
185	11.566	11.550	11.588	VV	129639	2797961	24.97%	0.501%
186	11.603	11.588	11.615	VV	120507	1983722	17.70%	0.355%
187	11.634	11.615	11.656	VV	125844	2946619	26.30%	0.527%
188	11.670	11.656	11.697	VV	118040	2778888	24.80%	0.497%
189	11.724	11.697	11.755	VV	123641	4050507	36.15%	0.725%
190	11.771	11.755	11.804	VV	115122	3218751	28.73%	0.576%
191	11.816	11.804	11.838	VV	105522	2094939	18.70%	0.375%
192	11.873	11.838	11.891	VV	106142	3283218	29.30%	0.588%
193	11.900	11.891	11.928	VV	101466	2188633	19.53%	0.392%
194	11.949	11.928	11.971	VV	104057	2608811	23.28%	0.467%

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195	11.998	11.971	12.071	VV	140006	6292910	56.16%	1.126%
196	12.095	12.071	12.131	VV	105724	3497466	31.21%	0.626%
197	12.149	12.131	12.173	VV	94781	2291943	20.46%	0.410%
198	12.216	12.173	12.238	VV	93049	3503772	31.27%	0.627%
199	12.252	12.238	12.286	VV	93055	2630386	23.48%	0.471%
200	12.303	12.286	12.376	VV	94813	4763310	42.51%	0.853%
201	12.390	12.376	12.410	VV	86164	1717801	15.33%	0.307%
202	12.447	12.410	12.468	VV	86604	2909857	25.97%	0.521%
203	12.482	12.468	12.509	VV	84349	1966453	17.55%	0.352%
204	12.528	12.509	12.541	VV	78650	1512763	13.50%	0.271%
205	12.555	12.541	12.604	VV	79131	2802432	25.01%	0.502%
206	12.657	12.604	12.695	VV	73677	3874700	34.58%	0.694%
207	12.720	12.695	12.750	VV	76518	2363204	21.09%	0.423%
208	12.761	12.750	12.785	VV	69305	1364767	12.18%	0.244%
209	12.830	12.785	12.868	VV	381983	7059508	63.01%	1.264%
210	12.879	12.868	12.890	VV	67287	887324	7.92%	0.159%
211	12.901	12.890	12.949	VV	66524	2267377	20.24%	0.406%
212	12.962	12.949	12.981	VV	61209	1134690	10.13%	0.203%
213	13.002	12.981	13.032	VV	63231	1822172	16.26%	0.326%
214	13.054	13.032	13.114	VV	65899	2872514	25.64%	0.514%
215	13.141	13.114	13.182	VV	57468	2244658	20.03%	0.402%
216	13.199	13.182	13.207	VV	52714	784307	7.00%	0.140%
217	13.224	13.207	13.298	VV	58982	2863443	25.56%	0.513%
218	13.313	13.298	13.335	VV	51843	1090548	9.73%	0.195%
219	13.341	13.335	13.394	VV	48229	1639506	14.63%	0.293%
220	13.422	13.394	13.441	VV	48300	1293916	11.55%	0.232%
221	13.457	13.441	13.480	VV	48047	1048937	9.36%	0.188%
222	13.495	13.480	13.561	VV	47993	2104622	18.78%	0.377%
223	13.584	13.561	13.606	VV	45118	1116463	9.96%	0.200%
224	13.625	13.606	13.693	VV	41229	1939184	17.31%	0.347%
225	13.718	13.693	13.748	VV	36432	1131124	10.10%	0.202%
226	13.767	13.748	13.832	VV	33257	1590398	14.19%	0.285%
227	13.874	13.832	13.915	VV	30928	1485632	13.26%	0.266%
228	13.928	13.915	13.945	VV	30847	530506	4.73%	0.095%
229	13.967	13.945	13.998	VV	29415	889766	7.94%	0.159%
230	14.014	13.998	14.038	VV	27530	642450	5.73%	0.115%
231	14.074	14.038	14.105	VV	26904	1020657	9.11%	0.183%
232	14.139	14.105	14.192	VV	24580	1197232	10.69%	0.214%
233	14.210	14.192	14.228	VV	22833	462339	4.13%	0.083%
234	14.241	14.228	14.267	VV	22554	500717	4.47%	0.090%
235	14.282	14.267	14.353	VV	21460	984810	8.79%	0.176%
236	14.372	14.353	14.395	VV	17688	431582	3.85%	0.077%
237	14.414	14.395	14.499	VV	17821	992452	8.86%	0.178%
238	14.506	14.499	14.515	VV	14452	133741	1.19%	0.024%
239	14.520	14.515	14.571	VV	14780	465842	4.16%	0.083%
240	14.580	14.571	14.621	VV	13557	384680	3.43%	0.069%
241	14.642	14.621	14.661	VV	12164	284551	2.54%	0.051%
242	14.677	14.661	14.738	VV	11945	513364	4.58%	0.092%
243	14.748	14.738	14.855	VV	11099	684138	6.11%	0.122%
244	14.871	14.855	14.884	VV	8967	155657	1.39%	0.028%
245	14.900	14.884	15.011	VV	8910	581423	5.19%	0.104%
246	15.016	15.011	15.022	VV	7022	43416	0.39%	0.008%

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247	15.057	15.022	15.162	VV	29498	866182	7.73%	0.155%
248	15.209	15.162	15.250	VV	6438	291391	2.60%	0.052%
249	15.260	15.250	15.363	VV	5214	284929	2.54%	0.051%
250	15.386	15.363	15.396	VV	3620	71527	0.64%	0.013%
251	15.408	15.396	15.491	VV	3749	183457	1.64%	0.033%
252	15.498	15.491	15.550	VV	3024	97212	0.87%	0.017%
253	15.578	15.550	15.678	VV	3054	180520	1.61%	0.032%
254	15.700	15.678	15.731	VV	2396	62064	0.55%	0.011%
255	15.744	15.731	15.831	VV	1738	85558	0.76%	0.015%
256	15.875	15.831	15.935	VV	1663	82023	0.73%	0.015%
257	15.939	15.935	15.958	VV	1207	15660	0.14%	0.003%
258	15.980	15.958	15.999	VV	1395	30266	0.27%	0.005%
259	16.019	15.999	16.040	VV	1625	33612	0.30%	0.006%
260	16.069	16.040	16.118	VV	2991	76412	0.68%	0.014%
261	16.180	16.118	16.231	VV	1367	56732	0.51%	0.010%
262	16.255	16.231	16.276	VV	730	15738	0.14%	0.003%
263	16.311	16.276	16.411	VV	609	33504	0.30%	0.006%
264	16.468	16.411	16.514	VV	1143	38724	0.35%	0.007%
265	16.542	16.514	16.598	VV	852	28951	0.26%	0.005%
266	16.648	16.598	16.668	VV	1408	29796	0.27%	0.005%
267	16.692	16.668	16.768	VV	3061	52357	0.47%	0.009%
268	16.782	16.768	16.808	VV	175	2744	0.02%	0.000%
269	16.819	16.808	16.831	VV	329	2263	0.02%	0.000%
270	16.864	16.831	16.917	VV	538	12684	0.11%	0.002%
271	16.947	16.917	16.970	VV	388	7435	0.07%	0.001%
272	17.015	16.970	17.068	VV	1390	36637	0.33%	0.007%
273	17.097	17.068	17.132	VV	1803	33576	0.30%	0.006%
274	17.151	17.132	17.161	VV	351	4446	0.04%	0.001%
275	17.182	17.161	17.241	VV	358	11267	0.10%	0.002%
276	17.251	17.241	17.285	VV	185	2512	0.02%	0.000%
277	17.303	17.285	17.313	PV	139	1240	0.01%	0.000%
278	17.332	17.313	17.348	VV	177	1867	0.02%	0.000%
279	17.409	17.348	17.430	VV	352	7095	0.06%	0.001%
280	17.488	17.430	17.509	VV	1198	28009	0.25%	0.005%
281	17.532	17.509	17.573	VV	1586	30833	0.28%	0.006%
282	17.652	17.573	17.725	VV	864	43096	0.38%	0.008%
283	17.740	17.725	17.794	VV	858	15800	0.14%	0.003%
284	17.834	17.794	17.848	VV	900	16576	0.15%	0.003%
285	17.889	17.848	17.934	VV	11484	228404	2.04%	0.041%
286	17.957	17.934	17.998	VV	2909	50976	0.45%	0.009%
287	18.019	17.998	18.034	VV	719	11874	0.11%	0.002%
288	18.046	18.034	18.071	VV	573	9584	0.09%	0.002%
289	18.082	18.071	18.110	VV	405	3793	0.03%	0.001%
290	18.163	18.110	18.195	PV	651	14364	0.13%	0.003%
291	18.200	18.195	18.207	VV	134	937	0.01%	0.000%
292	18.217	18.207	18.241	PV	225	3048	0.03%	0.001%
293	18.361	18.241	18.405	VV	3580	109122	0.97%	0.020%
294	18.463	18.405	18.548	VV	2098	110120	0.98%	0.020%
295	18.572	18.548	18.591	VV	819	18896	0.17%	0.003%
296	18.651	18.591	18.670	VV	1798	49254	0.44%	0.009%
297	18.716	18.670	18.742	VV	6769	176690	1.58%	0.032%
298	18.755	18.742	18.803	VV	3370	86952	0.78%	0.016%
299	18.818	18.803	18.846	VV	1434	35027	0.31%	0.006%

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300	18.862	18.846	18.885	VV	1545	32404	0.29%	0.006%
301	18.895	18.885	18.916	VV	1400	23242	0.21%	0.004%
302	18.956	18.916	19.000	VV	1983	79318	0.71%	0.014%
303	19.026	19.000	19.055	VV	1439	44010	0.39%	0.008%
304	19.062	19.055	19.069	VV	1508	11526	0.10%	0.002%
305	19.076	19.069	19.084	VV	1376	12298	0.11%	0.002%
306	19.150	19.084	19.169	VV	2771	93458	0.83%	0.017%
307	19.192	19.169	19.221	VV	2505	68280	0.61%	0.012%
308	19.229	19.221	19.245	VV	2319	31232	0.28%	0.006%
309	19.289	19.245	19.316	VV	2408	91352	0.82%	0.016%
310	19.338	19.316	19.348	VV	2106	35335	0.32%	0.006%
311	19.381	19.348	19.406	VV	2958	78919	0.70%	0.014%
312	19.421	19.406	19.442	VV	2179	43470	0.39%	0.008%
313	19.491	19.442	19.505	VV	3437	104366	0.93%	0.019%
314	19.522	19.505	19.594	VV	3998	152187	1.36%	0.027%
315	19.648	19.594	19.668	VV	2837	108499	0.97%	0.019%
316	19.707	19.668	19.743	VV	3408	134533	1.20%	0.024%
317	19.755	19.743	19.768	VV	2812	40444	0.36%	0.007%
318	19.818	19.768	19.834	VV	2992	110169	0.98%	0.020%
319	19.890	19.834	19.914	VV	3929	158724	1.42%	0.028%
320	19.945	19.914	19.965	VV	3839	109951	0.98%	0.020%
321	20.027	19.965	20.044	VV	3967	181721	1.62%	0.033%
322	20.059	20.044	20.093	VV	3905	107747	0.96%	0.019%
323	20.123	20.093	20.139	VV	3779	97788	0.87%	0.018%
324	20.155	20.139	20.171	VV	3734	68857	0.61%	0.012%
325	20.195	20.171	20.203	VV	4050	72423	0.65%	0.013%
326	20.265	20.203	20.301	VV	7267	326796	2.92%	0.058%
327	20.310	20.301	20.324	VV	6138	79747	0.71%	0.014%
328	20.335	20.324	20.395	VV	5744	223604	2.00%	0.040%
329	20.400	20.395	20.444	VV	4866	140067	1.25%	0.025%
330	20.475	20.444	20.495	VV	5025	141221	1.26%	0.025%
331	20.514	20.495	20.532	VV	4986	107608	0.96%	0.019%
332	20.600	20.532	20.668	VV	5396	384503	3.43%	0.069%
333	20.681	20.668	20.695	VV	3971	62329	0.56%	0.011%
334	20.699	20.695	20.704	VV	4087	22529	0.20%	0.004%
335	20.761	20.704	20.855	VV	4927	395269	3.53%	0.071%
336	20.867	20.855	20.915	VV	4027	128040	1.14%	0.023%
337	20.928	20.915	20.961	VV	3361	89208	0.80%	0.016%
338	20.994	20.961	21.011	VV	3453	99532	0.89%	0.018%
339	21.021	21.011	21.046	VV	3368	68362	0.61%	0.012%
340	21.128	21.046	21.213	VV	3589	323367	2.89%	0.058%
341	21.227	21.213	21.245	VV	3233	58562	0.52%	0.010%
342	21.254	21.245	21.310	VV	3016	94039	0.84%	0.017%
343	21.324	21.310	21.354	VV	1991	47799	0.43%	0.009%
344	21.452	21.354	21.481	VV	2624	169772	1.52%	0.030%
345	21.490	21.481	21.548	VV	2106	72503	0.65%	0.013%
346	21.560	21.548	21.576	VV	1524	23381	0.21%	0.004%
347	21.586	21.576	21.614	VV	1231	25851	0.23%	0.005%
348	21.665	21.614	21.687	VV	1480	56892	0.51%	0.010%
349	21.704	21.687	21.715	VV	1326	21296	0.19%	0.004%
350	21.726	21.715	21.761	VV	1213	30827	0.28%	0.006%
351	21.769	21.761	21.798	VV	995	20904	0.19%	0.004%

					rteres				
352	21.872	21.798	21.961	VV	1302	96689	0.86%	0.017%	
353	21.969	21.961	21.981	VV	875	8828	0.08%	0.002%	
354	21.996	21.981	22.003	VV	990	10102	0.09%	0.002%	
355	22.022	22.003	22.043	VV	1101	22458	0.20%	0.004%	
356	22.053	22.043	22.081	VV	1173	22405	0.20%	0.004%	
357	22.090	22.081	22.188	VV	915	34510	0.31%	0.006%	
					Sum of corrected areas:	558635446			

Aliphatic EPH 032625.M Tue Apr 01 04:51:08 2025

Report of Analysis

Client:	G Environmental	Date Collected:	03/27/25
Project:	Stockton	Date Received:	03/28/25
Client Sample ID:	D5DL	SDG No.:	Q1675
Lab Sample ID:	Q1675-17DL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.6
Sample Wt/Vol:	30.07 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068466.D	5	03/31/25	04/01/25	PB167381

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	207		4.79	21.1	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	6.22	U	6.22	10.5	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	5.08		40 - 140	51%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	5.70		40 - 140	57%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1675-17DL	Acq On:	01 Apr 2025 08:49
Client Sample ID:	D5DL	Operator:	YP/AJ
Data file:	FC068466.D	Misc:	
Instrument:	FID_C	ALS Vial:	12
Dilution Factor:	5	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.097	6.359	10430144	64.257	300	ug/ml
Aliphatic C12-C16	6.360	9.742	40947434	243.453	200	ug/ml
Aliphatic C16-C21	9.743	13.096	41736937	243.349	300	ug/ml
Aliphatic C21-C28	13.097	16.749	6303669	37.329	400	ug/ml
Aliphatic C28-C40	16.750	21.544	1541873	11.323	600	ug/ml
Aliphatic EPH	3.097	21.544	100960057	599.711		ug/ml
ortho-Terphenyl (SURR)	11.382	11.382	1132153	5.7		ug/ml
1-chlorooctadecane (SURR)	12.824	12.824	756885	5.08		ug/ml
Aliphatic C9-C28	3.097	16.749	99418184	588.388	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040125AL\
 Data File : FC068466.D
 Signal(s) : FID1A.ch
 Acq On : 01 Apr 2025 08:49
 Operator : YP/AJ
 Sample : Q1675-17DL 5X
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 D5DL

Integration File: autoint1.e
 Quant Time: Apr 02 02:57:08 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:35:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.382	1132153	5.700 ug/ml
Spiked Amount 50.000		Recovery =	11.40%
12) S 1-chlorooctadecane (S...	12.824	756885	5.077 ug/ml
Spiked Amount 50.000		Recovery =	10.15%

Target Compounds

(f)=RT Delta > 1/2 Window

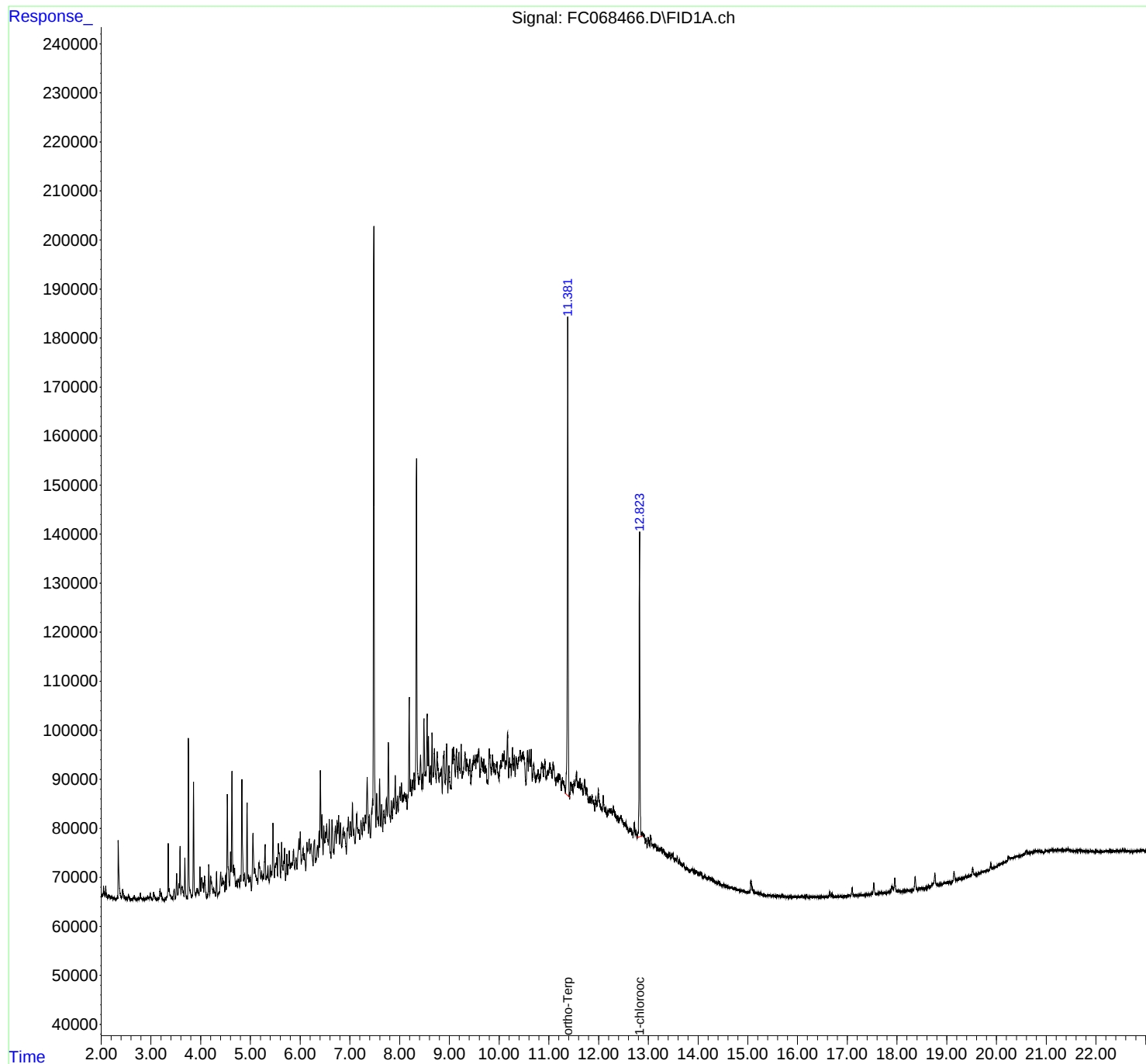
(m)=manual int.

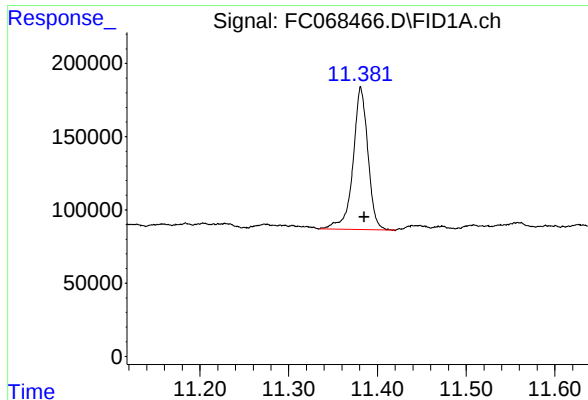
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040125AL\
Data File : FC068466.D
Signal(s) : FID1A.ch
Acq On : 01 Apr 2025 08:49
Operator : YP/AJ
Sample : Q1675-17DL 5X
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
D5DL

Integration File: autoint1.e
Quant Time: Apr 02 02:57:08 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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

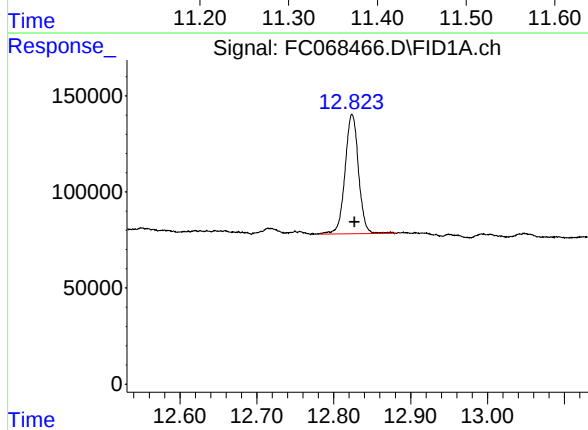




#9 ortho-Terphenyl (SURR)

R.T.: 11.382 min
Delta R.T.: -0.003 min
Response: 1132153
Conc: 5.70 ug/ml

Instrument :
FID_C
ClientSampleId :
D5DL



#12 1-chlorooctadecane (SURR)

R.T.: 12.824 min
Delta R.T.: -0.003 min
Response: 756885
Conc: 5.08 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040125AL\
 Data File : FC068466.D
 Signal(s) : FID1A.ch
 Acq On : 01 Apr 2025 08:49
 Sample : Q1675-17DL 5X
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	2.344	2.304	2.410	BV	10598	145919	6.67%	0.139%
2	2.432	2.410	2.455	VV	1882	27984	1.28%	0.027%
3	2.463	2.455	2.531	VV	657	10377	0.47%	0.010%
4	2.547	2.531	2.609	VV	1007	15457	0.71%	0.015%
5	2.667	2.609	2.712	PV	920	16077	0.74%	0.015%
6	2.745	2.712	2.757	PV	368	5279	0.24%	0.005%
7	2.787	2.757	2.828	VV	1274	18229	0.83%	0.017%
8	2.854	2.828	2.871	VV	254	4293	0.20%	0.004%
9	2.904	2.871	2.915	VV	509	5933	0.27%	0.006%
10	2.932	2.915	2.964	VV	824	14248	0.65%	0.014%
11	2.986	2.964	3.034	VV	1353	22275	1.02%	0.021%
12	3.053	3.034	3.116	VV	1507	29214	1.34%	0.028%
13	3.134	3.116	3.146	VV	254	2907	0.13%	0.003%
14	3.183	3.146	3.200	VV	2237	29746	1.36%	0.028%
15	3.211	3.200	3.229	VV	1460	14750	0.67%	0.014%
16	3.237	3.229	3.266	VV	225	2384	0.11%	0.002%
17	3.286	3.266	3.301	PV	367	3395	0.16%	0.003%
18	3.348	3.301	3.408	VV	11459	141966	6.49%	0.135%
19	3.427	3.408	3.438	VV	681	8930	0.41%	0.009%
20	3.467	3.438	3.489	VV	2191	36044	1.65%	0.034%
21	3.517	3.489	3.538	VV	5392	71581	3.27%	0.068%
22	3.585	3.538	3.604	VV	10951	153149	7.00%	0.146%
23	3.628	3.604	3.665	VV	2720	71639	3.28%	0.068%
24	3.682	3.665	3.733	VV	8590	95467	4.37%	0.091%
25	3.754	3.733	3.812	VV	32781	325312	14.88%	0.310%
26	3.856	3.812	3.903	VV	24107	267346	12.23%	0.255%
27	3.928	3.903	3.966	VV	2328	61100	2.79%	0.058%
28	3.986	3.966	4.003	VV	6748	80738	3.69%	0.077%
29	4.021	4.003	4.062	VV	4481	114480	5.23%	0.109%
30	4.079	4.062	4.120	VV	4897	86603	3.96%	0.083%
31	4.163	4.120	4.182	VV	7132	90930	4.16%	0.087%
32	4.202	4.182	4.248	VV	4919	115821	5.30%	0.110%
33	4.262	4.248	4.297	VV	2481	50772	2.32%	0.048%
34	4.318	4.297	4.342	VV	5806	71398	3.26%	0.068%
35	4.402	4.342	4.421	VV	5613	125594	5.74%	0.120%
36	4.443	4.421	4.485	VV	4295	129498	5.92%	0.123%

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37	4.502	4.485	4.515	VV	5047	60040	2.75%	0.057%
38	4.536	4.515	4.582	VV	21717	328426	15.02%	0.313%
39	4.600	4.582	4.610	VV	9610	109665	5.01%	0.105%
40	4.629	4.610	4.649	VV	26197	327577	14.98%	0.312%
41	4.661	4.649	4.701	VV	7140	169419	7.75%	0.162%
42	4.719	4.701	4.736	VV	3770	69806	3.19%	0.067%
43	4.767	4.736	4.785	VV	4229	101047	4.62%	0.096%
44	4.802	4.785	4.810	VV	4984	58794	2.69%	0.056%
45	4.829	4.810	4.864	VV	24540	359617	16.44%	0.343%
46	4.883	4.864	4.904	VV	5545	100177	4.58%	0.096%
47	4.933	4.904	4.968	VV	19759	291247	13.32%	0.278%
48	4.978	4.968	4.987	VV	4406	46422	2.12%	0.044%
49	4.998	4.987	5.020	VV	4618	71648	3.28%	0.068%
50	5.051	5.020	5.078	VV	13553	260763	11.92%	0.249%
51	5.090	5.078	5.127	VV	6397	152595	6.98%	0.146%
52	5.136	5.127	5.148	VV	4402	50568	2.31%	0.048%
53	5.170	5.148	5.209	VV	7475	214504	9.81%	0.205%
54	5.226	5.209	5.242	VV	5939	98728	4.51%	0.094%
55	5.258	5.242	5.267	VV	5209	68531	3.13%	0.065%
56	5.295	5.267	5.314	VV	11211	204670	9.36%	0.195%
57	5.352	5.314	5.380	VV	6909	193284	8.84%	0.184%
58	5.399	5.380	5.412	VV	7143	104399	4.77%	0.100%
59	5.424	5.412	5.433	VV	5843	66799	3.05%	0.064%
60	5.454	5.433	5.483	VV	15582	272372	12.46%	0.260%
61	5.529	5.483	5.544	VV	8654	248022	11.34%	0.237%
62	5.562	5.544	5.605	VV	11389	308194	14.09%	0.294%
63	5.627	5.605	5.655	VV	11733	230236	10.53%	0.220%
64	5.687	5.655	5.706	VV	10541	226993	10.38%	0.216%
65	5.732	5.706	5.749	VV	9238	167279	7.65%	0.160%
66	5.781	5.749	5.799	VV	9973	224350	10.26%	0.214%
67	5.811	5.799	5.822	VV	7362	98660	4.51%	0.094%
68	5.836	5.822	5.848	VV	7343	109002	4.98%	0.104%
69	5.867	5.848	5.893	VV	10263	223673	10.23%	0.213%
70	5.917	5.893	5.936	VV	8553	186269	8.52%	0.178%
71	5.975	5.936	5.986	VV	12370	293335	13.41%	0.280%
72	6.003	5.986	6.024	VV	13788	243029	11.11%	0.232%
73	6.059	6.024	6.076	VV	10426	282376	12.91%	0.269%
74	6.087	6.076	6.113	VV	9417	176616	8.08%	0.168%
75	6.137	6.113	6.159	VV	11663	264738	12.11%	0.252%
76	6.181	6.159	6.197	VV	12287	250091	11.44%	0.239%
77	6.221	6.197	6.260	VV	11369	363393	16.62%	0.347%
78	6.287	6.260	6.307	VV	12173	281880	12.89%	0.269%
79	6.349	6.307	6.364	VV	10932	319360	14.60%	0.305%
80	6.380	6.364	6.390	VV	13882	176888	8.09%	0.169%
81	6.407	6.390	6.427	VV	26135	411743	18.83%	0.393%
82	6.440	6.427	6.462	VV	17374	282663	12.93%	0.270%
83	6.477	6.462	6.498	VV	14877	264293	12.09%	0.252%
84	6.512	6.498	6.520	VV	13629	171119	7.82%	0.163%
85	6.534	6.520	6.566	VV	15493	364537	16.67%	0.348%
86	6.586	6.566	6.620	VV	16286	384740	17.59%	0.367%
87	6.641	6.620	6.680	VV	16297	430800	19.70%	0.411%
88	6.709	6.680	6.727	VV	14905	356217	16.29%	0.340%
89	6.742	6.727	6.756	VV	16017	244372	11.17%	0.233%

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90	6.773	6.756	6.792	VV	17191	317487	14.52%	0.303%
91	6.811	6.792	6.836	VV	15572	344666	15.76%	0.329%
92	6.866	6.836	6.882	VV	14625	350363	16.02%	0.334%
93	6.895	6.882	6.930	VV	13796	347426	15.89%	0.331%
94	6.969	6.930	6.990	VV	16705	501397	22.93%	0.478%
95	7.010	6.990	7.029	VV	15889	336832	15.40%	0.321%
96	7.053	7.029	7.071	VV	19775	396937	18.15%	0.379%
97	7.081	7.071	7.103	VV	14155	251089	11.48%	0.239%
98	7.137	7.103	7.169	VV	17379	574650	26.28%	0.548%
99	7.179	7.169	7.200	VV	14234	247232	11.31%	0.236%
100	7.224	7.200	7.248	VV	15949	418095	19.12%	0.399%
101	7.265	7.248	7.290	VV	16601	380032	17.38%	0.362%
102	7.309	7.290	7.321	VV	17146	292568	13.38%	0.279%
103	7.348	7.321	7.376	VV	24682	630353	28.82%	0.601%
104	7.392	7.376	7.414	VV	17192	334997	15.32%	0.319%
105	7.540	7.524	7.578	VV	21486	571756	26.15%	0.545%
106	7.598	7.578	7.621	VV	24443	489070	22.36%	0.466%
107	7.640	7.621	7.661	VV	19023	401218	18.35%	0.383%
108	7.685	7.661	7.710	VV	18136	484144	22.14%	0.462%
109	7.733	7.710	7.752	VV	20529	465970	21.31%	0.444%
110	7.775	7.752	7.817	VV	31964	829976	37.95%	0.792%
111	7.835	7.817	7.851	VV	19965	365467	16.71%	0.349%
112	7.875	7.851	7.894	VV	20481	489176	22.37%	0.467%
113	7.913	7.894	7.937	VV	25118	537628	24.58%	0.513%
114	7.955	7.937	7.970	VV	20912	387777	17.73%	0.370%
115	8.006	7.970	8.022	VV	22776	639898	29.26%	0.610%
116	8.038	8.022	8.058	VV	23651	471520	21.56%	0.450%
117	8.071	8.058	8.080	VV	21055	274718	12.56%	0.262%
118	8.095	8.080	8.106	VV	21679	327641	14.98%	0.312%
119	8.115	8.106	8.129	VV	21492	286509	13.10%	0.273%
120	8.138	8.129	8.151	VV	21000	267712	12.24%	0.255%
121	8.193	8.151	8.212	VV	40972	954067	43.63%	0.910%
122	8.222	8.212	8.239	VV	24410	372745	17.04%	0.355%
123	8.257	8.239	8.270	VV	23881	428565	19.60%	0.409%
124	8.289	8.270	8.305	VV	25658	498269	22.78%	0.475%
125	8.422	8.384	8.444	VV	29329	916639	41.92%	0.874%
126	8.458	8.444	8.470	VV	25403	386088	17.66%	0.368%
127	8.489	8.470	8.515	VV	36764	781648	35.74%	0.745%
128	8.554	8.515	8.569	VV	37790	959848	43.89%	0.915%
129	8.581	8.569	8.601	VV	32944	556407	25.44%	0.531%
130	8.620	8.601	8.636	VV	27100	526243	24.06%	0.502%
131	8.653	8.636	8.681	VV	33717	751910	34.38%	0.717%
132	8.701	8.681	8.736	VV	30739	898072	41.07%	0.856%
133	8.755	8.736	8.792	VV	29671	897834	41.06%	0.856%
134	8.839	8.792	8.858	VV	26231	985285	45.06%	0.940%
135	8.892	8.858	8.919	VV	30043	979306	44.78%	0.934%
136	8.947	8.919	8.971	VV	31565	825595	37.75%	0.787%
137	8.992	8.971	9.038	VV	27026	974104	44.54%	0.929%
138	9.061	9.038	9.072	VV	30464	561701	25.69%	0.536%
139	9.085	9.072	9.119	VV	30802	797561	36.47%	0.761%
140	9.143	9.119	9.173	VV	30419	895035	40.93%	0.854%
141	9.190	9.173	9.220	VV	29822	763343	34.91%	0.728%

rteres								
142	9.239	9.220	9.261	VV	31339	684538	31.30%	0.653%
143	9.316	9.261	9.334	VV	29992	1195853	54.68%	1.140%
144	9.349	9.334	9.388	VV	28460	866054	39.60%	0.826%
145	9.413	9.388	9.434	VV	28486	733371	33.54%	0.699%
146	9.485	9.434	9.501	VV	29174	1085591	49.64%	1.035%
147	9.518	9.501	9.533	VV	29271	547910	25.05%	0.523%
148	9.552	9.533	9.567	VV	29232	579220	26.49%	0.552%
149	9.590	9.567	9.617	VV	30215	845637	38.67%	0.806%
150	9.641	9.617	9.684	VV	28636	1099512	50.28%	1.049%
151	9.695	9.684	9.711	VV	28509	436619	19.97%	0.416%
152	9.726	9.711	9.781	VV	26843	1061188	48.53%	1.012%
153	9.802	9.781	9.844	VV	30476	1045890	47.83%	0.997%
154	9.869	9.844	9.891	VV	29338	766922	35.07%	0.731%
155	9.905	9.891	9.931	VV	27514	638691	29.21%	0.609%
156	9.955	9.931	9.998	VV	27769	1053819	48.19%	1.005%
157	10.034	9.998	10.044	VV	28207	733897	33.56%	0.700%
158	10.068	10.044	10.083	VV	28971	655809	29.99%	0.625%
159	10.105	10.083	10.121	VV	30092	646724	29.57%	0.617%
160	10.170	10.121	10.193	VV	33311	1244403	56.90%	1.187%
161	10.212	10.193	10.222	VV	28611	478246	21.87%	0.456%
162	10.230	10.222	10.246	VV	27424	381470	17.44%	0.364%
163	10.269	10.246	10.289	VV	30751	722555	33.04%	0.689%
164	10.307	10.289	10.324	VV	29151	587277	26.85%	0.560%
165	10.346	10.324	10.369	VV	28517	734320	33.58%	0.700%
166	10.425	10.369	10.445	VV	30156	1316861	60.22%	1.256%
167	10.466	10.445	10.476	VV	29461	542721	24.82%	0.518%
168	10.485	10.476	10.538	VV	29990	1011964	46.28%	0.965%
169	10.571	10.538	10.588	VV	30078	818179	37.41%	0.780%
170	10.607	10.588	10.629	VV	30171	690132	31.56%	0.658%
171	10.647	10.629	10.668	VV	30329	653921	29.90%	0.624%
172	10.695	10.668	10.739	VV	27473	1089727	49.83%	1.039%
173	10.786	10.739	10.811	VV	26228	1069680	48.91%	1.020%
174	10.857	10.811	10.894	VV	27661	1305689	59.71%	1.245%
175	10.919	10.894	10.952	VV	28254	915914	41.88%	0.873%
176	10.974	10.952	10.985	VV	26022	505563	23.12%	0.482%
177	11.022	10.985	11.071	VV	27660	1339948	61.27%	1.278%
178	11.086	11.071	11.139	VV	27659	1051655	48.09%	1.003%
179	11.158	11.139	11.169	VV	24709	436587	19.96%	0.416%
180	11.204	11.169	11.218	VV	25337	720512	32.95%	0.687%
181	11.229	11.218	11.254	VV	25097	523714	23.95%	0.499%
182	11.274	11.254	11.334	VV	24603	1122130	51.31%	1.070%
183	11.382	11.334	11.418	VV	117662	2186846	100.00%	2.086%
184	11.444	11.418	11.461	VV	23621	584749	26.74%	0.558%
185	11.472	11.461	11.488	VV	23027	357283	16.34%	0.341%
186	11.508	11.488	11.527	VV	24015	553703	25.32%	0.528%
187	11.558	11.527	11.578	VV	25681	740048	33.84%	0.706%
188	11.592	11.578	11.608	VV	23553	407551	18.64%	0.389%
189	11.627	11.608	11.658	VV	24310	696954	31.87%	0.665%
190	11.666	11.658	11.693	VV	23140	479170	21.91%	0.457%
191	11.720	11.693	11.748	VV	23789	737908	33.74%	0.704%
192	11.764	11.748	11.801	VV	22391	669787	30.63%	0.639%
193	11.811	11.801	11.828	VV	20698	332957	15.23%	0.318%
194	11.837	11.828	11.855	VV	20796	334639	15.30%	0.319%

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195	11.870	11.855	11.923	VV	20757	793120	36.27%	0.756%
196	11.945	11.923	11.968	VV	20531	525436	24.03%	0.501%
197	11.992	11.968	12.068	VV	22353	1176717	53.81%	1.122%
198	12.091	12.068	12.138	VV	20643	791257	36.18%	0.755%
199	12.146	12.138	12.171	VV	18482	353072	16.15%	0.337%
200	12.215	12.171	12.236	VV	18147	691248	31.61%	0.659%
201	12.253	12.236	12.281	VV	18147	476079	21.77%	0.454%
202	12.298	12.281	12.371	VV	18869	934882	42.75%	0.892%
203	12.385	12.371	12.405	VV	16788	330157	15.10%	0.315%
204	12.450	12.405	12.512	VV	16920	1028574	47.03%	0.981%
205	12.522	12.512	12.538	VV	15301	233725	10.69%	0.223%
206	12.551	12.538	12.599	VV	15570	531851	24.32%	0.507%
207	12.621	12.599	12.693	VV	14098	772242	35.31%	0.736%
208	12.717	12.693	12.738	VV	15220	380400	17.39%	0.363%
209	12.753	12.738	12.778	VV	13461	306736	14.03%	0.293%
210	12.824	12.778	12.863	VV	74615	1395440	63.81%	1.331%
211	12.873	12.863	12.941	VV	13245	592882	27.11%	0.565%
212	12.951	12.941	12.976	VV	12165	243293	11.13%	0.232%
213	12.994	12.976	13.026	VV	12380	345957	15.82%	0.330%
214	13.048	13.026	13.082	VV	12697	392177	17.93%	0.374%
215	13.090	13.082	13.104	VV	10891	137463	6.29%	0.131%
216	13.125	13.104	13.171	VV	10930	426485	19.50%	0.407%
217	13.192	13.171	13.231	VV	10239	361806	16.54%	0.345%
218	13.242	13.231	13.254	VV	10115	135069	6.18%	0.129%
219	13.268	13.254	13.290	VV	10179	212905	9.74%	0.203%
220	13.305	13.290	13.390	VV	9948	545830	24.96%	0.521%
221	13.415	13.390	13.445	VV	9113	288172	13.18%	0.275%
222	13.458	13.445	13.475	VV	8986	158898	7.27%	0.152%
223	13.496	13.475	13.522	VV	9109	240173	10.98%	0.229%
224	13.543	13.522	13.564	VV	7970	197387	9.03%	0.188%
225	13.581	13.564	13.609	VV	8549	210874	9.64%	0.201%
226	13.627	13.609	13.690	VV	7776	342697	15.67%	0.327%
227	13.705	13.690	13.751	VV	7018	237309	10.85%	0.226%
228	13.772	13.751	13.825	VV	6257	263129	12.03%	0.251%
229	13.875	13.825	13.908	VV	5891	278437	12.73%	0.266%
230	13.925	13.908	13.958	VV	5710	161801	7.40%	0.154%
231	13.966	13.958	13.994	VV	5468	115468	5.28%	0.110%
232	14.008	13.994	14.034	VV	5048	118900	5.44%	0.113%
233	14.064	14.034	14.106	VV	5136	202950	9.28%	0.194%
234	14.136	14.106	14.195	VV	4628	223876	10.24%	0.214%
235	14.209	14.195	14.228	VV	4212	81070	3.71%	0.077%
236	14.242	14.228	14.271	VV	4114	101495	4.64%	0.097%
237	14.286	14.271	14.348	VV	3900	164251	7.51%	0.157%
238	14.358	14.348	14.366	VV	3234	33790	1.55%	0.032%
239	14.372	14.366	14.389	VV	3207	43359	1.98%	0.041%
240	14.418	14.389	14.434	VV	3291	83822	3.83%	0.080%
241	14.446	14.434	14.498	VV	2929	103647	4.74%	0.099%
242	14.515	14.498	14.544	VV	2815	70419	3.22%	0.067%
243	14.550	14.544	14.614	VV	2492	97462	4.46%	0.093%
244	14.631	14.614	14.668	VV	2145	66553	3.04%	0.063%
245	14.675	14.668	14.708	VV	2183	48652	2.22%	0.046%
246	14.727	14.708	14.794	VV	1990	94259	4.31%	0.090%

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247	14.806	14.794	14.851	VV	1669	52942	2.42%	0.050%
248	14.900	14.851	14.998	VV	1542	117188	5.36%	0.112%
249	15.012	14.998	15.024	VV	1234	17532	0.80%	0.017%
250	15.065	15.024	15.141	VV	3501	126704	5.79%	0.121%
251	15.156	15.141	15.168	VV	1028	15415	0.70%	0.015%
252	15.213	15.168	15.240	VV	1071	41134	1.88%	0.039%
253	15.252	15.240	15.274	VV	1003	16761	0.77%	0.016%
254	15.281	15.274	15.371	VV	687	30596	1.40%	0.029%
255	15.427	15.371	15.450	VV	549	22480	1.03%	0.021%
256	15.463	15.450	15.488	VV	447	8979	0.41%	0.009%
257	15.507	15.488	15.534	VV	515	10805	0.49%	0.010%
258	15.581	15.568	15.591	VV	360	4565	0.21%	0.004%
259	15.600	15.591	15.654	VV	491	11013	0.50%	0.011%
260	15.665	15.654	15.681	VV	291	4083	0.19%	0.004%
261	15.700	15.681	15.741	VV	478	10480	0.48%	0.010%
262	15.754	15.741	15.801	VV	282	5715	0.26%	0.005%
263	15.811	15.801	15.854	VV	153	3078	0.14%	0.003%
264	15.881	15.854	15.950	VV	243	9033	0.41%	0.009%
265	15.962	15.950	15.994	VV	182	3449	0.16%	0.003%
266	16.020	15.994	16.046	VV	233	4826	0.22%	0.005%
267	16.083	16.046	16.141	VV	351	11573	0.53%	0.011%
268	16.180	16.141	16.234	VV	539	9810	0.45%	0.009%
269	16.257	16.234	16.284	VV	266	3961	0.18%	0.004%
270	16.351	16.284	16.370	VV	166	5432	0.25%	0.005%
271	16.391	16.370	16.427	PV	178	2391	0.11%	0.002%
272	16.472	16.427	16.534	VV	219	6485	0.30%	0.006%
273	16.554	16.534	16.614	VV	197	6083	0.28%	0.006%
274	16.647	16.614	16.674	VV	1141	17891	0.82%	0.017%
275	16.691	16.674	16.744	VV	760	12320	0.56%	0.012%
276	16.755	16.744	16.788	PV	103	1889	0.09%	0.002%
277	16.859	16.788	16.909	VV	199	6209	0.28%	0.006%
278	16.946	16.909	17.006	PV	205	6230	0.28%	0.006%
279	17.030	17.006	17.044	VV	344	4609	0.21%	0.004%
280	17.048	17.044	17.071	VV	197	2181	0.10%	0.002%
281	17.097	17.071	17.134	VV	1671	26816	1.23%	0.026%
282	17.156	17.134	17.226	VV	210	5435	0.25%	0.005%
283	17.245	17.226	17.268	PV	190	2782	0.13%	0.003%
284	17.288	17.268	17.308	VV	146	1726	0.08%	0.002%
285	17.329	17.308	17.368	PV	91	2215	0.10%	0.002%
286	17.375	17.368	17.381	VV	75	469	0.02%	0.000%
287	17.490	17.381	17.504	VV	282	9300	0.43%	0.009%
288	17.532	17.504	17.589	VV	2354	36147	1.65%	0.034%
289	17.649	17.589	17.671	VV	292	9206	0.42%	0.009%
290	17.684	17.671	17.695	VV	262	2621	0.12%	0.002%
291	17.705	17.695	17.718	VV	210	2077	0.09%	0.002%
292	17.738	17.718	17.764	VV	265	4534	0.21%	0.004%
293	17.775	17.764	17.781	PV	155	965	0.04%	0.001%
294	17.899	17.781	17.928	VV	1354	41927	1.92%	0.040%
295	17.955	17.928	17.997	VV	2881	51133	2.34%	0.049%
296	18.009	17.997	18.031	VV	388	5450	0.25%	0.005%
297	18.049	18.031	18.129	VV	235	7850	0.36%	0.007%
298	18.164	18.129	18.201	VV	189	4716	0.22%	0.004%
299	18.215	18.201	18.248	VV	247	3824	0.17%	0.004%

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300	18.363	18.248	18.424	PV	2747	49815	2.28%	0.048%
301	18.463	18.424	18.485	PV	268	6168	0.28%	0.006%
302	18.534	18.485	18.544	VV	105	3066	0.14%	0.003%
303	18.572	18.544	18.584	VV	85	1058	0.05%	0.001%
304	18.617	18.584	18.631	PV	207	3654	0.17%	0.003%
305	18.652	18.631	18.672	VV	314	5993	0.27%	0.006%
306	18.760	18.672	18.828	VV	2691	74471	3.41%	0.071%
307	18.954	18.828	18.983	VV	314	21311	0.97%	0.020%
308	19.011	18.983	19.024	VV	411	7560	0.35%	0.007%
309	19.034	19.024	19.066	VV	299	6401	0.29%	0.006%
310	19.146	19.066	19.194	VV	2300	53155	2.43%	0.051%
311	19.294	19.194	19.321	VV	574	35610	1.63%	0.034%
312	19.381	19.321	19.408	VV	800	31599	1.44%	0.030%
313	19.479	19.408	19.488	VV	766	33163	1.52%	0.032%
314	19.521	19.488	19.571	VV	2235	60682	2.77%	0.058%
315	19.578	19.571	19.594	VV	774	10141	0.46%	0.010%
316	19.759	19.594	19.764	VV	1086	92443	4.23%	0.088%
317	19.797	19.764	19.808	VV	1195	28880	1.32%	0.028%
318	19.887	19.808	19.921	VV	2337	94435	4.32%	0.090%
319	20.045	19.921	20.058	VV	1816	125608	5.74%	0.120%
320	20.243	20.058	20.288	VV	3094	304120	13.91%	0.290%
321	20.321	20.288	20.338	VV	2678	78372	3.58%	0.075%
322	20.414	20.338	20.444	VV	2822	173857	7.95%	0.166%
					Sum of corrected areas:		104857636	

Aliphatic EPH 032625.M Wed Apr 02 04:31:38 2025



CALIBRATION SUMMARY

Initial Calibration Report for SequenceID : FC032625AL

AreaCount

Parameter Range	FC068401.D	FC068402.D	FC068403.D	FC068404.D	FC068405.D	
Aliphatic C9-C12	45086767.000	23957696.000	10109387.000	5032376.000	2480291.000	
Aliphatic C12-C16	31366027.000	16525288.000	7021727.000	3486717.000	1690088.000	
Aliphatic C16-C21	46215435.000	24301108.000	10733415.000	5433148.000	2722484.000	
Aliphatic C21-C28	57370908.000	30982953.000	13741558.000	7153138.000	3908195.000	
Aliphatic C28-C40	66709018.000	35774110.000	16746543.000	8713011.000	4969759.000	
Aliphatic EPH	246748155.000	131541155.000	58352630.000	29818390.000	15770817.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aliphatic C9-C12	162319.1159996	4.653				
Aliphatic C12-C16	168194.168	4.51				
Aliphatic C16-C21	171510.5906664	7.383				
Aliphatic C21-C28	168869.942	12.042				
Aliphatic C28-C40	136171.7476664	15.894				
Aliphatic EPH	157243.7616662	9.786				

Concentration

Parameter Range	FC068401.D	FC068402.D	FC068403.D	FC068404.D	FC068405.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	FC068401.D	FC068402.D	FC068403.D	FC068404.D	FC068405.D	
Aliphatic C9-C12	150289.223333	159717.973333	168489.783333	167745.866666	165352.733333	
Aliphatic C12-C16	156830.135000	165252.880000	175543.175000	174335.850000	169008.800000	
Aliphatic C16-C21	154051.450000	162007.386666	178890.250000	181104.933333	181498.933333	

Initial Calibration Report for SequenceID : FC032625AL

Aliphatic C21-C28	143427.270000	154914.765000	171769.475000	178828.450000	195409.750000	
Aliphatic C28-C40	111181.696666	119247.033333	139554.525000	145216.850000	165658.633333	
Aliphatic EPH	137082.308333	146156.838888	162090.638888	165657.722222	175231.300000	

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
 Data File : FC068401.D
 Signal(s) : FID1A.ch
 Acq On : 26 Mar 2025 10:26
 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: Mar 26 13:11:37 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:10:46 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.397	18022152	87.143 ug/ml
Spiked Amount 50.000		Recovery =	174.29%
12) S 1-chlorooctadecane (S...	12.835	13391425	85.929 ug/ml
Spiked Amount 50.000		Recovery =	171.86%
Target Compounds			
1) T n-Nonane (C9)	3.203	14755216	88.977 ug/ml
2) T n-Decane (C10)	4.260	15026852	89.124 ug/ml
3) T A~Naphthalene (C11.7)	5.825	16689744	90.339 ug/ml
4) T n-Dodecane (C12)	6.267	15304699	89.485 ug/ml
5) T A~2-methylnaphthalene...	6.878	16293302	91.366 ug/ml
6) T n-Tetradecane (C14)	8.055	15405712	89.847 ug/ml
7) T n-Hexadecane (C16)	9.651	15960315	88.855 ug/ml
8) T n-Octadecane (C18)	11.091	16014633	87.298 ug/ml
10) T n-Eicosane (C20)	12.395	15259809	85.614 ug/ml
11) T n-Heneicosane (C21)	13.006	14940993	85.386 ug/ml
13) T n-Docosane (C22)	13.591	14810036	84.833 ug/ml
14) T n-Tetracosane (C24)	14.691	14604400	83.903 ug/ml
15) T n-Hexacosane (C26)	15.709	14222474	83.552 ug/ml
16) T n-Octacosane (C28)	16.657	13733998	81.646 ug/ml
17) T n-Tricontane (C30)	17.545	13722934	78.333 ug/ml
18) T n-Dotriacontane (C32)	18.374	12956119	76.432 ug/ml
19) T n-Tetratriacontane (C34)	19.156	11776981	77.993 ug/ml
20) T n-Hexatriacontane (C36)	19.893	10216728	80.554 ug/ml
21) T n-Octatriacontane (C38)	20.603	9266089	82.732 ug/ml
22) T n-Tetracontane (C40)	21.453	8770167	85.317 ug/ml

(f)=RT Delta > 1/2 Window

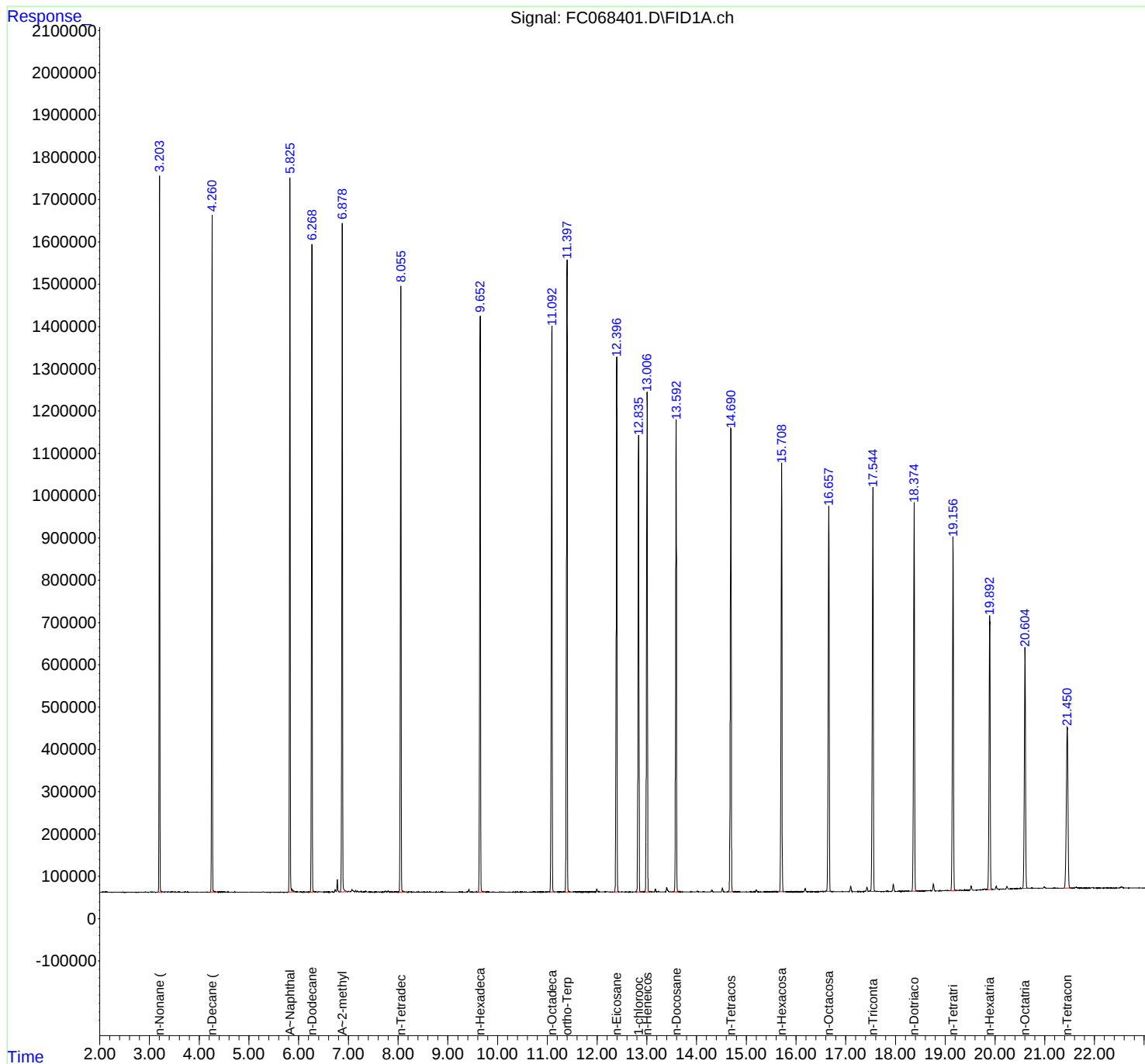
(m)=manual int.

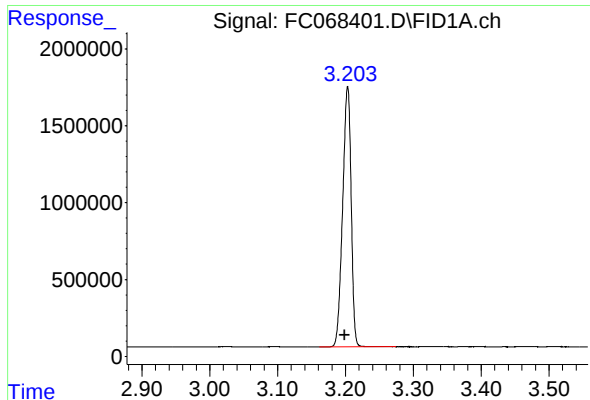
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
Data File : FC068401.D
Signal(s) : FID1A.ch
Acq On : 26 Mar 2025 10:26
Operator : YP/AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Mar 26 13:11:37 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:10:46 2025
Response via : Initial Calibration
Integrator: ChemStation

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

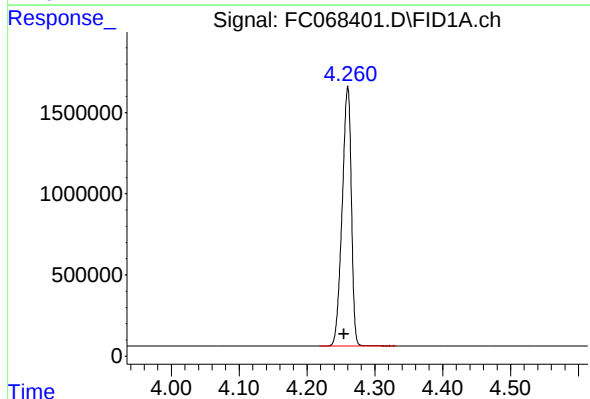




#1 n-Nonane (C9)

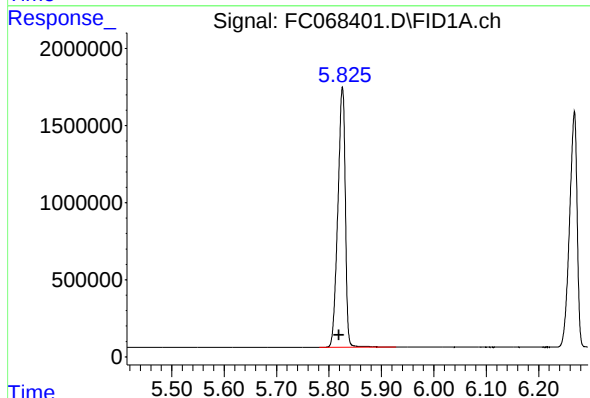
R.T.: 3.203 min
Delta R.T.: 0.004 min
Response: 14755216
Conc: 88.98 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



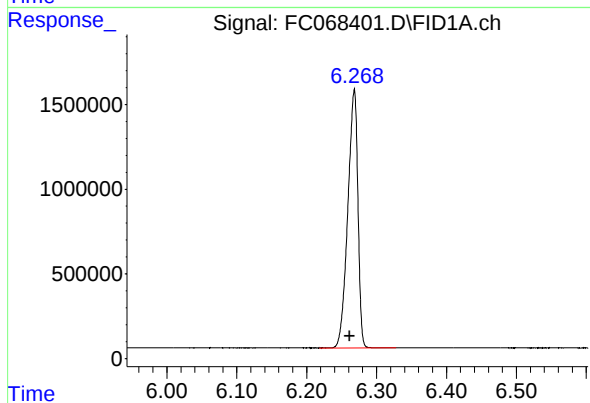
#2 n-Decane (C10)

R.T.: 4.260 min
Delta R.T.: 0.005 min
Response: 15026852
Conc: 89.12 ug/ml



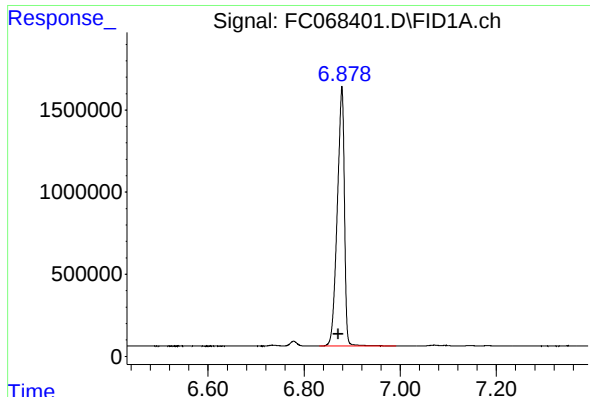
#3 A~Naphthalene (C11.7)

R.T.: 5.825 min
Delta R.T.: 0.006 min
Response: 16689744
Conc: 90.34 ug/ml



#4 n-Dodecane (C12)

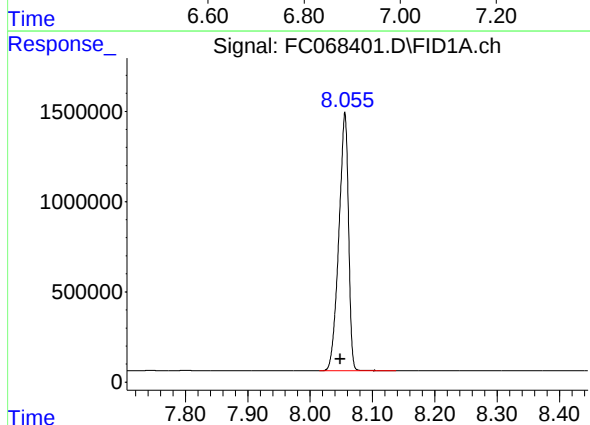
R.T.: 6.267 min
Delta R.T.: 0.006 min
Response: 15304699
Conc: 89.49 ug/ml



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

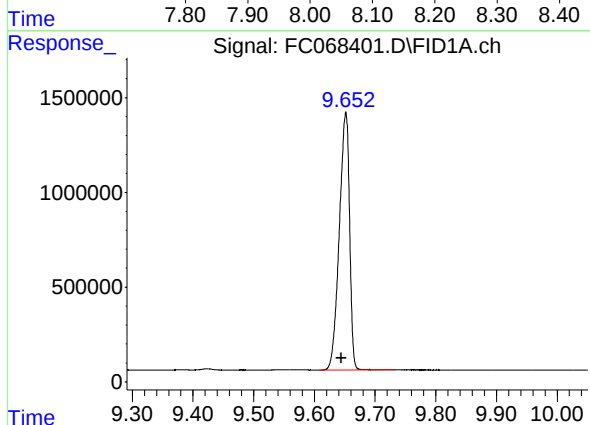
R.T.: 6.878 min
Delta R.T.: 0.007 min
Response: 16293302
Conc: 91.37 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



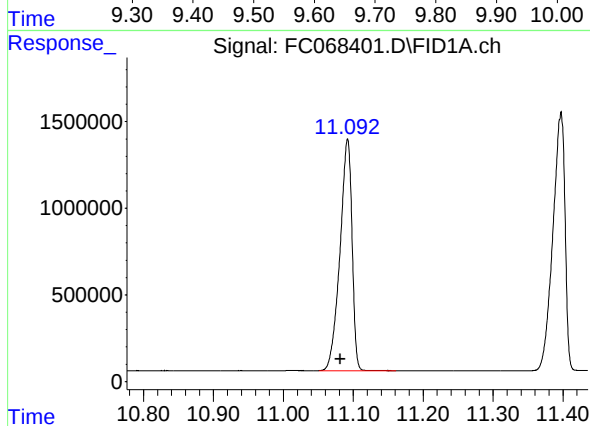
#6 n-Tetradecane (C14)

R.T.: 8.055 min
Delta R.T.: 0.007 min
Response: 15405712
Conc: 89.85 ug/ml



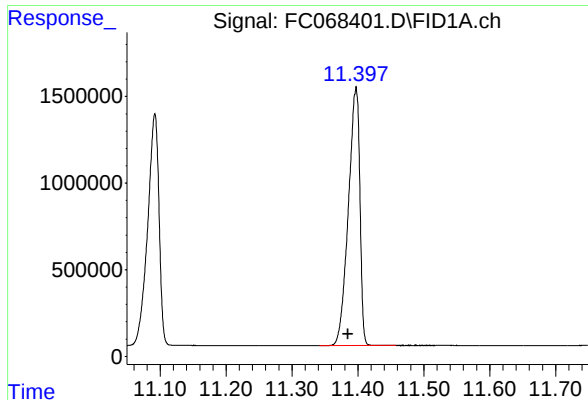
#7 n-Hexadecane (C16)

R.T.: 9.651 min
Delta R.T.: 0.007 min
Response: 15960315
Conc: 88.86 ug/ml



#8 n-Octadecane (C18)

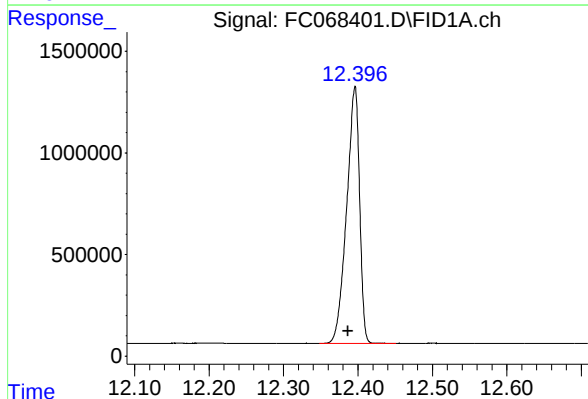
R.T.: 11.091 min
Delta R.T.: 0.010 min
Response: 16014633
Conc: 87.30 ug/ml



#9 ortho-Terphenyl (SURR)

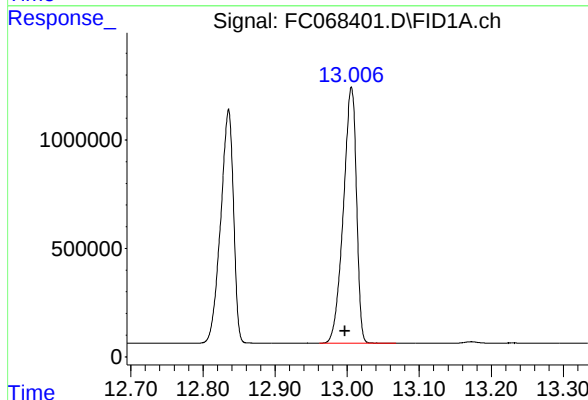
R.T.: 11.397 min
Delta R.T.: 0.012 min
Response: 18022152
Conc: 87.14 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



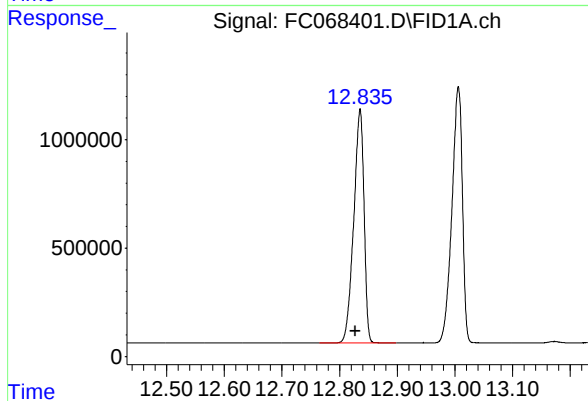
#10 n-Eicosane (C20)

R.T.: 12.395 min
Delta R.T.: 0.009 min
Response: 15259809
Conc: 85.61 ug/ml



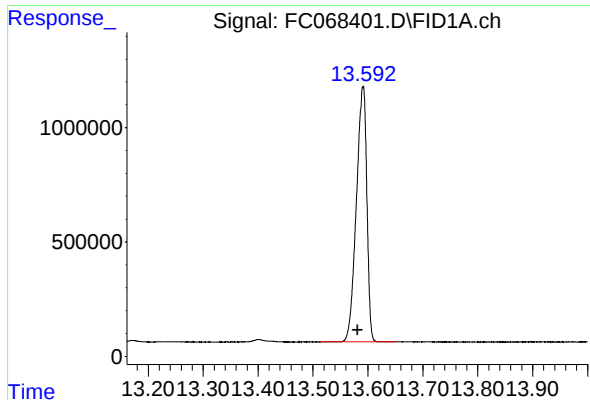
#11 n-Heneicosane (C21)

R.T.: 13.006 min
Delta R.T.: 0.009 min
Response: 14940993
Conc: 85.39 ug/ml



#12 1-chlorooctadecane (SURR)

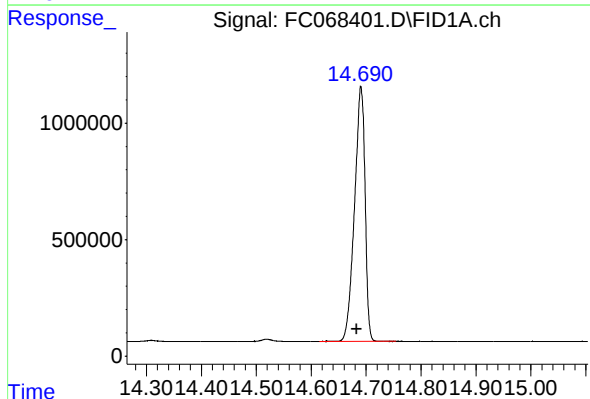
R.T.: 12.835 min
Delta R.T.: 0.008 min
Response: 13391425
Conc: 85.93 ug/ml



#13 n-Docosane (C22)

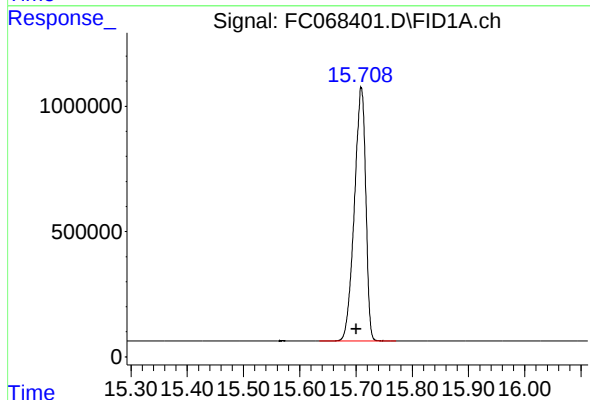
R.T.: 13.591 min
Delta R.T.: 0.009 min
Response: 14810036
Conc: 84.83 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



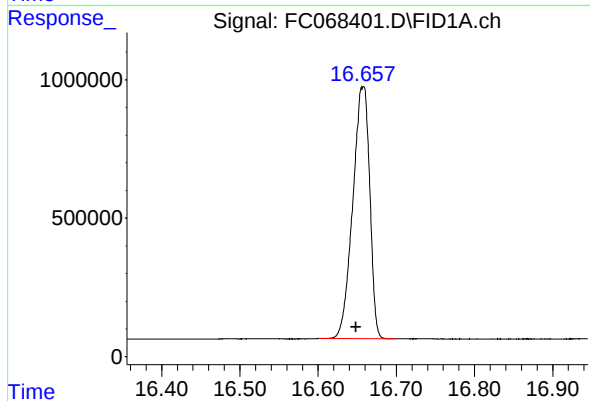
#14 n-Tetracosane (C24)

R.T.: 14.691 min
Delta R.T.: 0.008 min
Response: 14604400
Conc: 83.90 ug/ml



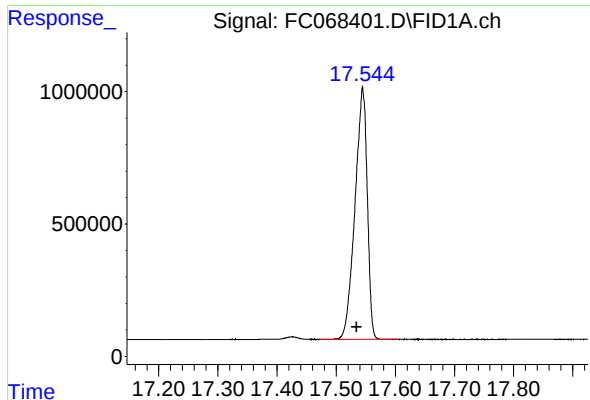
#15 n-Hexacosane (C26)

R.T.: 15.709 min
Delta R.T.: 0.009 min
Response: 14222474
Conc: 83.55 ug/ml



#16 n-Octacosane (C28)

R.T.: 16.657 min
Delta R.T.: 0.009 min
Response: 13733998
Conc: 81.65 ug/ml



#17 n-Tricontane (C30)

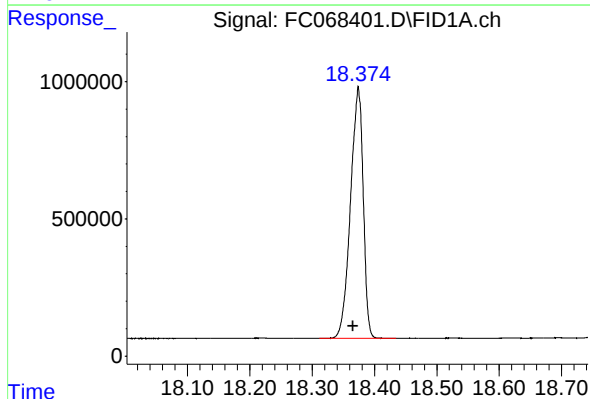
R.T.: 17.545 min
Delta R.T.: 0.010 min
Response: 13722934
Conc: 78.33 ug/ml

Instrument :

FID_C

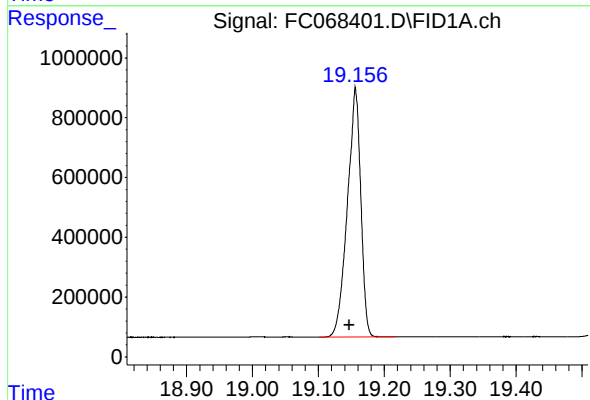
ClientSampleId :

100 PPM ALIPHATIC HC STD1



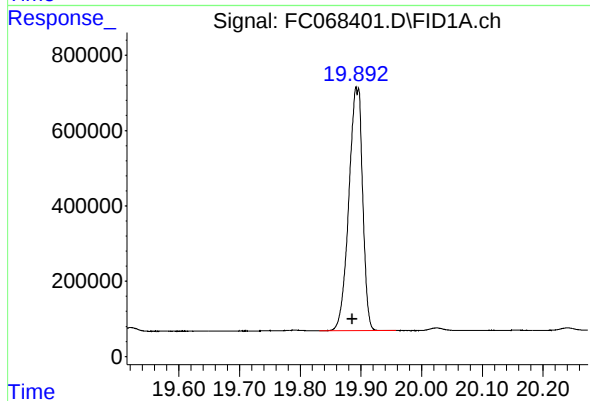
#18 n-Dotriacontane (C32)

R.T.: 18.374 min
Delta R.T.: 0.008 min
Response: 12956119
Conc: 76.43 ug/ml



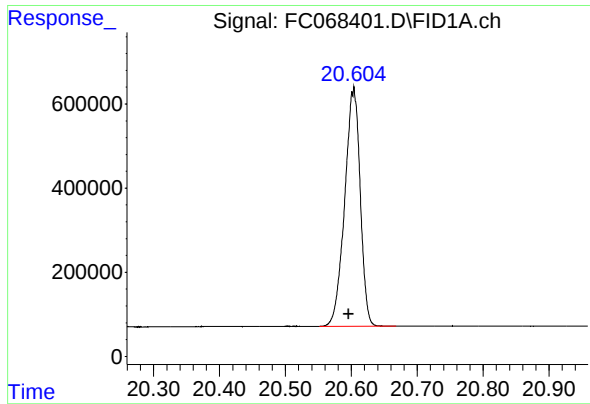
#19 n-Tetratriacontane (C34)

R.T.: 19.156 min
Delta R.T.: 0.009 min
Response: 11776981
Conc: 77.99 ug/ml



#20 n-Hexatriacontane (C36)

R.T.: 19.893 min
Delta R.T.: 0.008 min
Response: 10216728
Conc: 80.55 ug/ml



#21 n-Octatriacontane (C38)

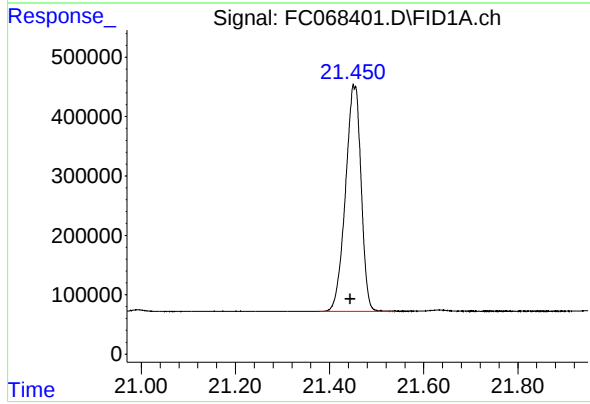
R.T.: 20.603 min
Delta R.T.: 0.008 min
Response: 9266089
Conc: 82.73 ug/ml

Instrument :

FID_C

ClientSampleId :

100 PPM ALIPHATIC HC STD1



#22 n-Tetracontane (C40)

R.T.: 21.453 min
Delta R.T.: 0.008 min
Response: 8770167
Conc: 85.32 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
Data File : FC068401.D
Signal(s) : FID1A.ch
Acq On : 26 Mar 2025 10:26
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 032625.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	3.203	3.161	3.274	BB	1719447	14755216	81.87%	4.742%
2	4.260	4.218	4.331	BB	1625059	15026852	83.38%	4.830%
3	5.825	5.781	5.928	BB	1681263	16689744	92.61%	5.364%
4	6.267	6.218	6.328	BB	1530304	15304699	84.92%	4.919%
5	6.878	6.831	6.991	BB	1564426	16293302	90.41%	5.237%
6	8.055	8.014	8.138	BB	1408500	15405712	85.48%	4.951%
7	9.651	9.608	9.734	BB	1357579	15960315	88.56%	5.130%
8	11.091	11.051	11.161	BB	1333868	16014633	88.86%	5.147%
9	11.397	11.341	11.458	BB	1500552	18022152	100.00%	5.792%
10	12.395	12.348	12.451	BB	1252392	15259809	84.67%	4.904%
11	12.835	12.764	12.898	BB	1068260	13391425	74.31%	4.304%
12	13.006	12.961	13.068	BB	1179776	14940993	82.90%	4.802%
13	13.591	13.511	13.651	BB	1126355	14810036	82.18%	4.760%
14	14.691	14.614	14.754	BB	1095361	14604400	81.04%	4.694%
15	15.709	15.634	15.771	BB	1007727	14222474	78.92%	4.571%
16	16.657	16.601	16.699	BBA	911782	13733998	76.21%	4.414%
17	17.545	17.471	17.601	BB	951533	13722934	76.14%	4.410%
18	18.374	18.311	18.434	BB	915155	12956119	71.89%	4.164%
19	19.156	19.101	19.218	BB	825897	11776981	65.35%	3.785%
20	19.893	19.831	19.958	BB	636073	10216728	56.69%	3.284%
21	20.603	20.551	20.668	BB	561524	9266089	51.41%	2.978%
22	21.453	21.378	21.541	BB	380222	8770167	48.66%	2.819%
Sum of corrected areas:						311144777		

Aliphatic EPH 032625.M Wed Mar 26 15:20:51 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
 Data File : FC068402.D
 Signal(s) : FID1A.ch
 Acq On : 26 Mar 2025 11:05
 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: Mar 26 13:12:07 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:10:46 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.390	9464670	45.765 ug/ml
Spiked Amount 50.000		Recovery =	91.53%
12) S 1-chlorooctadecane (S...	12.830	7002346	44.932 ug/ml
Spiked Amount 50.000		Recovery =	89.86%
Target Compounds			
1) T n-Nonane (C9)	3.202	7855746	47.372 ug/ml
2) T n-Decane (C10)	4.257	7995500	47.421 ug/ml
3) T A~Naphthalene (C11.7)	5.821	8815730	47.718 ug/ml
4) T n-Dodecane (C12)	6.263	8106450	47.398 ug/ml
5) T A~2-methylnaphthalene...	6.873	8570514	48.060 ug/ml
6) T n-Tetradecane (C14)	8.050	8121733	47.367 ug/ml
7) T n-Hexadecane (C16)	9.646	8403555	46.785 ug/ml
8) T n-Octadecane (C18)	11.085	8427177	45.938 ug/ml
10) T n-Eicosane (C20)	12.389	8040363	45.110 ug/ml
11) T n-Heneicosane (C21)	13.000	7833568	44.768 ug/ml
13) T n-Docosane (C22)	13.585	7826241	44.829 ug/ml
14) T n-Tetracosane (C24)	14.685	7903096	45.404 ug/ml
15) T n-Hexacosane (C26)	15.704	7744438	45.496 ug/ml
16) T n-Octacosane (C28)	16.652	7509178	44.641 ug/ml
17) T n-Tricontane (C30)	17.537	7529162	42.978 ug/ml
18) T n-Dotriacontane (C32)	18.368	7082773	41.783 ug/ml
19) T n-Tetratriacontane (C34)	19.151	6355847	42.092 ug/ml
20) T n-Hexatriacontane (C36)	19.888	5418030	42.719 ug/ml
21) T n-Octatriacontane (C38)	20.599	4849344	43.297 ug/ml
22) T n-Tetracontane (C40)	21.447	4538954	44.155 ug/ml

(f)=RT Delta > 1/2 Window

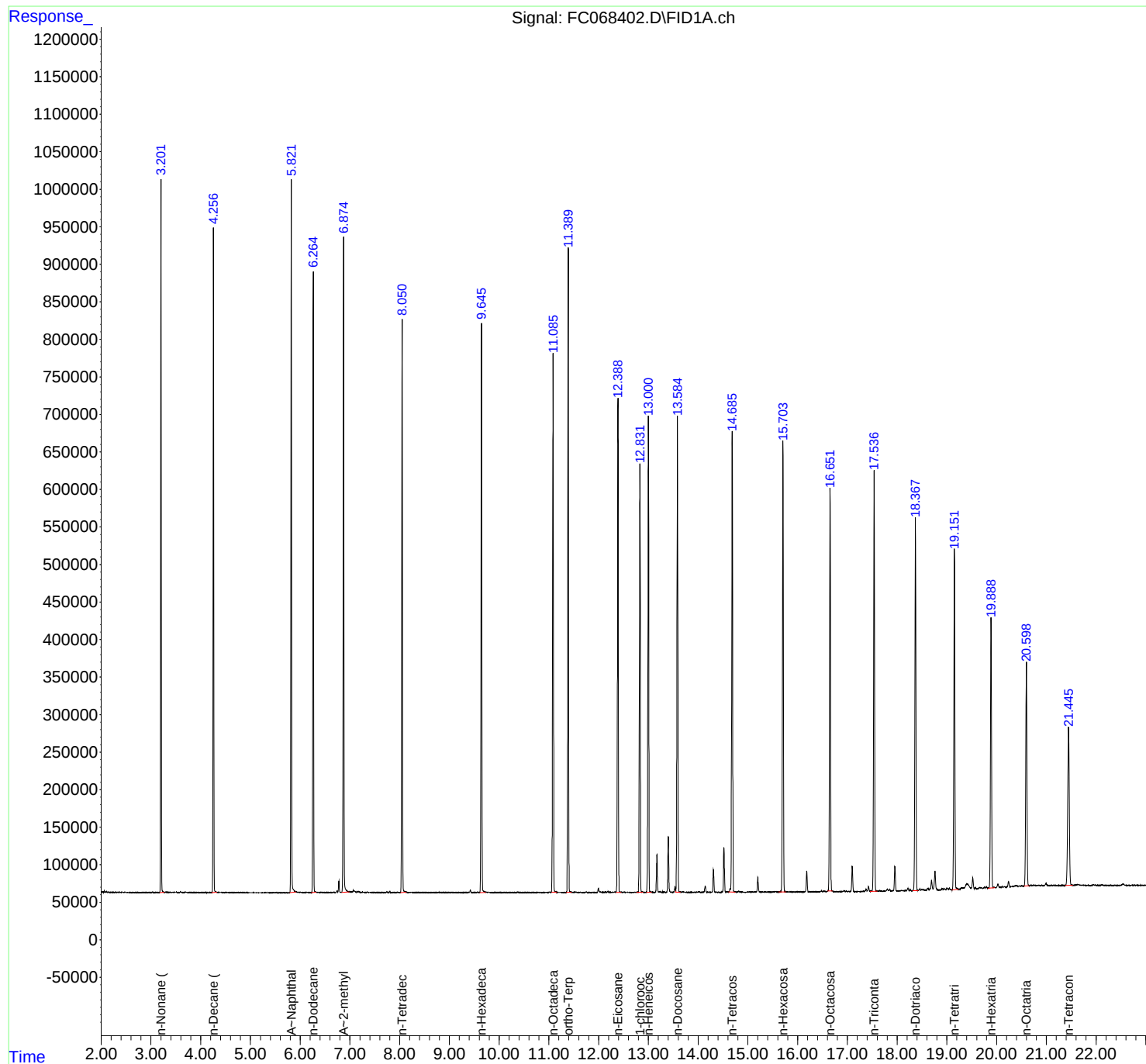
(m)=manual int.

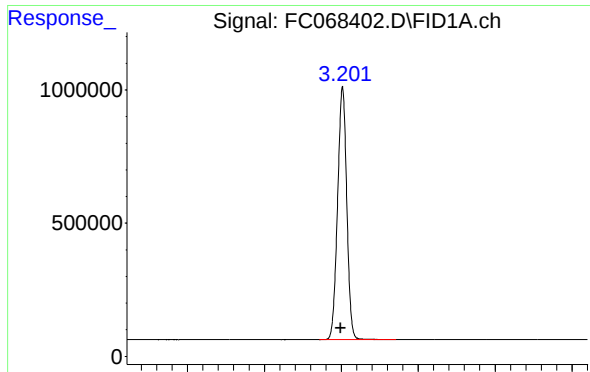
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
Data File : FC068402.D
Signal(s) : FID1A.ch
Acq On : 26 Mar 2025 11:05
Operator : YP/AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Mar 26 13:12:07 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:10:46 2025
Response via : Initial Calibration
Integrator: ChemStation

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

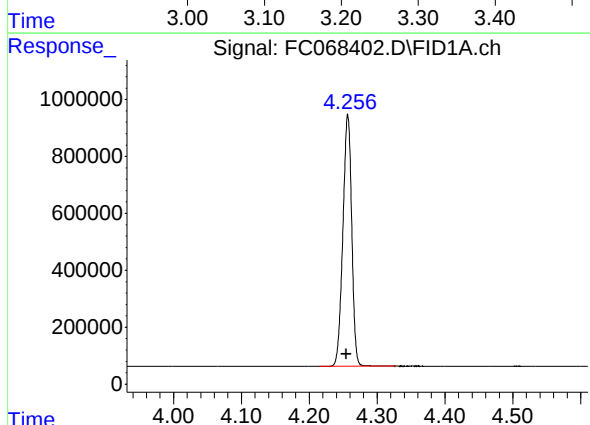




#1 n-Nonane (C9)

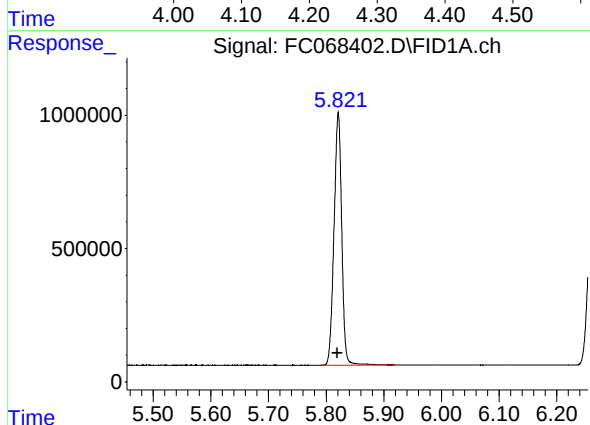
R.T.: 3.202 min
Delta R.T.: 0.003 min
Response: 7855746
Conc: 47.37 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



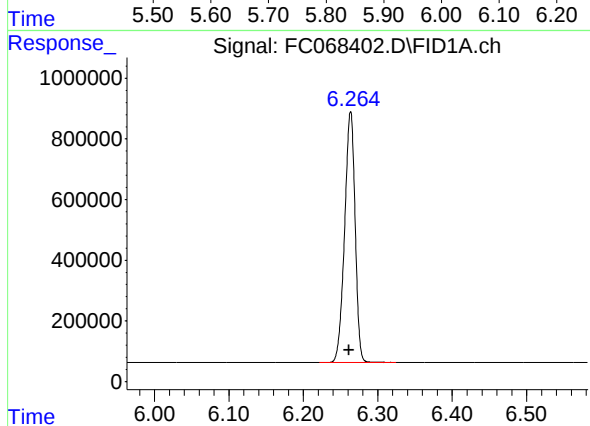
#2 n-Decane (C10)

R.T.: 4.257 min
Delta R.T.: 0.002 min
Response: 7995500
Conc: 47.42 ug/ml



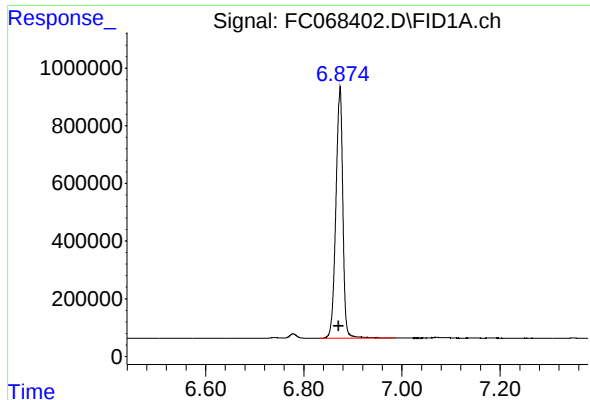
#3 A~Naphthalene (C11.7)

R.T.: 5.821 min
Delta R.T.: 0.002 min
Response: 8815730
Conc: 47.72 ug/ml



#4 n-Dodecane (C12)

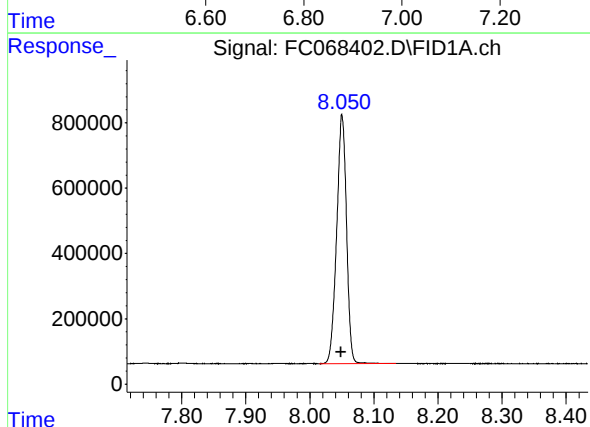
R.T.: 6.263 min
Delta R.T.: 0.002 min
Response: 8106450
Conc: 47.40 ug/ml



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

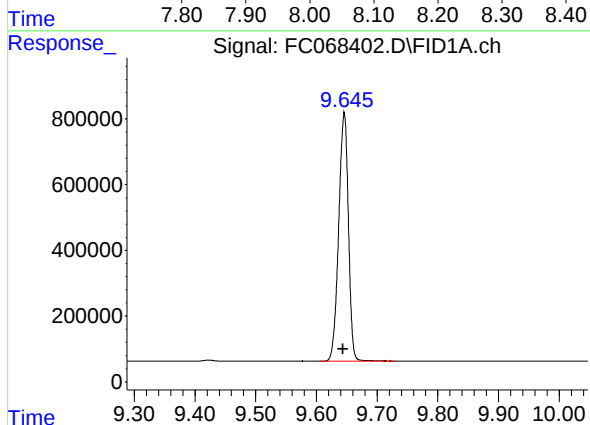
R.T.: 6.873 min
Delta R.T.: 0.003 min
Response: 8570514
Conc: 48.06 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



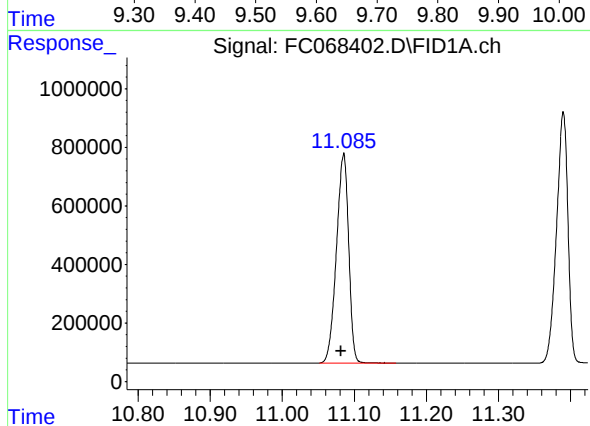
#6 n-Tetradecane (C14)

R.T.: 8.050 min
Delta R.T.: 0.002 min
Response: 8121733
Conc: 47.37 ug/ml



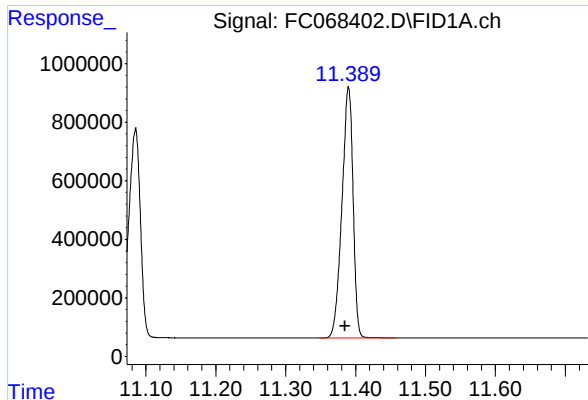
#7 n-Hexadecane (C16)

R.T.: 9.646 min
Delta R.T.: 0.002 min
Response: 8403555
Conc: 46.78 ug/ml



#8 n-Octadecane (C18)

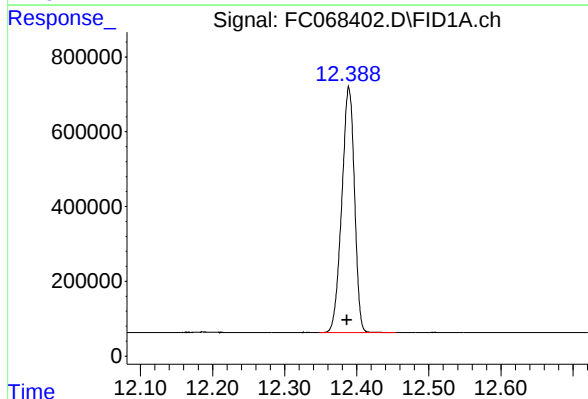
R.T.: 11.085 min
Delta R.T.: 0.003 min
Response: 8427177
Conc: 45.94 ug/ml



#9 ortho-Terphenyl (SURR)

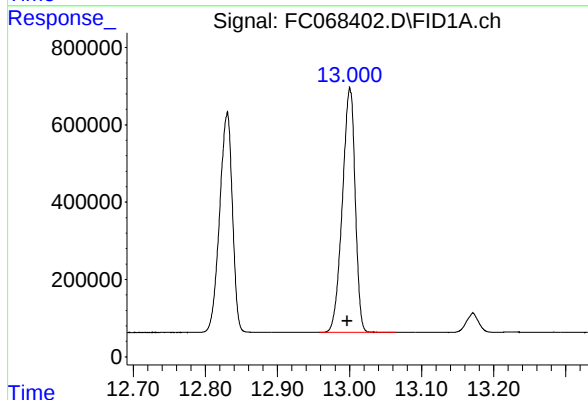
R.T.: 11.390 min
Delta R.T.: 0.005 min
Response: 9464670
Conc: 45.76 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



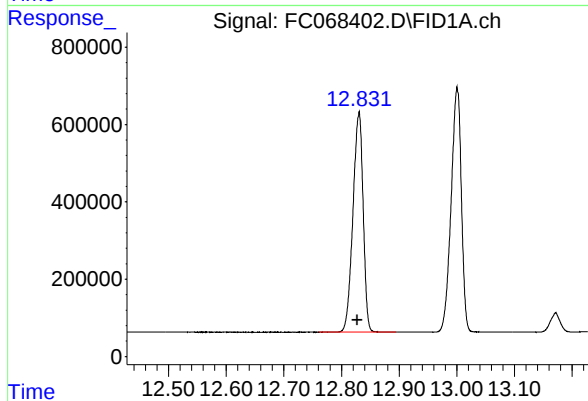
#10 n-Eicosane (C20)

R.T.: 12.389 min
Delta R.T.: 0.003 min
Response: 8040363
Conc: 45.11 ug/ml



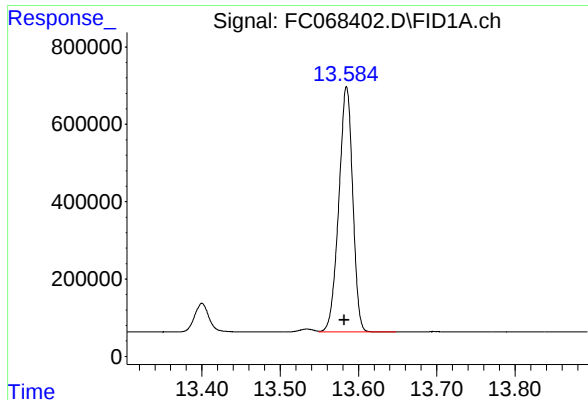
#11 n-Heneicosane (C21)

R.T.: 13.000 min
Delta R.T.: 0.003 min
Response: 7833568
Conc: 44.77 ug/ml



#12 1-chlorooctadecane (SURR)

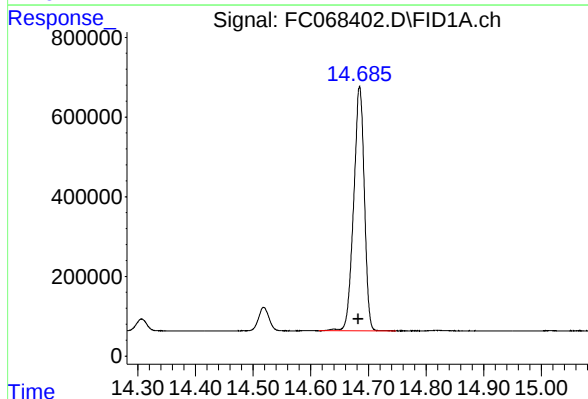
R.T.: 12.830 min
Delta R.T.: 0.003 min
Response: 7002346
Conc: 44.93 ug/ml



#13 n-Docosane (C22)

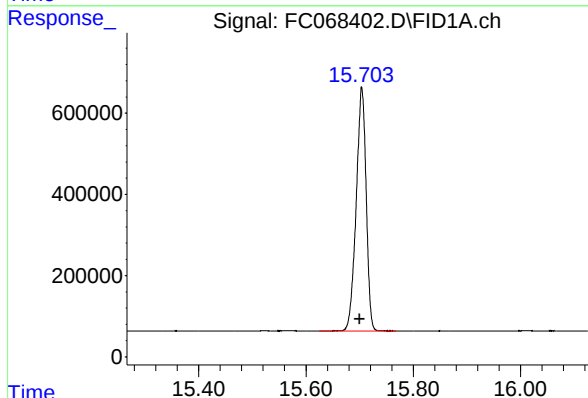
R.T.: 13.585 min
Delta R.T.: 0.003 min
Response: 7826241
Conc: 44.83 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



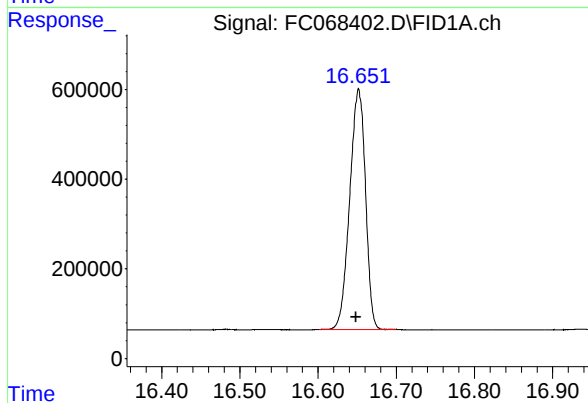
#14 n-Tetracosane (C24)

R.T.: 14.685 min
Delta R.T.: 0.002 min
Response: 7903096
Conc: 45.40 ug/ml



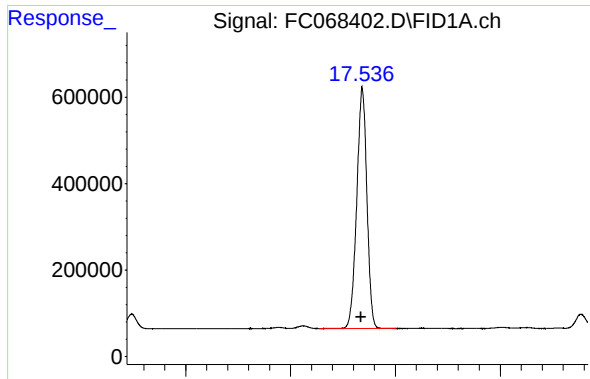
#15 n-Hexacosane (C26)

R.T.: 15.704 min
Delta R.T.: 0.004 min
Response: 7744438
Conc: 45.50 ug/ml



#16 n-Octacosane (C28)

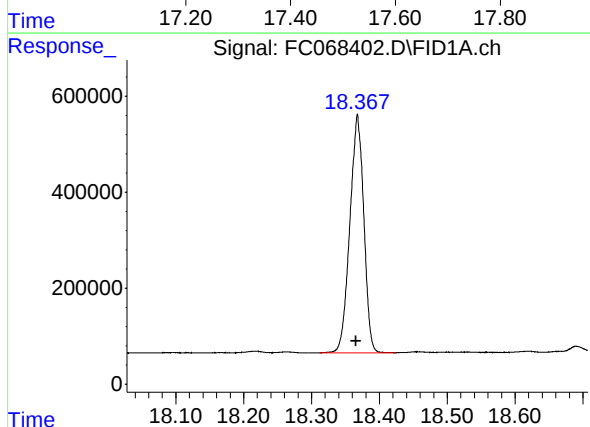
R.T.: 16.652 min
Delta R.T.: 0.003 min
Response: 7509178
Conc: 44.64 ug/ml



#17 n-Tricontane (C30)

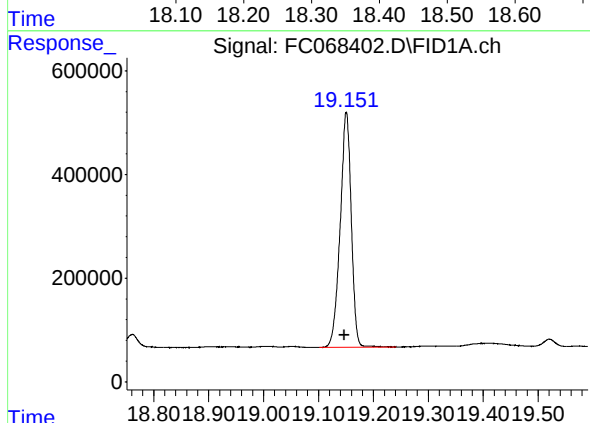
R.T.: 17.537 min
Delta R.T.: 0.003 min
Response: 7529162
Conc: 42.98 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



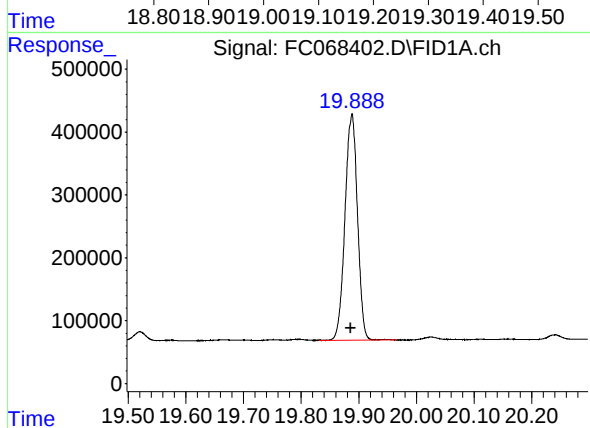
#18 n-Dotriacontane (C32)

R.T.: 18.368 min
Delta R.T.: 0.002 min
Response: 7082773
Conc: 41.78 ug/ml



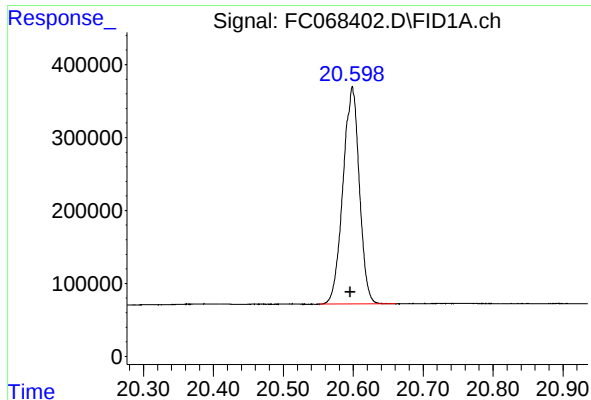
#19 n-Tetratriacontane (C34)

R.T.: 19.151 min
Delta R.T.: 0.003 min
Response: 6355847
Conc: 42.09 ug/ml



#20 n-Hexatriacontane (C36)

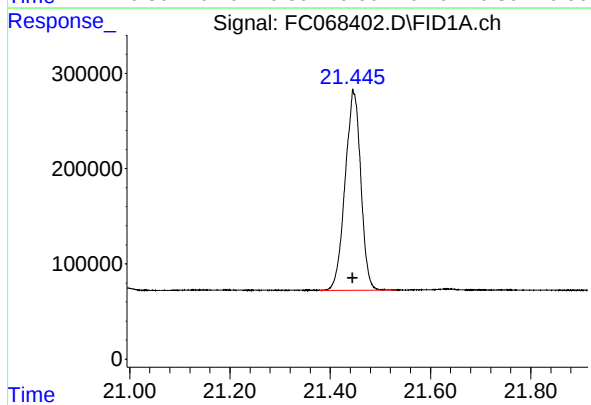
R.T.: 19.888 min
Delta R.T.: 0.002 min
Response: 5418030
Conc: 42.72 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.599 min
Delta R.T.: 0.003 min
Response: 4849344
Conc: 43.30 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



#22 n-Tetracontane (C40)

R.T.: 21.447 min
Delta R.T.: 0.002 min
Response: 4538954
Conc: 44.16 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
 Data File : FC068402.D
 Signal(s) : FID1A.ch
 Acq On : 26 Mar 2025 11:05
 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 032625.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	3.202	3.171	3.271	BB	944694	7855746	83.00%	4.750%
2	4.257	4.214	4.328	BB	886400	7995500	84.48%	4.834%
3	5.821	5.788	5.921	BB	946921	8815730	93.14%	5.330%
4	6.263	6.221	6.324	BB	834713	8106450	85.65%	4.901%
5	6.873	6.831	6.988	BB	878081	8570514	90.55%	5.182%
6	8.050	8.014	8.134	BB	759159	8121733	85.81%	4.911%
7	9.646	9.604	9.731	BB	747325	8403555	88.79%	5.081%
8	11.085	11.051	11.158	BB	711590	8427177	89.04%	5.095%
9	11.390	11.348	11.458	BB	860822	9464670	100.00%	5.722%
10	12.389	12.348	12.454	BB	654201	8040363	84.95%	4.861%
11	12.830	12.761	12.894	BB	572237	7002346	73.98%	4.234%
12	13.000	12.958	13.064	BB	633767	7833568	82.77%	4.736%
13	13.585	13.550	13.648	VB	635349	7826241	82.69%	4.732%
14	14.685	14.614	14.748	BB	614585	7903096	83.50%	4.778%
15	15.704	15.624	15.768	BB	600248	7744438	81.82%	4.682%
16	16.652	16.601	16.699	BBA	533202	7509178	79.34%	4.540%
17	17.537	17.454	17.601	PB	553842	7529162	79.55%	4.552%
18	18.368	18.311	18.424	BV	493502	7082773	74.83%	4.282%
19	19.151	19.101	19.241	BB	454434	6355847	67.15%	3.843%
20	19.888	19.831	19.964	BB	358256	5418030	57.24%	3.276%
21	20.599	20.551	20.661	BB	296533	4849344	51.24%	2.932%
22	21.447	21.378	21.531	BB	206613	4538954	47.96%	2.744%
Sum of corrected areas:						165394413		

Aliphatic EPH 032625.M Wed Mar 26 15:20:27 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
 Data File : FC068403.D
 Signal(s) : FID1A.ch
 Acq On : 26 Mar 2025 11:42
 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: Mar 26 13:12:41 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:10:46 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

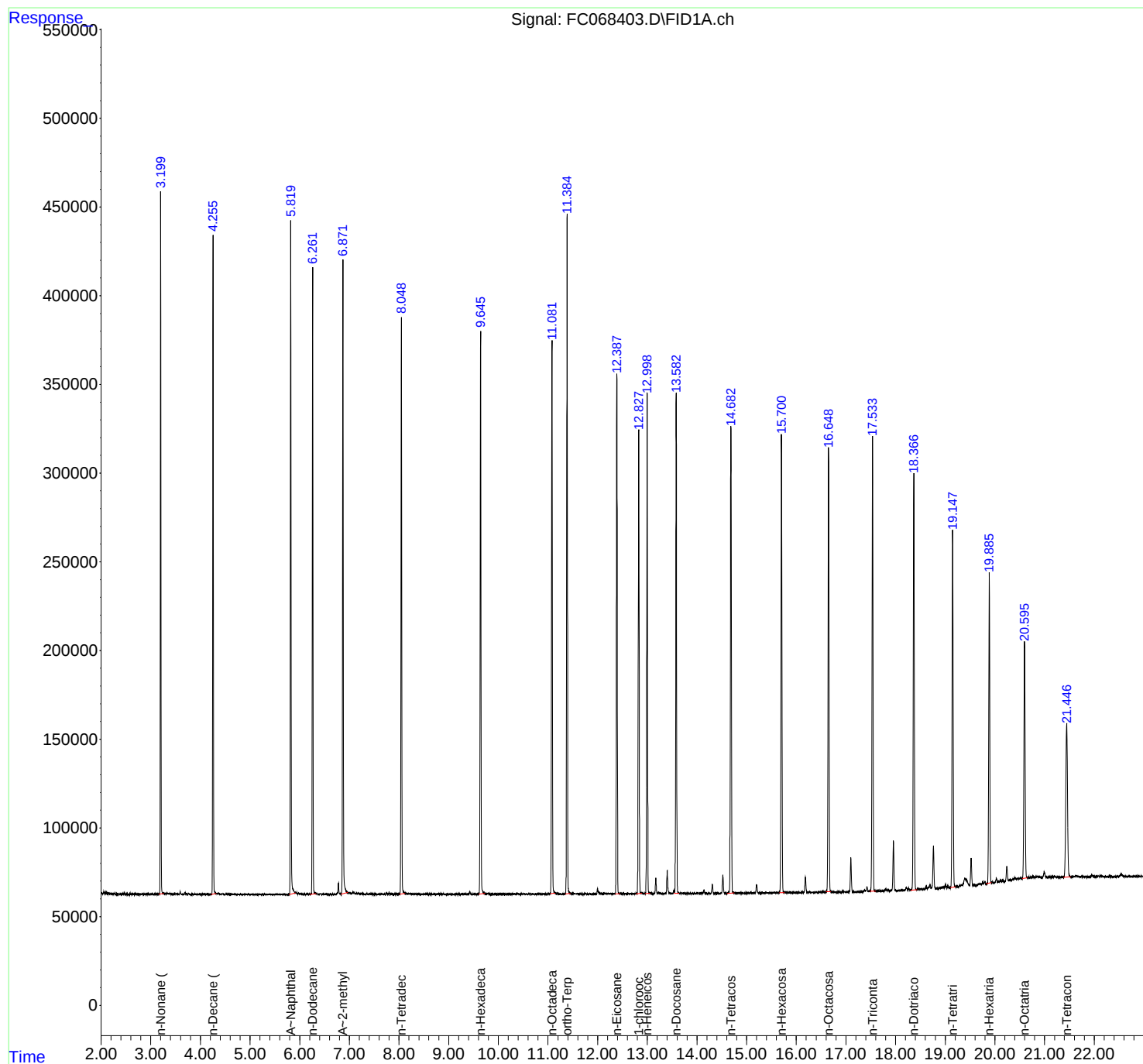
System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.385	4136235	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
12) S 1-chlorooctadecane (S...	12.827	3116874	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
Target Compounds			
1) T n-Nonane (C9)	3.199	3316650	20.000 ug/ml
2) T n-Decane (C10)	4.255	3372128	20.000 ug/ml
3) T A~Naphthalene (C11.7)	5.819	3694929	20.000 ug/ml
4) T n-Dodecane (C12)	6.261	3420609	20.000 ug/ml
5) T A~2-methylnaphthalene...	6.871	3566583	20.000 ug/ml
6) T n-Tetradecane (C14)	8.048	3429304	20.000 ug/ml
7) T n-Hexadecane (C16)	9.644	3592423	20.000 ug/ml
8) T n-Octadecane (C18)	11.081	3668970	20.000 ug/ml
10) T n-Eicosane (C20)	12.387	3564802	20.000 ug/ml
11) T n-Heneicosane (C21)	12.997	3499643	20.000 ug/ml
13) T n-Docosane (C22)	13.582	3491593	20.000 ug/ml
14) T n-Tetracosane (C24)	14.682	3481248	20.000 ug/ml
15) T n-Hexacosane (C26)	15.700	3404454	20.000 ug/ml
16) T n-Octacosane (C28)	16.648	3364263	20.000 ug/ml
17) T n-Tricontane (C30)	17.534	3503743	20.000 ug/ml
18) T n-Dotriacontane (C32)	18.365	3390251	20.000 ug/ml
19) T n-Tetratriacontane (C34)	19.147	3020004	20.000 ug/ml
20) T n-Hexatriacontane (C36)	19.886	2536609	20.000 ug/ml
21) T n-Octatriacontane (C38)	20.596	2240024	20.000 ug/ml
22) T n-Tetracontane (C40)	21.445	2055912	20.000 ug/ml

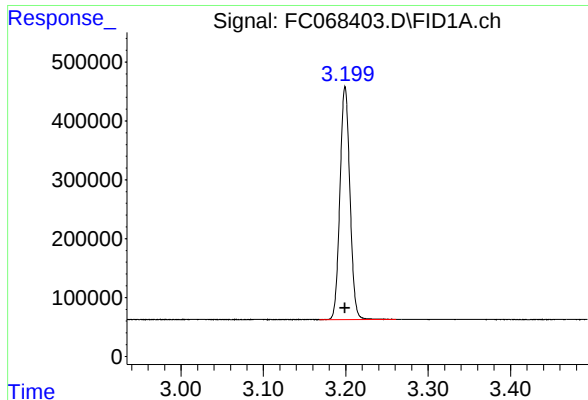
(f)=RT Delta > 1/2 Window

(m)=manual int.

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3

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

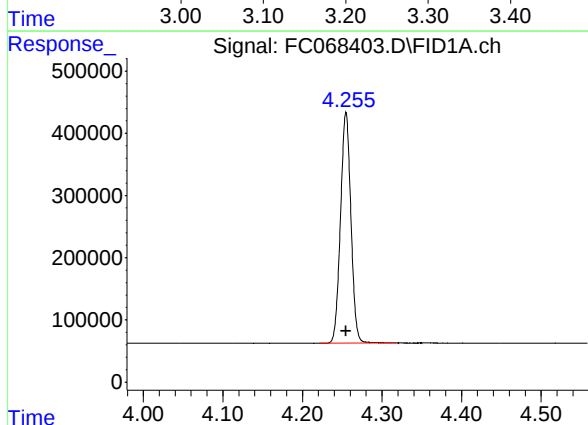




#1 n-Nonane (C9)

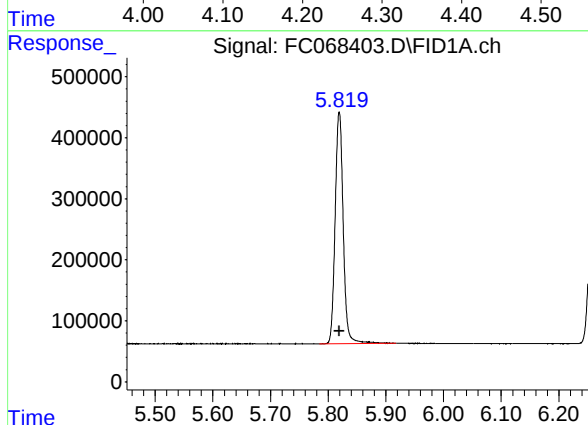
R.T.: 3.199 min
Delta R.T.: 0.000 min
Response: 3316650
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



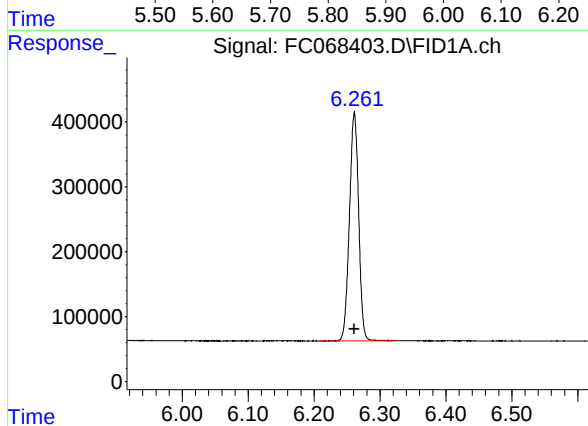
#2 n-Decane (C10)

R.T.: 4.255 min
Delta R.T.: 0.000 min
Response: 3372128
Conc: 20.00 ug/ml



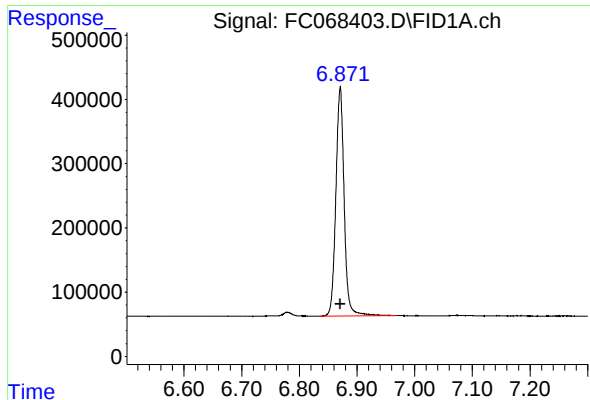
#3 A~Naphthalene (C11.7)

R.T.: 5.819 min
Delta R.T.: 0.000 min
Response: 3694929
Conc: 20.00 ug/ml



#4 n-Dodecane (C12)

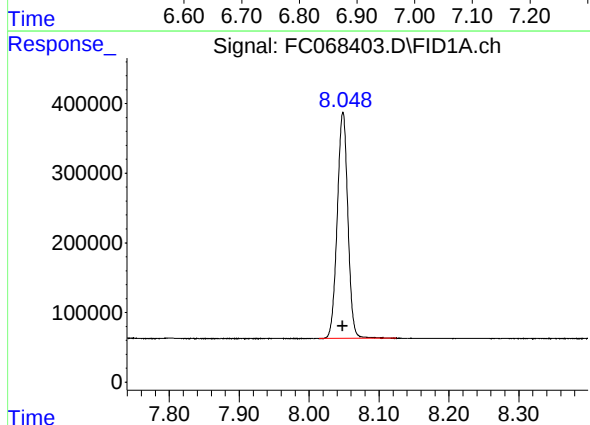
R.T.: 6.261 min
Delta R.T.: 0.000 min
Response: 3420609
Conc: 20.00 ug/ml



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

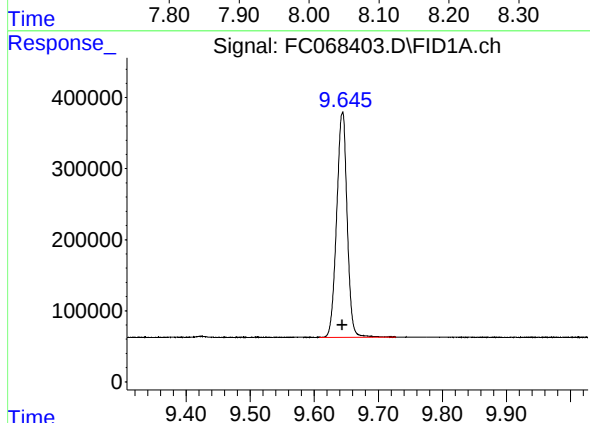
R.T.: 6.871 min
Delta R.T.: 0.000 min
Response: 3566583
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



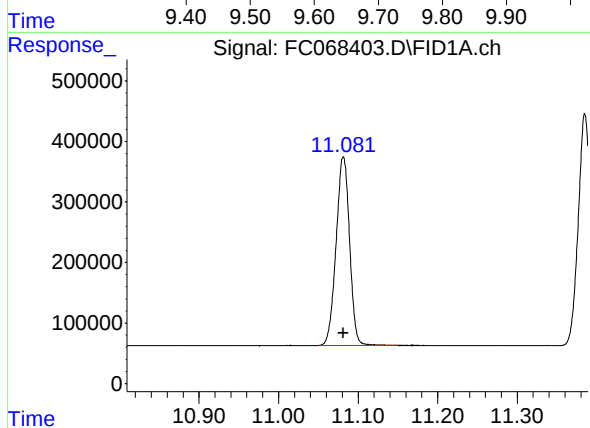
#6 n-Tetradecane (C14)

R.T.: 8.048 min
Delta R.T.: 0.000 min
Response: 3429304
Conc: 20.00 ug/ml



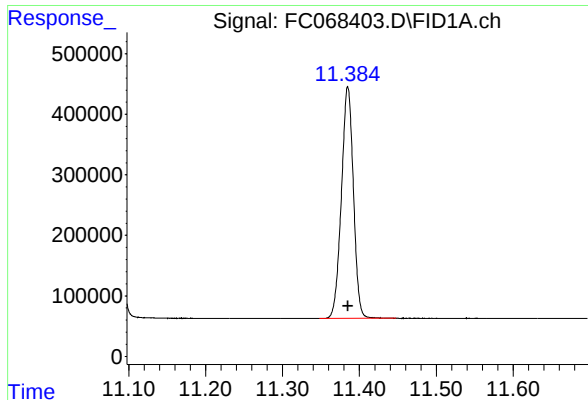
#7 n-Hexadecane (C16)

R.T.: 9.644 min
Delta R.T.: 0.000 min
Response: 3592423
Conc: 20.00 ug/ml



#8 n-Octadecane (C18)

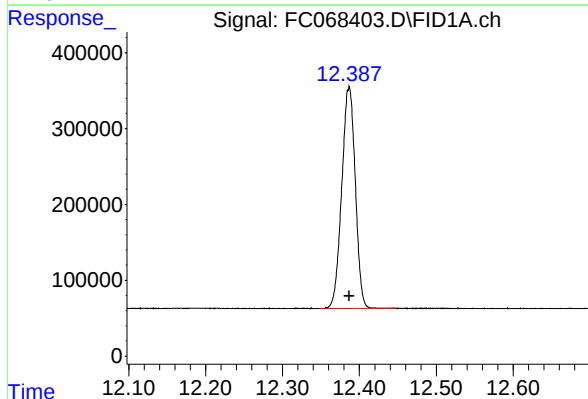
R.T.: 11.081 min
Delta R.T.: 0.000 min
Response: 3668970
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURRE)

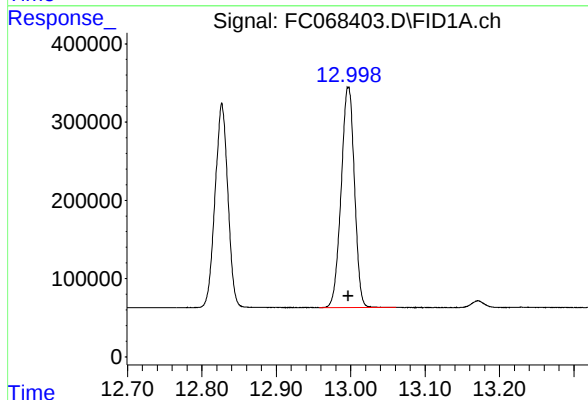
R.T.: 11.385 min
Delta R.T.: 0.000 min
Response: 4136235
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



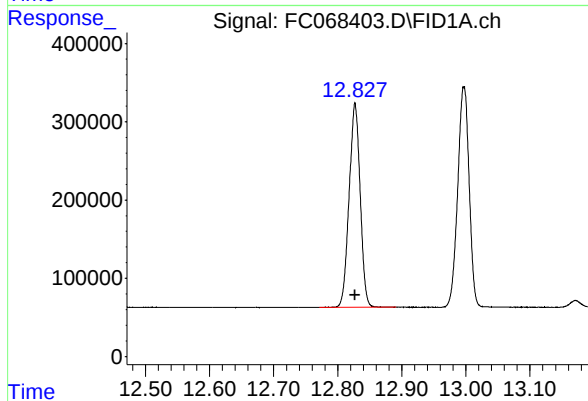
#10 n-Eicosane (C20)

R.T.: 12.387 min
Delta R.T.: 0.000 min
Response: 3564802
Conc: 20.00 ug/ml



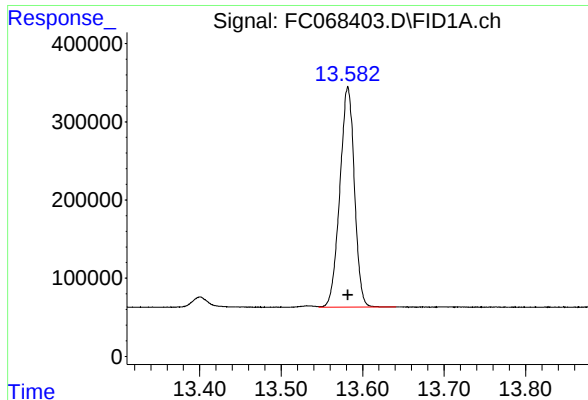
#11 n-Heneicosane (C21)

R.T.: 12.997 min
Delta R.T.: 0.000 min
Response: 3499643
Conc: 20.00 ug/ml



#12 1-chlorooctadecane (SURRE)

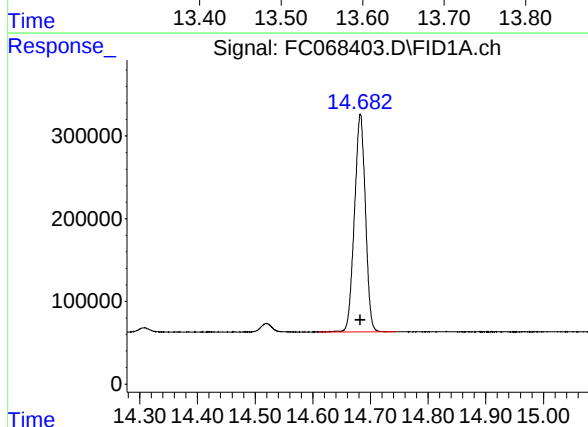
R.T.: 12.827 min
Delta R.T.: 0.000 min
Response: 3116874
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

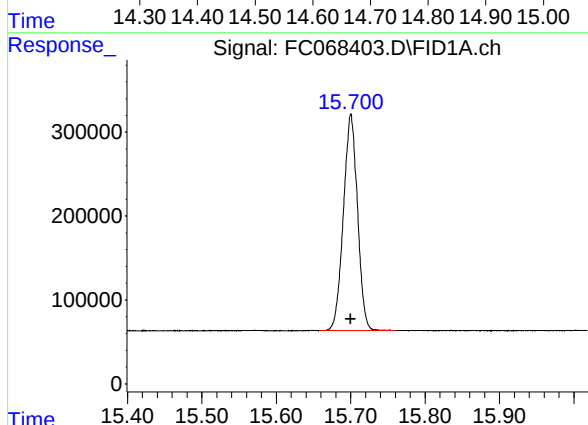
R.T.: 13.582 min
Delta R.T.: 0.000 min
Response: 3491593
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



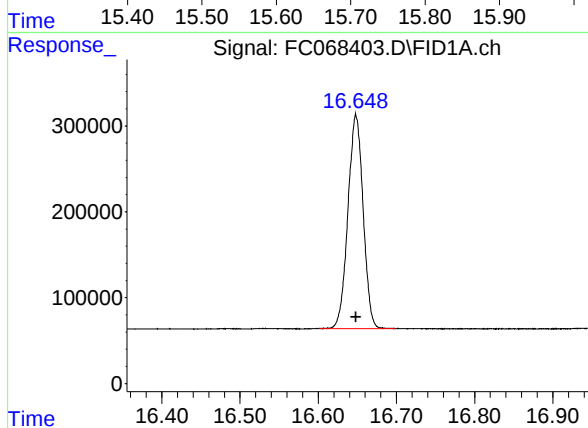
#14 n-Tetracosane (C24)

R.T.: 14.682 min
Delta R.T.: 0.000 min
Response: 3481248
Conc: 20.00 ug/ml



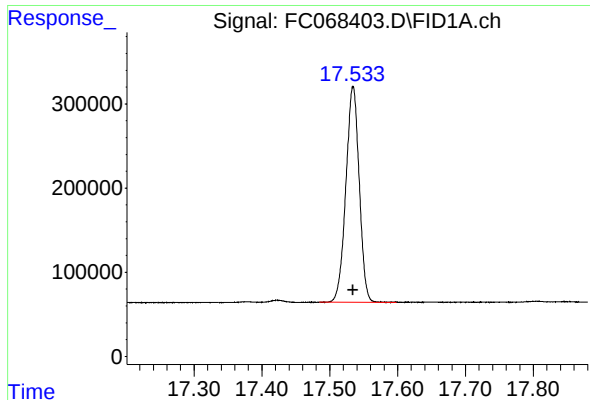
#15 n-Hexacosane (C26)

R.T.: 15.700 min
Delta R.T.: 0.000 min
Response: 3404454
Conc: 20.00 ug/ml



#16 n-Octacosane (C28)

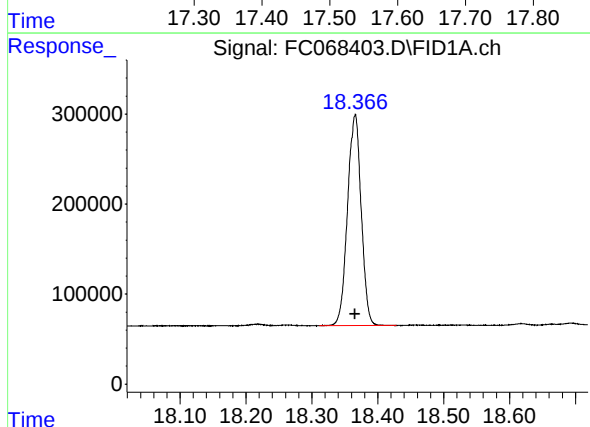
R.T.: 16.648 min
Delta R.T.: 0.000 min
Response: 3364263
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

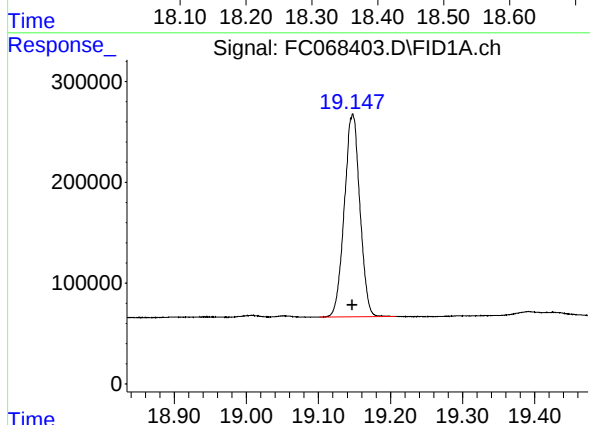
R.T.: 17.534 min
Delta R.T.: 0.000 min
Response: 3503743
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



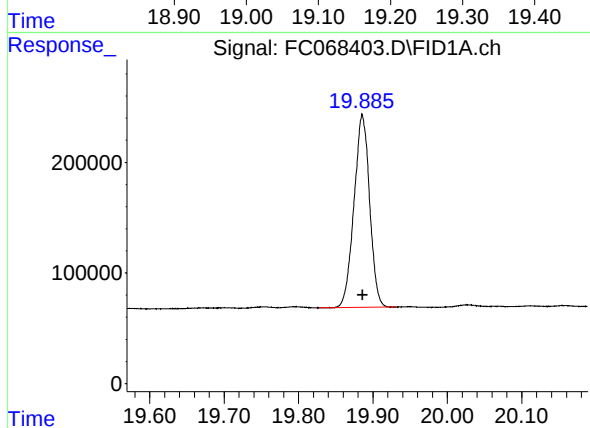
#18 n-Dotriacontane (C32)

R.T.: 18.365 min
Delta R.T.: 0.000 min
Response: 3390251
Conc: 20.00 ug/ml



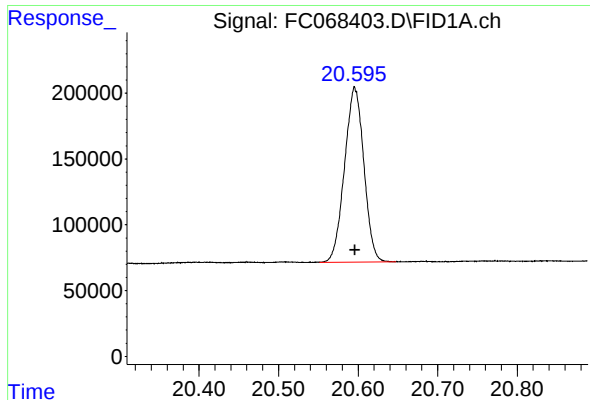
#19 n-Tetatriacontane (C34)

R.T.: 19.147 min
Delta R.T.: 0.000 min
Response: 3020004
Conc: 20.00 ug/ml



#20 n-Hexatriacontane (C36)

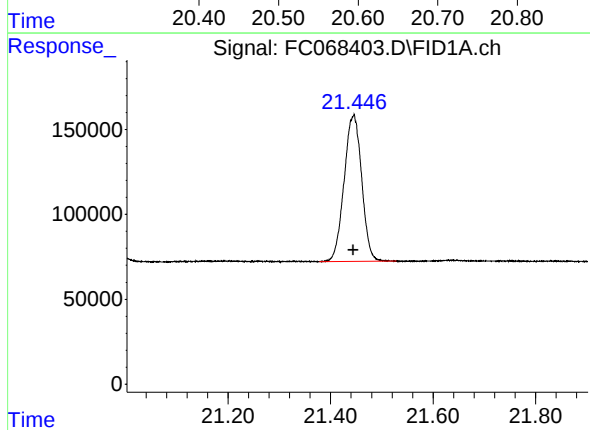
R.T.: 19.886 min
Delta R.T.: 0.000 min
Response: 2536609
Conc: 20.00 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.596 min
Delta R.T.: 0.000 min
Response: 2240024
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



#22 n-Tetracontane (C40)

R.T.: 21.445 min
Delta R.T.: 0.000 min
Response: 2055912
Conc: 20.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
 Data File : FC068403.D
 Signal(s) : FID1A.ch
 Acq On : 26 Mar 2025 11:42
 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 032625.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	3.199	3.168	3.261	BB	391897	3316650	80.19%	4.552%
2	4.255	4.221	4.318	BB	370053	3372128	81.53%	4.628%
3	5.819	5.784	5.918	BB	378942	3694929	89.33%	5.071%
4	6.261	6.208	6.324	BB	350271	3420609	82.70%	4.694%
5	6.871	6.834	6.968	BB	355486	3566583	86.23%	4.895%
6	8.048	8.014	8.124	BB	324096	3429304	82.91%	4.706%
7	9.644	9.608	9.728	BB	317980	3592423	86.85%	4.930%
8	11.081	11.051	11.148	BB	312639	3668970	88.70%	5.035%
9	11.385	11.348	11.448	BB	382989	4136235	100.00%	5.676%
10	12.387	12.348	12.448	BB	292059	3564802	86.18%	4.892%
11	12.827	12.771	12.891	BB	259906	3116874	75.36%	4.277%
12	12.997	12.958	13.061	BB	282416	3499643	84.61%	4.803%
13	13.582	13.547	13.641	VB	280961	3491593	84.41%	4.792%
14	14.682	14.611	14.744	BB	261965	3481248	84.16%	4.778%
15	15.700	15.658	15.761	BB	257212	3404454	82.31%	4.672%
16	16.648	16.601	16.699	BBA	248532	3364263	81.34%	4.617%
17	17.534	17.484	17.598	BB	256544	3503743	84.71%	4.808%
18	18.365	18.311	18.428	BB	232854	3390251	81.96%	4.653%
19	19.147	19.101	19.208	BB	200496	3020004	73.01%	4.145%
20	19.886	19.828	19.931	BB	173623	2536609	61.33%	3.481%
21	20.596	20.551	20.648	BB	132667	2240024	54.16%	3.074%
22	21.445	21.378	21.528	BB	85789	2055912	49.70%	2.821%
Sum of corrected areas:							72867248	

Aliphatic EPH 032625.M Wed Mar 26 15:19:45 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
 Data File : FC068404.D
 Signal(s) : FID1A.ch
 Acq On : 26 Mar 2025 12:21
 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: Mar 26 13:13:12 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:10:46 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.384	2086658	10.090 ug/ml
Spiked Amount 50.000		Recovery =	20.18%
12) S 1-chlorooctadecane (S...	12.826	1580360	10.141 ug/ml
Spiked Amount 50.000		Recovery =	20.28%
Target Compounds			
1) T n-Nonane (C9)	3.200	1652195	9.963 ug/ml
2) T n-Decane (C10)	4.255	1673518	9.926 ug/ml
3) T A~Naphthalene (C11.7)	5.820	1817299	9.837 ug/ml
4) T n-Dodecane (C12)	6.261	1706663	9.979 ug/ml
5) T A~2-methylnaphthalene...	6.871	1740430	9.760 ug/ml
6) T n-Tetradecane (C14)	8.047	1699414	9.911 ug/ml
7) T n-Hexadecane (C16)	9.643	1787303	9.950 ug/ml
8) T n-Octadecane (C18)	11.080	1839600	10.028 ug/ml
10) T n-Eicosane (C20)	12.386	1812535	10.169 ug/ml
11) T n-Heneicosane (C21)	12.996	1781013	10.178 ug/ml
13) T n-Docosane (C22)	13.581	1793771	10.275 ug/ml
14) T n-Tetracosane (C24)	14.681	1816027	10.433 ug/ml
15) T n-Hexacosane (C26)	15.699	1777806	10.444 ug/ml
16) T n-Octacosane (C28)	16.647	1765534	10.496 ug/ml
17) T n-Tricontane (C30)	17.533	1853554	10.580 ug/ml
18) T n-Dotriacontane (C32)	18.365	1792145	10.572 ug/ml
19) T n-Tetratriacontane (C34)	19.146	1586807	10.509 ug/ml
20) T n-Hexatriacontane (C36)	19.886	1308753	10.319 ug/ml
21) T n-Octatriacontane (C38)	20.595	1139413	10.173 ug/ml
22) T n-Tetracontane (C40)	21.443	1032339	10.043 ug/ml

(f)=RT Delta > 1/2 Window

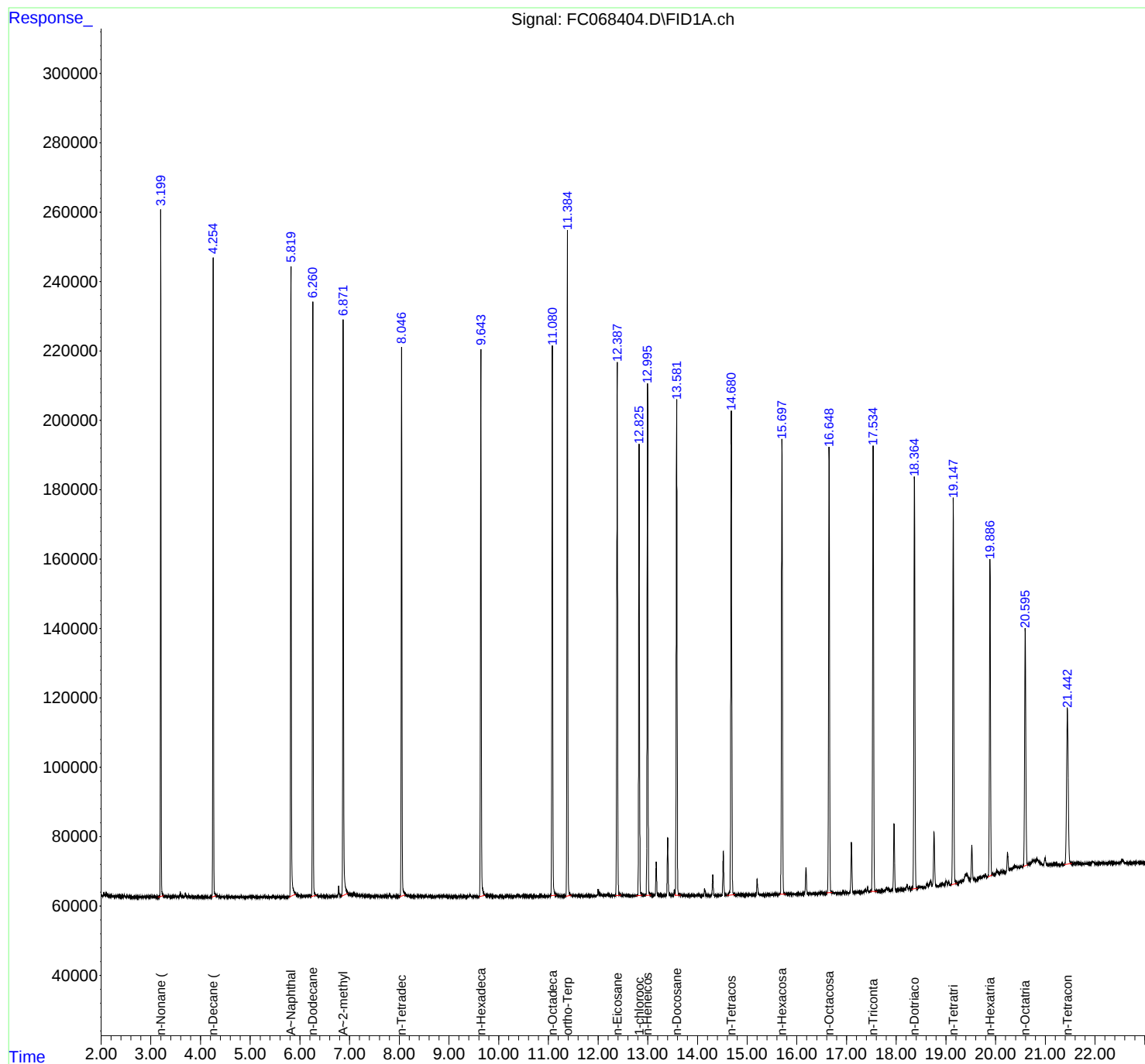
(m)=manual int.

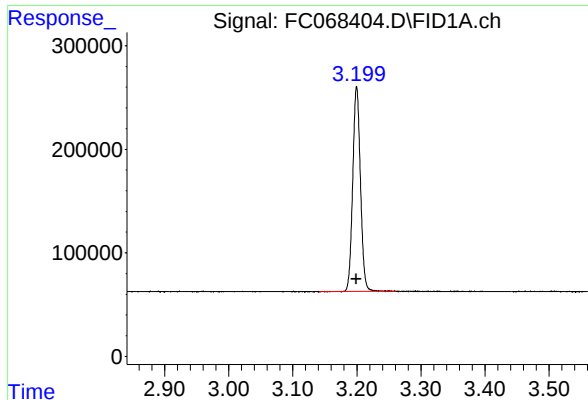
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
Data File : FC068404.D
Signal(s) : FID1A.ch
Acq On : 26 Mar 2025 12:21
Operator : YP/AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
Quant Time: Mar 26 13:13:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:10:46 2025
Response via : Initial Calibration
Integrator: ChemStation

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

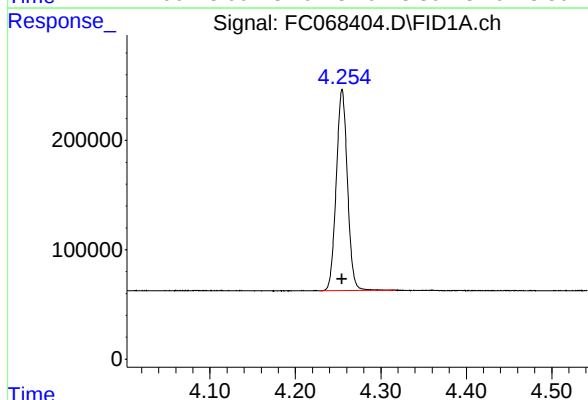




#1 n-Nonane (C9)

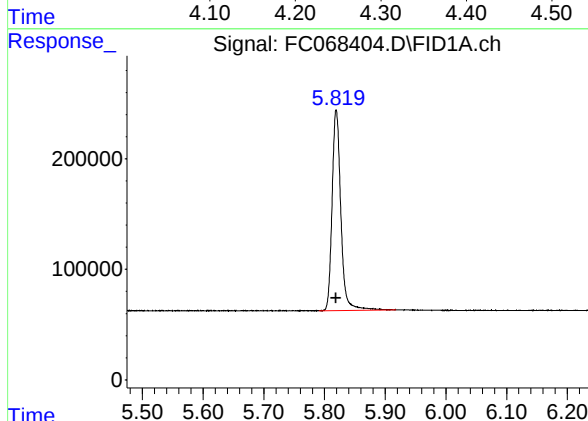
R.T.: 3.200 min
Delta R.T.: 0.000 min
Response: 1652195
Conc: 9.96 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



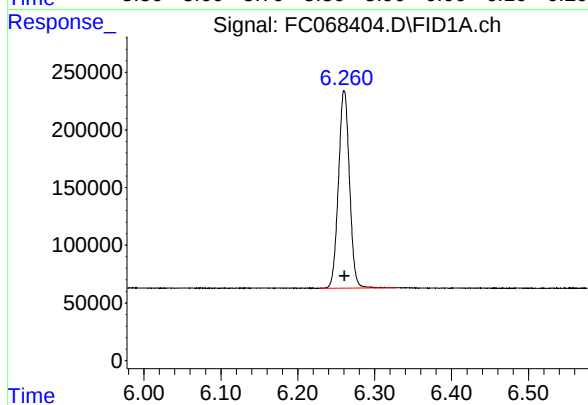
#2 n-Decane (C10)

R.T.: 4.255 min
Delta R.T.: 0.000 min
Response: 1673518
Conc: 9.93 ug/ml



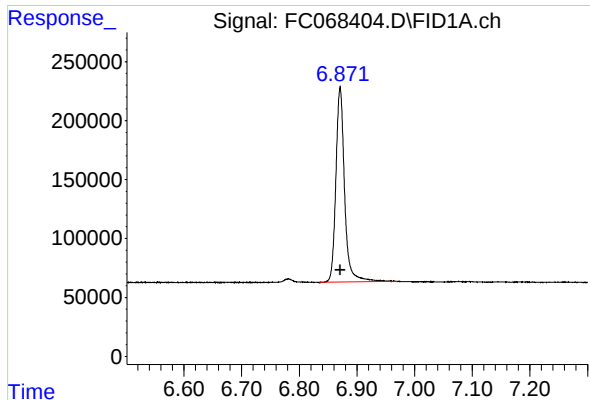
#3 A~Naphthalene (C11.7)

R.T.: 5.820 min
Delta R.T.: 0.000 min
Response: 1817299
Conc: 9.84 ug/ml



#4 n-Dodecane (C12)

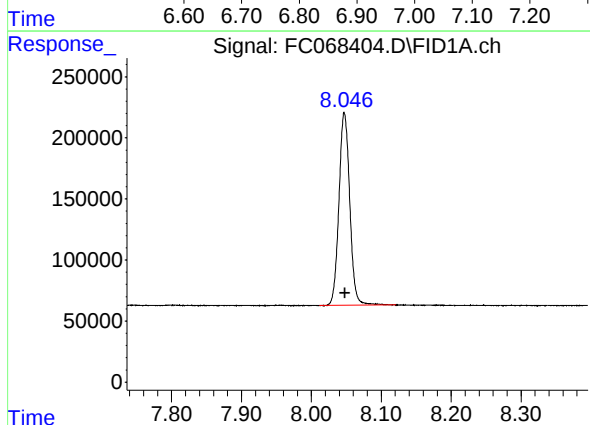
R.T.: 6.261 min
Delta R.T.: 0.000 min
Response: 1706663
Conc: 9.98 ug/ml



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

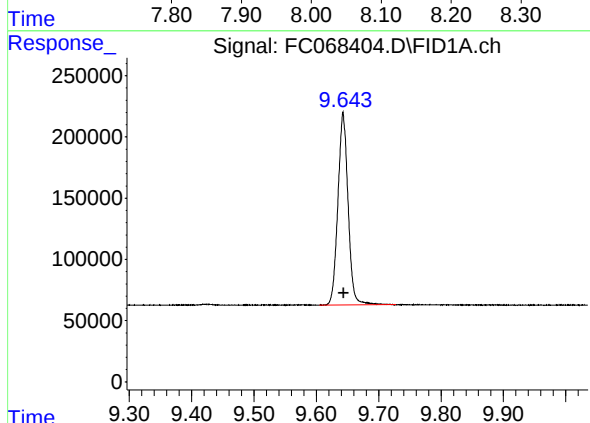
R.T.: 6.871 min
Delta R.T.: 0.000 min
Response: 1740430
Conc: 9.76 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



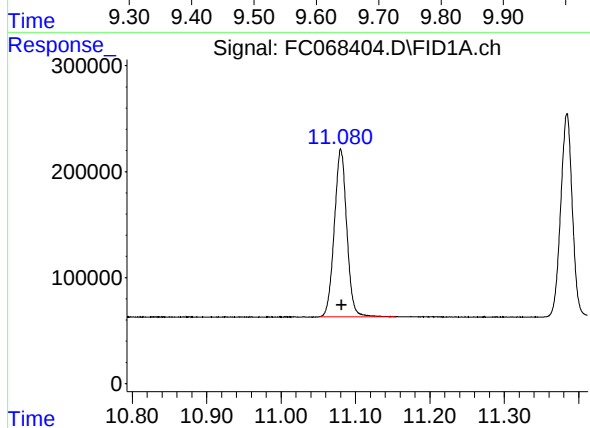
#6 n-Tetradecane (C14)

R.T.: 8.047 min
Delta R.T.: 0.000 min
Response: 1699414
Conc: 9.91 ug/ml



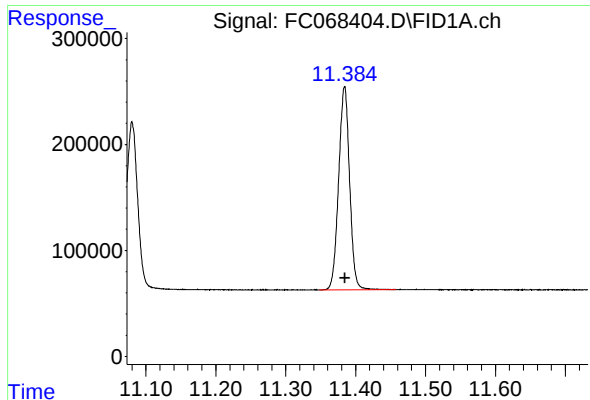
#7 n-Hexadecane (C16)

R.T.: 9.643 min
Delta R.T.: 0.000 min
Response: 1787303
Conc: 9.95 ug/ml



#8 n-Octadecane (C18)

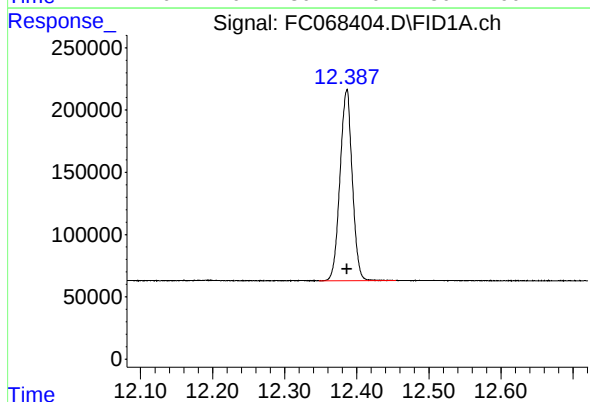
R.T.: 11.080 min
Delta R.T.: -0.001 min
Response: 1839600
Conc: 10.03 ug/ml



#9 ortho-Terphenyl (SURRE)

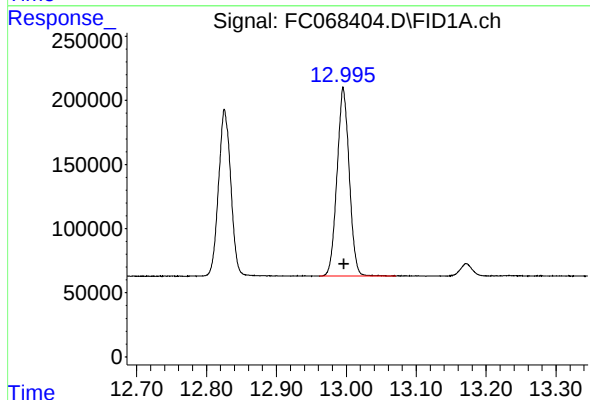
R.T.: 11.384 min
Delta R.T.: 0.000 min
Response: 2086658
Conc: 10.09 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



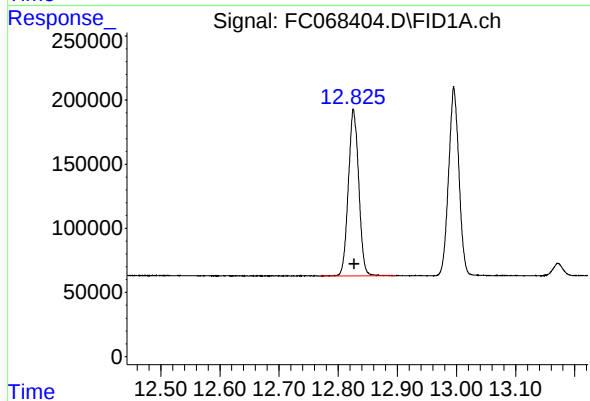
#10 n-Eicosane (C20)

R.T.: 12.386 min
Delta R.T.: 0.000 min
Response: 1812535
Conc: 10.17 ug/ml



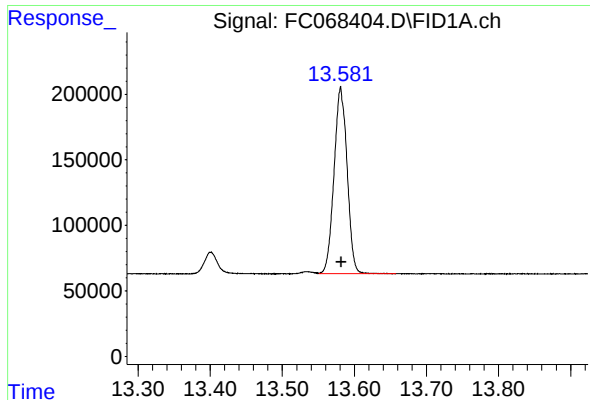
#11 n-Heneicosane (C21)

R.T.: 12.996 min
Delta R.T.: -0.001 min
Response: 1781013
Conc: 10.18 ug/ml



#12 1-chlorooctadecane (SURRE)

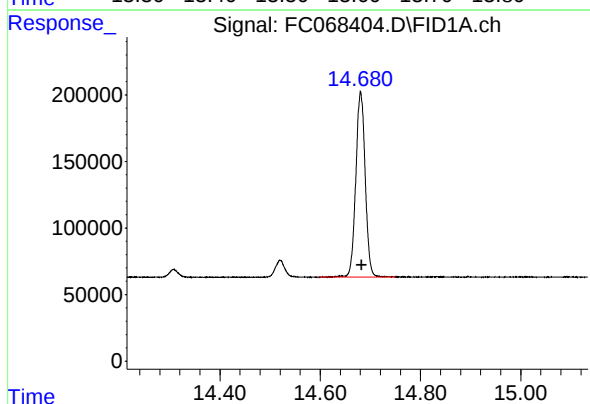
R.T.: 12.826 min
Delta R.T.: 0.000 min
Response: 1580360
Conc: 10.14 ug/ml



#13 n-Docosane (C22)

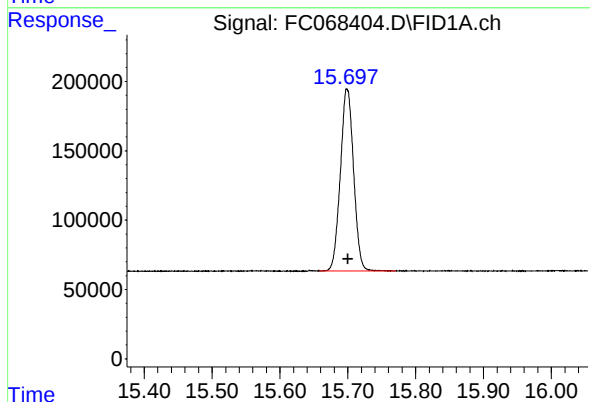
R.T.: 13.581 min
Delta R.T.: 0.000 min
Response: 1793771
Conc: 10.27 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



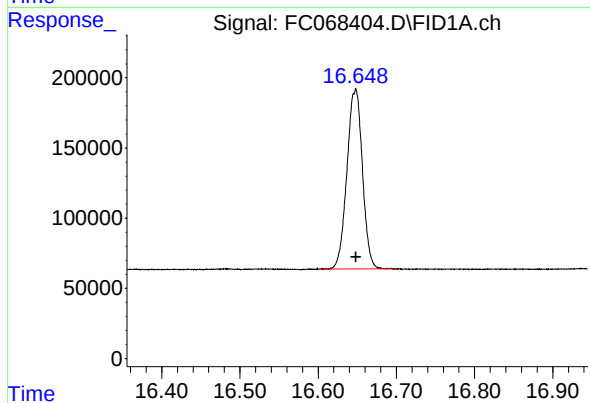
#14 n-Tetracosane (C24)

R.T.: 14.681 min
Delta R.T.: -0.002 min
Response: 1816027
Conc: 10.43 ug/ml



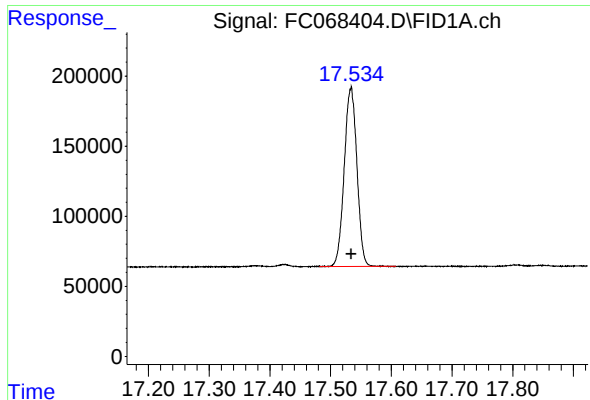
#15 n-Hexacosane (C26)

R.T.: 15.699 min
Delta R.T.: -0.001 min
Response: 1777806
Conc: 10.44 ug/ml



#16 n-Octacosane (C28)

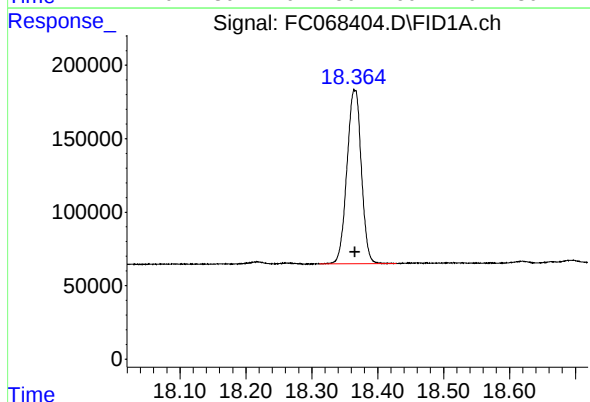
R.T.: 16.647 min
Delta R.T.: 0.000 min
Response: 1765534
Conc: 10.50 ug/ml



#17 n-Tricontane (C30)

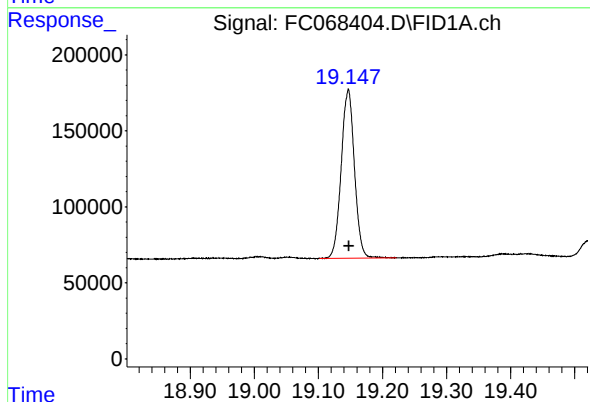
R.T.: 17.533 min
Delta R.T.: 0.000 min
Response: 1853554
Conc: 10.58 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



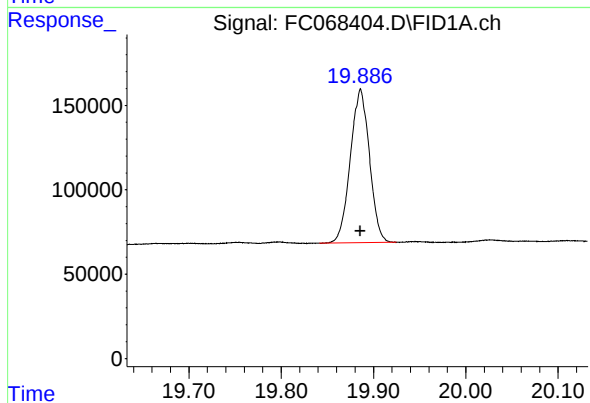
#18 n-Dotriacontane (C32)

R.T.: 18.365 min
Delta R.T.: 0.000 min
Response: 1792145
Conc: 10.57 ug/ml



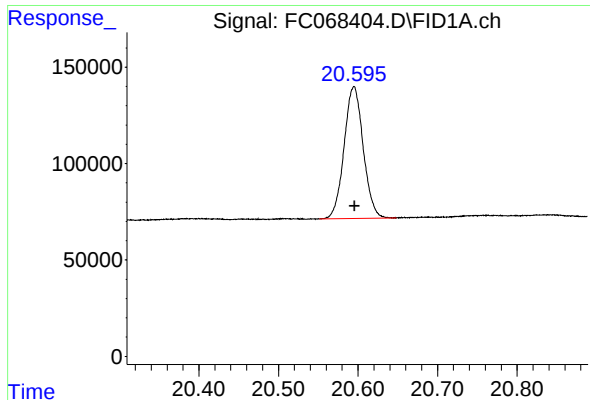
#19 n-Tetratriacontane (C34)

R.T.: 19.146 min
Delta R.T.: 0.000 min
Response: 1586807
Conc: 10.51 ug/ml



#20 n-Hexatriacontane (C36)

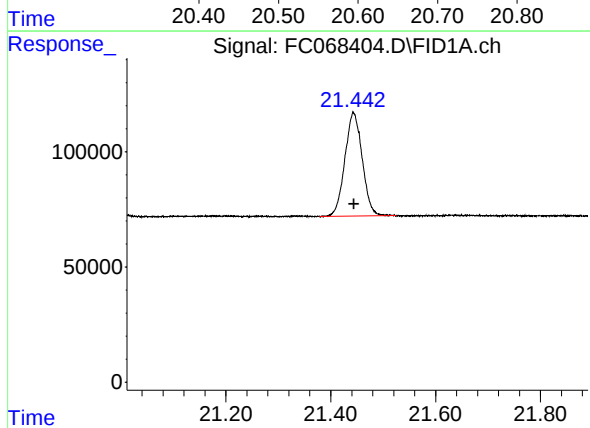
R.T.: 19.886 min
Delta R.T.: 0.000 min
Response: 1308753
Conc: 10.32 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.595 min
Delta R.T.: -0.001 min
Response: 1139413
Conc: 10.17 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



#22 n-Tetracontane (C40)

R.T.: 21.443 min
Delta R.T.: -0.001 min
Response: 1032339
Conc: 10.04 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
Data File : FC068404.D
Signal(s) : FID1A.ch
Acq On : 26 Mar 2025 12:21
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 032625.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	3.200	3.141	3.261	BB	195607	1652195	79.18%	4.460%
2	4.255	4.228	4.318	BB	183136	1673518	80.20%	4.518%
3	5.820	5.791	5.918	BB	179866	1817299	87.09%	4.906%
4	6.261	6.228	6.328	BB	171723	1706663	81.79%	4.607%
5	6.871	6.834	6.968	BB	164818	1740430	83.41%	4.698%
6	8.047	8.011	8.121	BB	157213	1699414	81.44%	4.588%
7	9.643	9.604	9.728	BB	153517	1787303	85.65%	4.825%
8	11.080	11.051	11.154	BB	157591	1839600	88.16%	4.966%
9	11.384	11.348	11.458	BB	192679	2086658	100.00%	5.633%
10	12.386	12.348	12.454	BB	151695	1812535	86.86%	4.893%
11	12.826	12.768	12.898	BB	125830	1580360	75.74%	4.266%
12	12.996	12.961	13.071	BB	145688	1781013	85.35%	4.808%
13	13.581	13.551	13.658	VB	140685	1793771	85.96%	4.842%
14	14.681	14.598	14.751	BB	138837	1816027	87.03%	4.902%
15	15.699	15.658	15.771	BB	132082	1777806	85.20%	4.799%
16	16.647	16.601	16.699	BBA	127402	1765534	84.61%	4.766%
17	17.533	17.481	17.608	BB	127760	1853554	88.83%	5.004%
18	18.365	18.311	18.428	BB	118545	1792145	85.89%	4.838%
19	19.146	19.101	19.221	BB	111502	1586807	76.05%	4.284%
20	19.886	19.841	19.924	BB	89375	1308753	62.72%	3.533%
21	20.595	20.551	20.648	BB	68161	1139413	54.60%	3.076%
22	21.443	21.378	21.524	BB	44776	1032339	49.47%	2.787%
Sum of corrected areas:							37043136	

Aliphatic EPH 032625.M Wed Mar 26 15:19:19 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
 Data File : FC068405.D
 Signal(s) : FID1A.ch
 Acq On : 26 Mar 2025 12:59
 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: Mar 26 13:34:23 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:16:01 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)	11.383	1040771	5.303 ug/ml
Spiked Amount 50.000		Recovery =	10.61%
12) S 1-chlorooctadecane (S...	12.826	787660	5.360 ug/ml
Spiked Amount 50.000		Recovery =	10.72%
Target Compounds			
1) T n-Nonane (C9)	3.200	819968	5.159 ug/ml
2) T n-Decane (C10)	4.255	821987	5.089 ug/ml
3) T A~Naphthalene (C11.7)	5.821	868483	4.895 ug/ml
4) T n-Dodecane (C12)	6.261	838336	5.105 ug/ml
5) T A~2-methylnaphthalene...	6.872	818798	4.769 ug/ml
6) T n-Tetradecane (C14)	8.048	823942	5.010 ug/ml
7) T n-Hexadecane (C16)	9.643	866146	5.050 ug/ml
8) T n-Octadecane (C18)	11.080	907661	5.216 ug/ml
10) T n-Eicosane (C20)	12.385	917135	5.452 ug/ml
11) T n-Heneicosane (C21)	12.995	897688	5.447 ug/ml
13) T n-Docosane (C22)	13.580	924581	5.616 ug/ml
14) T n-Tetracosane (C24)	14.681	982703	5.958 ug/ml
15) T n-Hexacosane (C26)	15.699	982054	6.089 ug/ml
16) T n-Octacosane (C28)	16.647	1018857	6.446 ug/ml
17) T n-Tricontane (C30)	17.533	1117126	6.892 ug/ml
18) T n-Dotriacontane (C32)	18.363	1085377	7.003 ug/ml
19) T n-Tetratriacontane (C34)	19.145	914648	6.597 ug/ml
20) T n-Hexatriacontane (C36)	19.884	718338	6.137 ug/ml
21) T n-Octatriacontane (C38)	20.594	606676	5.839 ug/ml
22) T n-Tetracontane (C40)	21.442	527594	5.488 ug/ml

(f)=RT Delta > 1/2 Window

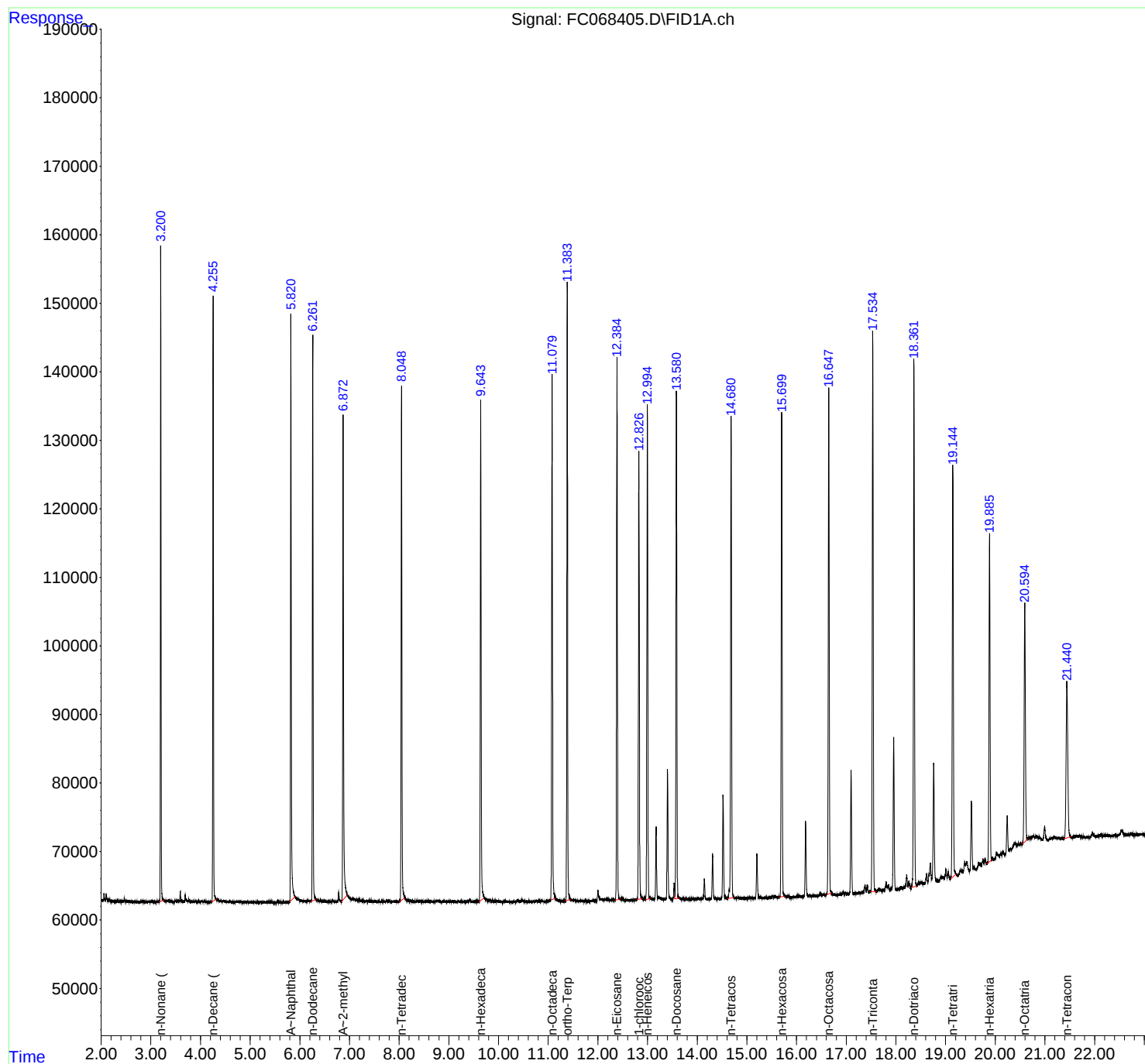
(m)=manual int.

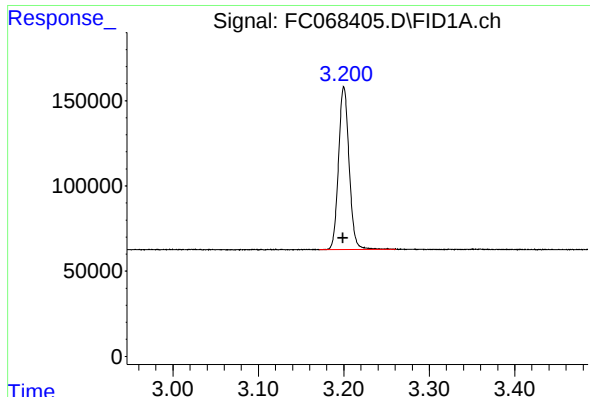
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
Data File : FC068405.D
Signal(s) : FID1A.ch
Acq On : 26 Mar 2025 12:59
Operator : YP/AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
Quant Time: Mar 26 13:34:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:16:01 2025
Response via : Initial Calibration
Integrator: ChemStation

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

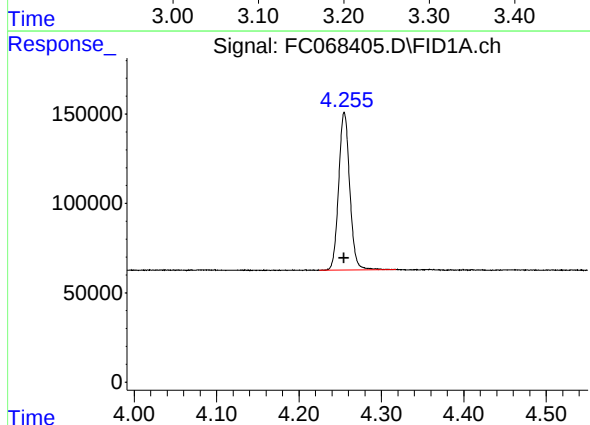




#1 n-Nonane (C9)

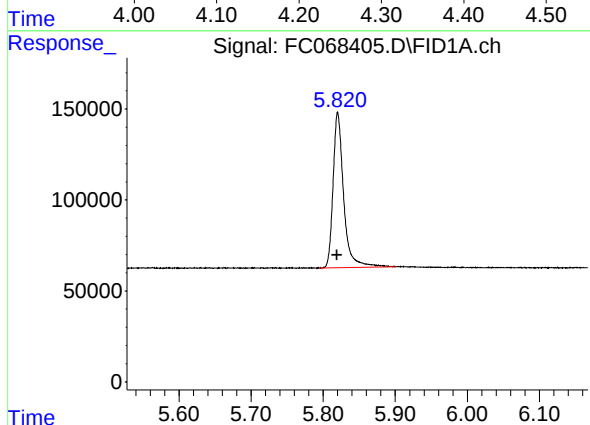
R.T.: 3.200 min
Delta R.T.: 0.001 min
Response: 819968
Conc: 5.16 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



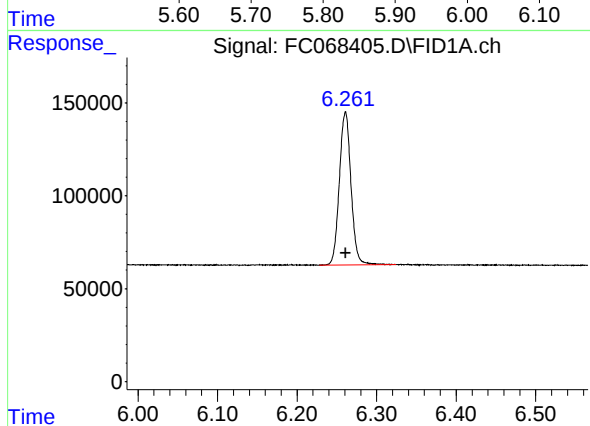
#2 n-Decane (C10)

R.T.: 4.255 min
Delta R.T.: 0.000 min
Response: 821987
Conc: 5.09 ug/ml



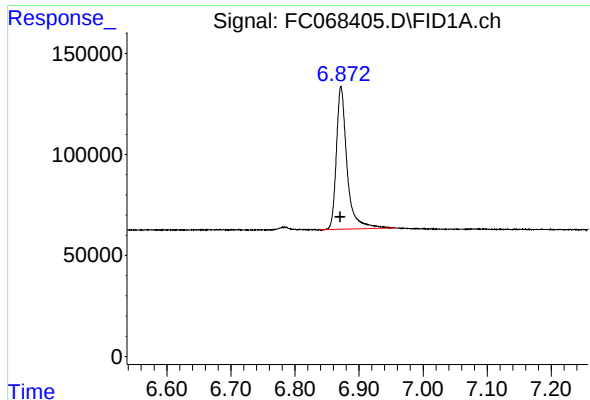
#3 A~Naphthalene (C11.7)

R.T.: 5.821 min
Delta R.T.: 0.001 min
Response: 868483
Conc: 4.90 ug/ml



#4 n-Dodecane (C12)

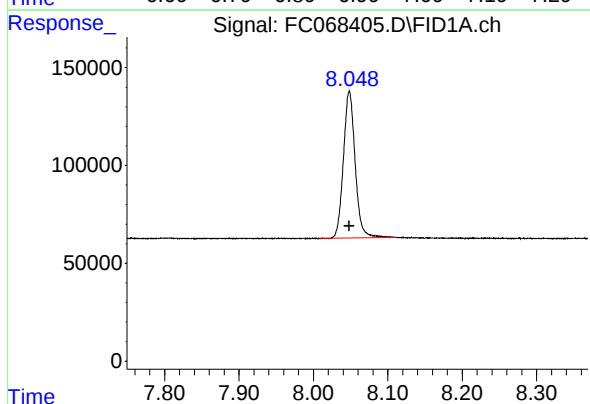
R.T.: 6.261 min
Delta R.T.: 0.000 min
Response: 838336
Conc: 5.11 ug/ml



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

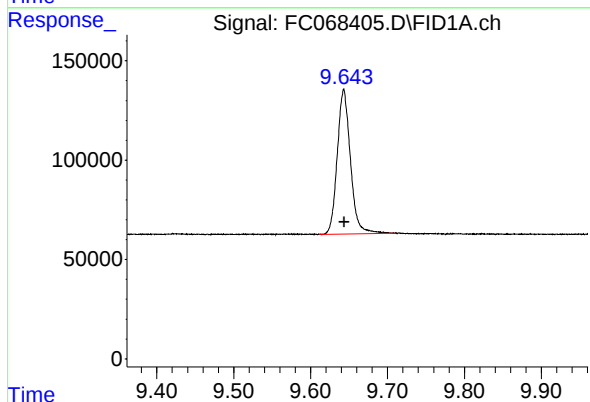
R.T.: 6.872 min
Delta R.T.: 0.001 min
Response: 818798
Conc: 4.77 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



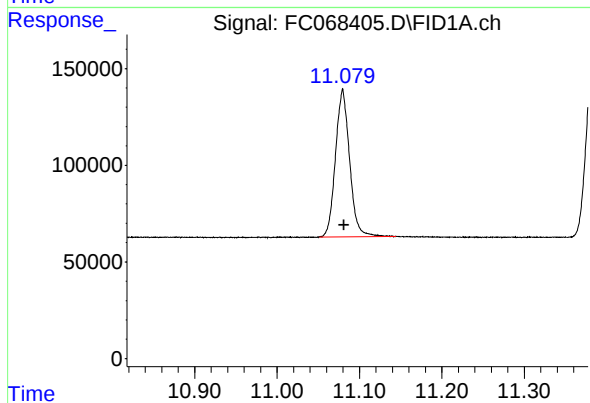
#6 n-Tetradecane (C14)

R.T.: 8.048 min
Delta R.T.: 0.000 min
Response: 823942
Conc: 5.01 ug/ml



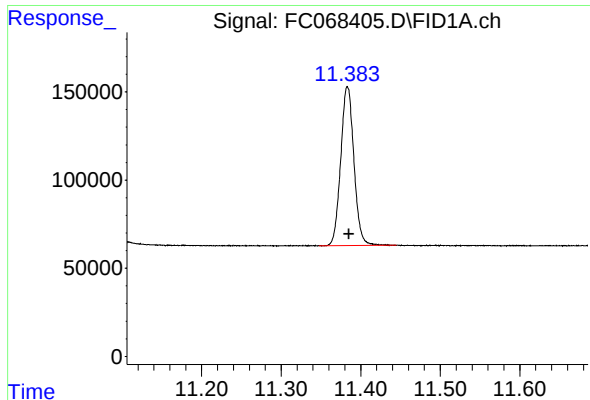
#7 n-Hexadecane (C16)

R.T.: 9.643 min
Delta R.T.: 0.000 min
Response: 866146
Conc: 5.05 ug/ml



#8 n-Octadecane (C18)

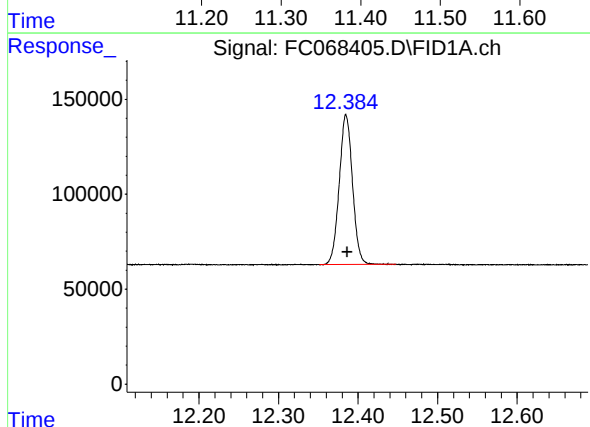
R.T.: 11.080 min
Delta R.T.: -0.002 min
Response: 907661
Conc: 5.22 ug/ml



#9 ortho-Terphenyl (SURR)

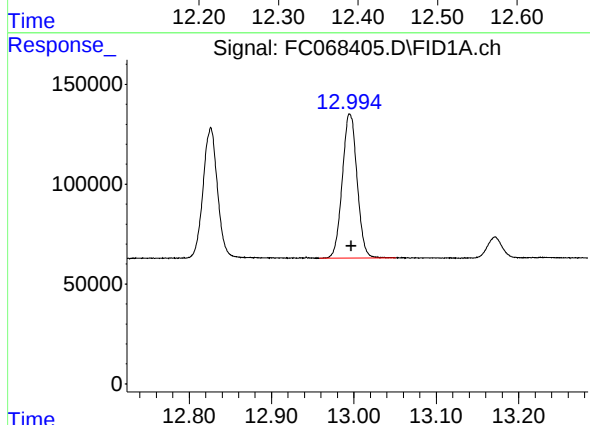
R.T.: 11.383 min
Delta R.T.: -0.002 min
Response: 1040771
Conc: 5.30 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



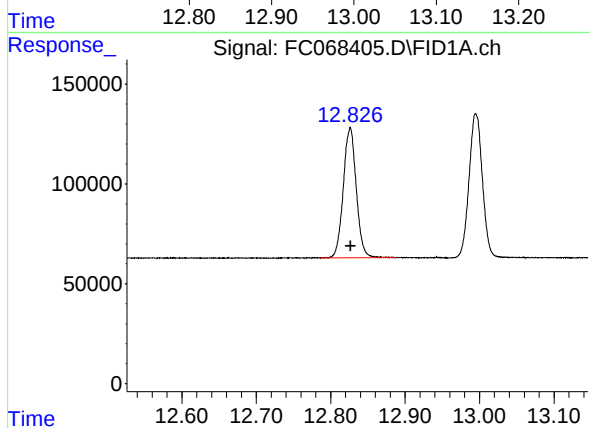
#10 n-Eicosane (C20)

R.T.: 12.385 min
Delta R.T.: -0.002 min
Response: 917135
Conc: 5.45 ug/ml



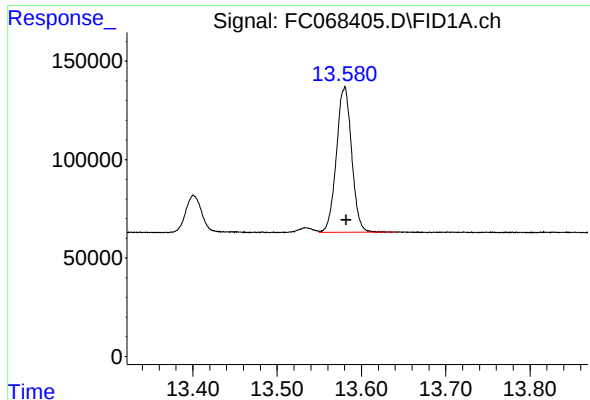
#11 n-Heneicosane (C21)

R.T.: 12.995 min
Delta R.T.: -0.002 min
Response: 897688
Conc: 5.45 ug/ml



#12 1-chlorooctadecane (SURR)

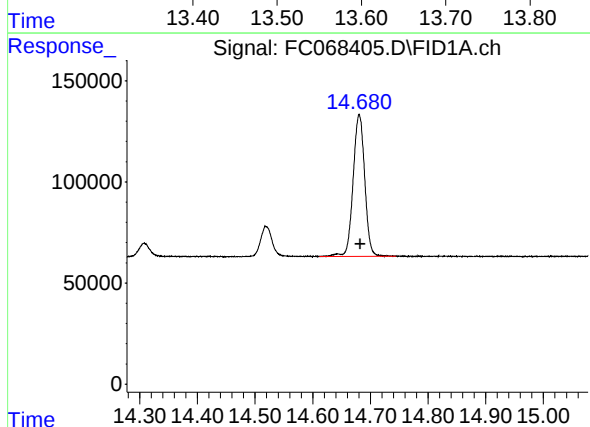
R.T.: 12.826 min
Delta R.T.: -0.001 min
Response: 787660
Conc: 5.36 ug/ml



#13 n-Docosane (C22)

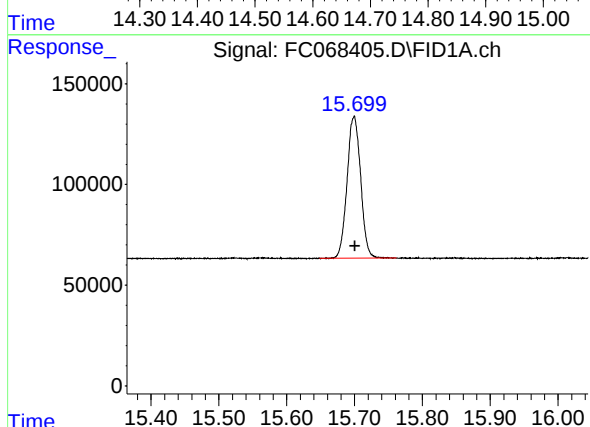
R.T.: 13.580 min
Delta R.T.: -0.002 min
Response: 924581
Conc: 5.62 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



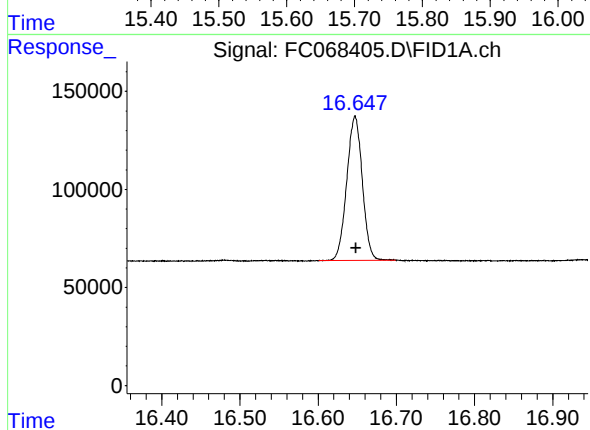
#14 n-Tetracosane (C24)

R.T.: 14.681 min
Delta R.T.: -0.002 min
Response: 982703
Conc: 5.96 ug/ml



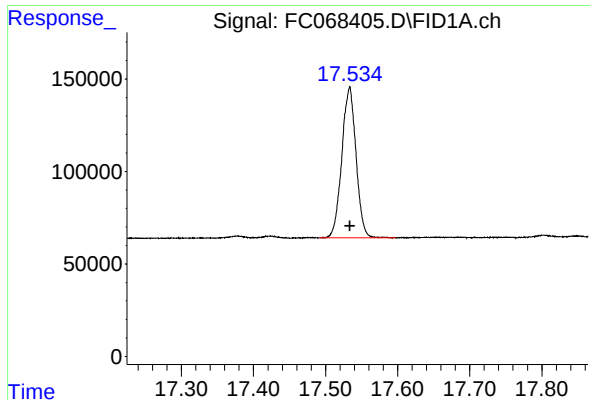
#15 n-Hexacosane (C26)

R.T.: 15.699 min
Delta R.T.: -0.001 min
Response: 982054
Conc: 6.09 ug/ml



#16 n-Octacosane (C28)

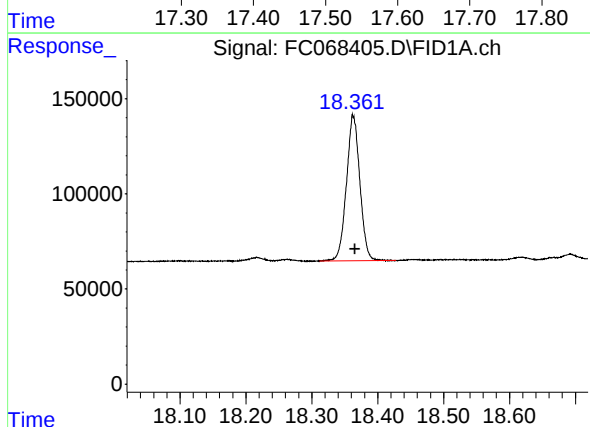
R.T.: 16.647 min
Delta R.T.: -0.001 min
Response: 1018857
Conc: 6.45 ug/ml



#17 n-Tricontane (C30)

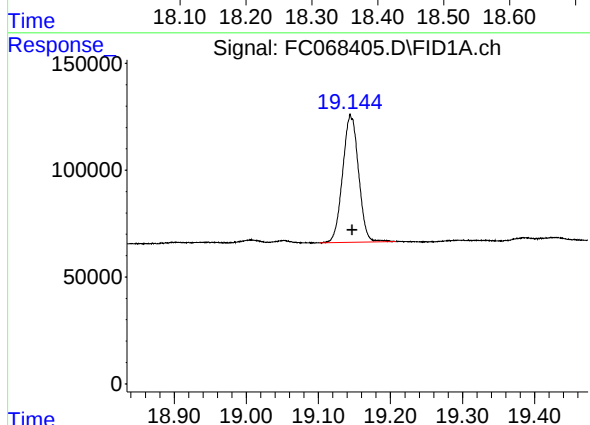
R.T.: 17.533 min
Delta R.T.: -0.001 min
Response: 1117126
Conc: 6.89 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



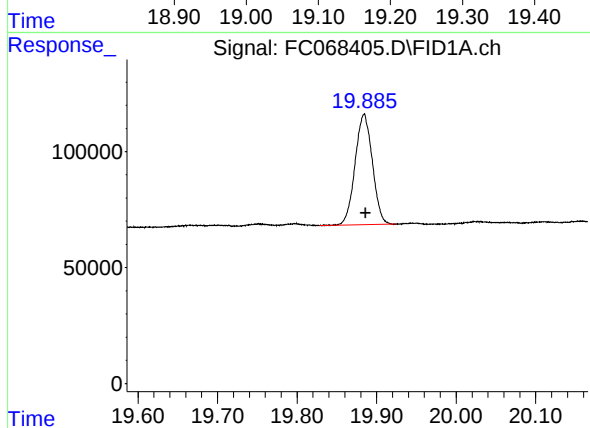
#18 n-Dotriacontane (C32)

R.T.: 18.363 min
Delta R.T.: -0.002 min
Response: 1085377
Conc: 7.00 ug/ml



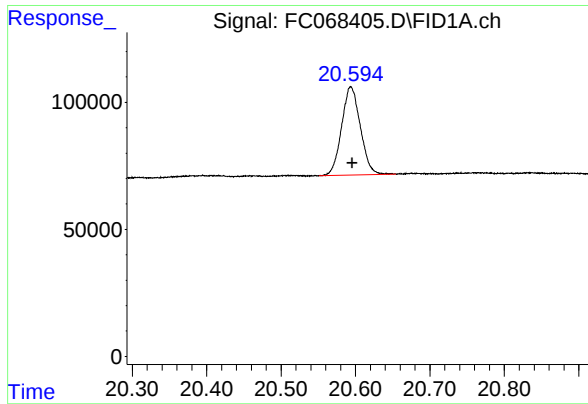
#19 n-Tetratriacontane (C34)

R.T.: 19.145 min
Delta R.T.: -0.002 min
Response: 914648
Conc: 6.60 ug/ml



#20 n-Hexatriacontane (C36)

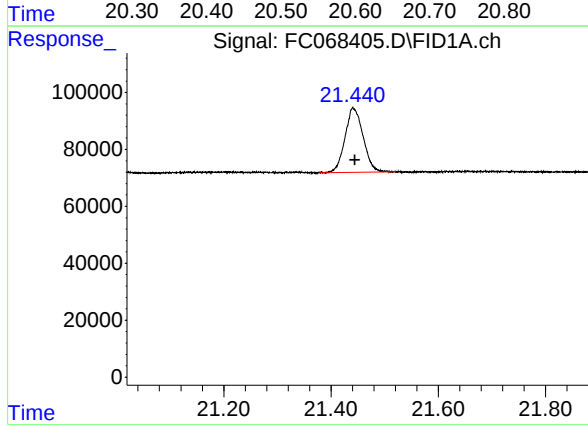
R.T.: 19.884 min
Delta R.T.: -0.002 min
Response: 718338
Conc: 6.14 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.594 min
Delta R.T.: -0.002 min
Response: 606676
Conc: 5.84 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



#22 n-Tetracontane (C40)

R.T.: 21.442 min
Delta R.T.: -0.003 min
Response: 527594
Conc: 5.49 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
Data File : FC068405.D
Signal(s) : FID1A.ch
Acq On : 26 Mar 2025 12:59
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 032625.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	3.200	3.171	3.261	BB	95009	819968	73.40%	4.252%
2	4.255	4.224	4.318	BB	88062	821987	73.58%	4.262%
3	5.821	5.794	5.901	BB	84303	868483	77.74%	4.503%
4	6.261	6.228	6.324	BB	82314	838336	75.04%	4.347%
5	6.872	6.838	6.958	BB	70545	818798	73.30%	4.245%
6	8.048	8.008	8.111	BB	74911	823942	73.76%	4.272%
7	9.643	9.611	9.711	BB	72124	866146	77.53%	4.491%
8	11.080	11.051	11.144	BB	75142	907661	81.25%	4.706%
9	11.383	11.348	11.444	BB	90389	1040771	93.17%	5.396%
10	12.385	12.351	12.448	BB	78929	917135	82.10%	4.755%
11	12.826	12.784	12.888	BB	64234	787660	70.51%	4.084%
12	12.995	12.958	13.051	BB	72551	897688	80.36%	4.654%
13	13.580	13.550	13.641	VB	74173	924581	82.76%	4.794%
14	14.681	14.611	14.744	BB	70161	982703	87.97%	5.095%
15	15.699	15.648	15.761	BB	69966	982054	87.91%	5.092%
16	16.647	16.601	16.699	BBA	73620	1018857	91.20%	5.283%
17	17.533	17.491	17.598	BB	81984	1117126	100.00%	5.792%
18	18.363	18.311	18.428	BB	75142	1085377	97.16%	5.628%
19	19.145	19.101	19.208	BB	59372	914648	81.88%	4.742%
20	19.884	19.828	19.924	BB	47750	718338	64.30%	3.725%
21	20.594	20.551	20.654	BB	34654	606676	54.31%	3.146%
22	21.442	21.378	21.521	BB	22563	527594	47.23%	2.736%
Sum of corrected areas:							19286529	

Aliphatic EPH 032625.M Wed Mar 26 15:17:56 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
 Data File : FC068406.D
 Signal(s) : FID1A.ch
 Acq On : 26 Mar 2025 13:36
 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: Mar 26 15:08:45 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:35:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.385	4184619	21.067 ug/ml
Spiked Amount 50.000		Recovery =	42.13%
12) S 1-chlorooctadecane (S...	12.827	3169108	21.259 ug/ml
Spiked Amount 50.000		Recovery =	42.52%
Target Compounds			
1) T n-Nonane (C9)	3.199	3345481	20.917 ug/ml
2) T n-Decane (C10)	4.255	3402627	20.990 ug/ml
3) T A~Naphthalene (C11.7)	5.819	3710999	21.004 ug/ml
4) T n-Dodecane (C12)	6.261	3451156	20.928 ug/ml
5) T A~2-methylnaphthalene...	6.871	3589505	21.103 ug/ml
6) T n-Tetradecane (C14)	8.049	3457908	21.016 ug/ml
7) T n-Hexadecane (C16)	9.644	3639050	21.176 ug/ml
8) T n-Octadecane (C18)	11.081	3725197	21.223 ug/ml
10) T n-Eicosane (C20)	12.386	3623685	21.158 ug/ml
11) T n-Heneicosane (C21)	12.997	3557280	21.207 ug/ml
13) T n-Docosane (C22)	13.581	3546383	21.022 ug/ml
14) T n-Tetracosane (C24)	14.682	3528543	20.603 ug/ml
15) T n-Hexacosane (C26)	15.700	3433946	20.403 ug/ml
16) T n-Octacosane (C28)	16.649	3381117	20.221 ug/ml
17) T n-Tricontane (C30)	17.535	3518206	20.178 ug/ml
18) T n-Dotriacontane (C32)	18.365	3395540	20.284 ug/ml
19) T n-Tetratriacontane (C34)	19.148	3029523	20.539 ug/ml
20) T n-Hexatriacontane (C36)	19.885	2556410	20.889 ug/ml
21) T n-Octatriacontane (C38)	20.597	2239784	20.857 ug/ml
22) T n-Tetracontane (C40)	21.443	2055815	20.976 ug/ml

(f)=RT Delta > 1/2 Window

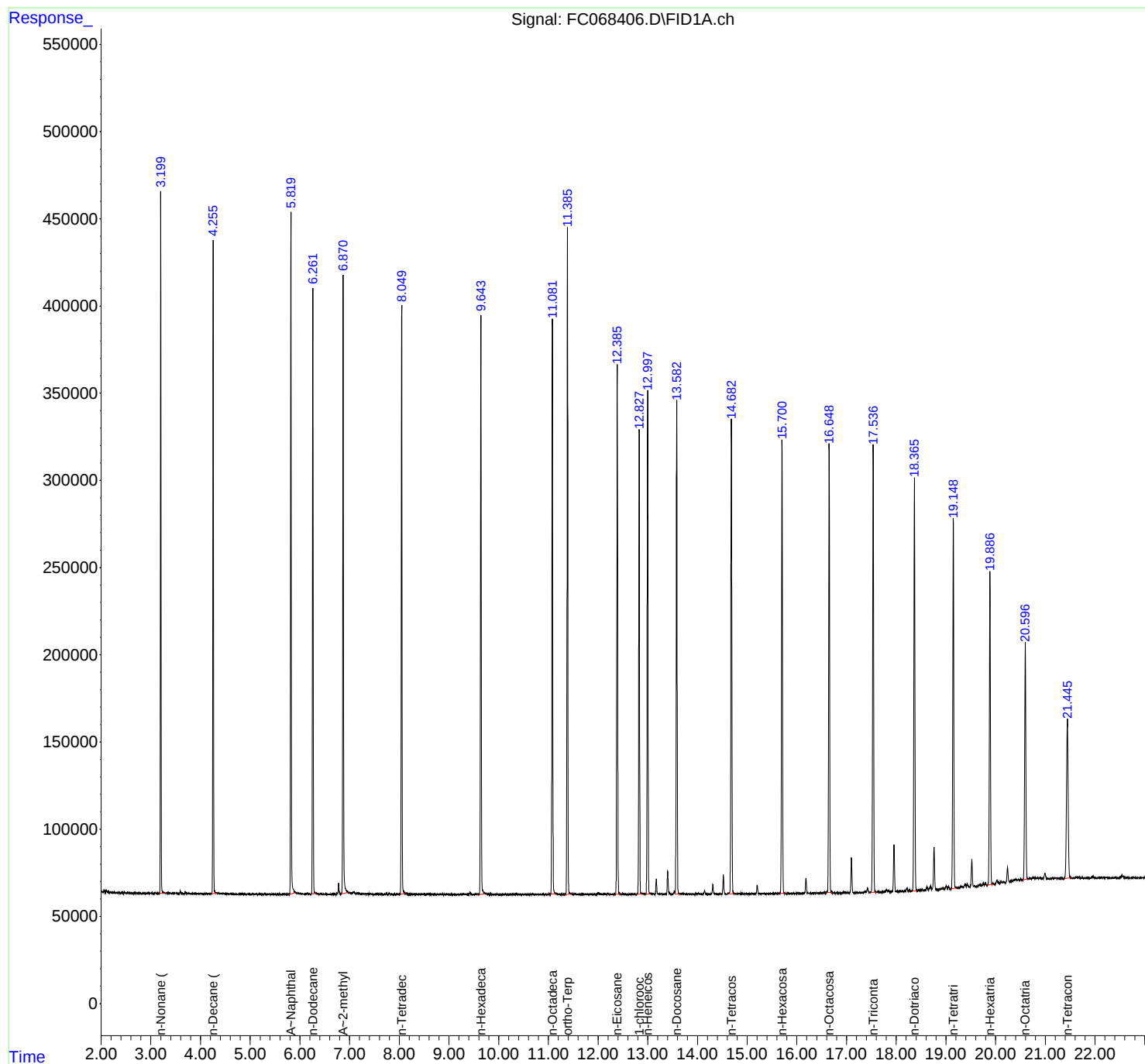
(m)=manual int.

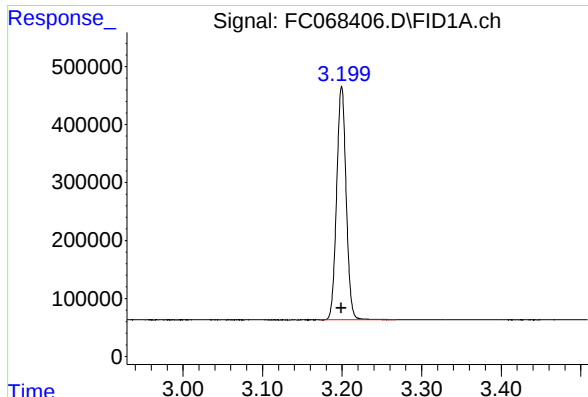
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
Data File : FC068406.D
Signal(s) : FID1A.ch
Acq On : 26 Mar 2025 13:36
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Mar 26 15:08:45 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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

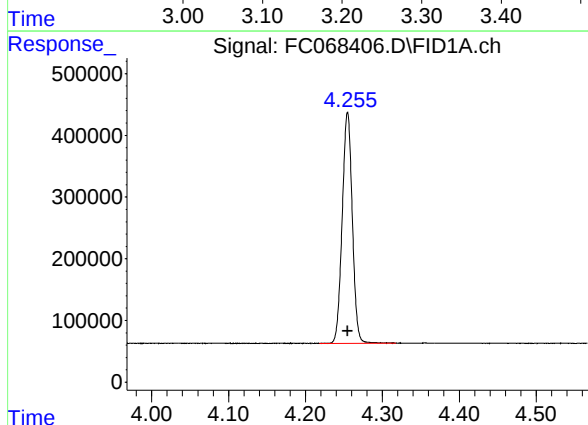




#1 n-Nonane (C9)

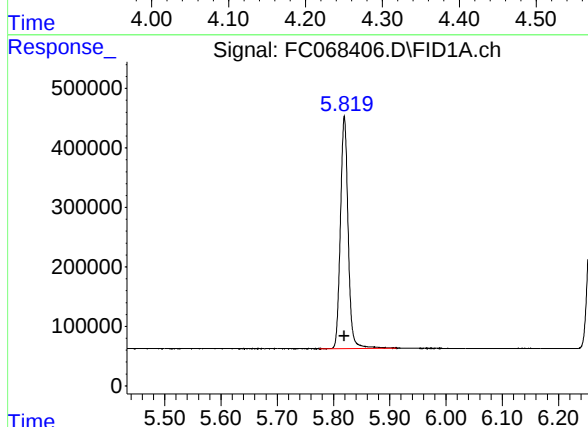
R.T.: 3.199 min
Delta R.T.: 0.000 min
Response: 3345481
Conc: 20.92 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



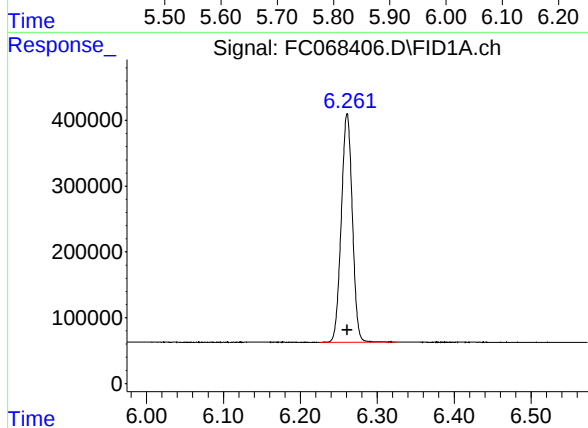
#2 n-Decane (C10)

R.T.: 4.255 min
Delta R.T.: 0.000 min
Response: 3402627
Conc: 20.99 ug/ml



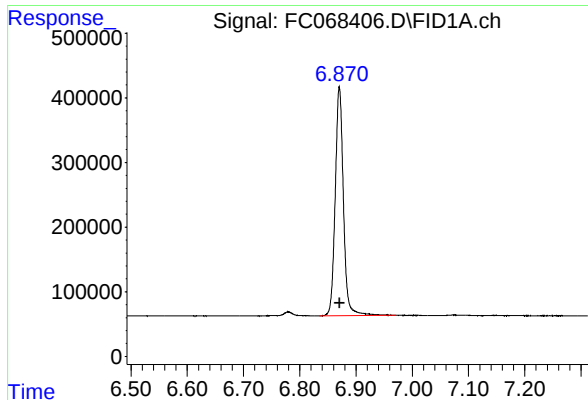
#3 A~Naphthalene (C11.7)

R.T.: 5.819 min
Delta R.T.: 0.000 min
Response: 3710999
Conc: 21.00 ug/ml



#4 n-Dodecane (C12)

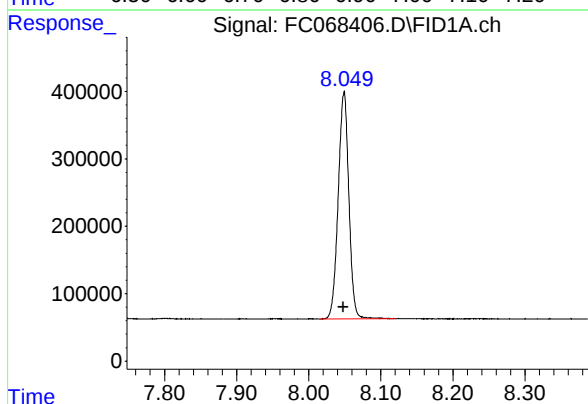
R.T.: 6.261 min
Delta R.T.: 0.000 min
Response: 3451156
Conc: 20.93 ug/ml



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

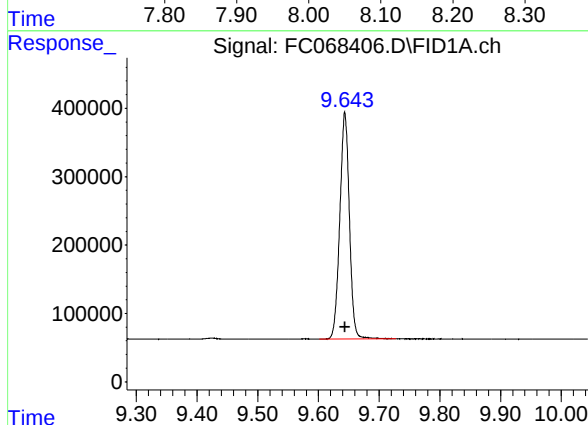
R.T.: 6.871 min
Delta R.T.: 0.000 min
Response: 3589505
Conc: 21.10 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



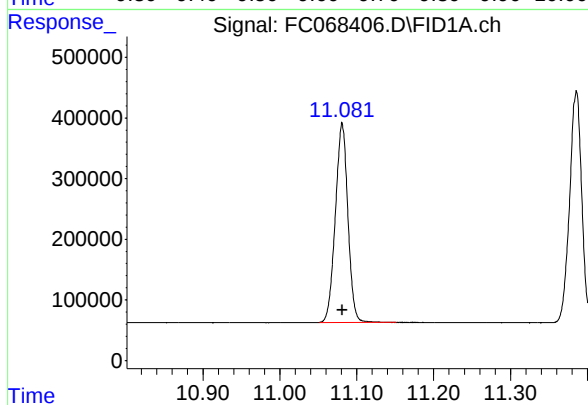
#6 n-Tetradecane (C14)

R.T.: 8.049 min
Delta R.T.: 0.000 min
Response: 3457908
Conc: 21.02 ug/ml



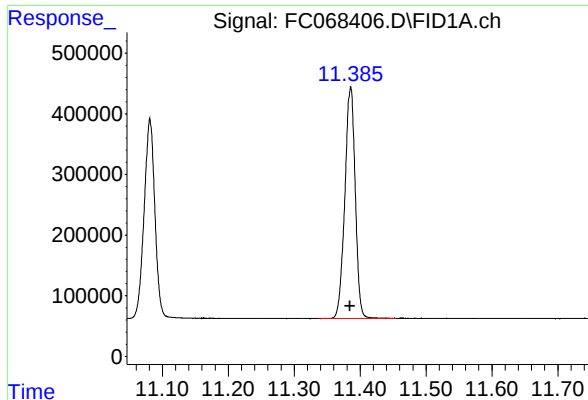
#7 n-Hexadecane (C16)

R.T.: 9.644 min
Delta R.T.: 0.000 min
Response: 3639050
Conc: 21.18 ug/ml



#8 n-Octadecane (C18)

R.T.: 11.081 min
Delta R.T.: 0.000 min
Response: 3725197
Conc: 21.22 ug/ml



#9 ortho-Terphenyl (SURR)

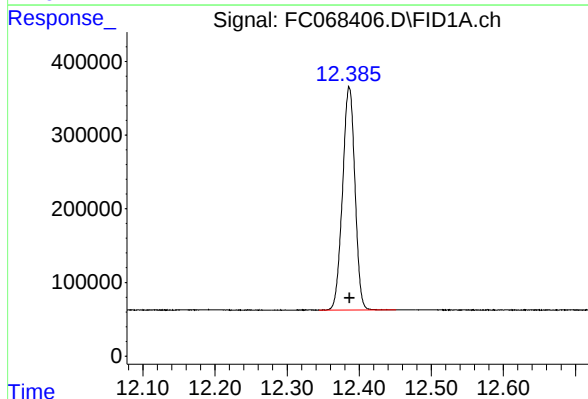
R.T.: 11.385 min
Delta R.T.: 0.000 min
Response: 4184619
Conc: 21.07 ug/ml

Instrument :

FID_C

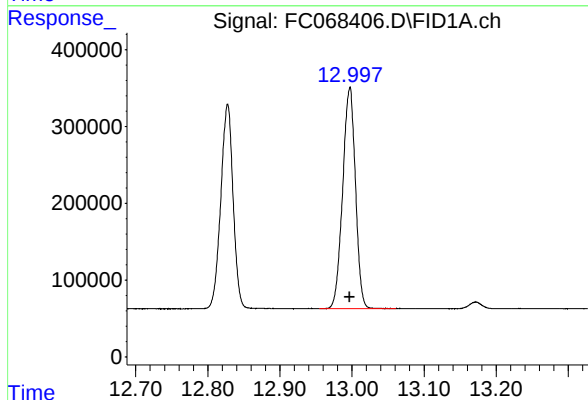
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



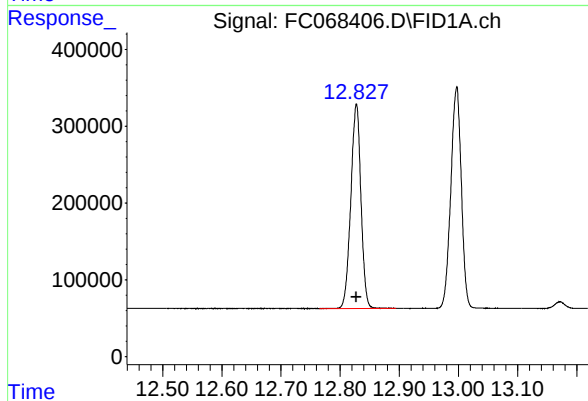
#10 n-Eicosane (C20)

R.T.: 12.386 min
Delta R.T.: 0.000 min
Response: 3623685
Conc: 21.16 ug/ml



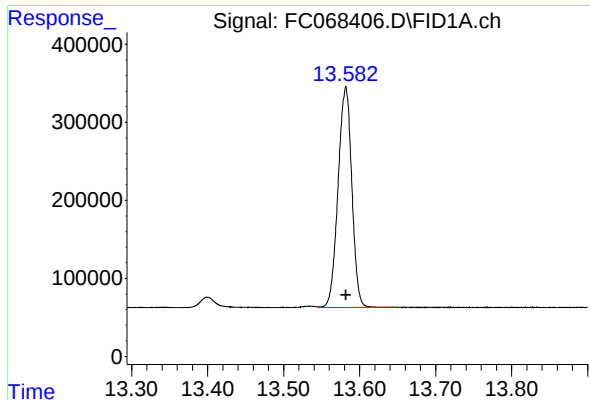
#11 n-Heneicosane (C21)

R.T.: 12.997 min
Delta R.T.: 0.000 min
Response: 3557280
Conc: 21.21 ug/ml



#12 1-chlorooctadecane (SURR)

R.T.: 12.827 min
Delta R.T.: 0.000 min
Response: 3169108
Conc: 21.26 ug/ml



#13 n-Docosane (C22)

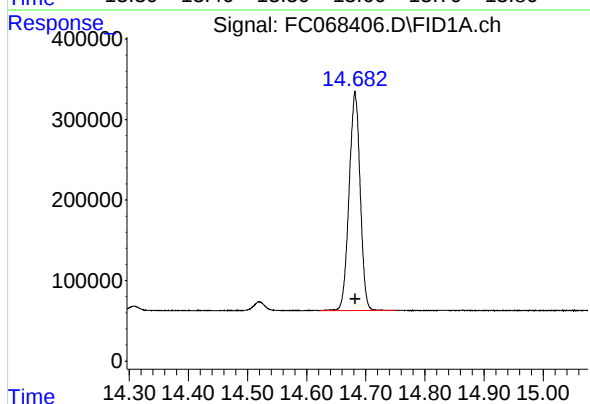
R.T.: 13.581 min
Delta R.T.: 0.000 min
Response: 3546383
Conc: 21.02 ug/ml

Instrument :

FID_C

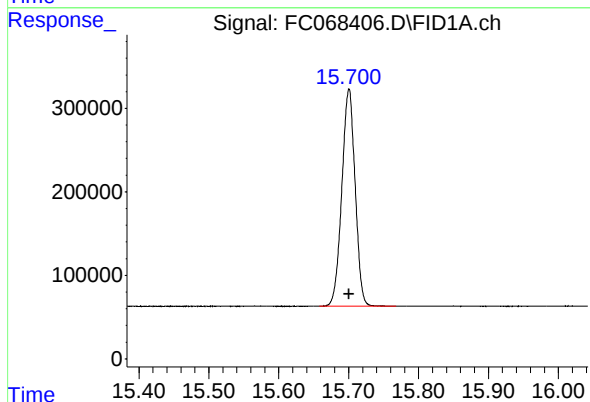
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



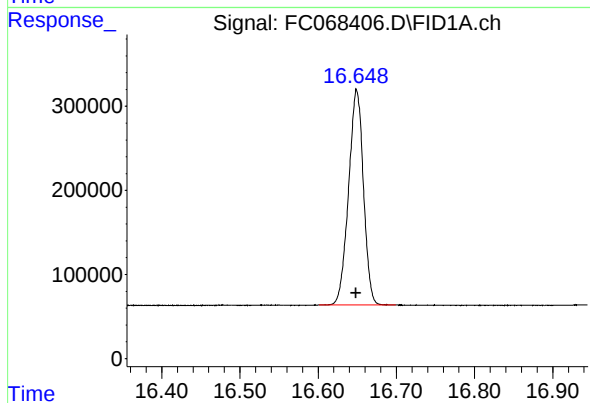
#14 n-Tetracosane (C24)

R.T.: 14.682 min
Delta R.T.: 0.000 min
Response: 3528543
Conc: 20.60 ug/ml



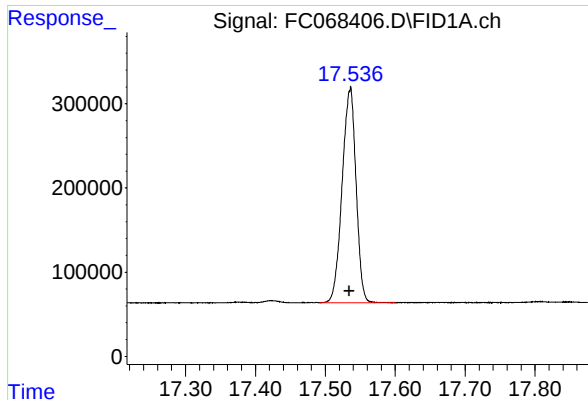
#15 n-Hexacosane (C26)

R.T.: 15.700 min
Delta R.T.: 0.000 min
Response: 3433946
Conc: 20.40 ug/ml



#16 n-Octacosane (C28)

R.T.: 16.649 min
Delta R.T.: 0.001 min
Response: 3381117
Conc: 20.22 ug/ml



#17 n-Tricontane (C30)

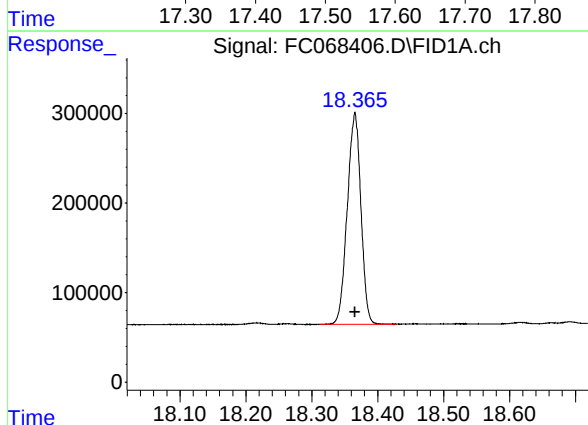
R.T.: 17.535 min
Delta R.T.: 0.000 min
Response: 3518206
Conc: 20.18 ug/ml

Instrument :

FID_C

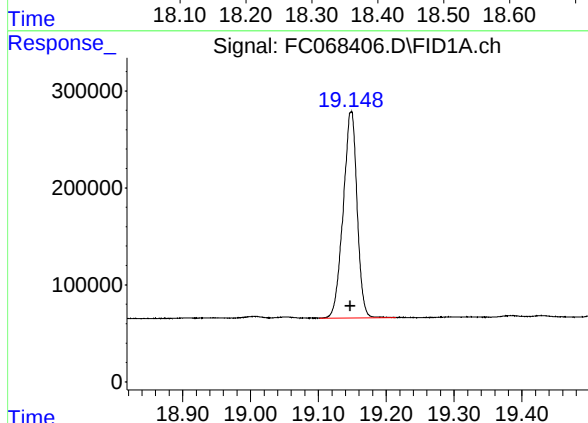
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



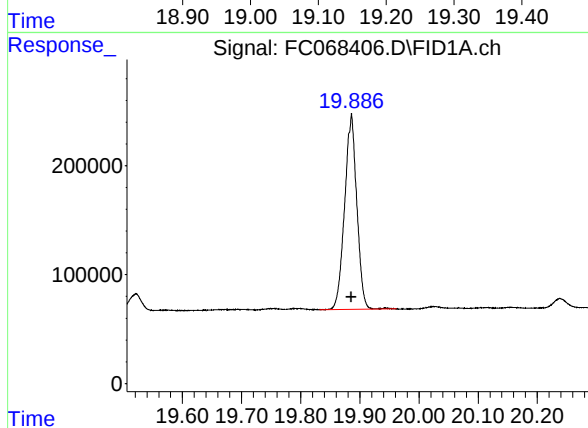
#18 n-Dotriacontane (C32)

R.T.: 18.365 min
Delta R.T.: 0.000 min
Response: 3395540
Conc: 20.28 ug/ml



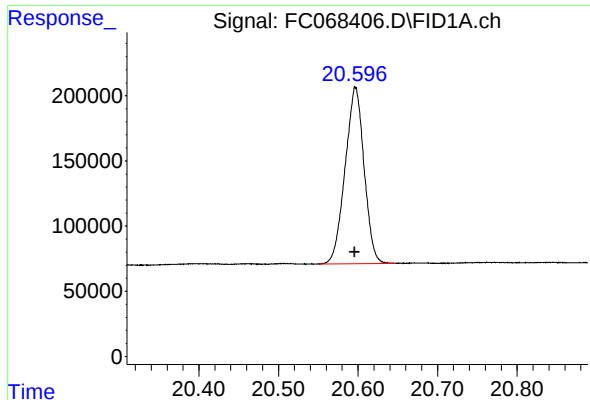
#19 n-Tetatriacontane (C34)

R.T.: 19.148 min
Delta R.T.: 0.000 min
Response: 3029523
Conc: 20.54 ug/ml



#20 n-Hexatriacontane (C36)

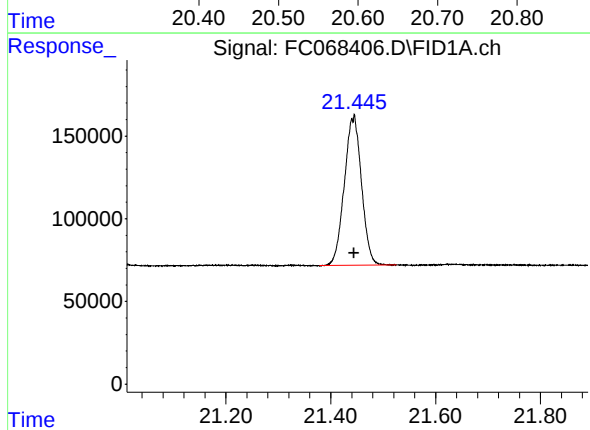
R.T.: 19.885 min
Delta R.T.: 0.000 min
Response: 2556410
Conc: 20.89 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.597 min
Delta R.T.: 0.001 min
Response: 2239784
Conc: 20.86 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



#22 n-Tetracontane (C40)

R.T.: 21.443 min
Delta R.T.: -0.001 min
Response: 2055815
Conc: 20.98 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC032625AL\
Data File : FC068406.D
Signal(s) : FID1A.ch
Acq On : 26 Mar 2025 13:36
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 032625.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	3.199	3.171	3.268	BB	400920	3345481	79.95%	4.549%
2	4.255	4.218	4.318	BB	374377	3402627	81.31%	4.627%
3	5.819	5.774	5.911	BB	385060	3710999	88.68%	5.046%
4	6.261	6.224	6.324	BB	347782	3451156	82.47%	4.693%
5	6.871	6.834	6.971	BB	353264	3589505	85.78%	4.881%
6	8.049	8.014	8.121	BB	333413	3457908	82.63%	4.702%
7	9.644	9.601	9.728	BB	328720	3639050	86.96%	4.948%
8	11.081	11.051	11.151	BB	327947	3725197	89.02%	5.065%
9	11.385	11.338	11.454	BB	378645	4184619	100.00%	5.690%
10	12.386	12.344	12.451	BB	303646	3623685	86.60%	4.927%
11	12.827	12.764	12.894	BB	267436	3169108	75.73%	4.309%
12	12.997	12.954	13.061	BB	290830	3557280	85.01%	4.837%
13	13.581	13.547	13.648	VB	280698	3546383	84.75%	4.822%
14	14.682	14.621	14.751	BB	269951	3528543	84.32%	4.798%
15	15.700	15.658	15.768	BB	261469	3433946	82.06%	4.669%
16	16.649	16.601	16.699	BBA	252617	3381117	80.80%	4.598%
17	17.535	17.491	17.601	BB	252856	3518206	84.07%	4.784%
18	18.365	18.311	18.428	BB	233659	3395540	81.14%	4.617%
19	19.148	19.101	19.214	BB	213686	3029523	72.40%	4.119%
20	19.885	19.831	19.961	BB	172391	2556410	61.09%	3.476%
21	20.597	20.551	20.648	BB	135273	2239784	53.52%	3.046%
22	21.443	21.378	21.524	BB	90309	2055815	49.13%	2.795%
Sum of corrected areas:							73541882	

Aliphatic EPH 032625.M Wed Mar 26 15:17:11 2025

Continuing Calibration Report for SequenceID : FC033125AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FC068444.D

Aliphatic C9-C12	9465089.000	60.000	3.098	6.359	157751.483	162319.116	2.814
Aliphatic C12-C16	6556350.000	40.000	6.360	9.743	163908.750	168194.168	2.548
Aliphatic C16-C21	10024155.000	60.000	9.744	13.097	167069.250	171510.591	2.590
Aliphatic C21-C28	12608586.000	80.000	13.098	16.748	157607.325	168869.942	6.669
Aliphatic C28-C40	14864058.000	120.000	16.749	21.546	123867.150	136171.748	9.036
Aliphatic EPH	53518238.000	360.000	3.098	21.546	148661.772	157243.762	5.458

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	31 Mar 2025 11:17
Client Sample ID:		Operator:	YP/AJ
Data file:	FC068444.D	Misc:	
Instrument:	FID_C	ALS Vial:	5
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.098	6.359	9465089.000	60.000	ug/ml
Aliphatic C12-C16	6.360	9.743	6556350.000	40.000	ug/ml
Aliphatic C16-C21	9.744	13.097	10024155.000	60.000	ug/ml
Aliphatic C21-C28	13.098	16.748	12608586.000	80.000	ug/ml
Aliphatic C28-C40	16.749	21.546	14864058.000	120.000	ug/ml
Aliphatic EPH	3.098	21.546	53518238.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
 Data File : FC068444.D
 Signal(s) : FID1A.ch
 Acq On : 31 Mar 2025 11:17
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
 Quant Time: Apr 01 03:16:41 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:35:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

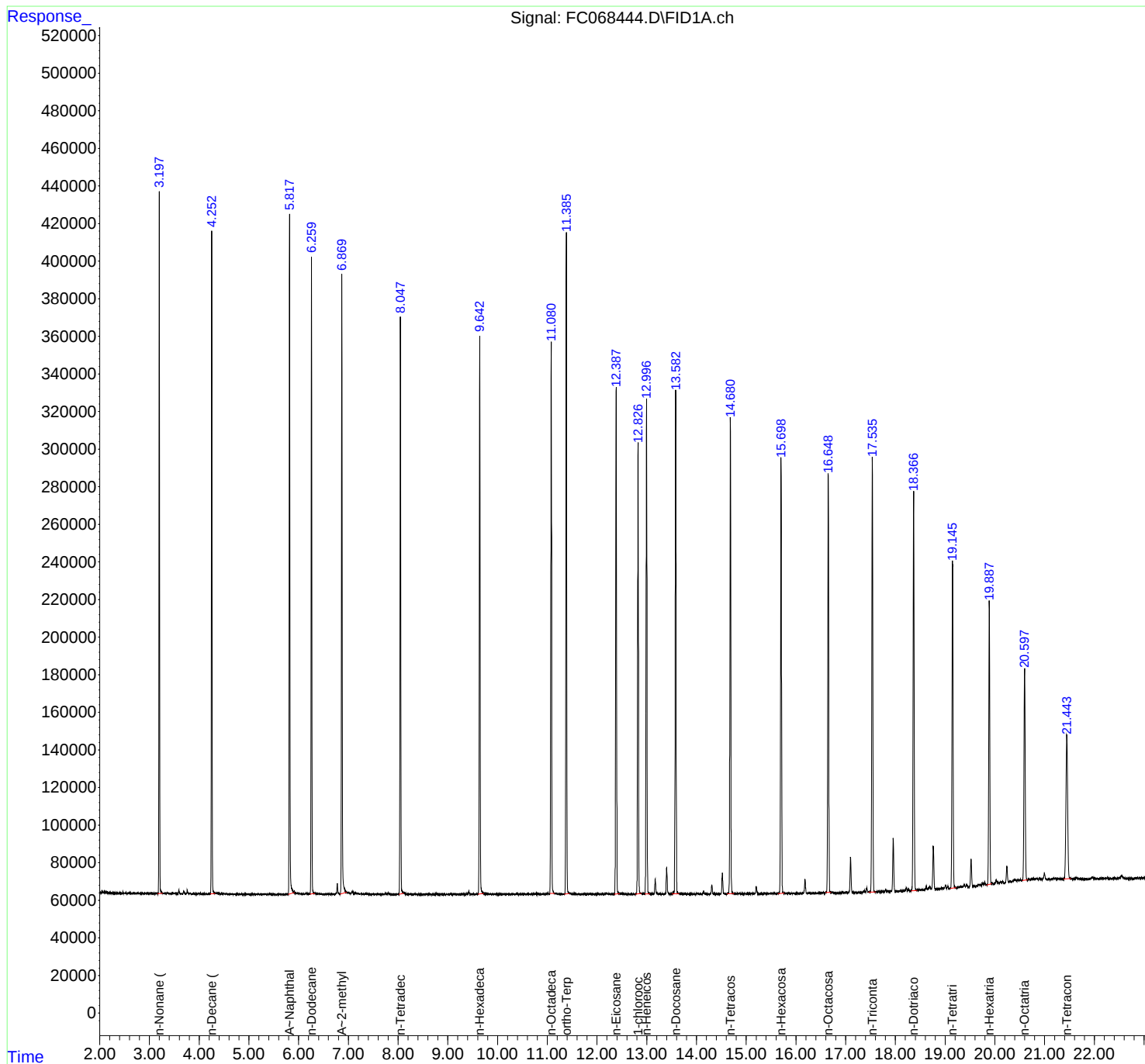
System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.384	3818492	19.224 ug/ml
Spiked Amount 50.000		Recovery =	38.45%
12) S 1-chlorooctadecane (S...	12.826	2866328	19.227 ug/ml
Spiked Amount 50.000		Recovery =	38.45%
Target Compounds			
1) T n-Nonane (C9)	3.198	3085351	19.290 ug/ml
2) T n-Decane (C10)	4.253	3165845	19.529 ug/ml
3) T A~Naphthalene (C11.7)	5.817	3454724	19.554 ug/ml
4) T n-Dodecane (C12)	6.259	3213893	19.489 ug/ml
5) T A~2-methylnaphthalene...	6.869	3333799	19.600 ug/ml
6) T n-Tetradecane (C14)	8.048	3196797	19.429 ug/ml
7) T n-Hexadecane (C16)	9.643	3359553	19.549 ug/ml
8) T n-Octadecane (C18)	11.080	3438134	19.588 ug/ml
10) T n-Eicosane (C20)	12.386	3325991	19.420 ug/ml
11) T n-Heneicosane (C21)	12.997	3260030	19.435 ug/ml
13) T n-Docosane (C22)	13.582	3244842	19.234 ug/ml
14) T n-Tetracosane (C24)	14.680	3193673	18.648 ug/ml
15) T n-Hexacosane (C26)	15.699	3103509	18.440 ug/ml
16) T n-Octacosane (C28)	16.648	3066562	18.339 ug/ml
17) T n-Tricontane (C30)	17.534	3212242	18.423 ug/ml
18) T n-Dotriacontane (C32)	18.365	3096514	18.497 ug/ml
19) T n-Tetratriacontane (C34)	19.148	2628464	17.820 ug/ml
20) T n-Hexatriacontane (C36)	19.887	2168292	17.718 ug/ml
21) T n-Octatriacontane (C38)	20.597	1952934	18.186 ug/ml
22) T n-Tetracontane (C40)	21.446	1805612	18.424 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

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\FC033125AL\
 Data File : FC068444.D
 Signal(s) : FID1A.ch
 Acq On : 31 Mar 2025 11:17
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	3.198	3.168	3.268	BB	372205	3085351	80.80%	4.606%
2	4.253	4.224	4.328	BB	349699	3165845	82.91%	4.726%
3	5.817	5.788	5.918	BB	358987	3454724	90.47%	5.157%
4	6.259	6.224	6.328	BB	332077	3213893	84.17%	4.797%
5	6.869	6.831	6.968	BB	328134	3333799	87.31%	4.976%
6	8.048	8.014	8.114	BB	306407	3196797	83.72%	4.772%
7	9.643	9.608	9.721	BB	296025	3359553	87.98%	5.015%
8	11.080	11.051	11.148	BB	292335	3438134	90.04%	5.132%
9	11.384	11.341	11.451	BB	352972	3818492	100.00%	5.700%
10	12.386	12.344	12.451	BB	271215	3325991	87.10%	4.965%
11	12.826	12.768	12.891	BB	239341	2866328	75.06%	4.279%
12	12.997	12.958	13.064	BB	262837	3260030	85.37%	4.866%
13	13.582	13.511	13.651	BB	263563	3244842	84.98%	4.844%
14	14.680	14.608	14.748	BB	250610	3193673	83.64%	4.767%
15	15.699	15.641	15.761	BB	230968	3103509	81.28%	4.633%
16	16.648	16.601	16.699	BBA	221361	3066562	80.31%	4.578%
17	17.534	17.458	17.601	BB	230619	3212242	84.12%	4.795%
18	18.365	18.311	18.434	BB	208467	3096514	81.09%	4.622%
19	19.148	19.101	19.218	BB	172073	2628464	68.84%	3.924%
20	19.887	19.831	19.928	BB	150459	2168292	56.78%	3.237%
21	20.597	20.551	20.658	BB	112739	1952934	51.14%	2.915%
22	21.446	21.378	21.531	BB	76516	1805612	47.29%	2.695%
Sum of corrected areas:							66991580	

Aliphatic EPH 032625.M Tue Apr 01 04:31:47 2025

Continuing Calibration Report for SequenceID : FC033125AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FC068461.D

Aliphatic C9-C12	10317792.000	60.000	3.098	6.359	171963.200	162319.116	-5.941
Aliphatic C12-C16	7151887.000	40.000	6.360	9.743	178797.175	168194.168	-6.304
Aliphatic C16-C21	10644632.000	60.000	9.744	13.097	177410.533	171510.591	-3.440
Aliphatic C21-C28	13003247.000	80.000	13.098	16.748	162540.588	168869.942	3.748
Aliphatic C28-C40	15298197.000	120.000	16.749	21.546	127484.975	136171.748	6.379
Aliphatic EPH	56415755.000	360.000	3.098	21.546	156710.431	157243.762	0.339

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	01 Apr 2025 01:08
Client Sample ID:		Operator:	YP/AJ
Data file:	FC068461.D	Misc:	
Instrument:	FID_C	ALS Vial:	2
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.098	6.359	10317792.000	60.000	ug/ml
Aliphatic C12-C16	6.360	9.743	7151887.000	40.000	ug/ml
Aliphatic C16-C21	9.744	13.097	10644632.000	60.000	ug/ml
Aliphatic C21-C28	13.098	16.748	13003247.000	80.000	ug/ml
Aliphatic C28-C40	16.749	21.546	15298197.000	120.000	ug/ml
Aliphatic EPH	3.098	21.546	56415755.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
 Data File : FC068461.D
 Signal(s) : FID1A.ch
 Acq On : 01 Apr 2025 01:08
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
 Quant Time: Apr 01 03:22:19 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:35:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.385	4087279	20.577 ug/ml
Spiked Amount 50.000		Recovery =	41.15%
12) S 1-chlorooctadecane (S...	12.827	3031524	20.336 ug/ml
Spiked Amount 50.000		Recovery =	40.67%
Target Compounds			
1) T n-Nonane (C9)	3.198	3362426	21.023 ug/ml
2) T n-Decane (C10)	4.252	3452973	21.301 ug/ml
3) T A~Naphthalene (C11.7)	5.817	3803795	21.530 ug/ml
4) T n-Dodecane (C12)	6.260	3502393	21.238 ug/ml
5) T A~2-methylnaphthalene...	6.869	3694133	21.718 ug/ml
6) T n-Tetradecane (C14)	8.047	3498796	21.264 ug/ml
7) T n-Hexadecane (C16)	9.643	3653091	21.257 ug/ml
8) T n-Octadecane (C18)	11.080	3691702	21.032 ug/ml
10) T n-Eicosane (C20)	12.386	3521992	20.565 ug/ml
11) T n-Heneicosane (C21)	12.997	3430938	20.454 ug/ml
13) T n-Docosane (C22)	13.583	3386199	20.072 ug/ml
14) T n-Tetracosane (C24)	14.683	3302105	19.281 ug/ml
15) T n-Hexacosane (C26)	15.701	3197032	18.995 ug/ml
16) T n-Octacosane (C28)	16.650	3117911	18.646 ug/ml
17) T n-Tricontane (C30)	17.535	3204933	18.382 ug/ml
18) T n-Dotriacontane (C32)	18.367	3146421	18.795 ug/ml
19) T n-Tetratriacontane (C34)	19.149	2659351	18.030 ug/ml
20) T n-Hexatriacontane (C36)	19.889	2234548	18.259 ug/ml
21) T n-Octatriacontane (C38)	20.599	2118203	19.725 ug/ml
22) T n-Tetracontane (C40)	21.447	1934741	19.741 ug/ml

(f)=RT Delta > 1/2 Window

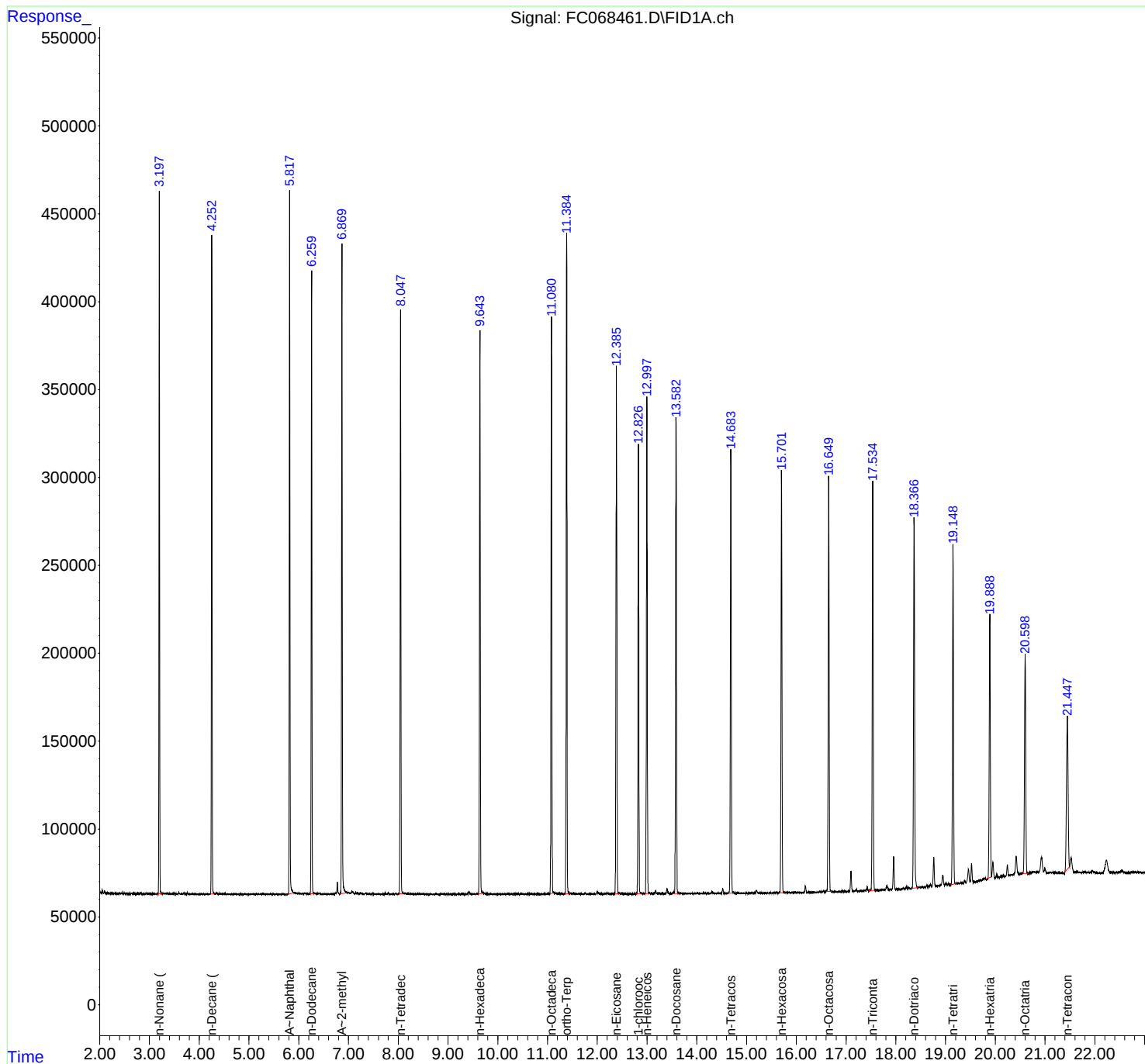
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068461.D
Signal(s) : FID1A.ch
Acq On : 01 Apr 2025 01:08
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Apr 01 03:22:19 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
 Data File : FC068461.D
 Signal(s) : FID1A.ch
 Acq On : 01 Apr 2025 01:08
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	3.198	3.161	3.258	BB	398602	3362426	82.27%	4.734%
2	4.252	4.221	4.311	BB	374231	3452973	84.48%	4.861%
3	5.817	5.778	5.908	BB	400657	3803795	93.06%	5.355%
4	6.260	6.215	6.318	BB	360288	3502393	85.69%	4.931%
5	6.869	6.831	6.971	BB	367133	3694133	90.38%	5.201%
6	8.047	8.011	8.111	BB	332181	3498796	85.60%	4.926%
7	9.643	9.601	9.708	BB	317198	3653091	89.38%	5.143%
8	11.080	11.051	11.141	BB	326844	3691702	90.32%	5.197%
9	11.385	11.345	11.448	BB	374754	4087279	100.00%	5.754%
10	12.386	12.348	12.448	BB	298419	3521992	86.17%	4.958%
11	12.827	12.768	12.891	BB	251249	3031524	74.17%	4.268%
12	12.997	12.958	13.061	BB	280207	3430938	83.94%	4.830%
13	13.583	13.511	13.638	BB	269509	3386199	82.85%	4.767%
14	14.683	14.621	14.741	BB	254521	3302105	80.79%	4.649%
15	15.701	15.628	15.761	BB	239267	3197032	78.22%	4.501%
16	16.650	16.601	16.700	BBA	236587	3117911	76.28%	4.389%
17	17.535	17.458	17.591	BB	231346	3204933	78.41%	4.512%
18	18.367	18.311	18.438	BB	208680	3146421	76.98%	4.430%
19	19.149	19.101	19.208	BB	190288	2659351	65.06%	3.744%
20	19.889	19.811	19.923	BV	149257	2234548	54.67%	3.146%
21	20.599	20.551	20.661	BB	123842	2118203	51.82%	2.982%
22	21.447	21.378	21.492	BV	86867	1934741	47.34%	2.724%
Sum of corrected areas:							71032486	

Aliphatic EPH 032625.M Tue Apr 01 04:35:37 2025

Continuing Calibration Report for SequenceID : FC040125AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FC068464.D

Aliphatic C9-C12	9793802.000	60.000	3.097	6.359	163230.033	162319.116	-0.561
Aliphatic C12-C16	6722165.000	40.000	6.360	9.742	168054.125	168194.168	0.083
Aliphatic C16-C21	9852986.000	60.000	9.743	13.096	164216.433	171510.591	4.253
Aliphatic C21-C28	12280464.000	80.000	13.097	16.749	153505.800	168869.942	9.098
Aliphatic C28-C40	14868463.000	120.000	16.750	21.544	123903.858	136171.748	9.009
Aliphatic EPH	53517880.000	360.000	3.097	21.544	148660.778	157243.762	5.458

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	01 Apr 2025 07:35
Client Sample ID:		Operator:	YP/AJ
Data file:	FC068464.D	Misc:	
Instrument:	FID_C	ALS Vial:	5
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.097	6.359	9793802.000	60.000	ug/ml
Aliphatic C12-C16	6.360	9.742	6722165.000	40.000	ug/ml
Aliphatic C16-C21	9.743	13.096	9852986.000	60.000	ug/ml
Aliphatic C21-C28	13.097	16.749	12280464.000	80.000	ug/ml
Aliphatic C28-C40	16.750	21.544	14868463.000	120.000	ug/ml
Aliphatic EPH	3.097	21.544	53517880.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040125AL\
 Data File : FC068464.D
 Signal(s) : FID1A.ch
 Acq On : 01 Apr 2025 07:35
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
 Quant Time: Apr 01 08:20:28 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:35:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.383	3774854	19.005 ug/ml
Spiked Amount 50.000		Recovery =	38.01%
12) S 1-chlorooctadecane (S...	12.825	2799660	18.780 ug/ml
Spiked Amount 50.000		Recovery =	37.56%
Target Compounds			
1) T n-Nonane (C9)	3.197	3185020	19.914 ug/ml
2) T n-Decane (C10)	4.252	3280485	20.237 ug/ml
3) T A~Naphthalene (C11.7)	5.817	3599774	20.375 ug/ml
4) T n-Dodecane (C12)	6.259	3328297	20.183 ug/ml
5) T A~2-methylnaphthalene...	6.869	3477858	20.447 ug/ml
6) T n-Tetradecane (C14)	8.047	3306142	20.094 ug/ml
7) T n-Hexadecane (C16)	9.642	3416023	19.878 ug/ml
8) T n-Octadecane (C18)	11.080	3416098	19.462 ug/ml
10) T n-Eicosane (C20)	12.384	3257472	19.020 ug/ml
11) T n-Heneicosane (C21)	12.996	3179416	18.954 ug/ml
13) T n-Docosane (C22)	13.580	3158705	18.724 ug/ml
14) T n-Tetracosane (C24)	14.681	3110405	18.162 ug/ml
15) T n-Hexacosane (C26)	15.700	3024071	17.968 ug/ml
16) T n-Octacosane (C28)	16.649	2987283	17.865 ug/ml
17) T n-Tricontane (C30)	17.534	3136291	17.988 ug/ml
18) T n-Dotriacontane (C32)	18.365	3035197	18.131 ug/ml
19) T n-Tetratriacontane (C34)	19.148	2600830	17.633 ug/ml
20) T n-Hexatriacontane (C36)	19.885	2179334	17.808 ug/ml
21) T n-Octatriacontane (C38)	20.596	2006280	18.683 ug/ml
22) T n-Tetracontane (C40)	21.444	1910531	19.494 ug/ml

(f)=RT Delta > 1/2 Window

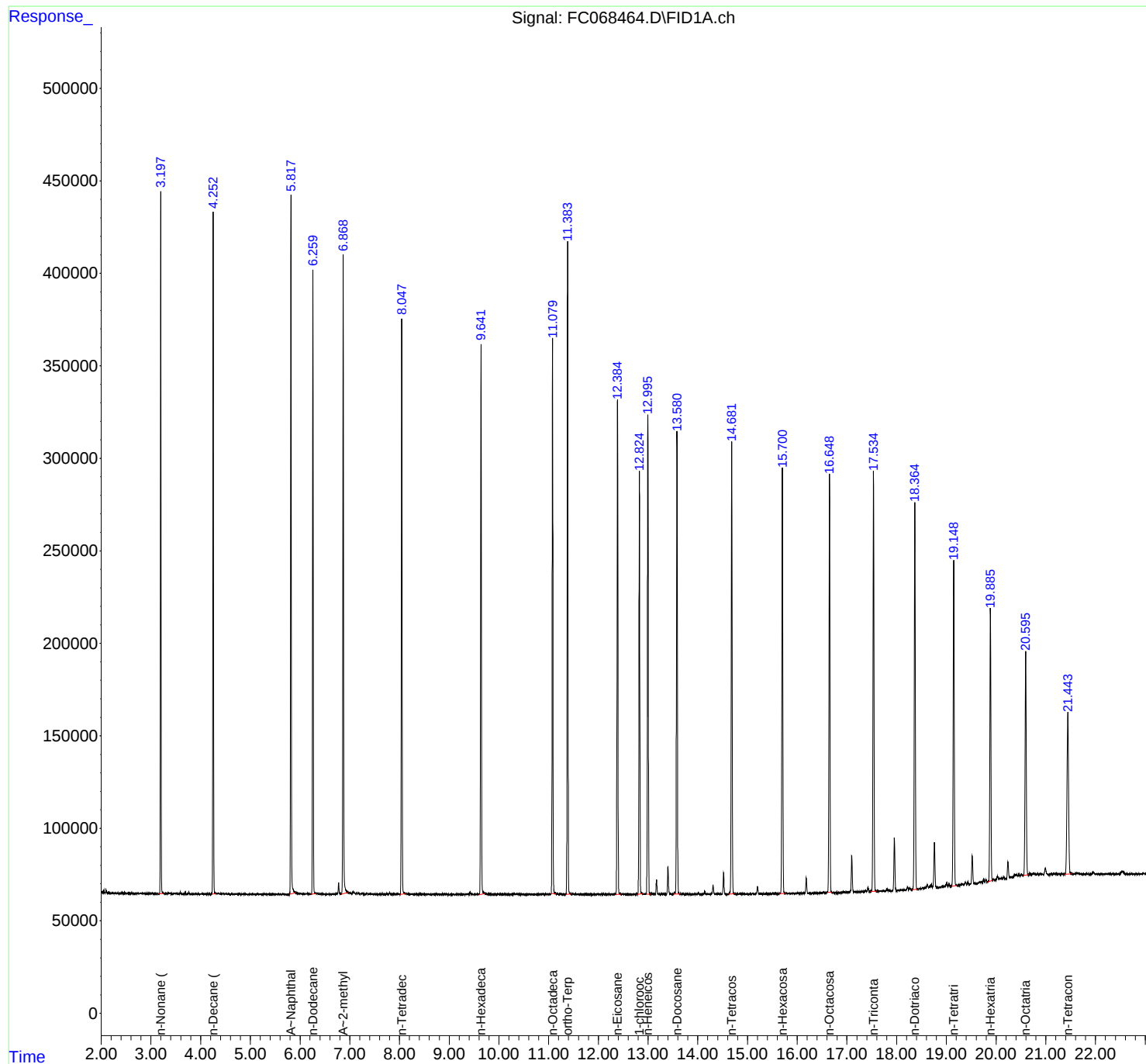
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040125AL\
Data File : FC068464.D
Signal(s) : FID1A.ch
Acq On : 01 Apr 2025 07:35
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Apr 01 08:20:28 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040125AL\
 Data File : FC068464.D
 Signal(s) : FID1A.ch
 Acq On : 01 Apr 2025 07:35
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	3.197	3.155	3.258	BB	377494	3185020	84.37%	4.742%
2	4.252	4.225	4.311	BB	364898	3280485	86.90%	4.884%
3	5.817	5.785	5.908	BB	377515	3599774	95.36%	5.359%
4	6.259	6.215	6.321	BB	336601	3328297	88.17%	4.955%
5	6.869	6.831	6.965	BB	344834	3477858	92.13%	5.178%
6	8.047	8.011	8.128	BB	310325	3306142	87.58%	4.922%
7	9.642	9.605	9.711	BB	297941	3416023	90.49%	5.086%
8	11.080	11.051	11.148	BB	296042	3416098	90.50%	5.086%
9	11.383	11.341	11.451	BB	356053	3774854	100.00%	5.620%
10	12.384	12.345	12.455	BB	266868	3257472	86.29%	4.850%
11	12.825	12.771	12.895	BB	227168	2799660	74.17%	4.168%
12	12.996	12.958	13.061	BB	257456	3179416	84.23%	4.733%
13	13.580	13.511	13.648	BB	248994	3158705	83.68%	4.703%
14	14.681	14.615	14.748	BB	245368	3110405	82.40%	4.631%
15	15.700	15.638	15.768	BB	228581	3024071	80.11%	4.502%
16	16.649	16.601	16.700	BBA	226680	2987283	79.14%	4.447%
17	17.534	17.478	17.595	BB	225913	3136291	83.08%	4.669%
18	18.365	18.311	18.428	BB	207778	3035197	80.41%	4.519%
19	19.148	19.101	19.211	BB	175595	2600830	68.90%	3.872%
20	19.885	19.835	19.925	BV	147666	2179334	57.73%	3.245%
21	20.596	20.551	20.658	BB	119973	2006280	53.15%	2.987%
22	21.444	21.378	21.521	BB	87194	1910531	50.61%	2.844%
Sum of corrected areas:							67170026	

Aliphatic EPH 032625.M Wed Apr 02 03:27:29 2025

Continuing Calibration Report for SequenceID : FC040125AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FC068468.D

Aliphatic C9-C12	9682294.000	60.000	3.097	6.359	161371.567	162319.116	0.584
Aliphatic C12-C16	6682574.000	40.000	6.360	9.742	167064.350	168194.168	0.672
Aliphatic C16-C21	9959123.000	60.000	9.743	13.096	165985.383	171510.591	3.221
Aliphatic C21-C28	12456931.000	80.000	13.097	16.749	155711.638	168869.942	7.792
Aliphatic C28-C40	14862509.000	120.000	16.750	21.544	123854.242	136171.748	9.046
Aliphatic EPH	53643431.000	360.000	3.097	21.544	149009.531	157243.762	5.237

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	01 Apr 2025 11:08
Client Sample ID:		Operator:	YP/AJ
Data file:	FC068468.D	Misc:	
Instrument:	FID_C	ALS Vial:	5
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.097	6.359	9682294.000	60.000	ug/ml
Aliphatic C12-C16	6.360	9.742	6682574.000	40.000	ug/ml
Aliphatic C16-C21	9.743	13.096	9959123.000	60.000	ug/ml
Aliphatic C21-C28	13.097	16.749	12456931.000	80.000	ug/ml
Aliphatic C28-C40	16.750	21.544	14862509.000	120.000	ug/ml
Aliphatic EPH	3.097	21.544	53643431.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040125AL\
 Data File : FC068468.D
 Signal(s) : FID1A.ch
 Acq On : 01 Apr 2025 11:08
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
 Quant Time: Apr 02 02:57:44 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:35:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.383	3811647	19.190 ug/ml
Spiked Amount 50.000		Recovery =	38.38%
12) S 1-chlorooctadecane (S...	12.825	2847887	19.104 ug/ml
Spiked Amount 50.000		Recovery =	38.21%
Target Compounds			
1) T n-Nonane (C9)	3.197	3149608	19.692 ug/ml
2) T n-Decane (C10)	4.252	3241103	19.994 ug/ml
3) T A~Naphthalene (C11.7)	5.816	3558384	20.141 ug/ml
4) T n-Dodecane (C12)	6.258	3291583	19.960 ug/ml
5) T A~2-methylnaphthalene...	6.868	3441492	20.233 ug/ml
6) T n-Tetradecane (C14)	8.045	3275889	19.910 ug/ml
7) T n-Hexadecane (C16)	9.641	3406685	19.823 ug/ml
8) T n-Octadecane (C18)	11.079	3432816	19.557 ug/ml
10) T n-Eicosane (C20)	12.384	3302338	19.282 ug/ml
11) T n-Heneicosane (C21)	12.994	3223969	19.220 ug/ml
13) T n-Docosane (C22)	13.579	3204760	18.997 ug/ml
14) T n-Tetracosane (C24)	14.680	3159959	18.451 ug/ml
15) T n-Hexacosane (C26)	15.699	3069379	18.237 ug/ml
16) T n-Octacosane (C28)	16.646	3022833	18.078 ug/ml
17) T n-Tricontane (C30)	17.532	3168132	18.170 ug/ml
18) T n-Dotriacontane (C32)	18.364	3051835	18.230 ug/ml
19) T n-Tetratriacontane (C34)	19.145	2604001	17.654 ug/ml
20) T n-Hexatriacontane (C36)	19.884	2162292	17.669 ug/ml
21) T n-Octatriacontane (C38)	20.594	1986952	18.503 ug/ml
22) T n-Tetracontane (C40)	21.443	1889297	19.277 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

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\FC040125AL\
Data File : FC068468.D
Signal(s) : FID1A.ch
Acq On : 01 Apr 2025 11:08
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	3.197	3.171	3.258	BB	376566	3149608	82.63%	4.680%
2	4.252	4.218	4.308	BB	352426	3241103	85.03%	4.816%
3	5.816	5.788	5.904	BB	370620	3558384	93.36%	5.287%
4	6.258	6.221	6.318	BB	330912	3291583	86.36%	4.891%
5	6.868	6.828	6.964	BB	346988	3441492	90.29%	5.113%
6	8.045	8.011	8.111	BB	307920	3275889	85.94%	4.867%
7	9.641	9.594	9.708	BB	298981	3406685	89.38%	5.062%
8	11.079	11.051	11.144	BB	291273	3432816	90.06%	5.101%
9	11.383	11.344	11.471	BB	354323	3811647	100.00%	5.663%
10	12.384	12.344	12.458	BB	268281	3302338	86.64%	4.907%
11	12.825	12.768	12.898	BB	241729	2847887	74.72%	4.231%
12	12.994	12.958	13.068	BB	265172	3223969	84.58%	4.790%
13	13.579	13.511	13.648	BB	254836	3204760	84.08%	4.762%
14	14.680	14.618	14.751	BB	244898	3159959	82.90%	4.695%
15	15.699	15.651	15.768	BB	229030	3069379	80.53%	4.561%
16	16.646	16.601	16.699	BBA	218747	3022833	79.31%	4.491%
17	17.532	17.454	17.601	BB	223811	3168132	83.12%	4.707%
18	18.364	18.311	18.424	BB	214413	3051835	80.07%	4.534%
19	19.145	19.101	19.214	BB	175471	2604001	68.32%	3.869%
20	19.884	19.811	19.924	BB	136232	2162292	56.73%	3.213%
21	20.594	20.551	20.658	BB	119042	1986952	52.13%	2.952%
22	21.443	21.378	21.518	BB	85480	1889297	49.57%	2.807%
Sum of corrected areas:							67302838	

Aliphatic EPH 032625.M Wed Apr 02 03:28:53 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC040125AL\
 Data File : FC068468.D
 Signal(s) : FID1A.ch
 Acq On : 01 Apr 2025 11:08
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 FID_C
 LabSampleId :
 20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
 Quant Time: Apr 02 02:57:44 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:35:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 T	n-Nonane (C9)	159.943	157.480 E3	1.5	95	0.00
2 T	n-Decane (C10)	162.107	162.055 E3	0.0	96	0.00
3 T	A~Naphthalene (C11.7)	176.677	177.919 E3	-0.7	96	0.00
4 T	n-Dodecane (C12)	164.908	164.579 E3	0.2	96	0.00
5 T	A~2-methylnaphthalene (C12.	170.095	172.075 E3	-1.2	96	0.00
6 T	n-Tetradecane (C14)	164.537	163.794 E3	0.5	96	0.00
7 T	n-Hexadecane (C16)	171.851	170.334 E3	0.9	95	0.00
8 T	n-Octadecane (C18)	175.526	171.641 E3	2.2	94	0.00
9 S	ortho-Terphenyl (SURR)	198.629	190.582 E3	4.1	92	0.00
10 T	n-Eicosane (C20)	171.265	165.117 E3	3.6	93	0.00
11 T	n-Heneicosane (C21)	167.740	161.198 E3	3.9	92	0.00
12 S	1-chlorooctadecane (SURR)	149.075	142.394 E3	4.5	91	0.00
13 T	n-Docosane (C22)	168.700	160.238 E3	5.0	92	0.00
14 T	n-Tetracosane (C24)	171.262	157.998 E3	7.7	91	0.00
15 T	n-Hexacosane (C26)	168.306	153.469 E3	8.8	90	0.00
16 T	n-Octacosane (C28)	167.212	151.142 E3	9.6	90	0.00
17 T	n-Tricontane (C30)	174.356	158.407 E3	9.1	90	0.00
18 T	n-Dotriacontane (C32)	167.404	152.592 E3	8.8	90	0.00
19 T	n-Tetratriacontane (C34)	147.499	130.200 E3	11.7	86	0.00
20 T	n-Hexatriacontane (C36)	122.380	108.115 E3	11.7	85	0.00
21 T	n-Octatriacontane (C38)	107.385	99.348 E3	7.5	89	0.00
22 T	n-Tetracontane (C40)	98.006	94.465 E3	3.6	92	0.00

Evaluate Continuing Calibration Report - Not Found

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



QC SAMPLE DATA

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	PB167381BL	SDG No.:	Q1675
Lab Sample ID:	PB167381BL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
03/31/25 08:56	03/31/25 13:54	PB167381

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C28-C40	Aliphatic C28-C40	1.18	U	1	1.18	2.00	mg/kg	FC068445.D
Aliphatic C9-C28	Aliphatic C9-C28	0.91	U	1	0.91	3.99	mg/kg	FC068445.D
Total AliphaticEPH	Total AliphaticEPH	2.09	U		2.09	5.99	mg/kg	
Total EPH	Total EPH	2.09	U		2.09	5.99	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	PB167381BL	SDG No.:	Q1675
Lab Sample ID:	PB167381BL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068445.D	1	03/31/25	03/31/25	PB167381

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	0.91	U	0.91	3.99	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	1.18	U	1.18	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	35.3		40 - 140	71%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	35.7		40 - 140	71%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB167381BL	Acq On:	31 Mar 2025 13:54
Client Sample ID:	PB167381BL	Operator:	YP/AJ
Data file:	FC068445.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	3.098	6.359	0	0	300	ug/ml
Aliphatic C12-C16	6.360	9.743	0	0	200	ug/ml
Aliphatic C16-C21	9.744	13.097	0	0	300	ug/ml
Aliphatic C21-C28	13.098	16.748	0	0	400	ug/ml
Aliphatic C28-C40	16.749	21.546	0	0	600	ug/ml
Aliphatic EPH	3.098	21.546	0	0		ug/ml
ortho-Terphenyl (SURR)	11.387	11.387	7084773	35.67		ug/ml
1-chlorooctadecane (SURR)	12.828	12.828	5268449	35.34		ug/ml
Aliphatic C9-C28	3.098	16.748	0	0	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
 Data File : FC068445.D
 Signal(s) : FID1A.ch
 Acq On : 31 Mar 2025 13:54
 Operator : YP/AJ
 Sample : PB167381BL
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 PB167381BL

Integration File: autoint1.e
 Quant Time: Apr 01 03:17:09 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:35:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.387	7084773	35.668 ug/ml
Spiked Amount 50.000		Recovery =	71.34%
12) S 1-chlorooctadecane (S...	12.828	5268449	35.341 ug/ml
Spiked Amount 50.000		Recovery =	70.68%

Target Compounds

(f)=RT Delta > 1/2 Window

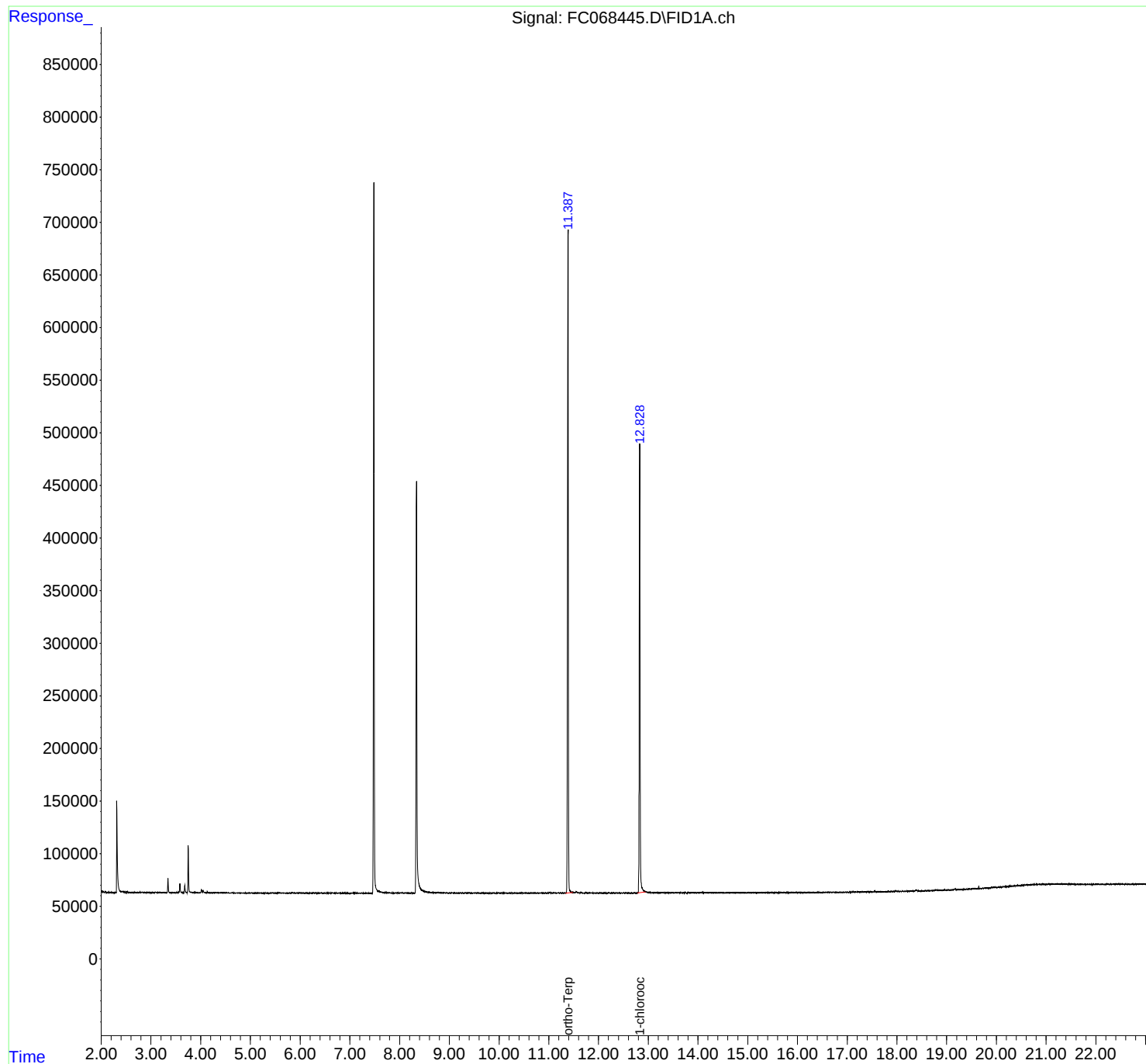
(m)=manual int.

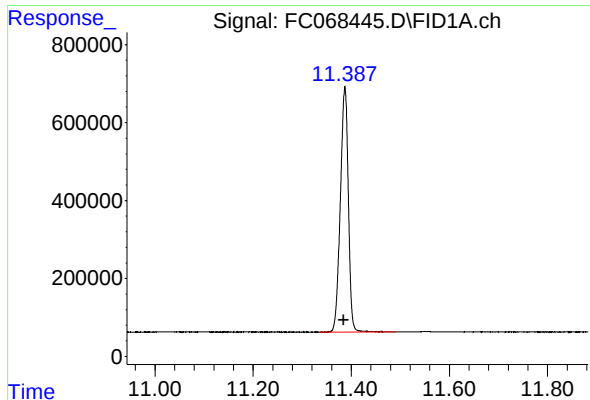
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068445.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 13:54
Operator : YP/AJ
Sample : PB167381BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB167381BL

Integration File: autoint1.e
Quant Time: Apr 01 03:17:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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

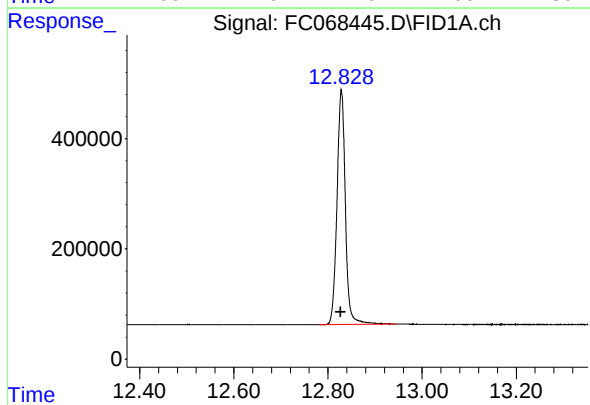




#9 ortho-Terphenyl (SURR)

R.T.: 11.387 min
Delta R.T.: 0.002 min
Response: 7084773
Conc: 35.67 ug/ml

Instrument :
FID_C
ClientSampleId :
PB167381BL



#12 1-chlorooctadecane (SURR)

R.T.: 12.828 min
Delta R.T.: 0.001 min
Response: 5268449
Conc: 35.34 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068445.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 13:54
Sample : PB167381BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	11.387	11.334	11.491	BB	632659	7084773	100.00%	57.352%
2	12.828	12.781	12.944	BB	424392	5268449	74.36%	42.648%
Sum of corrected areas:							12353222	

Aliphatic EPH 032625.M Tue Apr 01 04:32:22 2025

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	PB167381BS	SDG No.:	Q1675
Lab Sample ID:	PB167381BS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
03/31/25 08:56	03/31/25 14:31	PB167381

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C28-C40	Aliphatic C28-C40	22.6		1	1.18	2.00	mg/kg	FC068446.D
Aliphatic C9-C28	Aliphatic C9-C28	68.2		1	0.91	3.99	mg/kg	FC068446.D
Total AliphaticEPH	Total AliphaticEPH	90.8			2.09	5.99	mg/kg	
Total EPH	Total EPH	90.8			2.09	5.99	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	PB167381BS	SDG No.:	Q1675
Lab Sample ID:	PB167381BS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068446.D	1	03/31/25	03/31/25	PB167381

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	68.2		0.91	3.99	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	22.6		1.18	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	36.6		40 - 140	73%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	36.9		40 - 140	74%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB167381BS	Acq On:	31 Mar 2025 14:31
Client Sample ID:	PB167381BS	Operator:	YP/AJ
Data file:	FC068446.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	3.098	6.359	29606309	182.396	300	ug/ml
Aliphatic C12-C16	6.360	9.743	41030530	243.947	200	ug/ml
Aliphatic C16-C21	9.744	13.097	47462012	276.729	300	ug/ml
Aliphatic C21-C28	13.098	16.748	54540738	322.975	400	ug/ml
Aliphatic C28-C40	16.749	21.546	46162046	338.999	600	ug/ml
Aliphatic EPH	3.098	21.546	218801635	1370		ug/ml
ortho-Terphenyl (SURR)	11.388	11.388	7332248	36.91		ug/ml
1-chlorooctadecane (SURR)	12.828	12.828	5457920	36.61		ug/ml
Aliphatic C9-C28	3.098	16.748	172639589	1030	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
 Data File : FC068446.D
 Signal(s) : FID1A.ch
 Acq On : 31 Mar 2025 14:31
 Operator : YP/AJ
 Sample : PB167381BS
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :

FID_C

ClientSampleId :

PB167381BS

Manual Integrations**APPROVED**

Reviewed By :Yogesh Patel 04/01/2025

Supervised By :mohammad ahmed 04/02/2025

Integration File: autoint1.e

Quant Time: Apr 01 03:17:25 2025

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M

Quant Title : GC Extractables

QLast Update : Wed Mar 26 13:35:27 2025

Response via : Initial Calibration

Integrator: ChemStation

Volume Inj. : 1 ul

Signal Phase : Rxi-1ms

Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.388	7332248	36.914 ug/ml
Spiked Amount 50.000		Recovery =	73.83%
12) S 1-chlorooctadecane (S...	12.828	5457920	36.612 ug/ml
Spiked Amount 50.000		Recovery =	73.22%
Target Compounds			
1) T n-Nonane (C9)	3.203	5306898	33.180 ug/ml
2) T n-Decane (C10)	4.256	5623606	34.691 ug/ml
3) T A~Naphthalene (C11.7)	5.820	6577765	37.230 ug/ml
4) T n-Dodecane (C12)	6.261	6063272	36.768 ug/ml
5) T A~2-methylnaphthalene...	6.871	6222859	36.585 ug/ml
6) T n-Tetradecane (C14)	8.051	6433374	39.100 ug/ml
7) T n-Hexadecane (C16)	9.645	6671860	38.824 ug/ml
8) T n-Octadecane (C18)	11.083	6585903	37.521 ug/ml
10) T n-Eicosane (C20)	12.389	6671193	38.952 ug/ml
11) T n-Heneicosane (C21)	12.999	6291163	37.505 ug/ml
13) T n-Docosane (C22)	13.584	6155739	36.489 ug/ml
14) T n-Tetracosane (C24)	14.643	12502057	72.999 ug/mlm
15) T n-Hexacosane (C26)	15.705	5753957	34.188 ug/ml
16) T n-Octacosane (C28)	16.651	5538759	33.124 ug/ml
17) T n-Tricontane (C30)	17.540	5414223	31.053 ug/ml
18) T n-Dotriacontane (C32)	18.368	5198635	31.054 ug/ml
19) T n-Tetratriacontane (C34)	19.151	5002100	33.913 ug/ml
20) T n-Hexatriacontane (C36)	19.890	4690133	38.324 ug/ml
21) T n-Octatriacontane (C38)	20.601	4569299	42.551 ug/ml
22) T n-Tetracontane (C40)	21.450	4320321	44.082 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068446.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 14:31
Operator : YP/AJ
Sample : PB167381BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

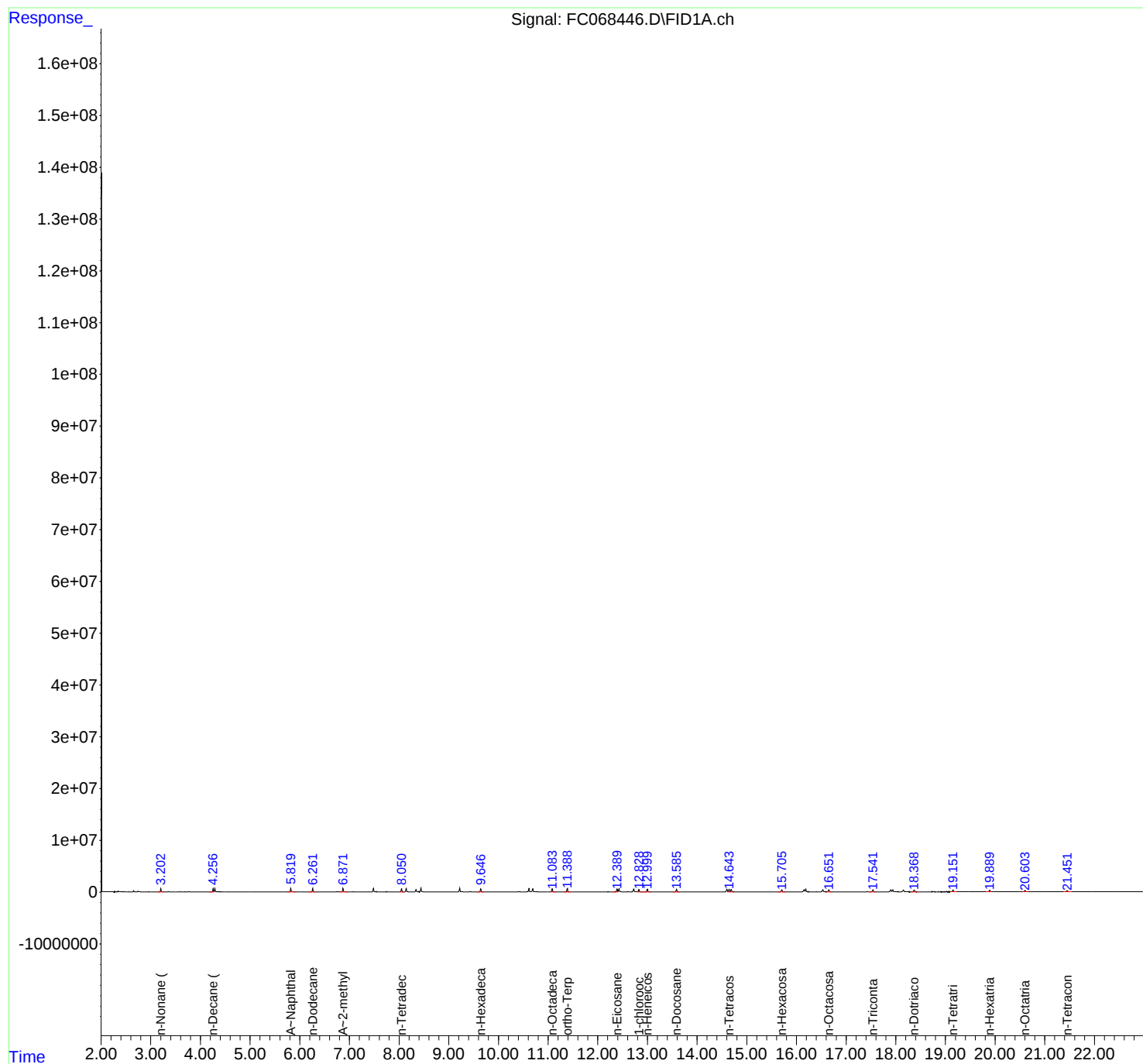
Instrument :
FID_C
ClientSampleId :
PB167381BS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 04/01/2025
Supervised By :mohammad ahmed 04/02/2025

Integration File: autoint1.e
Quant Time: Apr 01 03:17:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Instrument :

FID_C

ClientSampleId :

PB167381BS

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/01/2025

Supervised By :mohammad ahmed 04/02/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC03312
Data File : FC068446.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 14:31
Sample : PB167381BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	3.203	3.138	3.265	BB	632168	5306898	72.01%	2.291%
2	4.256	4.178	4.274	BV	629542	5623606	76.31%	2.428%
3	4.291	4.274	4.339	VV	690018	6034768	81.89%	2.606%
4	5.820	5.748	5.915	BB	685891	6577765	89.26%	2.840%
5	6.262	6.178	6.325	BB	622519	6063272	82.28%	2.618%
6	6.871	6.808	6.971	BB	630090	6222859	84.44%	2.687%
7	8.051	8.001	8.111	BV	618467	6433374	87.30%	2.778%
8	8.144	8.111	8.215	PB	689153	7107192	96.44%	3.069%
9	8.441	8.408	8.525	VB	727737	7225732	98.05%	3.120%
10	9.222	9.145	9.331	BB	679012	7369513	100.00%	3.182%
11	9.645	9.565	9.715	BB	585051	6671860	90.53%	2.881%
12	10.616	10.521	10.658	BV	651738	7126969	96.71%	3.077%
13	10.692	10.658	10.808	VB	596912	7156388	97.11%	3.090%
14	11.083	11.051	11.158	BB	567184	6585903	89.37%	2.844%
15	11.388	11.318	11.458	BB	665876	7332248	99.49%	3.166%
16	12.389	12.305	12.407	BV	552295	6671193	90.52%	2.881%
17	12.428	12.407	12.498	VB	585975	6851436	92.97%	2.958%
18	12.723	12.651	12.763	BV	579777	6778960	91.99%	2.927%
19	12.828	12.796	12.898	VB	457410	5457920	74.06%	2.357%
20	12.999	12.918	13.068	BB	518566	6291163	85.37%	2.716%
21	13.584	13.511	13.655	BB	488970	6155739	83.53%	2.658%
22	14.599	14.515	14.618	BV	475254	6395229	86.78%	2.761%
23	14.643	14.618	14.661	VV	513718	6365078	86.37%	2.748%
24	14.684	14.661	14.771	VB	474771	6119164	83.03%	2.642%
25	15.705	15.625	15.775	BB	434083	5753957	78.08%	2.485%
26	16.153	16.075	16.168	BV	434325	6118765	83.03%	2.642%
27	16.187	16.168	16.241	VV	541188	6255125	84.88%	2.701%
28	16.531	16.441	16.596	BBA	429653	5838922	79.23%	2.521%
29	16.651	16.601	16.700	BBA	406225	5538759	75.16%	2.392%
30	17.540	17.465	17.595	BB	400229	5414223	73.47%	2.338%
31	17.900	17.811	17.916	BV	419449	5746282	77.97%	2.481%
32	17.940	17.916	18.041	VB	418899	5717418	77.58%	2.469%
33	18.154	18.061	18.251	BB	378723	5503635	74.68%	2.376%
34	18.368	18.311	18.445	BB	364126	5198635	70.54%	2.245%
35	19.151	19.101	19.225	BB	348113	5002100	67.88%	2.160%
36	19.890	19.811	19.931	BB	316147	4690133	63.64%	2.025%

	Area	Height	Area%	Height%	Integration	Integration	Integration	Integration	Integration	Integration
37	20.601	20.551	20.665	BB	271410	4569299	62.00%	1.973%		
38	21.450	21.378	21.545	BB	198021	4320321	58.00%	1.973%		
					Sum of corrected areas:		2315			

Aliphatic EPH 032625.M Tue Apr 01 04:33:26 2025

Instrument :
FID_C
ClientSampleId :
PB167381BS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/01/2025
Supervised By :mohammad ahmed 04/02/2025

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	PB167381BSD	SDG No.:	Q1675
Lab Sample ID:	PB167381BSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
03/31/25 08:56	03/31/25 15:08	PB167381

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C28-C40	Aliphatic C28-C40	22.2		1	1.18	2.00	mg/kg	FC068447.D
Aliphatic C9-C28	Aliphatic C9-C28	67.3		1	0.91	4.00	mg/kg	FC068447.D
Total AliphaticEPH	Total AliphaticEPH	89.5			2.09	6.00	mg/kg	
Total EPH	Total EPH	89.5			2.09	6.00	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	PB167381BSD	SDG No.:	Q1675
Lab Sample ID:	PB167381BSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068447.D	1	03/31/25	03/31/25	PB167381

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	67.3		0.91	4.00	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	22.2		1.18	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	35.6		40 - 140	71%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	35.9		40 - 140	72%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB167381BSD	Acq On:	31 Mar 2025 15:08
Client Sample ID:	PB167381BSD	Operator:	YP/AJ
Data file:	FC068447.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	3.098	6.359	29831285	183.782	300	ug/ml
Aliphatic C12-C16	6.360	9.743	40449019	240.49	200	ug/ml
Aliphatic C16-C21	9.744	13.097	46233510	269.567	300	ug/ml
Aliphatic C21-C28	13.098	16.748	53364669	316.01	400	ug/ml
Aliphatic C28-C40	16.749	21.546	45316617	332.79	600	ug/ml
Aliphatic EPH	3.098	21.546	215195100	1340		ug/ml
ortho-Terphenyl (SURR)	11.388	11.388	7127983	35.89		ug/ml
1-chlorooctadecane (SURR)	12.829	12.829	5308935	35.61		ug/ml
Aliphatic C9-C28	3.098	16.748	169878483	1010	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
 Data File : FC068447.D
 Signal(s) : FID1A.ch
 Acq On : 31 Mar 2025 15:08
 Operator : YP/AJ
 Sample : PB167381BSD
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 PB167381BSD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 04/01/2025
 Supervised By :mohammad ahmed 04/02/2025

Integration File: autoint1.e
 Quant Time: Apr 01 03:17:53 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:35:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.388	7127983	35.886 ug/ml
Spiked Amount 50.000		Recovery =	71.77%
12) S 1-chlorooctadecane (S...	12.829	5308935	35.613 ug/ml
Spiked Amount 50.000		Recovery =	71.23%
Target Compounds			
1) T n-Nonane (C9)	3.203	5386211	33.676 ug/ml
2) T n-Decane (C10)	4.257	5686695	35.080 ug/ml
3) T A~Naphthalene (C11.7)	5.820	6594233	37.324 ug/ml
4) T n-Dodecane (C12)	6.261	6079949	36.869 ug/ml
5) T A~2-methylnaphthalene...	6.872	6196105	36.427 ug/ml
6) T n-Tetradecane (C14)	8.051	6369803	38.713 ug/ml
7) T n-Hexadecane (C16)	9.645	6542262	38.069 ug/ml
8) T n-Octadecane (C18)	11.084	6420569	36.579 ug/ml
10) T n-Eicosane (C20)	12.390	6490982	37.900 ug/ml
11) T n-Heneicosane (C21)	12.999	6126033	36.521 ug/ml
13) T n-Docosane (C22)	13.584	6001617	35.576 ug/ml
14) T n-Tetracosane (C24)	14.642	12218804	71.346 ug/mlm
15) T n-Hexacosane (C26)	15.705	5647090	33.553 ug/ml
16) T n-Octacosane (C28)	16.651	5441584	32.543 ug/ml
17) T n-Tricontane (C30)	17.538	5323960	30.535 ug/ml
18) T n-Dotriacontane (C32)	18.369	5102822	30.482 ug/ml
19) T n-Tetratriacontane (C34)	19.151	4907791	33.273 ug/ml
20) T n-Hexatriacontane (C36)	19.891	4605731	37.635 ug/ml
21) T n-Octatriacontane (C38)	20.601	4495575	41.864 ug/ml
22) T n-Tetracontane (C40)	21.449	4256548	43.432 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068447.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 15:08
Operator : YP/AJ
Sample : PB167381BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

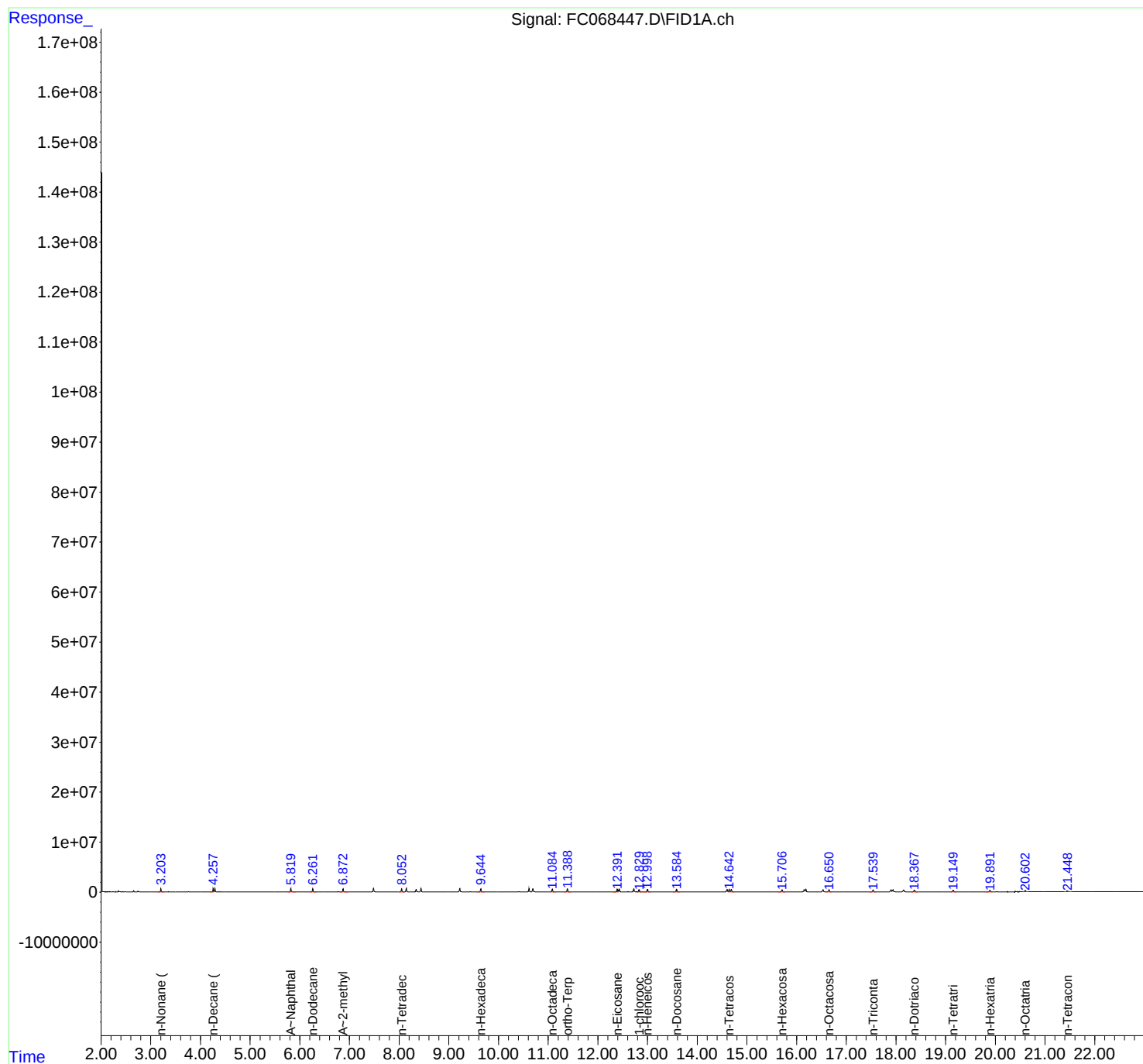
Instrument :
FID_C
ClientSampleId :
PB167381BSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 04/01/2025
Supervised By :mohammad ahmed 04/02/2025

Integration File: autoint1.e
Quant Time: Apr 01 03:17:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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



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Instrument :

FID_C

ClientSampleId :

PB167381BSD

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/01/2025

Supervised By :mohammad ahmed 04/02/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC03312
Data File : FC068447.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 15:08
Sample : PB167381BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	3.203	3.141	3.271	BB	643928	5386211	74.61%	2.366%
2	4.257	4.194	4.274	BV	650238	5686695	78.77%	2.498%
3	4.292	4.274	4.339	VV	704063	6084197	84.28%	2.673%
4	5.820	5.758	5.914	BB	690972	6594233	91.35%	2.897%
5	6.261	6.204	6.328	BB	600015	6079949	84.22%	2.671%
6	6.872	6.808	6.974	BB	631658	6196105	85.83%	2.722%
7	8.051	8.001	8.111	BB	606956	6369803	88.24%	2.798%
8	8.145	8.114	8.221	BB	705177	7015422	97.18%	3.082%
9	8.441	8.407	8.518	VB	706808	7106456	98.44%	3.122%
10	9.222	9.144	9.331	BB	656478	7218971	100.00%	3.171%
11	9.645	9.564	9.711	BB	598861	6542262	90.63%	2.874%
12	10.616	10.528	10.659	BV	656986	6945706	96.21%	3.051%
13	10.692	10.659	10.821	VB	613741	6986144	96.77%	3.069%
14	11.084	11.051	11.158	BB	565627	6420569	88.94%	2.821%
15	11.388	11.318	11.461	BB	634697	7127983	98.74%	3.131%
16	12.390	12.301	12.407	BV	532660	6490982	89.92%	2.852%
17	12.428	12.407	12.504	VB	563777	6676605	92.49%	2.933%
18	12.723	12.644	12.764	BV	592063	6587471	91.25%	2.894%
19	12.829	12.796	12.894	VB	434651	5308935	73.54%	2.332%
20	12.999	12.914	13.064	BB	493069	6126033	84.86%	2.691%
21	13.584	13.511	13.648	BB	497714	6001617	83.14%	2.637%
22	14.600	14.518	14.619	BV	464166	6251055	86.59%	2.746%
23	14.642	14.619	14.661	VV	508582	6215002	86.09%	2.730%
24	14.684	14.661	14.768	VB	478361	5989872	82.97%	2.631%
25	15.705	15.624	15.771	BB	419138	5647090	78.23%	2.481%
26	16.152	16.071	16.168	BV	394764	5980713	82.85%	2.627%
27	16.186	16.168	16.238	VV	527336	6124716	84.84%	2.691%
28	16.530	16.438	16.596	BBA	445881	5713020	79.14%	2.510%
29	16.651	16.601	16.699	BBA	399474	5441584	75.38%	2.391%
30	17.538	17.468	17.594	BB	387439	5323960	73.75%	2.339%
31	17.900	17.804	17.916	BV	412892	5638929	78.11%	2.477%
32	17.939	17.916	18.051	VB	394154	5598312	77.55%	2.459%
33	18.154	18.071	18.258	BB	374722	5386949	74.62%	2.367%
34	18.369	18.311	18.428	BB	346859	5102822	70.69%	2.242%
35	19.151	19.101	19.214	BB	336410	4907791	67.98%	2.156%
36	19.891	19.811	19.934	BB	314634	4605731	63.80%	2.023%

rters
37 20.601 20.551 20.668 BB 260197 4495575 62.27% 1.975%
38 21.449 21.378 21.541 BB 185008 4256548 58
Sum of corrected areas: 2276

Aliphatic EPH 032625.M Tue Apr 01 04:34:40 2025

Instrument :

FID_C

ClientSampleId :

PB167381BSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/01/2025

Supervised By :mohammad ahmed 04/02/2025

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	RT5358MS	SDG No.:	Q1675
Lab Sample ID:	Q1674-01MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	89.2
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
03/31/25 08:56	03/31/25 18:15	PB167381

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C28-C40	Aliphatic C28-C40	30.7		1	1.32	2.24	mg/kg FC068452.D
Aliphatic C9-C28	Aliphatic C9-C28	76.6		1	1.02	4.48	mg/kg FC068452.D
Total AliphaticEPH	Total AliphaticEPH	107			2.34	6.72	mg/kg
Total EPH	Total EPH	107			2.34	6.72	mg/kg

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	RT5358MS	SDG No.:	Q1675
Lab Sample ID:	Q1674-01MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	89.2
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068452.D	1	03/31/25	03/31/25	PB167381

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	76.6		1.02	4.48	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	30.7		1.32	2.24	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	32.9		40 - 140	66%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	33.5		40 - 140	67%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1674-01MS	Acq On:	31 Mar 2025 18:15
Client Sample ID:	RT5358MS	Operator:	YP/AJ
Data file:	FC068452.D	Misc:	
Instrument:	FID_C	ALS Vial:	18
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.098	6.359	28570900	176.017	300	ug/ml
Aliphatic C12-C16	6.360	9.743	38958045	231.625	200	ug/ml
Aliphatic C16-C21	9.744	13.097	46976371	273.898	300	ug/ml
Aliphatic C21-C28	13.098	16.748	58171667	344.476	400	ug/ml
Aliphatic C28-C40	16.749	21.546	56022477	411.41	600	ug/ml
Aliphatic EPH	3.098	21.546	228699460	1440		ug/ml
ortho-Terphenyl (SURR)	11.388	11.388	6654048	33.5		ug/ml
1-chlorooctadecane (SURR)	12.829	12.829	4909904	32.94		ug/ml
Aliphatic C9-C28	3.098	16.748	172676983	1030	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
 Data File : FC068452.D
 Signal(s) : FID1A.ch
 Acq On : 31 Mar 2025 18:15
 Operator : YP/AJ
 Sample : Q1674-01MS
 Misc :
 ALS Vial : 18 Sample Multiplier: 1

Instrument :

FID_C

ClientSampleId :

RT5358MS

Manual Integrations**APPROVED**

Reviewed By :Yogesh Patel 04/01/2025

Supervised By :mohammad ahmed 04/02/2025

Integration File: autoint1.e

Quant Time: Apr 01 03:19:27 2025

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M

Quant Title : GC Extractables

QLast Update : Wed Mar 26 13:35:27 2025

Response via : Initial Calibration

Integrator: ChemStation

Volume Inj. : 1 ul

Signal Phase : Rxi-1ms

Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.388	6654048	33.500 ug/ml
Spiked Amount 50.000		Recovery =	67.00%
12) S 1-chlorooctadecane (S...	12.829	4909904	32.936 ug/ml
Spiked Amount 50.000		Recovery =	65.87%
Target Compounds			
1) T n-Nonane (C9)	3.196	4200191	26.261 ug/ml
2) T n-Decane (C10)	4.253	4742376	29.255 ug/ml
3) T A~Naphthalene (C11.7)	5.818	5687418	32.191 ug/ml
4) T n-Dodecane (C12)	6.260	5331602	32.331 ug/ml
5) T A~2-methylnaphthalene...	6.870	5502312	32.348 ug/ml
6) T n-Tetradecane (C14)	8.051	5843613	35.515 ug/ml
7) T n-Hexadecane (C16)	9.645	6258756	36.420 ug/ml
8) T n-Octadecane (C18)	11.083	6191944	35.276 ug/ml
10) T n-Eicosane (C20)	12.389	6250399	36.495 ug/ml
11) T n-Heneicosane (C21)	12.999	5874184	35.019 ug/ml
13) T n-Docosane (C22)	13.583	5753660	34.106 ug/ml
14) T n-Tetracosane (C24)	14.642	11528771	67.316 ug/mlm
15) T n-Hexacosane (C26)	15.705	5368861	31.899 ug/ml
16) T n-Octacosane (C28)	16.652	5134186	30.705 ug/ml
17) T n-Tricontane (C30)	17.539	5017019	28.775 ug/ml
18) T n-Dotriacontane (C32)	18.370	4794468	28.640 ug/ml
19) T n-Tetratriacontane (C34)	19.153	4685620	31.767 ug/ml
20) T n-Hexatriacontane (C36)	19.890	4290092	35.055 ug/ml
21) T n-Octatriacontane (C38)	20.602	4172916	38.859 ug/ml
22) T n-Tetracontane (C40)	21.450	3982395	40.634 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068452.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 18:15
Operator : YP/AJ
Sample : Q1674-01MS
Misc :
ALS Vial : 18 Sample Multiplier: 1

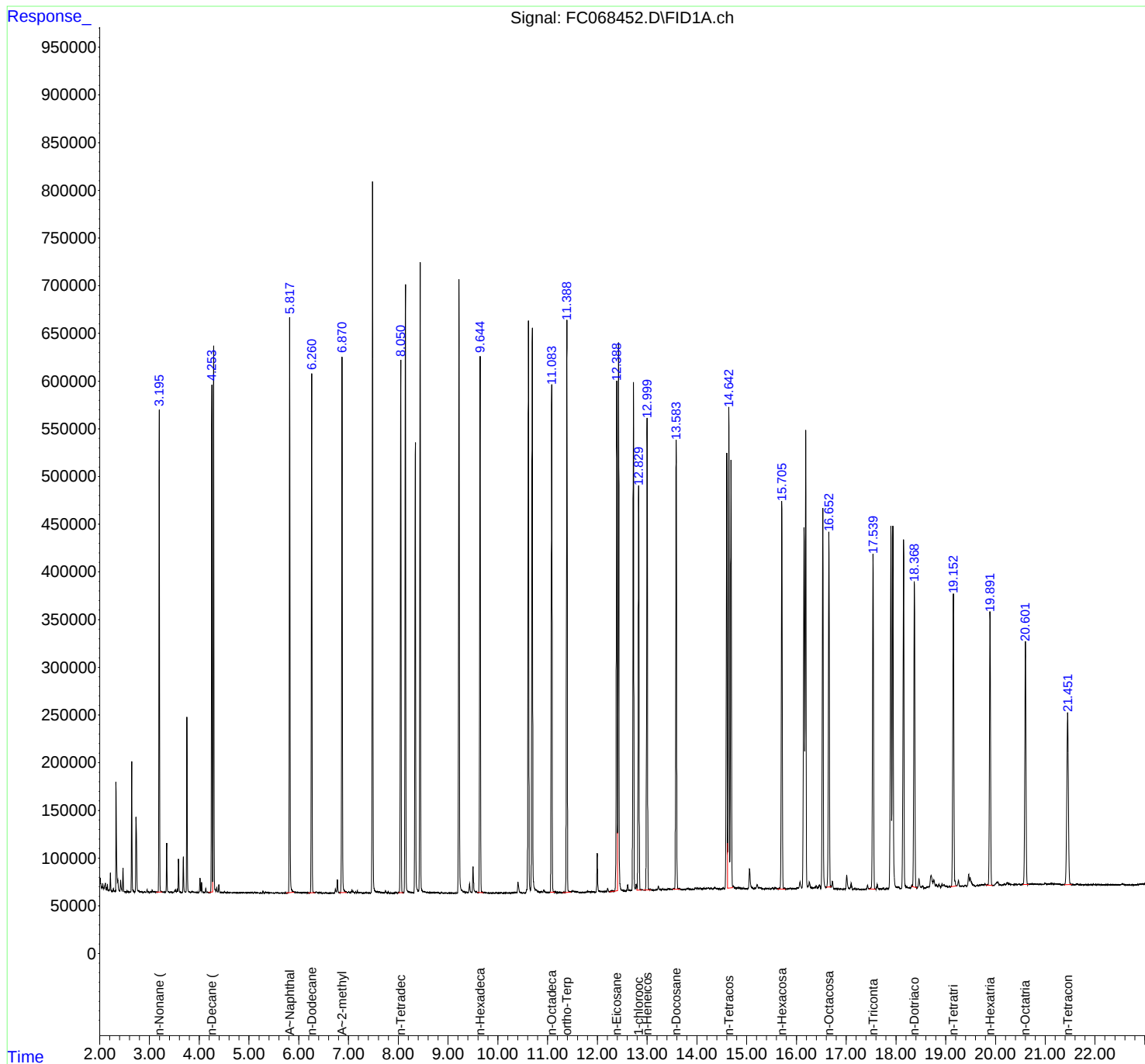
Instrument :
FID_C
ClientSampleId :
RT5358MS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 04/01/2025
Supervised By :mohammad ahmed 04/02/2025

Integration File: autoint1.e
Quant Time: Apr 01 03:19:27 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Instrument :

FID_C

ClientSampleId :

RT5358MS

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/01/2025

Supervised By :mohammad ahmed 04/02/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC03312
Data File : FC068452.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 18:15
Sample : Q1674-01MS
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	2.329	2.304	2.401	BV	114493	1050393	15.30%	0.427%
2	2.420	2.401	2.450	VV	11783	131369	1.91%	0.053%
3	2.468	2.450	2.511	VV	24635	199112	2.90%	0.081%
4	2.520	2.511	2.531	VV	240	1239	0.02%	0.001%
5	2.549	2.531	2.578	PV	1143	11523	0.17%	0.005%
6	2.584	2.578	2.624	VV	153	1755	0.03%	0.001%
7	2.643	2.624	2.707	PV	133161	1046316	15.24%	0.426%
8	2.731	2.707	2.874	VV	76103	1005153	14.64%	0.409%
9	2.905	2.874	2.931	VV	379	5787	0.08%	0.002%
10	2.952	2.931	3.004	PV	2851	30566	0.45%	0.012%
11	3.019	3.004	3.044	VV	306	4491	0.07%	0.002%
12	3.055	3.044	3.124	VV	2471	34530	0.50%	0.014%
13	3.130	3.124	3.148	VV	222	2790	0.04%	0.001%
14	3.156	3.148	3.166	VV	211	2189	0.03%	0.001%
15	3.196	3.166	3.271	VV	497427	4220448	61.47%	1.717%
16	3.282	3.271	3.301	VV	331	4570	0.07%	0.002%
17	3.314	3.301	3.328	VV	567	5633	0.08%	0.002%
18	3.346	3.328	3.414	VV	50810	417413	6.08%	0.170%
19	3.430	3.414	3.441	VV	328	4183	0.06%	0.002%
20	3.453	3.441	3.483	VV	332	7275	0.11%	0.003%
21	3.520	3.483	3.540	VV	3224	46160	0.67%	0.019%
22	3.557	3.540	3.567	VV	3420	30956	0.45%	0.013%
23	3.584	3.567	3.648	VV	34725	303383	4.42%	0.123%
24	3.680	3.648	3.729	VV	37108	323690	4.71%	0.132%
25	3.752	3.729	3.840	VV	181768	1511865	22.02%	0.615%
26	3.860	3.840	3.898	VV	1052	25590	0.37%	0.010%
27	3.911	3.898	3.938	VV	612	11468	0.17%	0.005%
28	3.949	3.938	3.984	VV	474	10192	0.15%	0.004%
29	4.017	3.984	4.034	VV	15133	162484	2.37%	0.066%
30	4.048	4.034	4.108	VV	10905	108397	1.58%	0.044%
31	4.132	4.108	4.189	VV	4429	48303	0.70%	0.020%
32	4.201	4.189	4.223	VV	246	3927	0.06%	0.002%
33	4.253	4.223	4.271	VV	533668	4763229	69.37%	1.937%
34	4.288	4.271	4.336	VV	569840	5057841	73.66%	2.057%
35	4.352	4.336	4.375	VV	5426	61572	0.90%	0.025%
36	4.394	4.375	4.487	VV	8619	105879	1.54%	0.043%

37	4.505	4.487	4.557	VV	764	16313	0.24%	0.007%
38	4.571	4.557	4.611	VV	249	5305	0.01%	0.001%
39	4.630	4.611	4.654	VV	332	5415	0.01%	0.001%
40	4.664	4.654	4.684	VV	220	2904	0.01%	0.001%
41	4.710	4.684	4.734	VV	340	5471	0.01%	0.001%
42	4.746	4.734	4.758	PV	112	1228	0.01%	0.001%
43	4.774	4.758	4.785	VV	200	1808	0.03%	0.001%
44	4.792	4.785	4.797	VV	77	509	0.01%	0.000%
45	4.811	4.797	4.820	VV	155	1272	0.02%	0.001%
46	4.856	4.820	4.876	VV	298	7354	0.11%	0.003%
47	4.889	4.876	4.915	VV	237	4872	0.07%	0.002%
48	4.925	4.915	4.951	VV	234	3504	0.05%	0.001%
49	4.964	4.951	4.988	VV	199	3104	0.05%	0.001%
50	5.000	4.988	5.064	VV	261	4814	0.07%	0.002%
51	5.110	5.064	5.225	VV	996	20906	0.30%	0.009%
52	5.282	5.225	5.311	PV	1729	19455	0.28%	0.008%
53	5.332	5.311	5.392	VV	727	15378	0.22%	0.006%
54	5.416	5.392	5.442	VV	240	4441	0.06%	0.002%
55	5.458	5.442	5.508	VV	142	3303	0.05%	0.001%
56	5.528	5.508	5.541	VV	162	2328	0.03%	0.001%
57	5.564	5.541	5.598	VV	165	4212	0.06%	0.002%
58	5.625	5.598	5.635	VV	130	1556	0.02%	0.001%
59	5.652	5.635	5.683	VV	159	2316	0.03%	0.001%
60	5.736	5.683	5.752	VV	136	3207	0.05%	0.001%
61	5.818	5.752	5.909	VV	602148	5739200	83.58%	2.334%
62	5.916	5.909	5.968	VV	1045	26349	0.38%	0.011%
63	5.984	5.968	6.024	VV	930	18271	0.27%	0.007%
64	6.039	6.024	6.088	VV	376	10477	0.15%	0.004%
65	6.110	6.088	6.138	VV	437	9978	0.15%	0.004%
66	6.147	6.138	6.171	VV	426	6161	0.09%	0.003%
67	6.185	6.171	6.211	VV	224	4535	0.07%	0.002%
68	6.260	6.211	6.327	VV	543476	5354355	77.98%	2.178%
69	6.348	6.327	6.389	VV	1024	21162	0.31%	0.009%
70	6.405	6.389	6.521	VV	490	16345	0.24%	0.007%
71	6.539	6.521	6.600	VV	450	9508	0.14%	0.004%
72	6.617	6.600	6.637	PV	111	1596	0.02%	0.001%
73	6.652	6.637	6.693	VV	177	3805	0.06%	0.002%
74	6.705	6.693	6.718	VV	73	607	0.01%	0.000%
75	6.737	6.718	6.757	VV	3320	44256	0.64%	0.018%
76	6.777	6.757	6.830	VV	14145	158869	2.31%	0.065%
77	6.870	6.830	6.982	VV	561880	5566018	81.06%	2.264%
78	7.006	6.982	7.027	VV	1662	25243	0.37%	0.010%
79	7.069	7.027	7.124	VV	2572	68321	1.00%	0.028%
80	7.143	7.124	7.161	VV	1324	16417	0.24%	0.007%
81	7.180	7.161	7.211	VV	1742	22693	0.33%	0.009%
82	7.237	7.211	7.324	VV	653	18252	0.27%	0.007%
83	7.347	7.324	7.377	VV	787	11022	0.16%	0.004%
84	7.390	7.377	7.430	VV	238	4141	0.06%	0.002%
85	7.595	7.570	7.611	VV	1401	29402	0.43%	0.012%
86	7.624	7.611	7.654	VV	1531	24948	0.36%	0.010%
87	7.665	7.654	7.691	VV	610	12501	0.18%	0.005%
88	7.743	7.724	7.774	VV	1912	27276	0.40%	0.011%
89	7.800	7.774	7.858	VV	1155	21227	0.31%	0.009%

Instrument :

FID_C

ClientSampleId :

RT5358MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/01/2025

Supervised By :mohammad ahmed 04/02/2025

							Instrument : FID_C	
							ClientSampleId : RT5358MS	
90	7.953	7.858	7.985	VV	521	18457	0.27%	0.008%
91	8.051	7.985	8.107	VV	558590	5871410	Manual IntegrationsAPPROVED	
92	8.144	8.107	8.214	VV	639042	6427181		
93	8.223	8.214	8.261	VV	1092	24461		
94	8.274	8.261	8.307	VV	788	14912		
95	8.441	8.411	8.563	VV	659239	6656429		
96	8.578	8.563	8.661	VV	992	36277	0.53%	0.015%
97	8.677	8.661	8.699	VV	594	10235	0.15%	0.004%
98	8.722	8.699	8.751	VV	1018	19213	0.28%	0.008%
99	8.777	8.751	8.827	VV	555	16522	0.24%	0.007%
100	8.867	8.827	8.904	VV	1275	18684	0.27%	0.008%
101	8.919	8.904	8.984	VV	207	5316	0.08%	0.002%
102	8.997	8.984	9.032	VV	188	2725	0.04%	0.001%
103	9.053	9.032	9.084	PV	243	4864	0.07%	0.002%
104	9.129	9.084	9.184	VV	293	10432	0.15%	0.004%
105	9.221	9.184	9.359	VV	643900	6866363	100.00%	2.793%
106	9.377	9.359	9.400	VV	1028	19818	0.29%	0.008%
107	9.433	9.400	9.481	VV	9686	148233	2.16%	0.060%
108	9.503	9.481	9.565	VV	27741	356640	5.19%	0.145%
109	9.576	9.565	9.611	VV	1150	21406	0.31%	0.009%
110	9.645	9.611	9.713	VV	566580	6296359	91.70%	2.561%
111	9.728	9.713	9.848	VV	728	29661	0.43%	0.012%
112	9.865	9.848	9.891	VV	214	3403	0.05%	0.001%
113	9.910	9.891	9.934	VV	208	3561	0.05%	0.001%
114	9.973	9.934	10.008	PV	539	10713	0.16%	0.004%
115	10.019	10.008	10.025	VV	189	1512	0.02%	0.001%
116	10.063	10.025	10.102	VV	373	10989	0.16%	0.004%
117	10.150	10.102	10.199	VV	236	8521	0.12%	0.003%
118	10.216	10.199	10.234	VV	206	2866	0.04%	0.001%
119	10.284	10.234	10.317	VV	455	13722	0.20%	0.006%
120	10.355	10.317	10.372	VV	855	17847	0.26%	0.007%
121	10.408	10.372	10.508	VV	11398	199208	2.90%	0.081%
122	10.515	10.508	10.534	VV	210	2493	0.04%	0.001%
123	10.616	10.534	10.658	PV	608270	6680269	97.29%	2.717%
124	10.692	10.658	10.758	VV	579045	6644484	96.77%	2.702%
125	10.766	10.758	10.859	VV	3502	106642	1.55%	0.043%
126	10.883	10.859	10.903	VV	1752	29234	0.43%	0.012%
127	10.924	10.903	10.997	VV	3012	67502	0.98%	0.027%
128	11.010	10.997	11.036	VV	687	11275	0.16%	0.005%
129	11.083	11.036	11.143	VV	533712	6237453	90.84%	2.537%
130	11.159	11.143	11.205	VV	1071	22468	0.33%	0.009%
131	11.229	11.205	11.254	VV	535	10688	0.16%	0.004%
132	11.272	11.254	11.295	VV	675	8393	0.12%	0.003%
133	11.324	11.295	11.346	VV	612	9141	0.13%	0.004%
134	11.388	11.346	11.441	VV	600266	6676647	97.24%	2.716%
135	11.454	11.441	11.474	VV	1095	17477	0.25%	0.007%
136	11.497	11.474	11.514	VV	2375	36694	0.53%	0.015%
137	11.527	11.514	11.544	VV	1792	25485	0.37%	0.010%
138	11.561	11.544	11.584	VV	1308	23701	0.35%	0.010%
139	11.598	11.584	11.653	VV	1173	21969	0.32%	0.009%
140	11.747	11.653	11.767	VV	664	24084	0.35%	0.010%
141	11.798	11.767	11.821	VV	1292	29273	0.43%	0.012%

142	11.834	11.821	11.872	VV	1157	24784	0.36%	0.010%
143	11.902	11.872	11.958	VV	823	30928		
144	11.998	11.958	12.067	VV	41065	489173		
145	12.084	12.067	12.100	VV	1428	23199		
146	12.113	12.100	12.144	VV	1158	26975		
147	12.162	12.144	12.175	VV	1035	17256		
148	12.206	12.175	12.249	VV	4162	82183	1.20%	0.033%
149	12.271	12.249	12.289	VV	1598	30092	0.44%	0.012%
150	12.309	12.289	12.331	VV	1769	37289	0.54%	0.015%
151	12.389	12.331	12.407	VV	529146	6301938	91.78%	2.563%
152	12.428	12.407	12.546	VV	570215	6677143	97.24%	2.716%
153	12.564	12.546	12.578	VV	1650	29904	0.44%	0.012%
154	12.609	12.578	12.654	VV	7854	154464	2.25%	0.063%
155	12.665	12.654	12.688	VV	2026	38487	0.56%	0.016%
156	12.724	12.688	12.761	VV	530559	6413810	93.41%	2.609%
157	12.780	12.761	12.796	VV	8226	128254	1.87%	0.052%
158	12.829	12.796	12.897	VV	421665	5055897	73.63%	2.056%
159	12.906	12.897	12.926	VV	2661	44583	0.65%	0.018%
160	12.940	12.926	12.959	VV	2560	46749	0.68%	0.019%
161	12.999	12.959	13.046	VV	495292	5997439	87.35%	2.439%
162	13.063	13.046	13.108	VV	3349	100654	1.47%	0.041%
163	13.117	13.108	13.147	VV	2423	53851	0.78%	0.022%
164	13.224	13.147	13.280	VV	6476	252707	3.68%	0.103%
165	13.313	13.280	13.358	VV	3137	135142	1.97%	0.055%
166	13.374	13.358	13.392	VV	2900	55122	0.80%	0.022%
167	13.426	13.392	13.454	VV	3845	117471	1.71%	0.048%
168	13.469	13.454	13.483	VV	3269	54359	0.79%	0.022%
169	13.503	13.483	13.518	VV	3193	63042	0.92%	0.026%
170	13.534	13.518	13.545	VV	3658	53713	0.78%	0.022%
171	13.583	13.545	13.624	VV	474412	5888812	85.76%	2.395%
172	13.637	13.624	13.698	VV	3799	138632	2.02%	0.056%
173	13.703	13.698	13.721	VV	2776	38183	0.56%	0.016%
174	13.735	13.721	13.752	VV	2898	52509	0.76%	0.021%
175	13.808	13.752	13.861	VV	3693	203277	2.96%	0.083%
176	13.874	13.861	13.892	VV	2954	53501	0.78%	0.022%
177	13.910	13.892	13.937	VV	2954	75729	1.10%	0.031%
178	13.971	13.937	13.996	VV	4248	123735	1.80%	0.050%
179	14.014	13.996	14.036	VV	4290	90412	1.32%	0.037%
180	14.063	14.036	14.096	VV	4211	129245	1.88%	0.053%
181	14.146	14.096	14.184	VV	3918	178050	2.59%	0.072%
182	14.230	14.184	14.254	VV	4362	157278	2.29%	0.064%
183	14.285	14.254	14.326	VV	4176	146064	2.13%	0.059%
184	14.362	14.326	14.453	VV	4426	262081	3.82%	0.107%
185	14.461	14.453	14.494	VV	3013	71025	1.03%	0.029%
186	14.523	14.494	14.557	VV	3834	129804	1.89%	0.053%
187	14.600	14.557	14.619	VV	462780	6011253	87.55%	2.445%
188	14.642	14.619	14.661	VV	503461	5942200	86.54%	2.417%
189	14.684	14.661	14.784	VV	454892	5938131	86.48%	2.415%
190	14.793	14.784	14.811	VV	3562	55566	0.81%	0.023%
191	14.834	14.811	14.853	VV	4548	99135	1.44%	0.040%
192	14.872	14.853	14.897	VV	4162	94656	1.38%	0.038%
193	14.927	14.897	14.978	VV	3704	162318	2.36%	0.066%
194	15.057	14.978	15.173	VV	23761	710047	10.34%	0.289%

Instrument :

FID_C

ClientSampleId :

RT5358MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/01/2025

Supervised By :mohammad ahmed 04/02/2025

195	15.211	15.173	15.237	VV	7212	188337	2.74%	0.077%
196	15.255	15.237	15.301	VV	4344	147302		
197	15.308	15.301	15.351	VV	3293	89038		
198	15.410	15.351	15.477	VV	3420	225860		
199	15.518	15.477	15.550	VV	3866	141386		
200	15.575	15.550	15.641	VV	3752	168769		
201	15.705	15.641	15.741	VV	408327	5507225	80.21%	2.240%
202	15.758	15.741	15.798	VV	3706	102553	1.49%	0.042%
203	15.874	15.798	15.919	VV	3479	206193	3.00%	0.084%
204	15.943	15.919	15.966	VV	3025	79712	1.16%	0.032%
205	16.024	15.966	16.033	VV	3620	126302	1.84%	0.051%
206	16.070	16.033	16.107	VV	9519	248064	3.61%	0.101%
207	16.152	16.107	16.168	VV	376767	5742965	83.64%	2.336%
208	16.186	16.168	16.230	VV	490654	5845219	85.13%	2.377%
209	16.259	16.230	16.334	VV	9633	320851	4.67%	0.130%
210	16.344	16.334	16.356	VV	3623	46708	0.68%	0.019%
211	16.400	16.356	16.424	VV	5747	173631	2.53%	0.071%
212	16.465	16.424	16.491	VV	5950	177796	2.59%	0.072%
213	16.530	16.491	16.594	VV	406178	5499082	80.09%	2.237%
214	16.652	16.594	16.686	VV	370422	5362371	78.10%	2.181%
215	16.695	16.686	16.703	VV	4822	47885	0.70%	0.019%
216	16.724	16.703	16.760	VV	10089	187368	2.73%	0.076%
217	16.770	16.760	16.788	VV	2463	39215	0.57%	0.016%
218	16.797	16.788	16.831	VV	2272	56699	0.83%	0.023%
219	16.863	16.831	16.878	VV	2140	57678	0.84%	0.023%
220	16.892	16.878	16.943	VV	2157	81026	1.18%	0.033%
221	17.010	16.943	17.071	VV	16419	390447	5.69%	0.159%
222	17.099	17.071	17.134	VV	8286	163983	2.39%	0.067%
223	17.181	17.134	17.222	VV	2382	103982	1.51%	0.042%
224	17.245	17.222	17.277	VV	2202	60909	0.89%	0.025%
225	17.289	17.277	17.308	VV	1730	29970	0.44%	0.012%
226	17.337	17.308	17.354	VV	1658	44049	0.64%	0.018%
227	17.385	17.354	17.396	VV	1727	41201	0.60%	0.017%
228	17.428	17.396	17.455	VV	5724	116446	1.70%	0.047%
229	17.463	17.455	17.472	VV	2195	22862	0.33%	0.009%
230	17.539	17.472	17.587	VV	354531	5148379	74.98%	2.094%
231	17.624	17.587	17.674	VV	6744	161619	2.35%	0.066%
232	17.684	17.674	17.719	VV	1894	48421	0.71%	0.020%
233	17.747	17.719	17.783	VV	2802	76342	1.11%	0.031%
234	17.807	17.783	17.818	VV	2235	40153	0.58%	0.016%
235	17.836	17.818	17.851	VV	2358	44497	0.65%	0.018%
236	17.899	17.851	17.916	VV	383857	5561897	81.00%	2.262%
237	17.937	17.916	18.023	VV	378834	5410440	78.80%	2.201%
238	18.047	18.023	18.106	VV	4038	158274	2.31%	0.064%
239	18.154	18.106	18.279	VV	367154	5295637	77.12%	2.154%
240	18.321	18.279	18.330	VV	5225	115286	1.68%	0.047%
241	18.370	18.330	18.428	VV	321297	4991589	72.70%	2.030%
242	18.463	18.428	18.515	VV	12251	313638	4.57%	0.128%
243	18.535	18.515	18.590	VV	4971	150360	2.19%	0.061%
244	18.705	18.590	18.744	VV	15792	641918	9.35%	0.261%
245	18.762	18.744	18.794	VV	11049	242972	3.54%	0.099%
246	18.812	18.794	18.840	VV	5717	136983	1.99%	0.056%

Instrument :

FID_C

ClientSampleId :

RT5358MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/01/2025

Supervised By :mohammad ahmed 04/02/2025

247	18.865	18.840	18.897	VV	5862	166141	2.42%	0.068%
248	18.927	18.897	18.941	VV	6268	130160		
249	18.967	18.941	19.014	VV	5717	214212		
250	19.029	19.014	19.051	VV	4106	84106		
251	19.073	19.051	19.094	VV	4093	99373		
252	19.153	19.094	19.219	VV	304863	4989092	72	
253	19.256	19.219	19.284	VV	10283	251634	3.66%	0.102%
254	19.297	19.284	19.315	VV	4410	77307	1.13%	0.031%
255	19.337	19.315	19.364	VV	4682	123218	1.79%	0.050%
256	19.391	19.364	19.424	VV	5322	166337	2.42%	0.068%
257	19.461	19.424	19.478	VV	16477	315189	4.59%	0.128%
258	19.491	19.478	19.600	VV	13084	520288	7.58%	0.212%
259	19.636	19.600	19.654	VV	5116	151045	2.20%	0.061%
260	19.702	19.654	19.714	VV	5351	185530	2.70%	0.075%
261	19.735	19.714	19.762	VV	5743	159271	2.32%	0.065%
262	19.791	19.762	19.821	VV	6416	200099	2.91%	0.081%
263	19.890	19.821	19.944	VV	293018	4665604	67.95%	1.898%
264	20.028	19.944	20.134	VV	8442	694544	10.12%	0.282%
265	20.175	20.134	20.200	VV	5936	218580	3.18%	0.089%
266	20.237	20.200	20.263	VV	7451	249286	3.63%	0.101%
267	20.273	20.263	20.362	VV	6504	350351	5.10%	0.142%
268	20.390	20.362	20.444	VV	5772	279567	4.07%	0.114%
269	20.477	20.444	20.516	VV	5937	246296	3.59%	0.100%
270	20.528	20.516	20.544	VV	5756	95896	1.40%	0.039%
271	20.602	20.544	20.667	VV	259776	4591207	66.87%	1.867%
272	20.739	20.667	20.850	VV	6149	644259	9.38%	0.262%
273	20.876	20.850	20.958	VV	5722	359741	5.24%	0.146%
274	20.996	20.958	21.029	VV	6523	256890	3.74%	0.104%
275	21.120	21.029	21.187	VV	6439	574644	8.37%	0.234%
276	21.198	21.187	21.278	VV	6028	322639	4.70%	0.131%
277	21.286	21.278	21.378	VV	5662	318248	4.63%	0.129%
278	21.450	21.378	21.568	VV	185214	4574851	66.63%	1.861%
279	21.580	21.568	21.593	VV	5203	79778	1.16%	0.032%
280	21.637	21.593	21.818	VV	5824	694094	10.11%	0.282%
281	21.827	21.818	21.841	VV	4945	67960	0.99%	0.028%
282	21.857	21.841	21.906	VV	5001	192436	2.80%	0.078%
283	21.962	21.906	22.001	VV	5232	287403	4.19%	0.117%
284	22.005	22.001	22.024	VV	5053	69524	1.01%	0.028%
285	22.092	22.024	22.108	VV	5009	247857	3.61%	0.101%
286	22.119	22.108	22.150	VV	4932	123582	1.80%	0.050%
287	22.157	22.150	22.165	VV	4802	42662	0.62%	0.017%
288	22.172	22.165	22.201	VBA	4755	106897	1.56%	0.043%
Sum of corrected areas:					245866437			

Instrument :

FID_C

ClientSampleId :

RT5358MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/01/2025

Supervised By :mohammad ahmed 04/02/2025

Aliphatic EPH 032625.M Tue Apr 01 04:38:56 2025

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	RT5358MSD	SDG No.:	Q1675
Lab Sample ID:	Q1674-01MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	89.2
Sample Wt/Vol:	30.04 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
03/31/25 08:56	03/31/25 18:53	PB167381

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C28-C40	Aliphatic C28-C40	27.3		1	1.32	2.24	mg/kg	FC068453.D
Aliphatic C9-C28	Aliphatic C9-C28	75.9		1	1.02	4.48	mg/kg	FC068453.D
Total AliphaticEPH	Total AliphaticEPH	103			2.34	6.72	mg/kg	
Total EPH	Total EPH	103			2.34	6.72	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Stockton	Date Received:	
Client Sample ID:	RT5358MSD	SDG No.:	Q1675
Lab Sample ID:	Q1674-01MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	89.2
Sample Wt/Vol:	30.04 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068453.D	1	03/31/25	03/31/25	PB167381

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	75.9		1.02	4.48	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	27.3		1.32	2.24	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	33.3		40 - 140	67%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	33.7		40 - 140	67%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q1674-01MSD	Acq On:	31 Mar 2025 18:53
Client Sample ID:	RT5358MSD	Operator:	YP/AJ
Data file:	FC068453.D	Misc:	
Instrument:	FID_C	ALS Vial:	19
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.098	6.359	28309867	174.409	300	ug/ml
Aliphatic C12-C16	6.360	9.743	38917046	231.382	200	ug/ml
Aliphatic C16-C21	9.744	13.097	47159405	274.965	300	ug/ml
Aliphatic C21-C28	13.098	16.748	56815073	336.443	400	ug/ml
Aliphatic C28-C40	16.749	21.546	49790057	365.642	600	ug/ml
Aliphatic EPH	3.098	21.546	220991448	1380		ug/ml
ortho-Terphenyl (SURR)	11.388	11.388	6691900	33.69		ug/ml
1-chlorooctadecane (SURR)	12.829	12.829	4963718	33.3		ug/ml
Aliphatic C9-C28	3.098	16.748	171201391	1020	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
 Data File : FC068453.D
 Signal(s) : FID1A.ch
 Acq On : 31 Mar 2025 18:53
 Operator : YP/AJ
 Sample : Q1674-01MSD
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 RT5358MSD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 04/01/2025
 Supervised By :mohammad ahmed 04/02/2025

Integration File: autoint1.e
 Quant Time: Apr 01 03:19:53 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
 Quant Title : GC Extractables
 QLast Update : Wed Mar 26 13:35:27 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.388	6691900	33.690 ug/ml
Spiked Amount 50.000		Recovery =	67.38%
12) S 1-chlorooctadecane (S...	12.829	4963718	33.297 ug/ml
Spiked Amount 50.000		Recovery =	66.59%
Target Compounds			
1) T n-Nonane (C9)	3.196	4164155	26.035 ug/ml
2) T n-Decane (C10)	4.253	4713418	29.076 ug/ml
3) T A~Naphthalene (C11.7)	5.818	5662211	32.048 ug/ml
4) T n-Dodecane (C12)	6.261	5320665	32.264 ug/ml
5) T A~2-methylnaphthalene...	6.870	5483987	32.241 ug/ml
6) T n-Tetradecane (C14)	8.050	5842384	35.508 ug/ml
7) T n-Hexadecane (C16)	9.644	6295518	36.634 ug/ml
8) T n-Octadecane (C18)	11.083	6253937	35.630 ug/ml
10) T n-Eicosane (C20)	12.389	6333667	36.982 ug/ml
11) T n-Heneicosane (C21)	12.999	5944431	35.438 ug/ml
13) T n-Docosane (C22)	13.584	5826101	34.535 ug/ml
14) T n-Tetracosane (C24)	14.642	11600086	67.733 ug/mlm
15) T n-Hexacosane (C26)	15.705	5407963	32.132 ug/ml
16) T n-Octacosane (C28)	16.652	5181094	30.985 ug/ml
17) T n-Tricontane (C30)	17.540	5055938	28.998 ug/ml
18) T n-Dotriacontane (C32)	18.369	4838876	28.905 ug/ml
19) T n-Tetratriacontane (C34)	19.152	4729510	32.065 ug/ml
20) T n-Hexatriacontane (C36)	19.891	4355424	35.589 ug/ml
21) T n-Octatriacontane (C38)	20.601	4252455	39.600 ug/ml
22) T n-Tetracontane (C40)	21.450	4072472	41.553 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC033125AL\
Data File : FC068453.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 18:53
Operator : YP/AJ
Sample : Q1674-01MSD
Misc :
ALS Vial : 19 Sample Multiplier: 1

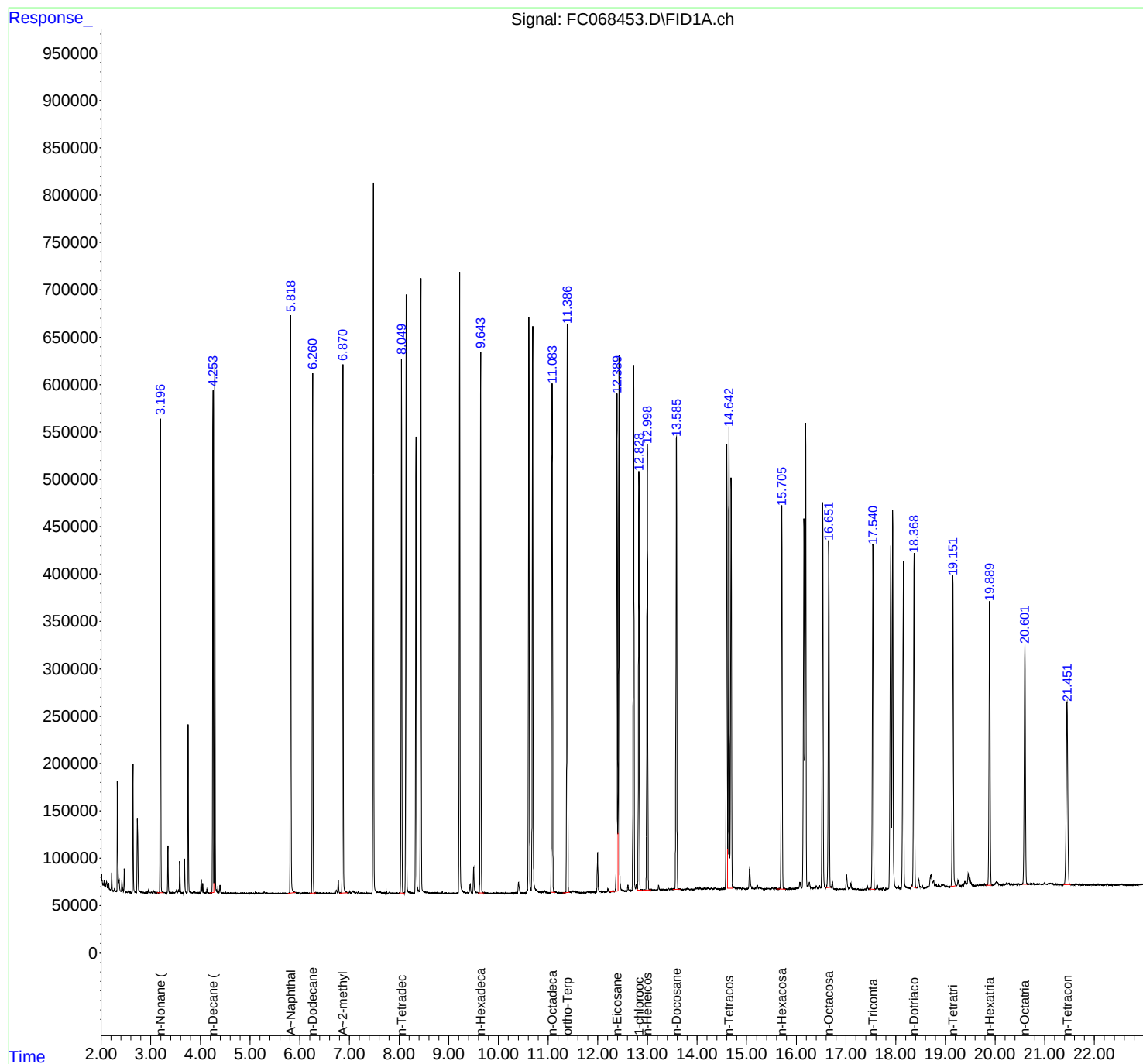
Instrument :
FID_C
ClientSampleId :
RT5358MSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 04/01/2025
Supervised By :mohammad ahmed 04/02/2025

Integration File: autoint1.e
Quant Time: Apr 01 03:19:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.M
Quant Title : GC Extractables
QLast Update : Wed Mar 26 13:35:27 2025
Response via : Initial Calibration
Integrator: ChemStation

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



rtres

Instrument :

FID_C

ClientSampleId :

RT5358MSD

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/01/2025

Supervised By :mohammad ahmed 04/02/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC03312
Data File : FC068453.D
Signal(s) : FID1A.ch
Acq On : 31 Mar 2025 18:53
Sample : Q1674-01MSD
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 032625.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	2.329	2.304	2.400	BV	112551	1044949	15.22%	0.442%
2	2.419	2.400	2.450	VV	11945	131507	1.92%	0.056%
3	2.467	2.450	2.531	VV	24372	196797	2.87%	0.083%
4	2.549	2.531	2.581	PV	1137	13774	0.20%	0.006%
5	2.590	2.581	2.620	VV	281	3103	0.05%	0.001%
6	2.642	2.620	2.711	PV	135170	1037787	15.12%	0.439%
7	2.731	2.711	2.891	VV	75283	995342	14.50%	0.421%
8	2.907	2.891	2.930	VV	402	3887	0.06%	0.002%
9	2.952	2.930	3.001	PV	2771	26465	0.39%	0.011%
10	3.022	3.001	3.044	VV	249	3720	0.05%	0.002%
11	3.056	3.044	3.166	VV	2278	33748	0.49%	0.014%
12	3.196	3.166	3.300	VV	497972	4183675	60.94%	1.769%
13	3.315	3.300	3.326	VV	444	4959	0.07%	0.002%
14	3.346	3.326	3.414	VV	49160	408510	5.95%	0.173%
15	3.430	3.414	3.444	VV	319	3240	0.05%	0.001%
16	3.454	3.444	3.482	VV	270	4692	0.07%	0.002%
17	3.520	3.482	3.540	VV	3112	43546	0.63%	0.018%
18	3.557	3.540	3.567	VV	3268	29413	0.43%	0.012%
19	3.584	3.567	3.658	VV	33233	293255	4.27%	0.124%
20	3.680	3.658	3.734	PV	35603	313317	4.56%	0.132%
21	3.753	3.734	3.823	VV	175870	1468896	21.39%	0.621%
22	3.861	3.823	3.897	VV	950	26499	0.39%	0.011%
23	3.907	3.897	3.931	VV	583	9489	0.14%	0.004%
24	3.950	3.931	3.990	VV	532	11073	0.16%	0.005%
25	4.017	3.990	4.034	VV	14537	155399	2.26%	0.066%
26	4.048	4.034	4.112	VV	10396	103911	1.51%	0.044%
27	4.132	4.112	4.151	VV	4148	36492	0.53%	0.015%
28	4.160	4.151	4.221	VV	460	9531	0.14%	0.004%
29	4.253	4.221	4.271	VV	532333	4735081	68.97%	2.002%
30	4.288	4.271	4.337	VV	563357	5021620	73.14%	2.123%
31	4.353	4.337	4.375	VV	5361	61747	0.90%	0.026%
32	4.395	4.375	4.488	VV	8524	101350	1.48%	0.043%
33	4.505	4.488	4.561	VV	721	13322	0.19%	0.006%
34	4.578	4.561	4.594	VV	257	3350	0.05%	0.001%
35	4.631	4.594	4.660	VV	257	7168	0.10%	0.003%
36	4.671	4.660	4.693	VV	253	2864	0.04%	0.001%

37	4.709	4.693	4.734	VV	264	3434	0.05%	0.001%
38	4.745	4.734	4.757	VV	93	723	0.01%	0.000%
39	4.773	4.757	4.789	PV	144	1503	0.01%	0.000%
40	4.846	4.789	4.878	PV	236	6221	0.01%	0.000%
41	4.889	4.878	4.923	VV	272	4824	0.01%	0.000%
42	4.934	4.923	4.946	VV	153	2009	0.01%	0.000%
43	4.964	4.946	5.060	VV	278	7965	0.12%	0.003%
44	5.074	5.060	5.088	PV	77	1029	0.01%	0.000%
45	5.109	5.088	5.189	VV	1054	17283	0.25%	0.007%
46	5.201	5.189	5.257	VV	69	1470	0.02%	0.001%
47	5.283	5.257	5.308	VV	1754	18628	0.27%	0.008%
48	5.331	5.308	5.398	VV	720	16164	0.24%	0.007%
49	5.414	5.398	5.441	VV	238	3937	0.06%	0.002%
50	5.461	5.441	5.498	VV	155	3329	0.05%	0.001%
51	5.519	5.498	5.540	VV	223	3233	0.05%	0.001%
52	5.563	5.540	5.621	VV	269	6400	0.09%	0.003%
53	5.625	5.621	5.634	VV	82	396	0.01%	0.000%
54	5.650	5.634	5.680	VV	119	2330	0.03%	0.001%
55	5.693	5.680	5.701	VV	120	831	0.01%	0.000%
56	5.715	5.701	5.758	VV	132	2926	0.04%	0.001%
57	5.818	5.758	5.971	PV	605436	5734531	83.52%	2.425%
58	5.985	5.971	6.074	VV	865	25551	0.37%	0.011%
59	6.110	6.074	6.129	VV	688	13291	0.19%	0.006%
60	6.141	6.129	6.168	VV	447	8277	0.12%	0.003%
61	6.185	6.168	6.202	VV	273	4656	0.07%	0.002%
62	6.208	6.202	6.226	VV	290	2804	0.04%	0.001%
63	6.261	6.226	6.334	VV	548317	5344821	77.85%	2.260%
64	6.347	6.334	6.388	VV	1045	18902	0.28%	0.008%
65	6.408	6.388	6.490	VV	477	13416	0.20%	0.006%
66	6.501	6.490	6.517	VV	146	2059	0.03%	0.001%
67	6.540	6.517	6.562	VV	496	7659	0.11%	0.003%
68	6.571	6.562	6.592	VV	247	3087	0.04%	0.001%
69	6.612	6.592	6.622	VV	127	1662	0.02%	0.001%
70	6.666	6.645	6.710	VV	265	4392	0.06%	0.002%
71	6.736	6.710	6.757	VV	3405	45710	0.67%	0.019%
72	6.777	6.757	6.831	VV	14093	157156	2.29%	0.066%
73	6.870	6.831	6.988	VV	558049	5546921	80.79%	2.345%
74	7.005	6.988	7.027	VV	1640	23987	0.35%	0.010%
75	7.069	7.027	7.124	VV	2448	67943	0.99%	0.029%
76	7.143	7.124	7.162	VV	1314	16915	0.25%	0.007%
77	7.180	7.162	7.208	VV	1792	22976	0.33%	0.010%
78	7.236	7.208	7.294	VV	627	17868	0.26%	0.008%
79	7.302	7.294	7.327	VV	130	2332	0.03%	0.001%
80	7.347	7.327	7.371	VV	813	10246	0.15%	0.004%
81	7.393	7.371	7.421	VV	255	5119	0.07%	0.002%
82	7.596	7.574	7.614	VV	1415	28986	0.42%	0.012%
83	7.624	7.614	7.662	VV	1475	25877	0.38%	0.011%
84	7.670	7.662	7.718	VV	584	16064	0.23%	0.007%
85	7.743	7.718	7.769	VV	2040	27538	0.40%	0.012%
86	7.799	7.769	7.824	VV	1192	18178	0.26%	0.008%
87	7.830	7.824	7.857	VV	251	2806	0.04%	0.001%
88	7.869	7.857	7.881	VV	194	1596	0.02%	0.001%
89	7.904	7.881	7.921	VV	305	4388	0.06%	0.002%

Instrument :

FID_C

ClientSampleId :

RT5358MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/01/2025

Supervised By :mohammad ahmed 04/02/2025

90	7.952	7.921	7.983	VV	552	11390	0.17%	0.005%
91	8.050	7.983	8.109	VV	563985	5869584	85.16%	2.903%
92	8.144	8.109	8.212	VV	633116	6398947	93.01%	2.664%
93	8.226	8.212	8.260	VV	1189	26185	0.04%	0.001%
94	8.273	8.260	8.305	VV	807	14489	0.06%	0.002%
95	8.441	8.407	8.564	VV	653716	6644311	96.89%	2.675%
96	8.577	8.564	8.614	VV	1146	23378	0.34%	0.010%
97	8.630	8.614	8.664	VV	557	13933	0.20%	0.006%
98	8.680	8.664	8.700	VV	621	9417	0.14%	0.004%
99	8.721	8.700	8.748	VV	950	17151	0.25%	0.007%
100	8.768	8.748	8.837	VV	539	16087	0.23%	0.007%
101	8.866	8.837	8.936	VV	1136	20096	0.29%	0.008%
102	8.947	8.936	8.977	VV	179	2247	0.03%	0.001%
103	9.001	8.977	9.015	PV	153	2524	0.04%	0.001%
104	9.057	9.015	9.078	VV	245	5856	0.09%	0.002%
105	9.123	9.078	9.149	VV	226	5622	0.08%	0.002%
106	9.164	9.149	9.188	VV	236	3272	0.05%	0.001%
107	9.221	9.188	9.361	VV	651581	6865788	100.00%	2.903%
108	9.378	9.361	9.399	VV	1039	17348	0.25%	0.007%
109	9.433	9.399	9.469	VV	10011	140607	2.05%	0.059%
110	9.503	9.469	9.568	VV	27546	363630	5.30%	0.154%
111	9.577	9.568	9.606	VV	1071	16933	0.25%	0.007%
112	9.644	9.606	9.715	VV	568991	6327757	92.16%	2.675%
113	9.741	9.715	9.838	VV	659	25613	0.37%	0.011%
114	9.850	9.838	9.864	VV	170	1997	0.03%	0.001%
115	9.873	9.864	9.894	VV	188	1604	0.02%	0.001%
116	9.910	9.894	9.951	PV	184	3205	0.05%	0.001%
117	9.972	9.951	10.004	VV	613	9461	0.14%	0.004%
118	10.011	10.004	10.021	VV	129	1317	0.02%	0.001%
119	10.027	10.021	10.044	VV	189	1861	0.03%	0.001%
120	10.066	10.044	10.131	VV	404	11532	0.17%	0.005%
121	10.146	10.131	10.184	VV	351	5011	0.07%	0.002%
122	10.221	10.184	10.233	PV	175	2678	0.04%	0.001%
123	10.284	10.233	10.317	VV	398	13242	0.19%	0.006%
124	10.354	10.317	10.369	VV	771	16385	0.24%	0.007%
125	10.407	10.369	10.506	VV	11475	197271	2.87%	0.083%
126	10.520	10.506	10.535	VV	198	2505	0.04%	0.001%
127	10.615	10.535	10.661	PV	608090	6724907	97.95%	2.843%
128	10.692	10.661	10.759	VV	593700	6675843	97.23%	2.823%
129	10.768	10.759	10.860	VV	3495	101245	1.47%	0.043%
130	10.883	10.860	10.903	VV	1787	27821	0.41%	0.012%
131	10.924	10.903	10.998	VV	2944	65788	0.96%	0.028%
132	11.010	10.998	11.034	VV	579	9379	0.14%	0.004%
133	11.083	11.034	11.144	VV	534834	6301543	91.78%	2.664%
134	11.156	11.144	11.200	VV	1054	19930	0.29%	0.008%
135	11.232	11.200	11.251	VV	443	8420	0.12%	0.004%
136	11.272	11.251	11.301	VV	551	6933	0.10%	0.003%
137	11.322	11.301	11.337	PV	468	4832	0.07%	0.002%
138	11.388	11.337	11.440	VV	599375	6723905	97.93%	2.843%
139	11.454	11.440	11.473	VV	920	15074	0.22%	0.006%
140	11.496	11.473	11.513	VV	2384	34138	0.50%	0.014%
141	11.527	11.513	11.545	VV	1643	24724	0.36%	0.010%

Instrument :

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ClientSampleId :

RT5358MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/01/2025

Supervised By :mohammad ahmed 04/02/2025

142	11.560	11.545	11.584	VV	1147	20880	0.30%	0.009%
143	11.597	11.584	11.652	VV	1082	16873	0.30%	0.009%
144	11.692	11.652	11.707	PV	203	3950	0.30%	0.009%
145	11.748	11.707	11.768	VV	543	10743	0.30%	0.009%
146	11.795	11.768	11.819	VV	1226	23669	0.30%	0.009%
147	11.833	11.819	11.877	VV	894	22252	0.30%	0.009%
148	11.904	11.877	11.929	VV	790	16241	0.24%	0.007%
149	11.997	11.929	12.074	VV	41686	515811	7.51%	0.218%
150	12.083	12.074	12.101	VV	1175	15650	0.23%	0.007%
151	12.115	12.101	12.141	VV	955	19230	0.28%	0.008%
152	12.160	12.141	12.176	VV	840	15107	0.22%	0.006%
153	12.207	12.176	12.251	VV	4018	72221	1.05%	0.031%
154	12.273	12.251	12.289	VV	1303	23869	0.35%	0.010%
155	12.311	12.289	12.333	VV	1532	32037	0.47%	0.014%
156	12.389	12.333	12.407	VV	520264	6371518	92.80%	2.694%
157	12.428	12.407	12.552	VV	567918	6703665	97.64%	2.834%
158	12.562	12.552	12.584	VV	1381	24738	0.36%	0.010%
159	12.609	12.584	12.684	VV	7629	167275	2.44%	0.071%
160	12.723	12.684	12.761	VV	560232	6443511	93.85%	2.724%
161	12.779	12.761	12.796	VV	8106	121029	1.76%	0.051%
162	12.829	12.796	12.891	VV	441655	5084352	74.05%	2.150%
163	12.905	12.891	12.930	VV	2262	50684	0.74%	0.021%
164	12.938	12.930	12.958	VV	2140	33940	0.49%	0.014%
165	12.999	12.958	13.043	VV	471964	6049377	88.11%	2.558%
166	13.063	13.043	13.111	VV	2973	96489	1.41%	0.041%
167	13.122	13.111	13.147	VV	2074	41025	0.60%	0.017%
168	13.224	13.147	13.282	VV	7015	231270	3.37%	0.098%
169	13.318	13.282	13.357	VV	2768	111455	1.62%	0.047%
170	13.372	13.357	13.394	VV	2463	50967	0.74%	0.022%
171	13.425	13.394	13.448	VV	3487	89968	1.31%	0.038%
172	13.465	13.448	13.512	VV	2925	101722	1.48%	0.043%
173	13.534	13.512	13.544	VV	2999	53750	0.78%	0.023%
174	13.584	13.544	13.623	VV	482372	5933751	86.42%	2.509%
175	13.639	13.623	13.692	VV	3258	112936	1.64%	0.048%
176	13.701	13.692	13.711	VV	2351	26456	0.39%	0.011%
177	13.735	13.711	13.767	VV	2470	77529	1.13%	0.033%
178	13.809	13.767	13.859	VV	3364	145725	2.12%	0.062%
179	13.874	13.859	13.894	VV	2470	47298	0.69%	0.020%
180	13.971	13.894	13.998	VV	3729	163523	2.38%	0.069%
181	14.014	13.998	14.037	VV	3799	77137	1.12%	0.033%
182	14.059	14.037	14.108	VV	3474	120305	1.75%	0.051%
183	14.146	14.108	14.168	VV	3222	99660	1.45%	0.042%
184	14.202	14.168	14.213	VV	3224	77975	1.14%	0.033%
185	14.230	14.213	14.261	VV	3550	89326	1.30%	0.038%
186	14.286	14.261	14.323	VV	3526	101723	1.48%	0.043%
187	14.362	14.323	14.461	VV	3728	227023	3.31%	0.096%
188	14.468	14.461	14.494	VV	2341	45605	0.66%	0.019%
189	14.520	14.494	14.555	VV	3270	101831	1.48%	0.043%
190	14.598	14.555	14.618	VV	471650	6017618	87.65%	2.544%
191	14.642	14.618	14.661	VV	483613	5932778	86.41%	2.508%
192	14.685	14.661	14.808	VV	436512	5988917	87.23%	2.532%
193	14.834	14.808	14.856	VV	3792	88761	1.29%	0.038%
194	14.874	14.856	14.894	VV	3264	67603	0.98%	0.029%

Instrument :

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ClientSampleId :

RT5358MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/01/2025

Supervised By :mohammad ahmed 04/02/2025

195	14.925	14.894	15.007	VV	2924	167850	2.44%	0.071%
196	15.057	15.007	15.178	VV	22916	589508		
197	15.211	15.178	15.236	VV	6225	146635		
198	15.253	15.236	15.357	VV	3494	183515		
199	15.410	15.357	15.428	VV	2787	90724		
200	15.441	15.428	15.484	VV	2357	68454		
201	15.519	15.484	15.552	VV	3011	95051	1.38%	0.040%
202	15.578	15.552	15.651	VV	2927	125662	1.83%	0.053%
203	15.705	15.651	15.741	VV	402338	5480732	79.83%	2.317%
204	15.760	15.741	15.786	VV	2679	58230	0.85%	0.025%
205	15.799	15.786	15.814	VV	1588	24414	0.36%	0.010%
206	15.874	15.814	15.898	VV	2484	92910	1.35%	0.039%
207	15.908	15.898	15.930	VV	1978	35495	0.52%	0.015%
208	15.947	15.930	15.967	VV	2025	39789	0.58%	0.017%
209	16.023	15.967	16.040	VV	2650	92651	1.35%	0.039%
210	16.071	16.040	16.107	VV	8588	193548	2.82%	0.082%
211	16.153	16.107	16.168	VV	390516	5751583	83.77%	2.432%
212	16.187	16.168	16.233	VV	498866	5805757	84.56%	2.455%
213	16.259	16.233	16.308	VV	8565	209511	3.05%	0.089%
214	16.314	16.308	16.331	VV	2574	33301	0.49%	0.014%
215	16.346	16.331	16.357	VV	2665	37495	0.55%	0.016%
216	16.401	16.357	16.424	VV	4656	126061	1.84%	0.053%
217	16.465	16.424	16.491	VV	4890	132868	1.94%	0.056%
218	16.530	16.491	16.593	VV	407086	5445584	79.31%	2.302%
219	16.652	16.593	16.684	VV	367843	5334395	77.70%	2.255%
220	16.724	16.684	16.846	VV	8851	229713	3.35%	0.097%
221	16.869	16.846	16.921	VV	1001	38089	0.55%	0.016%
222	16.931	16.921	16.941	VV	748	8411	0.12%	0.004%
223	16.951	16.941	16.958	VV	702	6669	0.10%	0.003%
224	17.010	16.958	17.068	VV	15801	289930	4.22%	0.123%
225	17.099	17.068	17.140	VV	6402	114074	1.66%	0.048%
226	17.183	17.140	17.228	VV	1025	37151	0.54%	0.016%
227	17.242	17.228	17.274	VV	839	15687	0.23%	0.007%
228	17.287	17.274	17.301	VV	366	4316	0.06%	0.002%
229	17.339	17.301	17.359	VV	317	8591	0.13%	0.004%
230	17.427	17.359	17.472	VV	4385	86172	1.26%	0.036%
231	17.540	17.472	17.584	VV	365807	5090592	74.14%	2.152%
232	17.624	17.584	17.723	VV	5053	101383	1.48%	0.043%
233	17.744	17.723	17.778	VV	1245	20144	0.29%	0.009%
234	17.806	17.778	17.818	PV	799	10648	0.16%	0.005%
235	17.838	17.818	17.854	VV	1035	18081	0.26%	0.008%
236	17.900	17.854	17.916	VV	367397	5504298	80.17%	2.327%
237	17.938	17.916	18.022	VV	399465	5378065	78.33%	2.274%
238	18.051	18.022	18.105	VV	2441	78495	1.14%	0.033%
239	18.155	18.105	18.284	VV	342971	5164112	75.22%	2.183%
240	18.321	18.284	18.329	VV	3379	59511	0.87%	0.025%
241	18.369	18.329	18.424	VV	354206	4924893	71.73%	2.082%
242	18.462	18.424	18.516	VV	10526	220342	3.21%	0.093%
243	18.534	18.516	18.569	VV	2972	55544	0.81%	0.023%
244	18.586	18.569	18.595	VV	700	9977	0.15%	0.004%
245	18.711	18.595	18.744	VV	13519	469298	6.84%	0.198%
246	18.762	18.744	18.793	VV	8156	168006	2.45%	0.071%

Instrument :

FID_C

ClientSampleId :

RT5358MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 04/01/2025

Supervised By :mohammad ahmed 04/02/2025

							Client Sampled : RT5358MSD	
247	18.812	18.793	18.838	VV	3850	83927	1.22%	0.035%
248	18.864	18.838	18.901	VV	3800	100460	3.12%	0.035%
249	18.926	18.901	18.944	VV	4243	81063	1.91%	0.035%
250	18.962	18.944	19.050	VV	3834	154484	2.02%	0.035%
251	19.075	19.050	19.094	VV	2001	43553	0.61%	0.035%
252	19.152	19.094	19.218	VV	328883	4871552	70.22%	0.035%
253	19.255	19.218	19.282	VV	8038	163543	2.38%	0.069%
254	19.299	19.282	19.317	VV	2337	41669	0.61%	0.018%
255	19.340	19.317	19.353	VV	2789	52331	0.76%	0.022%
256	19.394	19.353	19.434	VV	6338	226025	3.29%	0.096%
257	19.460	19.434	19.478	VV	14916	255229	3.72%	0.108%
258	19.491	19.478	19.604	VV	11274	342683	4.99%	0.145%
259	19.636	19.604	19.664	VV	2551	78853	1.15%	0.033%
260	19.691	19.664	19.714	VV	2754	76281	1.11%	0.032%
261	19.735	19.714	19.762	VV	2926	73104	1.06%	0.031%
262	19.790	19.762	19.818	VV	3154	87721	1.28%	0.037%
263	19.891	19.818	19.931	VV	294961	4512106	65.72%	1.908%
264	19.948	19.931	19.967	VV	2334	48402	0.70%	0.020%
265	20.028	19.967	20.125	VV	5787	333051	4.85%	0.141%
266	20.179	20.125	20.199	VV	3025	113209	1.65%	0.048%
267	20.234	20.199	20.261	VV	4093	129277	1.88%	0.055%
268	20.276	20.261	20.365	VV	3484	179200	2.61%	0.076%
269	20.421	20.365	20.448	VV	2772	130260	1.90%	0.055%
270	20.472	20.448	20.507	VV	2772	89806	1.31%	0.038%
271	20.601	20.507	20.667	VV	256314	4490717	65.41%	1.899%
272	20.695	20.667	20.708	VV	2744	62912	0.92%	0.027%
273	20.738	20.708	20.767	VV	2910	98369	1.43%	0.042%
274	20.803	20.767	20.855	VV	2640	132111	1.92%	0.056%
275	20.866	20.855	20.889	VV	2426	46358	0.68%	0.020%
276	20.897	20.889	20.950	VV	2299	80242	1.17%	0.034%
277	20.995	20.950	21.024	VV	2890	108130	1.57%	0.046%
278	21.107	21.024	21.211	VV	2771	256540	3.74%	0.108%
279	21.220	21.211	21.249	VV	1852	39134	0.57%	0.017%
280	21.277	21.249	21.377	VV	1650	109087	1.59%	0.046%
281	21.450	21.377	21.578	VV	193498	4216189	61.41%	1.783%
282	21.637	21.578	21.702	VV	1584	81611	1.19%	0.035%
283	21.724	21.702	21.754	VV	795	23114	0.34%	0.010%
284	21.767	21.754	21.784	VV	723	11964	0.17%	0.005%
285	21.803	21.784	21.900	VV	747	40989	0.60%	0.017%
286	21.954	21.900	22.010	VV	756	37603	0.55%	0.016%
287	22.023	22.010	22.180	VV	564	29518	0.43%	0.012%
Sum of corrected areas:							236515586	



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

Manual Integration Report

Sequence:

FC032625AL

Instrument

FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM ALIPHATIC HC	FC068415.D	n-Tetracontane (C40)	yogesh	3/27/2025 8:56:53 AM	mohammad	3/28/2025 1:18:48	Peak Integrated by Software

Manual Integration Report

Sequence:

FC033125AL

Instrument

FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PB167381BS	FC068446.D	n-Tetracosane (C24)	yogesh	4/1/2025 7:59:50 AM	mohammad	4/2/2025 1:16:40	Peak Integrated by Software
PB167381BSD	FC068447.D	n-Tetracosane (C24)	yogesh	4/1/2025 7:59:51 AM	mohammad	4/2/2025 1:16:40	Peak Integrated by Software
Q1674-01MS	FC068452.D	n-Tetracosane (C24)	yogesh	4/1/2025 7:59:53 AM	mohammad	4/2/2025 1:16:40	Peak Integrated by Software
Q1674-01MSD	FC068453.D	n-Tetracosane (C24)	yogesh	4/1/2025 7:59:54 AM	mohammad	4/2/2025 1:16:40	Peak Integrated by Software



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

Manual Integration Report

Sequence:

FC040125AL

Instrument

FID_c

Sample ID

File ID

Parameter

Review By

Review On

Supervised
By

Supervised On

Reason

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC032625AL

Review By	yogesh	Review On	3/26/2025 3:15:44 PM
Supervise By	mohammad	Supervise On	3/28/2025 1:18:48 AM
SubDirectory	FC032625AL	HP Acquire Method	HP Processing Method FC032625AL
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	FC068399.D	26 Mar 2025 09:12	YP/AJ	Ok
2	I.BLK	FC068400.D	26 Mar 2025 09:49	YP/AJ	Ok
3	100 PPM ALIPHATIC HC STD1	FC068401.D	26 Mar 2025 10:26	YP/AJ	Ok
4	50 PPM ALIPHATIC HC STD2	FC068402.D	26 Mar 2025 11:05	YP/AJ	Ok
5	20 PPM ALIPHATIC HC STD3	FC068403.D	26 Mar 2025 11:42	YP/AJ	Ok
6	10 PPM ALIPHATIC HC STD4	FC068404.D	26 Mar 2025 12:21	YP/AJ	Ok
7	5 PPM ALIPHATIC HC STD5	FC068405.D	26 Mar 2025 12:59	YP/AJ	Ok
8	20 PPM ALIPHATIC HC STD ICV	FC068406.D	26 Mar 2025 13:36	YP/AJ	Ok
9	I.BLK	FC068407.D	26 Mar 2025 14:14	YP/AJ	Ok
10	20 PPM ALIPHATIC HC STD	FC068408.D	26 Mar 2025 14:52	YP/AJ	Ok
11	PB167327BL	FC068409.D	26 Mar 2025 16:02	YP/AJ	Ok
12	PB167327BS	FC068410.D	26 Mar 2025 16:39	YP/AJ	Ok
13	PB167327BSD	FC068411.D	26 Mar 2025 17:17	YP/AJ	Ok
14	Q1625-01	FC068412.D	26 Mar 2025 17:55	YP/AJ	Ok
15	Q1644-03	FC068413.D	26 Mar 2025 18:32	YP/AJ	Ok
16	I.BLK	FC068414.D	26 Mar 2025 19:46	YP/AJ	Ok
17	20 PPM ALIPHATIC HC STD	FC068415.D	26 Mar 2025 20:24	YP/AJ	Ok,M

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC033125AL

Review By	yogesh	Review On	3/31/2025 12:04:41 PM
Supervise By	mohammad	Supervise On	4/2/2025 1:16:40 AM
SubDirectory	FC033125AL	HP Acquire Method	HP Processing Method FC032625AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24176 PP24174,PP24179		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FC068442.D	31 Mar 2025 08:44	YP/AJ	Ok
2	I.BLK	FC068443.D	31 Mar 2025 10:40	YP/AJ	Ok
3	20 PPM ALIPHATIC HC STD	FC068444.D	31 Mar 2025 11:17	YP/AJ	Ok
4	PB167381BL	FC068445.D	31 Mar 2025 13:54	YP/AJ	Ok
5	PB167381BS	FC068446.D	31 Mar 2025 14:31	YP/AJ	Ok,M
6	PB167381BSD	FC068447.D	31 Mar 2025 15:08	YP/AJ	Ok,M
7	Q1672-01	FC068448.D	31 Mar 2025 15:46	YP/AJ	Ok
8	Q1672-02	FC068449.D	31 Mar 2025 16:23	YP/AJ	Ok
9	Q1674-01	FC068450.D	31 Mar 2025 17:01	YP/AJ	Ok
10	Q1674-01D	FC068451.D	31 Mar 2025 17:38	YP/AJ	Ok
11	Q1674-01MS	FC068452.D	31 Mar 2025 18:15	YP/AJ	Ok,M
12	Q1674-01MSD	FC068453.D	31 Mar 2025 18:53	YP/AJ	Ok,M
13	Q1674-03	FC068454.D	31 Mar 2025 19:30	YP/AJ	Ok
14	Q1675-13	FC068455.D	31 Mar 2025 20:08	YP/AJ	Ok
15	Q1675-14	FC068456.D	31 Mar 2025 20:45	YP/AJ	Dilution
16	Q1675-15	FC068457.D	31 Mar 2025 21:23	YP/AJ	Ok
17	Q1675-16	FC068458.D	31 Mar 2025 22:01	YP/AJ	Ok
18	Q1675-17	FC068459.D	31 Mar 2025 22:38	YP/AJ	Dilution
19	I.BLK	FC068460.D	01 Apr 2025 00:31	YP/AJ	Ok
20	20 PPM ALIPHATIC HC STD	FC068461.D	01 Apr 2025 01:08	YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC040125AL

Review By	yogesh	Review On	4/1/2025 10:50:16 AM
Supervise By	mohammad	Supervise On	4/3/2025 1:38:08 AM
SubDirectory	FC040125AL	HP Acquire Method	HP Processing Method FC032625AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24176 PP24174,PP24179		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FC068462.D	01 Apr 2025 06:21	YP/AJ	Ok
2	I.BLK	FC068463.D	01 Apr 2025 06:58	YP/AJ	Ok
3	20 PPM ALIPHATIC HC STD	FC068464.D	01 Apr 2025 07:35	YP/AJ	Ok
4	Q1675-14DL	FC068465.D	01 Apr 2025 08:12	YP/AJ	Ok
5	Q1675-17DL	FC068466.D	01 Apr 2025 08:49	YP/AJ	Ok
6	I.BLK	FC068467.D	01 Apr 2025 10:31	YP/AJ	Ok
7	20 PPM ALIPHATIC HC STD	FC068468.D	01 Apr 2025 11:08	YP/AJ	Ok
8	PB167402BL	FC068469.D	01 Apr 2025 16:10	YP/AJ	Ok
9	PB167402BS	FC068470.D	01 Apr 2025 16:46	YP/AJ	Ok
10	PB167402TB	FC068471.D	01 Apr 2025 17:22	YP/AJ	Ok
11	Q1664-04	FC068472.D	01 Apr 2025 17:59	YP/AJ	Ok
12	Q1664-05	FC068473.D	01 Apr 2025 18:36	YP/AJ	Ok
13	Q1664-06	FC068474.D	01 Apr 2025 19:14	YP/AJ	Ok
14	Q1664-08	FC068475.D	01 Apr 2025 19:51	YP/AJ	Ok
15	Q1664-10	FC068476.D	01 Apr 2025 20:27	YP/AJ	Ok
16	Q1664-12	FC068477.D	01 Apr 2025 21:04	YP/AJ	Ok
17	Q1664-14	FC068478.D	01 Apr 2025 21:42	YP/AJ	Ok
18	Q1664-16	FC068479.D	01 Apr 2025 22:19	YP/AJ	Ok
19	Q1664-18	FC068480.D	01 Apr 2025 22:56	YP/AJ	Ok
20	Q1664-20	FC068481.D	01 Apr 2025 23:33	YP/AJ	Ok
21	Q1664-22	FC068482.D	02 Apr 2025 00:09	YP/AJ	Ok

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC040125AL

Review By	yogesh	Review On	4/1/2025 10:50:16 AM
Supervise By	mohammad	Supervise On	4/3/2025 1:38:08 AM
SubDirectory	FC040125AL	HP Acquire Method	HP Processing Method FC032625AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178		
CCC Internal Standard/PEM	PP24176		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24174,PP24179		

22	I.BLK	FC068483.D	02 Apr 2025 00:47	YP/AJ	Ok
23	20 PPM ALIPHATIC HC STD	FC068484.D	02 Apr 2025 01:23	YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC032625AL

Review By	yogesh	Review On	3/26/2025 3:15:44 PM
Supervise By	mohammad	Supervise On	3/28/2025 1:18:48 AM
SubDirectory	FC032625AL	HP Acquire Method	HP Processing Method FC032625AL

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	FC068399.D	26 Mar 2025 09:12		YP/AJ	Ok
2	I.BLK	I.BLK	FC068400.D	26 Mar 2025 09:49		YP/AJ	Ok
3	100 PPM ALIPHATIC HC	100 PPM ALIPHATIC HC	FC068401.D	26 Mar 2025 10:26		YP/AJ	Ok
4	50 PPM ALIPHATIC HC	50 PPM ALIPHATIC HC	FC068402.D	26 Mar 2025 11:05		YP/AJ	Ok
5	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068403.D	26 Mar 2025 11:42		YP/AJ	Ok
6	10 PPM ALIPHATIC HC	10 PPM ALIPHATIC HC	FC068404.D	26 Mar 2025 12:21		YP/AJ	Ok
7	5 PPM ALIPHATIC HC	5 PPM ALIPHATIC HC	FC068405.D	26 Mar 2025 12:59		YP/AJ	Ok
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068406.D	26 Mar 2025 13:36		YP/AJ	Ok
9	I.BLK	I.BLK	FC068407.D	26 Mar 2025 14:14		YP/AJ	Ok
10	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068408.D	26 Mar 2025 14:52		YP/AJ	Ok
11	PB167327BL	PB167327BL	FC068409.D	26 Mar 2025 16:02		YP/AJ	Ok
12	PB167327BS	PB167327BS	FC068410.D	26 Mar 2025 16:39	naphthalene break down - 5.0, 2-methylnephthalene break down - 4.9	YP/AJ	Ok
13	PB167327BSD	PB167327BSD	FC068411.D	26 Mar 2025 17:17	naphthalene break down - 5.0, 2-methylnephthalene break down - 4.9	YP/AJ	Ok
14	Q1625-01	FRAC-TANK-A1291	FC068412.D	26 Mar 2025 17:55		YP/AJ	Ok
15	Q1644-03	031925	FC068413.D	26 Mar 2025 18:32		YP/AJ	Ok
16	I.BLK	I.BLK	FC068414.D	26 Mar 2025 19:46		YP/AJ	Ok

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC032625AL

Review By	yogesh	Review On	3/26/2025 3:15:44 PM
Supervise By	mohammad	Supervise On	3/28/2025 1:18:48 AM
SubDirectory	FC032625AL	HP Acquire Method	HP Processing Method FC032625AL

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

17	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068415.D	26 Mar 2025 20:24		YP/AJ	Ok,M
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M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC033125AL

Review By	yogesh	Review On	3/31/2025 12:04:41 PM
Supervise By	mohammad	Supervise On	4/2/2025 1:16:40 AM
SubDirectory	FC033125AL	HP Acquire Method	HP Processing Method FC032625AL
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	FC068442.D	31 Mar 2025 08:44		YP/AJ	Ok
2	I.BLK	I.BLK	FC068443.D	31 Mar 2025 10:40		YP/AJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068444.D	31 Mar 2025 11:17		YP/AJ	Ok
4	PB167381BL	PB167381BL	FC068445.D	31 Mar 2025 13:54		YP/AJ	Ok
5	PB167381BS	PB167381BS	FC068446.D	31 Mar 2025 14:31		YP/AJ	Ok,M
6	PB167381BSD	PB167381BSD	FC068447.D	31 Mar 2025 15:08		YP/AJ	Ok,M
7	Q1672-01	TP-8	FC068448.D	31 Mar 2025 15:46		YP/AJ	Ok
8	Q1672-02	TP-8-EPH	FC068449.D	31 Mar 2025 16:23		YP/AJ	Ok
9	Q1674-01	RT5358	FC068450.D	31 Mar 2025 17:01		YP/AJ	Ok
10	Q1674-01D	Q1674-01D	FC068451.D	31 Mar 2025 17:38		YP/AJ	Ok
11	Q1674-01MS	RT5358MS	FC068452.D	31 Mar 2025 18:15	FC068450.D	YP/AJ	Ok,M
12	Q1674-01MSD	RT5358MSD	FC068453.D	31 Mar 2025 18:53	FC068450.D!FC068452.D	YP/AJ	Ok,M
13	Q1674-03	72-11991	FC068454.D	31 Mar 2025 19:30		YP/AJ	Ok
14	Q1675-13	D1	FC068455.D	31 Mar 2025 20:08		YP/AJ	Ok
15	Q1675-14	D2	FC068456.D	31 Mar 2025 20:45	need 10x dilution	YP/AJ	Dilution
16	Q1675-15	D3	FC068457.D	31 Mar 2025 21:23		YP/AJ	Ok
17	Q1675-16	D4	FC068458.D	31 Mar 2025 22:01		YP/AJ	Ok
18	Q1675-17	D5	FC068459.D	31 Mar 2025 22:38	need 5x dilution	YP/AJ	Dilution

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC033125AL

Review By	yogesh	Review On	3/31/2025 12:04:41 PM
Supervise By	mohammad	Supervise On	4/2/2025 1:16:40 AM
SubDirectory	FC033125AL	HP Acquire Method	HP Processing Method FC032625AL

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

19	I.BLK	I.BLK	FC068460.D	01 Apr 2025 00:31		YP/AJ	Ok
20	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068461.D	01 Apr 2025 01:08		YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC040125AL

Review By	yogesh	Review On	4/1/2025 10:50:16 AM
Supervise By	mohammad	Supervise On	4/3/2025 1:38:08 AM
SubDirectory	FC040125AL	HP Acquire Method	HP Processing Method FC032625AL

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	FC068462.D	01 Apr 2025 06:21		YP/AJ	Ok
2	I.BLK	I.BLK	FC068463.D	01 Apr 2025 06:58		YP/AJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068464.D	01 Apr 2025 07:35		YP/AJ	Ok
4	Q1675-14DL	D2DL	FC068465.D	01 Apr 2025 08:12		YP/AJ	Ok
5	Q1675-17DL	D5DL	FC068466.D	01 Apr 2025 08:49		YP/AJ	Ok
6	I.BLK	I.BLK	FC068467.D	01 Apr 2025 10:31		YP/AJ	Ok
7	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068468.D	01 Apr 2025 11:08		YP/AJ	Ok
8	PB167402BL	PB167402BL	FC068469.D	01 Apr 2025 16:10		YP/AJ	Ok
9	PB167402BS	PB167402BS	FC068470.D	01 Apr 2025 16:46	naphthalene break down - 5, 2-methylnepthalene break down - 4.80	YP/AJ	Ok
10	PB167402TB	PB167402TB	FC068471.D	01 Apr 2025 17:22		YP/AJ	Ok
11	Q1664-04	P001-BBDGA-001-01	FC068472.D	01 Apr 2025 17:59		YP/AJ	Ok
12	Q1664-05	P001-BBDGA-001-01MS	FC068473.D	01 Apr 2025 18:36	FC068472.D	YP/AJ	Ok
13	Q1664-06	P001-BBDGA-001-01MS	FC068474.D	01 Apr 2025 19:14	FC068472.D!FC068473.D	YP/AJ	Ok
14	Q1664-08	P001-BBDGA-001-02	FC068475.D	01 Apr 2025 19:51		YP/AJ	Ok
15	Q1664-10	P001-BBDGA-002-01	FC068476.D	01 Apr 2025 20:27		YP/AJ	Ok
16	Q1664-12	P001-BBDGA-003-01	FC068477.D	01 Apr 2025 21:04		YP/AJ	Ok
17	Q1664-14	P001-BBDGA-004-01	FC068478.D	01 Apr 2025 21:42		YP/AJ	Ok

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC040125AL

Review By	yogesh	Review On	4/1/2025 10:50:16 AM
Supervise By	mohammad	Supervise On	4/3/2025 1:38:08 AM
SubDirectory	FC040125AL	HP Acquire Method	HP Processing Method FC032625AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178		
CCC	PP24176		
Internal Standard/PEM			
ICV/I.BLK	PP24174,PP24179		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

18	Q1664-16	P001-BBDGA-005-01	FC068479.D	01 Apr 2025 22:19		YP/AJ	Ok
19	Q1664-18	P001-BBDGA-006-01	FC068480.D	01 Apr 2025 22:56		YP/AJ	Ok
20	Q1664-20	P001-BBDGA-007-01	FC068481.D	01 Apr 2025 23:33		YP/AJ	Ok
21	Q1664-22	P001-BBDGA-008-01	FC068482.D	02 Apr 2025 00:09		YP/AJ	Ok
22	I.BLK	I.BLK	FC068483.D	02 Apr 2025 00:47		YP/AJ	Ok
23	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068484.D	02 Apr 2025 01:23		YP/AJ	Ok

M : Manual Integration



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 3/31/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 03/28/2025
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: 03/29/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135225

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
Q1597-08	1-CONCRETE-SLAB	1	1.15	8.66	9.81	9.54	96.9	
Q1597-09	2-CONCRETE-SLAB	2	1.18	8.52	9.7	9.25	94.7	
Q1597-10	3-CONCRETE-SLAB	3	1.19	8.53	9.72	9.17	93.6	
Q1632-05	PIER-1-2	25	1.17	10.40	11.57	11.09	95.4	
Q1672-01	TP-8	4	1.18	10.24	11.42	10.66	92.6	
Q1672-02	TP-8-EPH	6	1.15	9.72	10.87	10.4	95.2	
Q1672-03	TP-8-VOC	5	1.13	10.11	11.24	10.00	87.7	
Q1674-01	RT5358	7	1.16	10.12	11.28	10.19	89.2	
Q1674-03	72-11991	8	1.19	10.27	11.46	9.84	84.2	
Q1675-01	P1	26	1.15	10.21	11.36	10.93	95.8	
Q1675-02	P2	27	1.19	10.57	11.76	11.39	96.5	
Q1675-03	P3	28	1.15	10.43	11.58	11.09	95.3	
Q1675-05	P5	29	1.18	10.78	11.96	11.11	92.1	
Q1675-06	P6	30	1.19	10.65	11.84	11.31	95.0	
Q1675-07	T1	31	1.18	10.08	11.26	10.53	92.8	
Q1675-08	T2	32	1.15	10.74	11.89	9.79	80.4	
Q1675-09	T3	33	1.17	10.50	11.67	9.82	82.4	
Q1675-10	T4	34	1.18	10.26	11.44	9.77	83.7	
Q1675-11	T5	35	1.18	10.41	11.59	9.84	83.2	
Q1675-12	T6	36	1.18	10.70	11.88	10.18	84.1	
Q1675-13	D1	37	1.18	10.40	11.58	9.67	81.6	
Q1675-14	D2	38	1.19	10.43	11.62	11.14	95.4	
Q1675-15	D3	39	1.18	10.26	11.44	10.97	95.4	
Q1675-16	D4	40	1.16	10.10	11.26	10.74	94.9	
Q1675-17	D5	41	1.18	10.76	11.94	11.36	94.6	
Q1675-18	K1P	42	1.15	11.65	12.8	11.03	84.8	
Q1675-19	K1	43	1.14	10.41	11.55	11.08	95.5	
Q1675-20	K2	44	1.18	10.45	11.63	11.18	95.7	



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 3/31/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 03/28/2025
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: 03/29/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135225

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
Q1675-21	K3	45	1.17	10.15	11.32	10.9	95.9	
Q1676-05	SVOC-GPC-BLANK	9	1.00	1.00	2.00	2.00	100.0	
Q1676-06	PEST-GPC-BLANK	10	1.00	1.00	2.00	2.00	100.0	
Q1676-07	PEST-GPC-BLANK-SPIKE	11	1.00	1.00	2.00	2.00	100.0	
Q1676-08	PCB-GPC-BLANK	12	1.00	1.00	2.00	2.00	100.0	
Q1676-09	PCB-GPC-BLANK-SPIKE	13	1.00	1.00	2.00	2.00	100.0	
Q1676-10	SVOC-GPC2-BLANK	14	1.00	1.00	2.00	2.00	100.0	
Q1676-11	PEST-GPC2-BLANK	15	1.00	1.00	2.00	2.00	100.0	
Q1676-12	PEST-GPC2-BLANK-SPIKE	16	1.00	1.00	2.00	2.00	100.0	
Q1676-13	PCB-GPC2-BLANK	17	1.00	1.00	2.00	2.00	100.0	
Q1676-14	PCB-GPC2-BLANK-SPIKE	18	1.00	1.00	2.00	2.00	100.0	
Q1677-01	JEI299N-1-1	19	1.00	1.00	2.00	2.00	100.0	oilc
Q1677-02	JEI299N-1-2	20	1.00	1.00	2.00	2.00	100.0	oilc
Q1677-03	HIH445B-1-1	21	1.00	1.00	2.00	2.00	100.0	oilc
Q1677-04	HIH445B-1-1	22	1.00	1.00	2.00	2.00	100.0	oilc
Q1678-01	MOO-25-0082	23	1.00	1.00	2.00	2.00	100.0	debris
Q1678-02	MOO-25-0082-87-88	24	1.14	10.54	11.68	10.55	89.3	

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

WORKLIST(Hardcopy Internal Chain)

135225

WorkList Name : %1-032825

WorkList ID : 188606

Department : Wet-Chemistry

Date : 03-28-2025 08:10:18

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1675-01	P1	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1675-02	P2	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1675-03	P3	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1675-05	P5	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1675-06	P6	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1675-07	T1	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1675-20	K2	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1675-21	K3	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/28/2025	Chemtech -SO
Q1675-14	D2	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/28/2025	Chemtech -SO
Q1675-15	D3	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1675-16	D4	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1675-17	D5	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1675-18	K1P	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1675-19	K1	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/28/2025	Chemtech -SO
Q1675-08	T2	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/28/2025	Chemtech -SO
Q1675-09	T3	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1675-10	T4	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1675-11	T5	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1675-12	T6	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1675-13	D1	Solid	Percent Solids	Cool 4 deg C	GENV01	I31	03/27/2025	Chemtech -SO
Q1676-05	SVOC-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/28/2025	Chemtech -SO

Date/Time 03/28/25 13:20

Raw Sample Received by: JB WOI

Raw Sample Relinquished by: JB WOI

Date/Time 03/28/25

Raw Sample Received by: JB WOI

Raw Sample Relinquished by: JB WOI

WORKLIST(Hardcopy Internal Chain)

9135225

WorkList Name : %1-032825 WorkList ID : 188606 Department : Wet-Chemistry Date : 03-28-2025 08:10:18

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1676-06	PEST-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/28/2025	Chemtech -SO
Q1676-07	PEST-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/28/2025	Chemtech -SO
Q1676-08	PCB-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/28/2025	Chemtech -SO
Q1676-09	PCB-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/28/2025	Chemtech -SO
Q1676-10	SVOC-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/28/2025	Chemtech -SO
Q1676-11	PEST-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/28/2025	Chemtech -SO
Q1676-12	PEST-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/28/2025	Chemtech -SO
Q1676-13	PCB-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/28/2025	Chemtech -SO
Q1676-14	PCB-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/28/2025	Chemtech -SO
Q1597-08	1-CONCRETE-SLAB	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/18/2025	Chemtech -SO
Q1597-09	2-CONCRETE-SLAB	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/18/2025	Chemtech -SO
Q1597-10	3-CONCRETE-SLAB	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/18/2025	Chemtech -SO
Q1632-05	PIER-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/24/2025	Chemtech -SO
Q1672-01	TP-8	Solid	Percent Solids	Cool 4 deg C	PSEG03	I31	03/27/2025	Chemtech -SO
Q1672-02	TP-8-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	I31	03/27/2025	Chemtech -SO
Q1677-04	HIH445B-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/28/2025	Chemtech -SO
Q1678-01	MOO-25-0082	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/28/2025	Chemtech -SO
Q1678-02	MOO-25-0082-87-88	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/28/2025	Chemtech -SO
Q1672-03	TP-8-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	I31	03/27/2025	Chemtech -SO
Q1674-01	RT5358	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/28/2025	Chemtech -SO
Q1674-03	72-11991	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/28/2025	Chemtech -SO

Date/Time 03/28/25 15:20
 Raw Sample Received by: JB WSC
 Raw Sample Relinquished by: JB WSC

Date/Time 03/28/25 15:10
 Raw Sample Received by: JB WSC
 Raw Sample Relinquished by: JB WSC

WORKLIST(Hardcopy Internal Chain)

135225

WorkList Name : %1-032825 WorkList ID : 188606 Department : Wet-Chemistry Date : 03-28-2025 08:10:18

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1677-01	JEI299N-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/28/2025	Chemtech -SO
Q1677-02	JEI299N-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/28/2025	Chemtech -SO
Q1677-03	HIH445B-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/28/2025	Chemtech -SO

Date/Time 03/28/25 15:20
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Date/Time 03/28/25 17:10
 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: 03/31/2025

Extraction Start Time: 08:56

Extraction End Date: 03/31/2025

Extraction End Time: 13:00

Concentration By: EH

Supervisor By: rajesh

Extraction Method: ☐ Separatory Funnel

☐ Continuous Liquid/Liquid

☐ Sonication

☐ Waste Dilution

☒ Soxhlet

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	100 PPM	PP24207
Surrogate	1.0ML	100 PPM	PP24210
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	E3914
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
03/31/25 13:05	RP (E.H. 205)	Y-L. Pestipud
	Preparation Group	Analysis Group

Analytical Method: MNJDEP-EPH-7

Concentration Date: 03/31/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB167381BL	PB167381BL	EPH_NF	30.02	N/A	ritesh	Evelyn	2			U3-1
PB167381BS	PB167381BS	EPH_NF	30.03	N/A	ritesh	Evelyn	2			2
PB167381BSD	PB167381BSD	EPH_NF	30.01	N/A	ritesh	Evelyn	2			3
Q1672-01	TP-8	EPH_NF	30.06	N/A	ritesh	Evelyn	2	D		4
Q1672-02	TP-8-EPH	EPH_NF	30.08	N/A	ritesh	Evelyn	2	D		5
Q1674-01	RT5358	EPH_NF	30.05	N/A	ritesh	Evelyn	2	D		6
Q1674-01DUP	RT5358DUP	EPH_NF	30.01	N/A	ritesh	Evelyn	2	D		U6-1
Q1674-01MS	RT5358MS	EPH_NF	30.02	N/A	ritesh	Evelyn	2	D		2
Q1674-01MSD	RT5358MSD	EPH_NF	30.04	N/A	ritesh	Evelyn	2	D		3
Q1674-03	72-11991	EPH_NF	30.05	N/A	ritesh	Evelyn	2	D		4
Q1675-13	D1	EPH_NF	30.04	N/A	ritesh	Evelyn	2	A		5
Q1675-14	D2	EPH_NF	30.06	N/A	ritesh	Evelyn	2	A	Stone	6
Q1675-15	D3	EPH_NF	30.03	N/A	ritesh	Evelyn	2	A	Stone	U7-1
Q1675-16	D4	EPH_NF	30.05	N/A	ritesh	Evelyn	2	A	Stone	2
Q1675-17	D5	EPH_NF	30.07	N/A	ritesh	Evelyn	2	A	Stone	3

* Extracts relinquished on the same date as received.

2
3/31/25

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1675
 WorkList ID : 188632
 Department : Extraction
 Date : 03-31-2025 08:17:09

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1672-01	TP-8	Solid	EPH_NF	Cool 4 deg C	PSEG03	I31	03/27/2025	NJEPH
Q1672-02	TP-8-EPH	Solid	EPH_NF	Cool 4 deg C	PSEG03	I31	03/27/2025	NJEPH
Q1674-01	RT5358	Solid	EPH_NF	Cool 4 deg C	PSEG03	I41	03/28/2025	NJEPH
Q1674-03	72-11991	Solid	EPH_NF	Cool 4 deg C	PSEG03	I41	03/28/2025	NJEPH
Q1675-01	P1	Solid	EPH_F2	Cool 4 deg C	GENV01	I31	03/27/2025	NJEPH
Q1675-02	P2	Solid	EPH_F2	Cool 4 deg C	GENV01	I31	03/27/2025	NJEPH
Q1675-03	P3	Solid	EPH_F2	Cool 4 deg C	GENV01	I31	03/27/2025	NJEPH
Q1675-05	P5	Solid	EPH_F2	Cool 4 deg C	GENV01	I31	03/27/2025	NJEPH
Q1675-06	P6	Solid	EPH_F2	Cool 4 deg C	GENV01	I31	03/27/2025	NJEPH
Q1675-13	D1	Solid	EPH_NF	Cool 4 deg C	GENV01	I31	03/27/2025	NJEPH
Q1675-14	D2	Solid	EPH_NF	Cool 4 deg C	GENV01	I31	03/27/2025	NJEPH
Q1675-15	D3	Solid	EPH_NF	Cool 4 deg C	GENV01	I31	03/27/2025	NJEPH
Q1675-16	D4	Solid	EPH_NF	Cool 4 deg C	GENV01	I31	03/27/2025	NJEPH
Q1675-17	D5	Solid	EPH_NF	Cool 4 deg C	GENV01	I31	03/27/2025	NJEPH
Q1675-18	K1P	Solid	EPH_F2	Cool 4 deg C	GENV01	I31	03/27/2025	NJEPH
Q1675-19	K1	Solid	EPH_F2	Cool 4 deg C	GENV01	I31	03/28/2025	NJEPH
Q1675-20	K2	Solid	EPH_F2	Cool 4 deg C	GENV01	I31	03/28/2025	NJEPH
Q1675-21	K3	Solid	EPH_F2	Cool 4 deg C	GENV01	I31	03/28/2025	NJEPH

Date/Time 03/31/25 8:50
Raw Sample Received by: PJ (Ref 101)
Raw Sample Relinquished by: PJ (Ref 101)

Date/Time 03/31/25 9:20
Raw Sample Received by: PJ (Ref 101)
Raw Sample Relinquished by: PJ (Ref 101)

SOP ID:	MNJDEP-EPH-7		
Clean Up SOP #:	N/A	Extraction Start Date :	04/01/2025
Matrix :	Water	Extraction Start Time :	08:13
Weigh By:	EH	Extraction By:	RJ
Balance check:	N/A	Filter By:	RJ
Balance ID:	N/A	pH Meter ID:	N/A
pH Strip Lot#:	E3880	Hood ID:	4,5,6,7
Extraction Method:	☒ Separatory Funnel	☐ Continuous Liquid/Liquid	☐ Sonication
		☐ Waste Dilution	☐ Soxhlet
		Extraction End Date :	04/01/2025
		Extraction End Time :	15:55
		Concentration By:	EH
		Supervisor By :	rajesh

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	100 PPM	PP24207
Surrogate	1.0ML	100 PPM	PP24210
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
Methylene Chloride	N/A	E3904
Baked Na2SO4	N/A	EP2597
Hexane	N/A	E3914
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
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5 ML Vial lot# 2210673.

KD Bath ID:	WATER BATH-1,2	Envap ID:	NEVAP-02
KD Bath Temperature:	60 °C	Envap Temperature:	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/01/25 16:00	RP (Est. Lab)	Y. P. P. H. P. C.
	Preparation Group	Analysis Group

Analytical Method: MNJDEP-EPH-7

Concentration Date: 04/01/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB167402BL	PB167402BL	EPH	1000	<2	ritesh	rajesh	2			SEP-01
PB167402BS	PB167402BS	EPH	1000	<2	ritesh	rajesh	2			2
PB167402TB	PB167402TB	EPH	1000	<2	ritesh	rajesh	2			3
Q1664-04	P001-BBDGA-001-01	EPH	1000	<2	ritesh	rajesh	2	A		4
Q1664-05	Q1664-04MS	EPH	1000	<2	ritesh	rajesh	2	A		5
Q1664-06	Q1664-04MSD	EPH	1000	<2	ritesh	rajesh	2	A		6
Q1664-08	P001-BBDGA-001-02	EPH	1000	<2	ritesh	rajesh	2	A		7
Q1664-10	P001-BBDGA-002-01	EPH	1000	<2	ritesh	rajesh	2	A		8
Q1664-12	P001-BBDGA-003-01	EPH	1000	<2	ritesh	rajesh	2	A		9
Q1664-14	P001-BBDGA-004-01	EPH	1000	<2	ritesh	rajesh	2	A		10
Q1664-16	P001-BBDGA-005-01	EPH	1000	<2	ritesh	rajesh	2	A		11
Q1664-18	P001-BBDGA-006-01	EPH	1000	<2	ritesh	rajesh	2	A		12
Q1664-20	P001-BBDGA-007-01	EPH	1000	<2	ritesh	rajesh	2	A		13
Q1664-22	P001-BBDGA-008-01	EPH	1000	<2	ritesh	rajesh	2	A		14

* Extracts relinquished on the same date as received.

2/1/25

Sample ID	ClientID	TCLP Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
PB167372TB	LEB372	20	N/A	2000	N/A	N/A	N/A	4.24	1.5	T-2
Q1664-04	P001-BBDGA-001-01	11	100.03	2000	N/A	N/A	N/A	5.5	1.0	T-2
Q1664-05	Q1664-04MS	11	100.03	2000	N/A	N/A	N/A	5.5	1.0	T-2
Q1664-06	Q1664-04MSD	11	100.03	2000	N/A	N/A	N/A	5.5	1.0	T-2
Q1664-08	P001-BBDGA-001-02	12	100.02	2000	N/A	N/A	N/A	7.2	1.5	T-2
Q1664-10	P001-BBDGA-002-01	13	100.03	2000	N/A	N/A	N/A	7.6	1.5	T-2
Q1664-12	P001-BBDGA-003-01	14	100.02	2000	N/A	N/A	N/A	7.2	1.0	T-2
Q1664-14	P001-BBDGA-004-01	15	100.02	2000	N/A	N/A	N/A	7.6	1.5	T-2
Q1664-16	P001-BBDGA-005-01	16	100.01	2000	N/A	N/A	N/A	7.2	1.5	T-2
Q1664-18	P001-BBDGA-006-01	17	100.02	2000	N/A	N/A	N/A	7.6	1.0	T-2
Q1664-20	P001-BBDGA-007-01	18	100.03	2000	N/A	N/A	N/A	7.2	1.5	T-2
Q1664-22	P001-BBDGA-008-01	19	100.04	2000	N/A	N/A	N/A	7.6	1.0	T-2

03/31/25
10:30

Prep Standard - Chemical Standard Summary

Order ID : Q1675

Test : EPH_NF

Prepbatch ID : PB167381,

Sequence ID/Qc Batch ID: FC033125AL,FC040125AL,

Standard ID :

EP2591,EP2597,PP24170,PP24174,PP24175,PP24176,PP24177,PP24178,PP24179,PP24207,PP24210,PP24403,

Chemical ID :

E2865,E3551,E3876,E3878,E3914,P12363,P12981,P12983,P12984,P13279,P13602,P13614,P13615,P13638,P13639,
P13640,P13641,P13642,P13644,P13650,P13651,P13663,P13671,P13680,P13685,P13715,P13717,P13755,P13757,P
13759,P13760,P13802,P13803,P13809,P13828,P13836,P13840,P13842,P13846,P13855,P13858,P13859,P13860,W3
177,

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	None	Evelyn Huang
(EX-SC-2)								

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

Pest/Pcb STANDARD PREPARATION LOG

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

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2900	100 PPM Aliphatic HC STD (Absolute)	PP24174	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani
								02/03/2025

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

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
783	50 PPM Aliphatic HC STD	PP24175	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani
								02/03/2025

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
784	20 PPM Aliphatic HC STD	PP24176	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani
								02/03/2025

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

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
785	10 PPM Aliphatic HC STD	PP24177	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani
								02/03/2025

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
786	5 PPM Aliphatic HC STD	PP24178	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani
								02/03/2025

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

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2901	20 PPM Aliphatic HC STD ICV (Absolute)	PP24179	02/03/2025	08/03/2025	Yogesh Patel	None	None	Ankita Jodhani
								02/03/2025

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1330	100 PPM NJEPH Spike Solution	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

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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 #
Restek	30540 / Custom NJEPH Aliphatics Calibration Standard	A0190424	08/03/2025	02/03/2025 / yogesh	03/16/2023 / Yogesh	P12363

CHEMICAL RECEIPT LOG BOOK

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0204989	08/27/2025	02/27/2025 / yogesh	12/20/2023 / Yogesh	P12984

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0213283	08/27/2025	02/27/2025 / yogesh	10/16/2024 / yogesh	P13602

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0213283	08/27/2025	02/27/2025 / yogesh	10/16/2024 / yogesh	P13614

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	A0213283	08/27/2025	02/27/2025 / yogesh	10/16/2024 / yogesh	P13615

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

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

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	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	08/27/2025	02/27/2025 / yogesh	10/16/2024 / yogesh	P13651

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	08/27/2025	02/27/2025 / yogesh	10/16/2024 / yogesh	P13663

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	08/03/2025	02/03/2025 / yogesh	10/16/2024 / yogesh	P13671

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	08/27/2025	02/27/2025 / yogesh	10/16/2024 / yogesh	P13680

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	01/16/2026	01/16/2025 / yogesh	10/16/2024 / yogesh	P13685

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

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

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	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

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

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	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

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

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	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

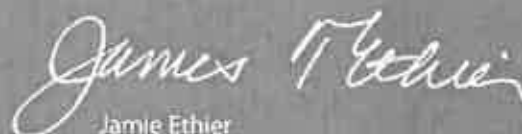
Certificate of Analysis

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

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

 **avantors**™



Material No.: 9254-03

Batch No.: 24H2762008

Manufactured Date: 2024-04-18

Expiration Date: 2027-04-18

Revision No.: 0

Certificate of Analysis

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

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

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

Recd. by RP on 2/12/25

E 3876



Jamie Croak
Director Quality Operations, Bioscience Production

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

Avantor Performance Materials LLC

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



Material No.: 9266-A4
Batch No.: 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.



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Calibration Standard

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

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

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

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

P12361
↓
P12370 } Y.P.
031/6/23

CERTIFIED VALUES

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

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

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

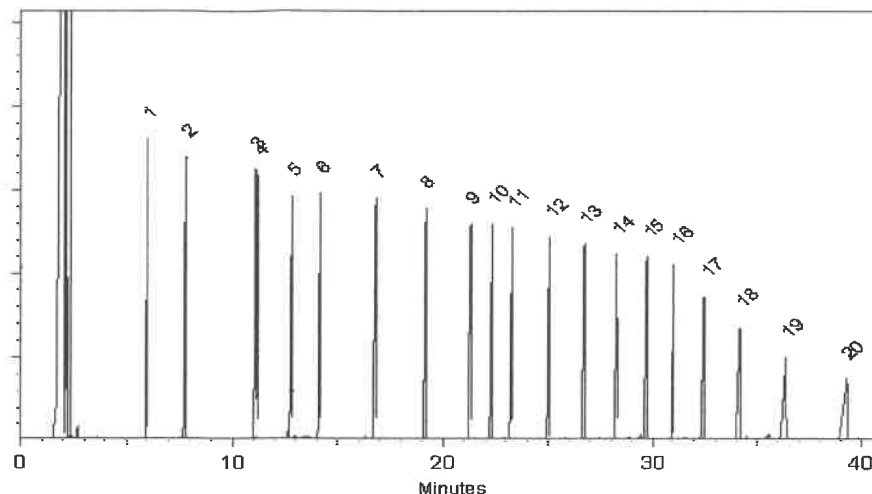
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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


Morgan Craighead - Mix Technician

Date Mixed: 10-Oct-2022

Balance: 1128360905


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 20-Oct-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description: 1-Chlorooctadecane Standard

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

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

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

Ship: Ambient

P12960
↓
P12991 } Y.P.
12/21/2023

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

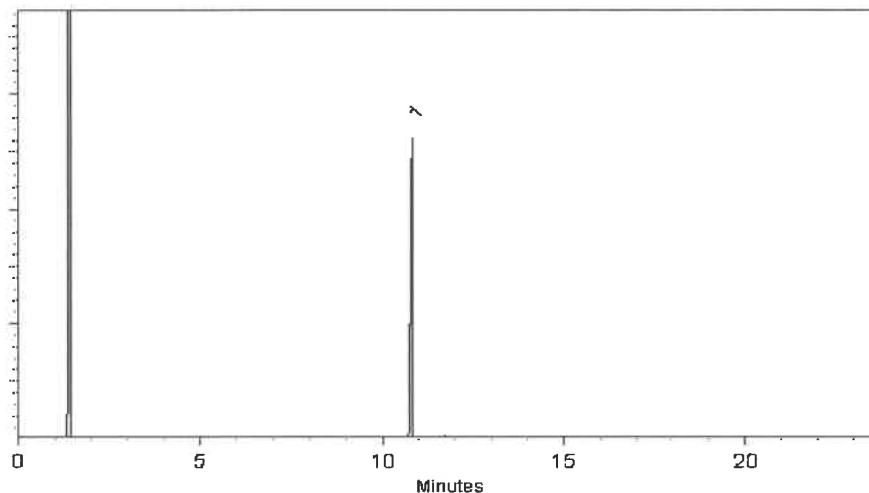
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Peter Robbins - Operations Technician I

Date Mixed: 02-Dec-2023

Balance Serial # B345965662

Christie Mills - Operations Lead Tech - ARM QC

Date Passed: 08-Dec-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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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:

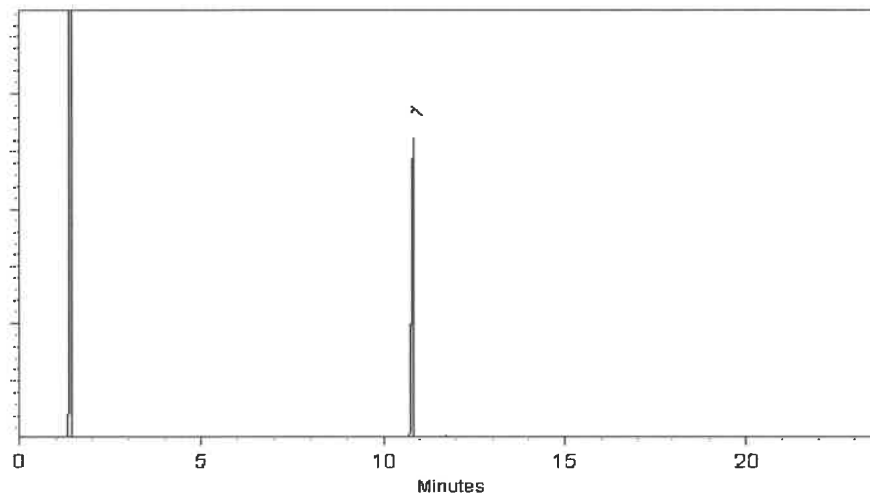
FID

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.

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- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

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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.: 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:

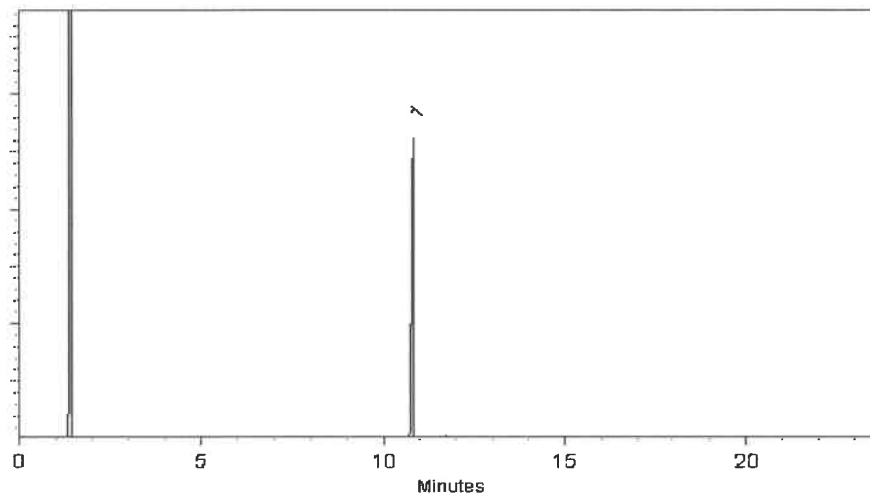
FID

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%.

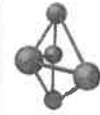
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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Handling Notes:

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CERTIFIED WEIGHT REPORT

Part Number: 95999

Lot Number: 040524

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

Expiration Date: 040534

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 1000

NIST Test ID#: 6UTB

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

CAUTION: Sonicate Before Use

Solvent(s):
Cyclohexane

Lot#
28930

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

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

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

Compound		Part Number	(RM#)	Lot Number	DIL Factor	Initial Vol. (mL)	Initial Conc. (µg/mL)	Nominal Conc. (µg/mL)	Purity (%)	Purity Uncertainty	Pipette	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information	
																(Solvent Safety Info. On Attached pg.)	
																OSHA PEL (TWA)	
																CAS#	
1.	2-Methylnaphthalene	(0214)	MKBF3783V	NA	NA	NA	NA	1000	97	0.2	NA	0.02579	0.02594	1005.7	5.7	91-57-6	N/A
2.	Naphthalene	(0222)	MKB28680V	NA	NA	NA	NA	1000	100	0.2	NA	0.02502	0.02511	1003.7	5.7	91-20-3	10 ppm (50mg/m ³ 8H) orl-rat 1630mg/kg
3.	n-Nonane	95708	120222	1.00	25.00	1000.7	1000.7	1000	NA	0.013	NA	NA	NA	1000.0	4.2	111-84-2	200 ppm (1050mg/m ³ 8H) orl-rat 490mg/kg
4.	n-Decane	95708	120222	1.00	25.00	1000.9	1000.9	1000	NA	0.013	NA	NA	NA	1000.2	4.2	124-18-5	ivn-mus 218mg/kg
5.	n-Dodecane	95708	120222	1.00	25.00	1000.7	1000.7	1000	NA	0.013	NA	NA	NA	1000.0	4.2	112-40-3	N/A
6.	n-Tetradecane	95708	120222	1.00	25.00	1002.1	1002.1	1000	NA	0.013	NA	NA	NA	1001.3	4.2	629-59-4	ivn-mus 3494mg/kg
7.	n-Hexadecane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	0.013	NA	NA	NA	999.7	4.2	544-76-3	N/A
8.	n-Octadecane	95708	120222	1.00	25.00	1001.0	1001.0	1000	NA	0.013	NA	NA	NA	1000.3	4.1	589-45-3	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	630-08-8	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 Kuyal, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



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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.:** A0213283

Description : 1-Chlorooctadecane Standard

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

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

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

Ship: Ambient

P13595
↓
P13624 } Y.P.
10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

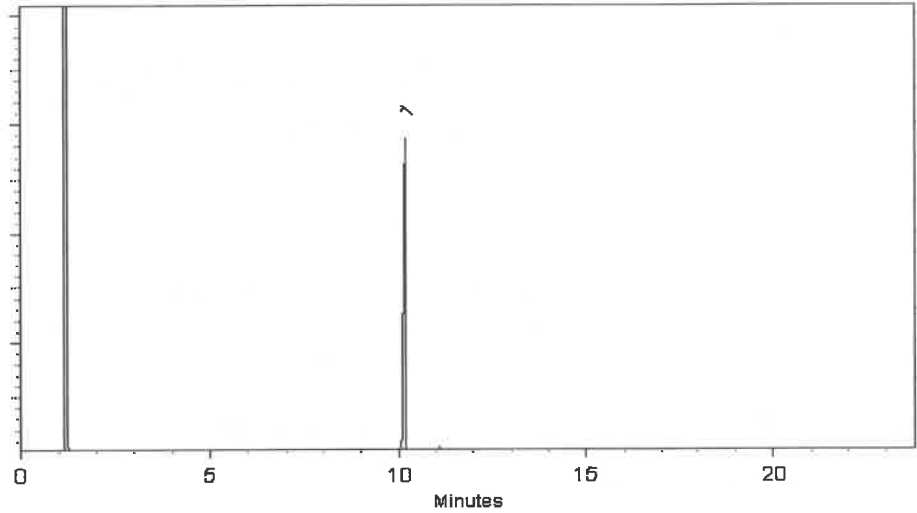
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Stacey Wanner - Operations Technician I

Date Mixed: 28-Jun-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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Handling Notes:

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

Description : 1-Chlorooctadecane Standard

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

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

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

Ship: Ambient

P13595
↓
P13624 } Y.P.
10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

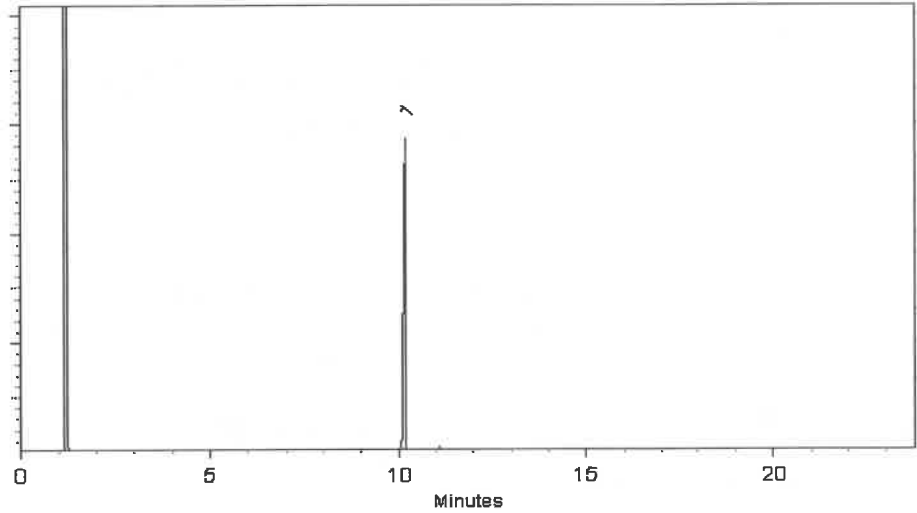
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Stacey Wanner - Operations Technician I

Date Mixed: 28-Jun-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Description : 1-Chlorooctadecane Standard

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

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

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

Ship: Ambient

P13595
↓
P13624 } Y.P.
10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

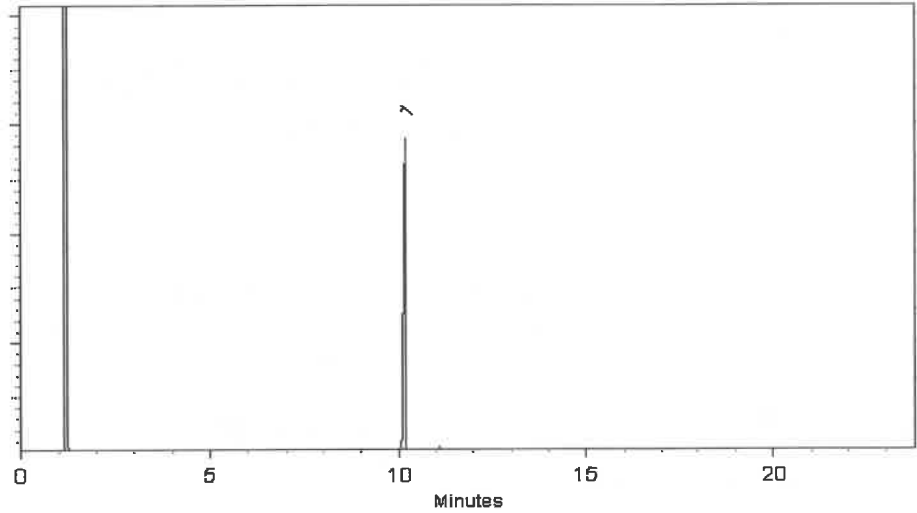
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Stacey Wanner - Operations Technician I

Date Mixed: 28-Jun-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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

General Certified Reference Material Notes

Expiration Notes:

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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:

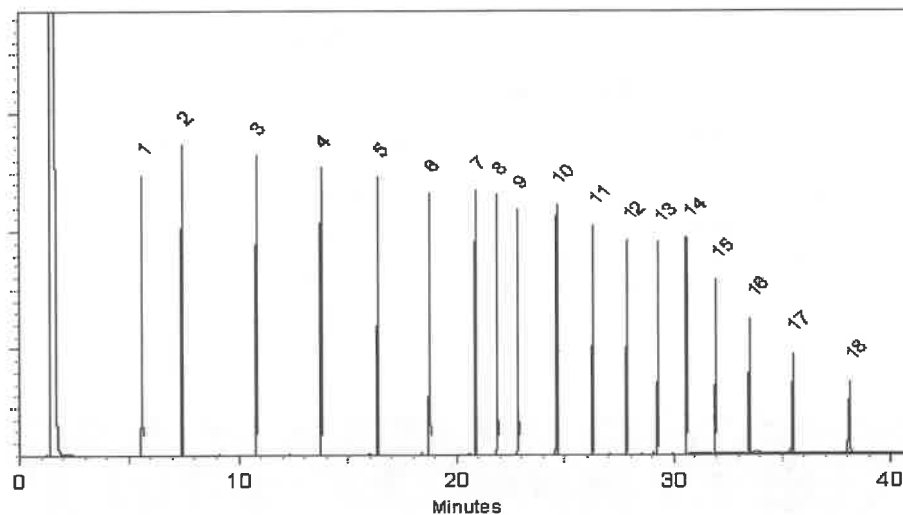
FID

Split Vent:

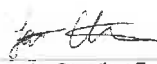
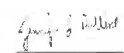
2 ml/min.

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:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

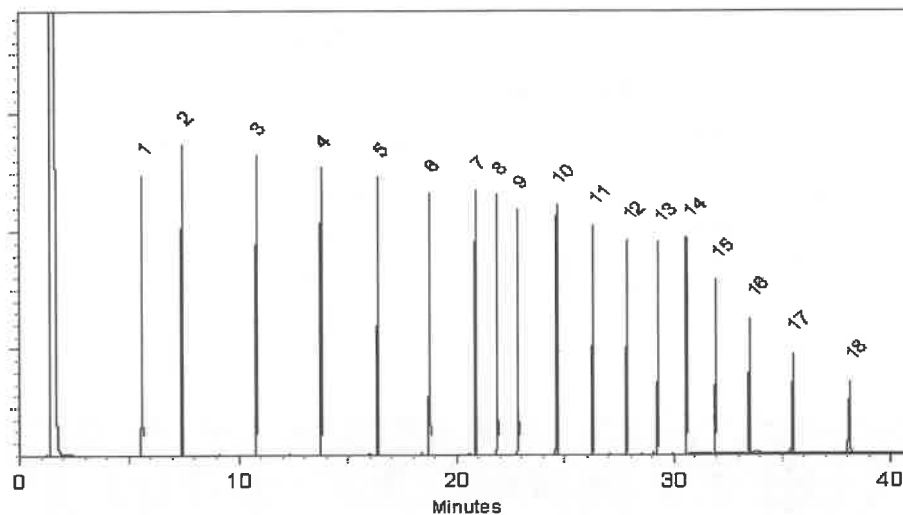
FID

Split Vent:

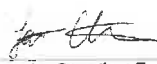
2 ml/min.

Inj. Vol

1µl

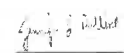


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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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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:

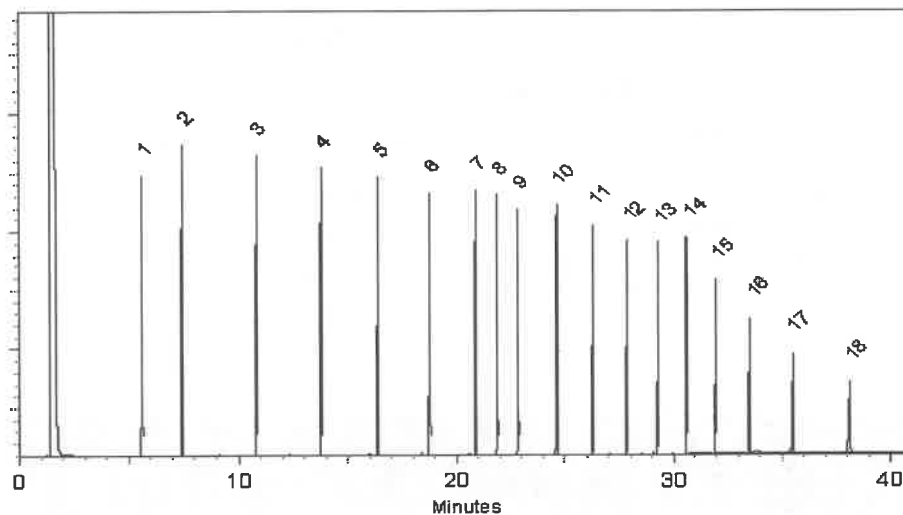
FID

Split Vent:

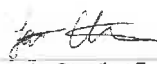
2 ml/min.

Inj. Vol

1µl

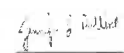


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

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

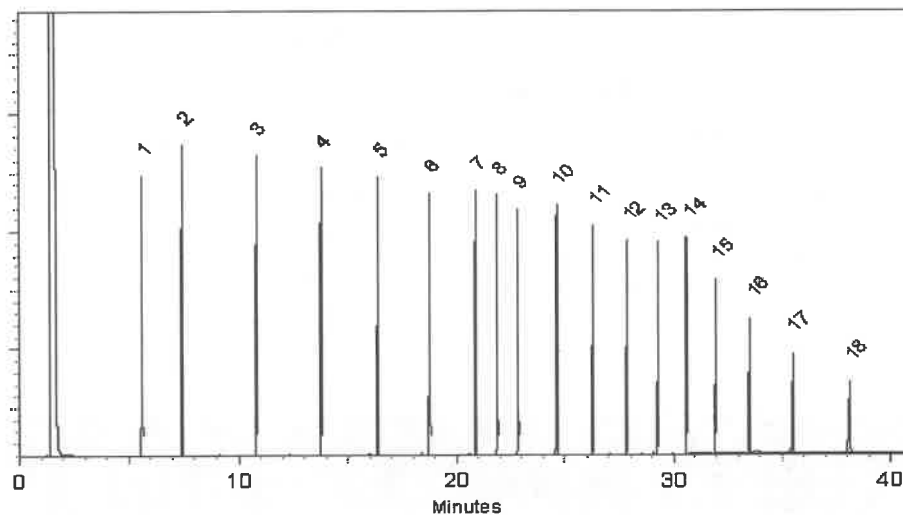
FID

Split Vent:

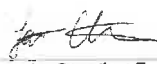
2 ml/min.

Inj. Vol

1µl

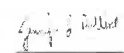


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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



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:

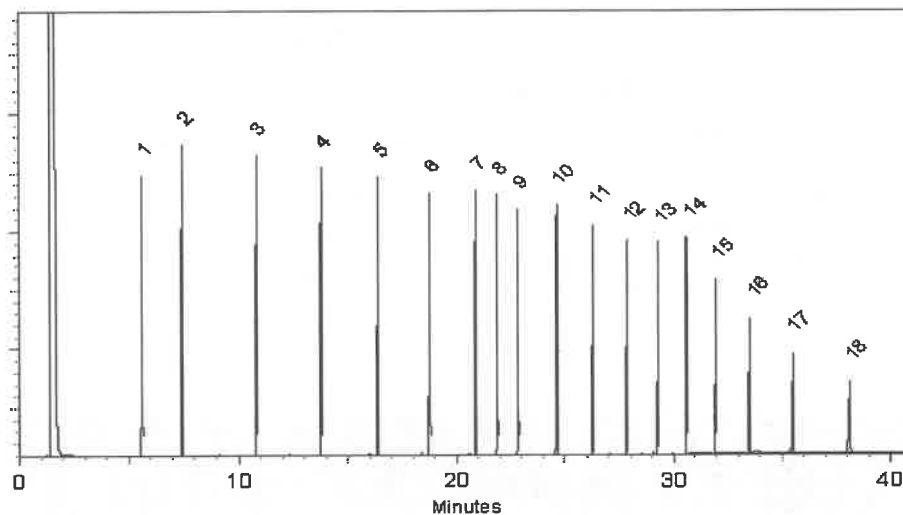
FID

Split Vent:

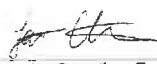
2 ml/min.

Inj. Vol

1µl

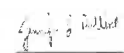


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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:

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

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



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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
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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	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:

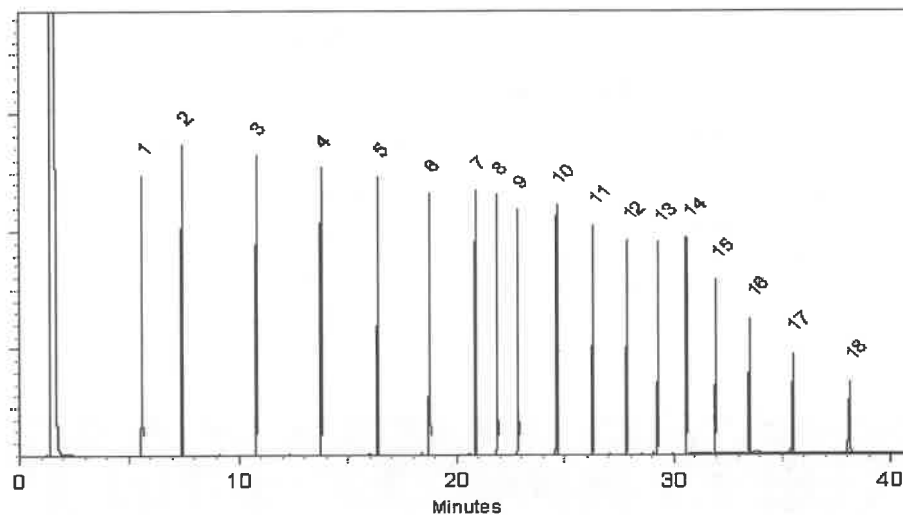
FID

Split Vent:

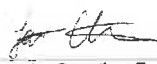
2 ml/min.

Inj. Vol

1µl

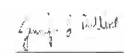


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Laith Clemente - Operations Technician I

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.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

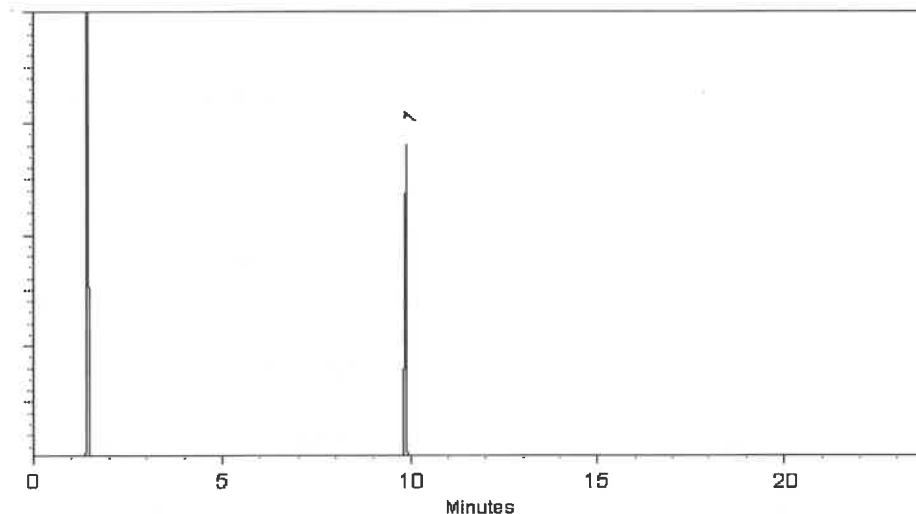
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- 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. : 31097 Lot No.: A0216631
Description : o-Terphenyl Standard
o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : April 30, 2028 Storage: 10°C or colder
Handling: Sonicate prior to use. Ship: Ambient

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

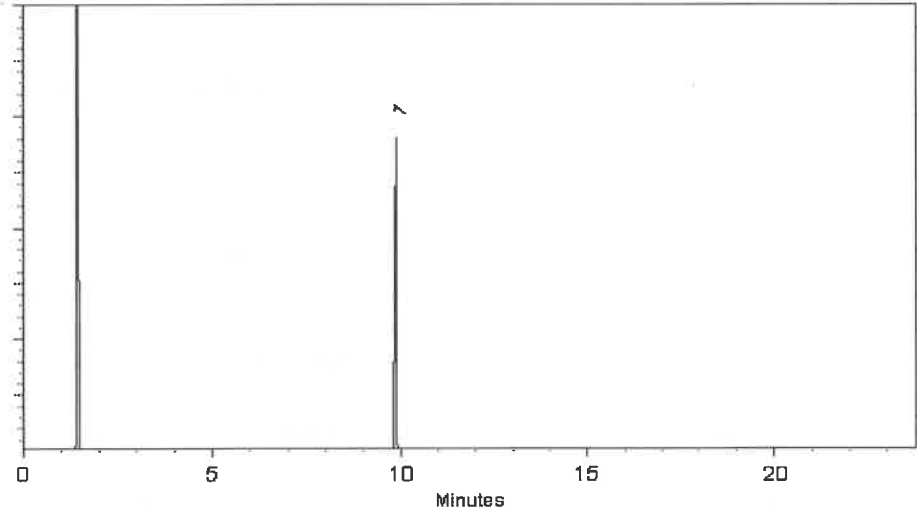
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

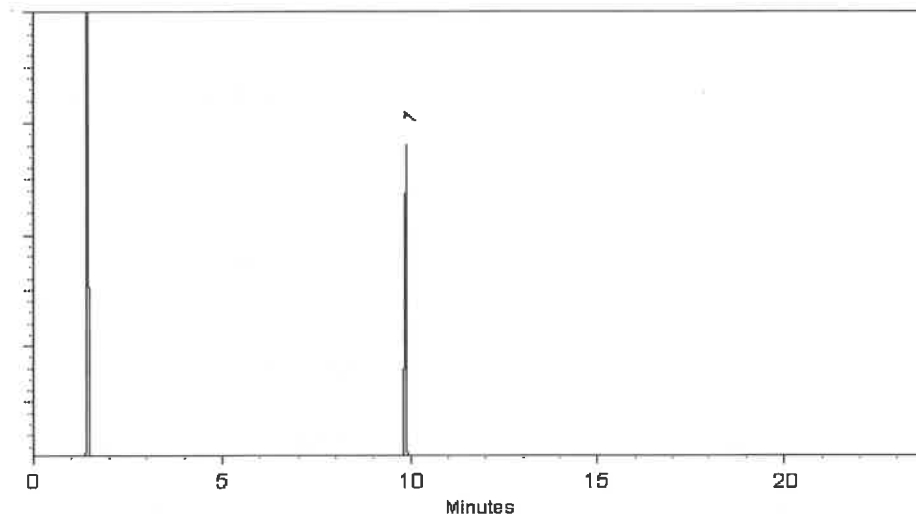
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

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Certified Uncertainty Value Notes:

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

Handling Notes:

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



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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

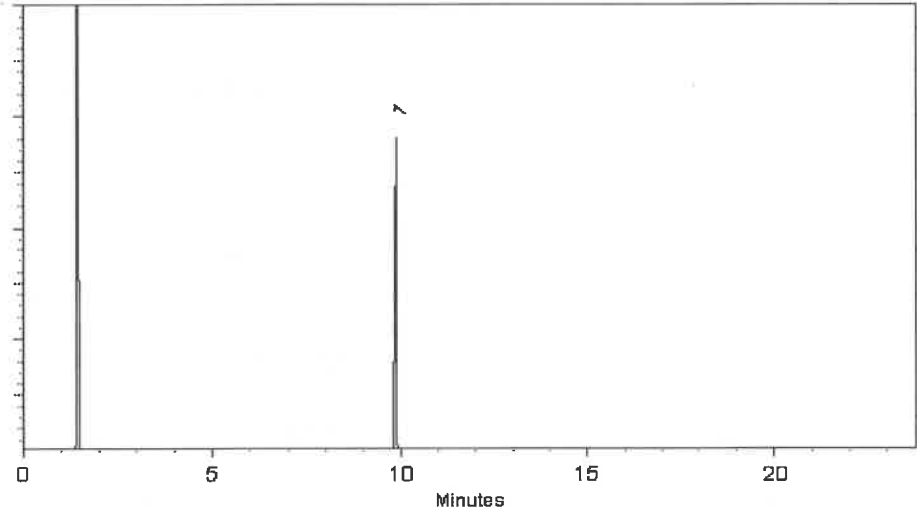
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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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:

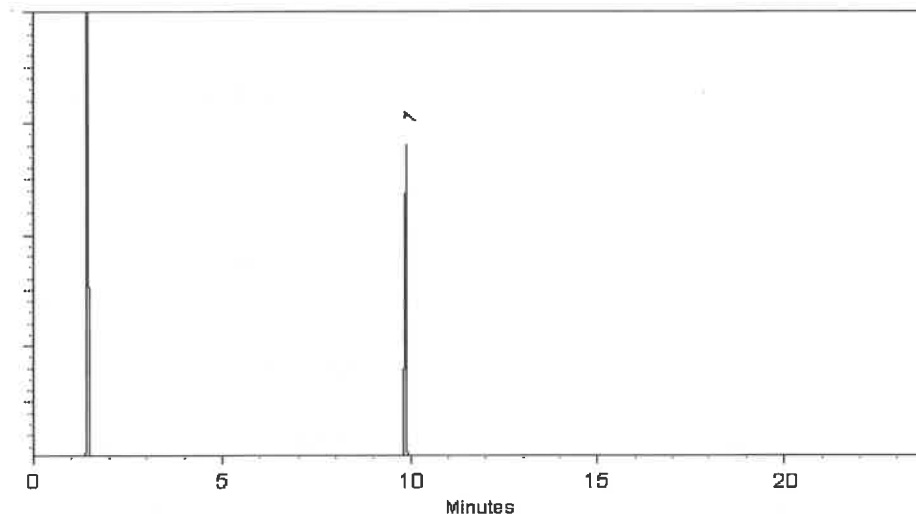
FID

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

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

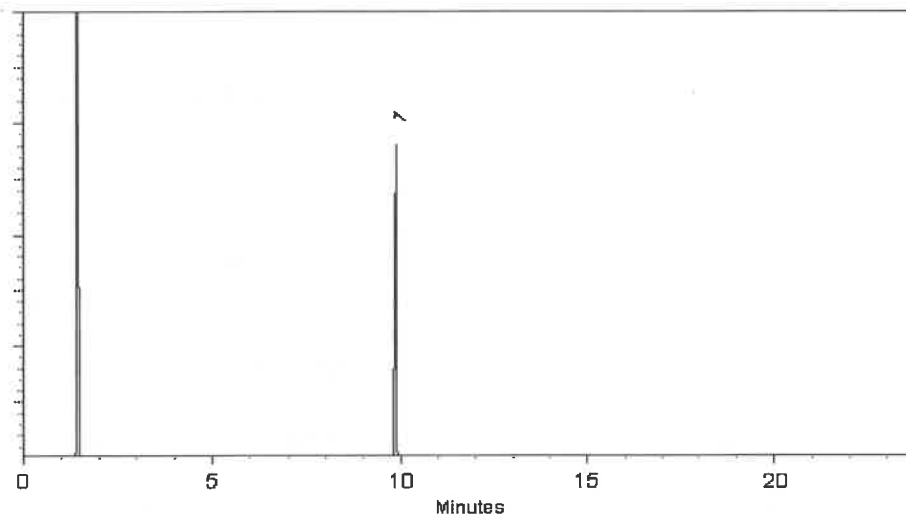
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.)

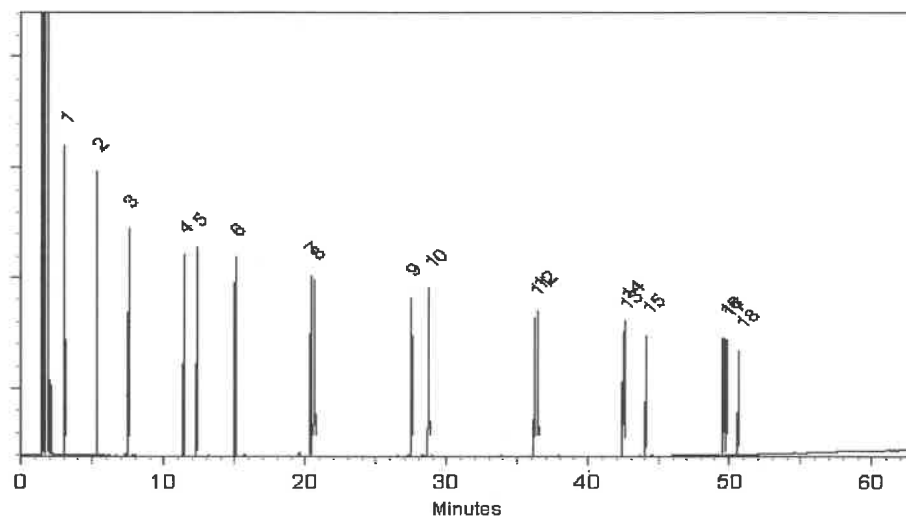
Inj. Temp:
250°C

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.)

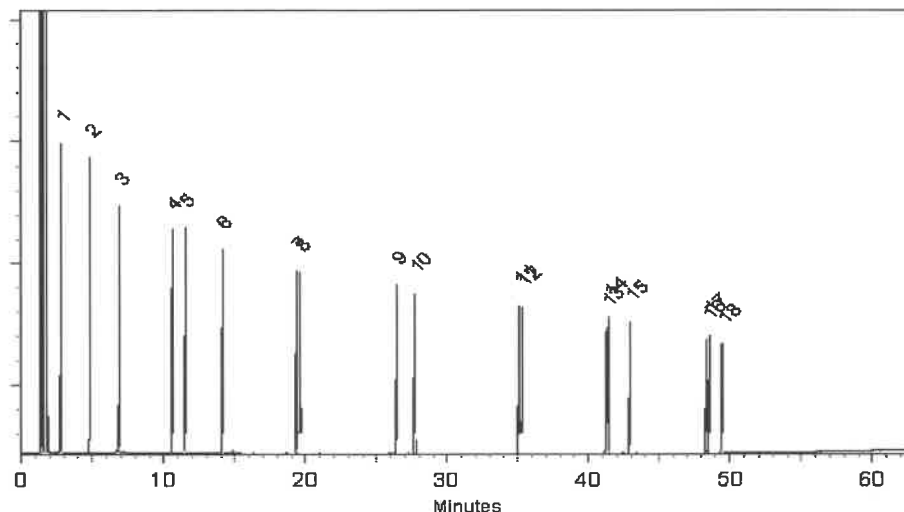
Inj. Temp:
250°C

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



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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31480 **Lot No.:** A0214879
Description : MA Fractionation Surrogate Spike Mix
MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : July 31, 2030 **Storage:** 10°C or colder
Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13743
↓
P13772 } Y.P.
11/01/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,009.0 µg/mL	+/- 180.5961
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,008.5 µg/mL	+/- 180.5736

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

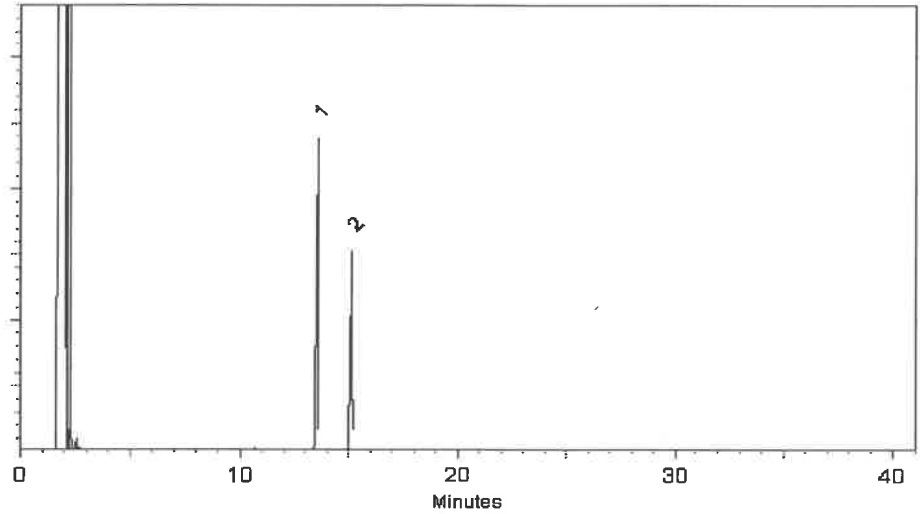
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



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

Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024

Balance Serial # 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31480 **Lot No.:** A0214879
Description : MA Fractionation Surrogate Spike Mix
MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : July 31, 2030 **Storage:** 10°C or colder
Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13743
↓
P13772 } Y.P.
11/01/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,009.0 µg/mL	+/- 180.5961
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,008.5 µg/mL	+/- 180.5736

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

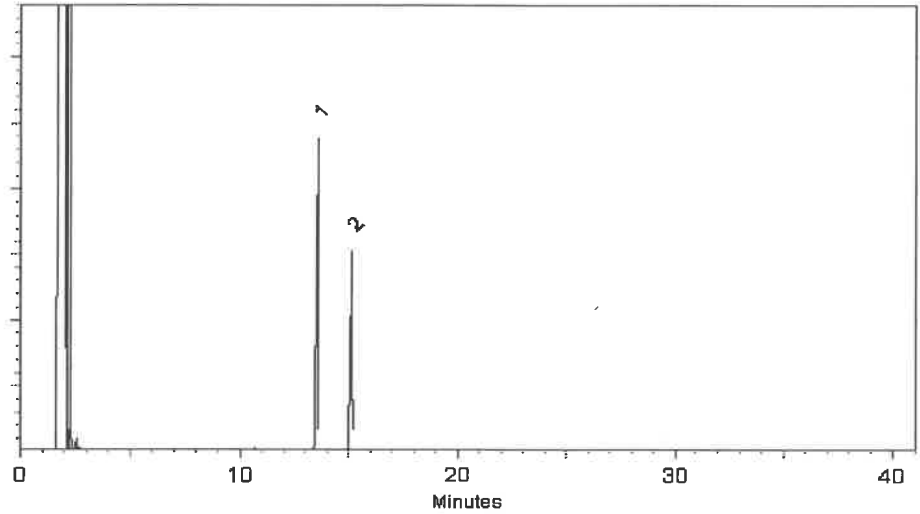
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



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

Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024

Balance Serial # 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

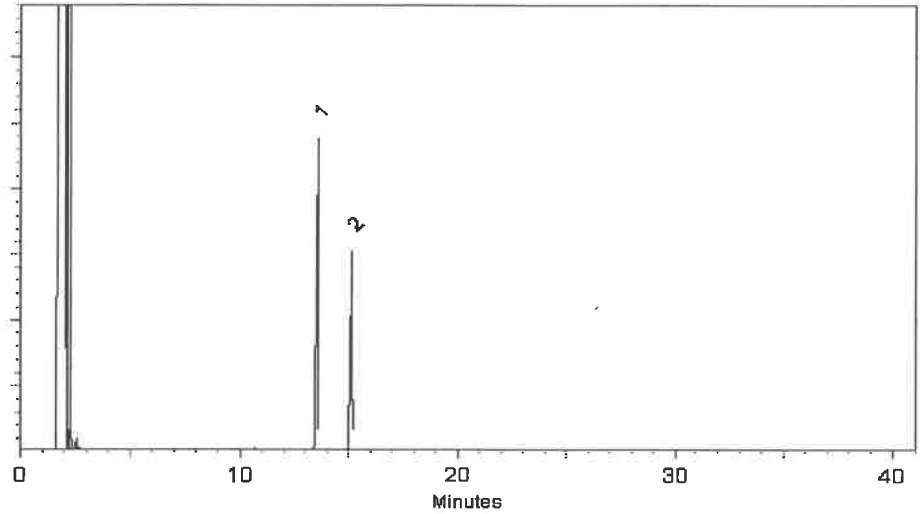
FID

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:

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

Catalog No. : 31480 **Lot No.:** A0214879
Description : MA Fractionation Surrogate Spike Mix
MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : July 31, 2030 **Storage:** 10°C or colder
Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13743
↓
P13772 } Y.P.
11/01/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,009.0 µg/mL	+/- 180.5961
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,008.5 µg/mL	+/- 180.5736

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

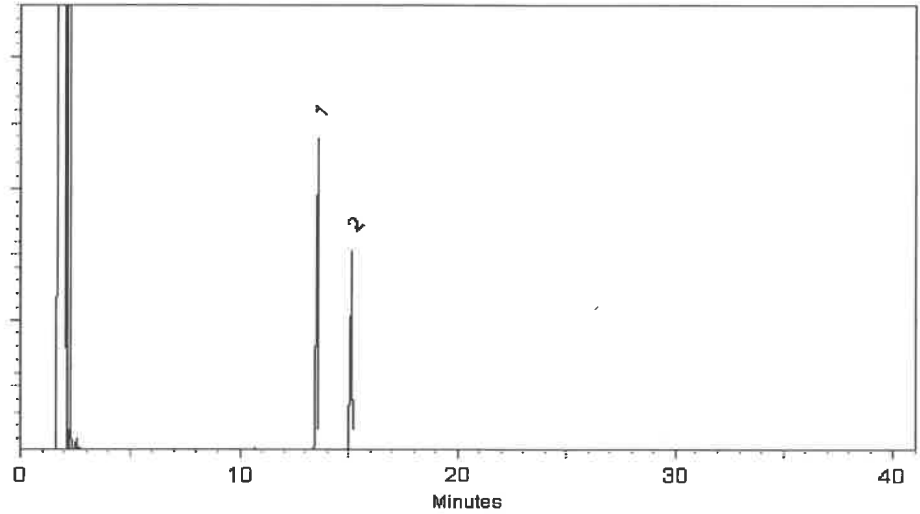
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



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

Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024

Balance Serial # 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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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.:** 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.)

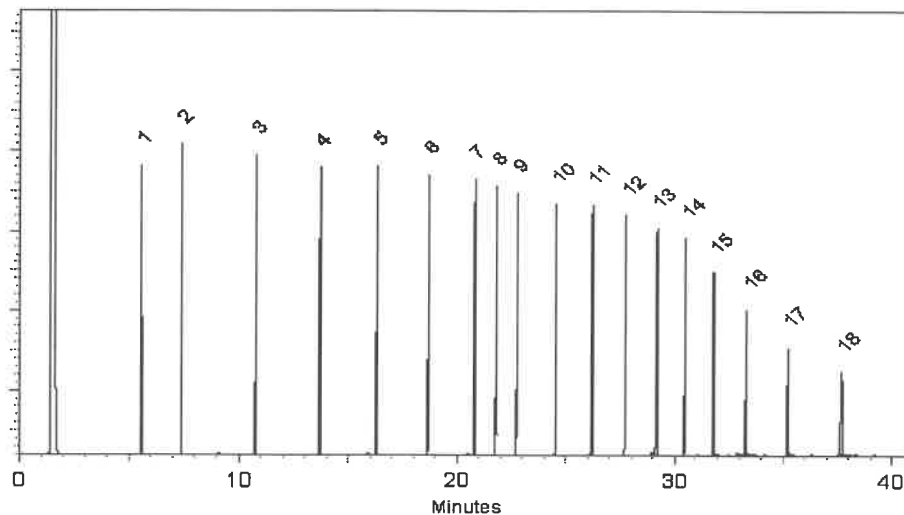
Inj. Temp:
 250°C

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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CERTIFIED REFERENCE MATERIAL

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

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

P13800
↓
P13829 } YIP
12/09/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

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

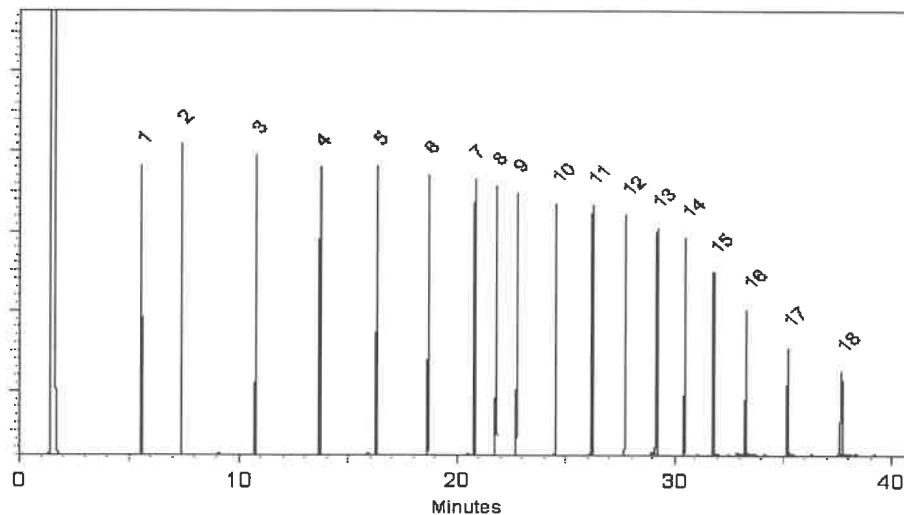
Inj. Temp:
 250°C

Det. Temp:
 330°C

Det. Type:
 FID

Split Vent:
 2 ml/min.

Inj. Vol
 1µl



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

Penelope S. Riglin
 Penelope Riglin - Operations Tech I

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

Jennifer Pollino
 Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

P13800
↓
P13829 } YIP
12/09/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

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

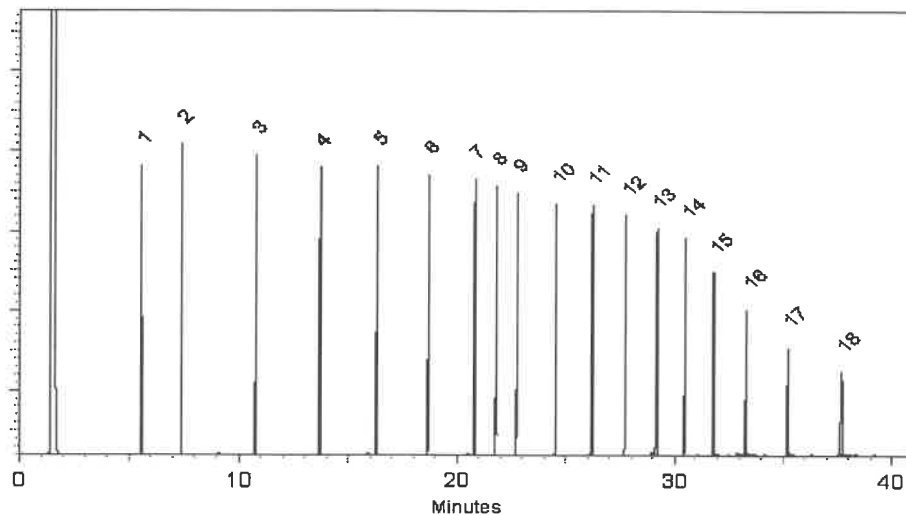
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Penelope S. Riglin
Penelope Riglin - Operations Tech I

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

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

P13800
↓
P13829 } YIP
12/09/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

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

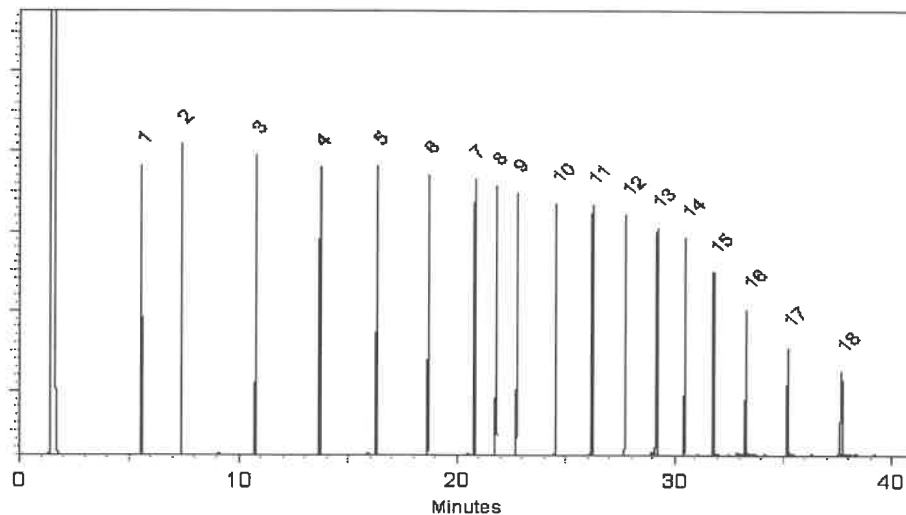
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Penelope S. Riglin
Penelope Riglin - Operations Tech I

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

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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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

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.)

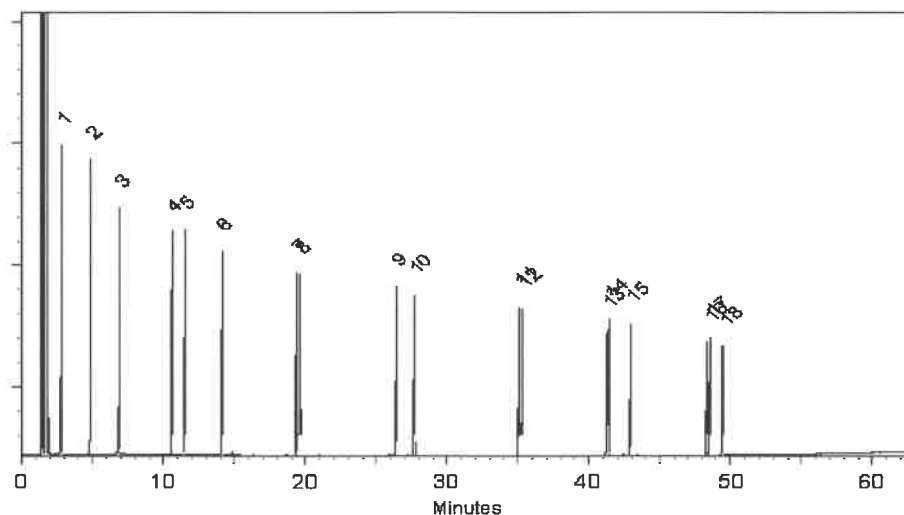
Inj. Temp:
250°C

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:

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



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CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

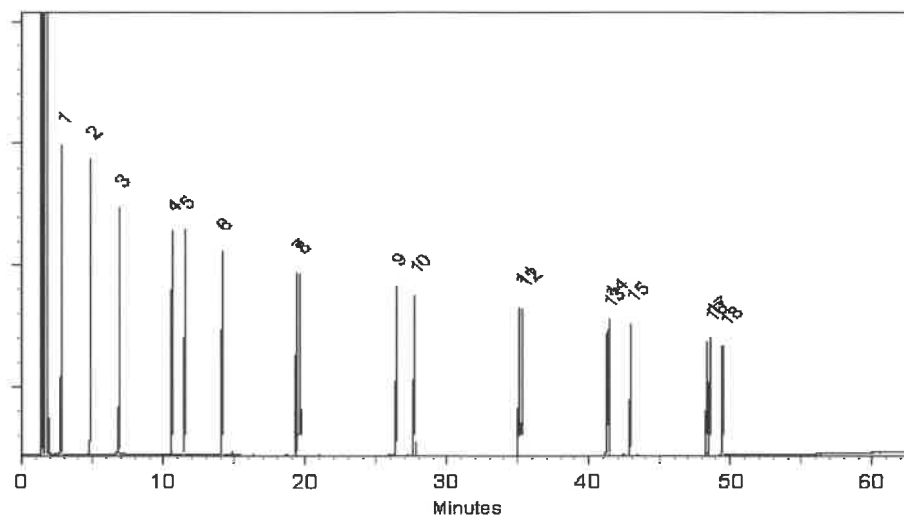
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0 µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* 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:

- 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

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

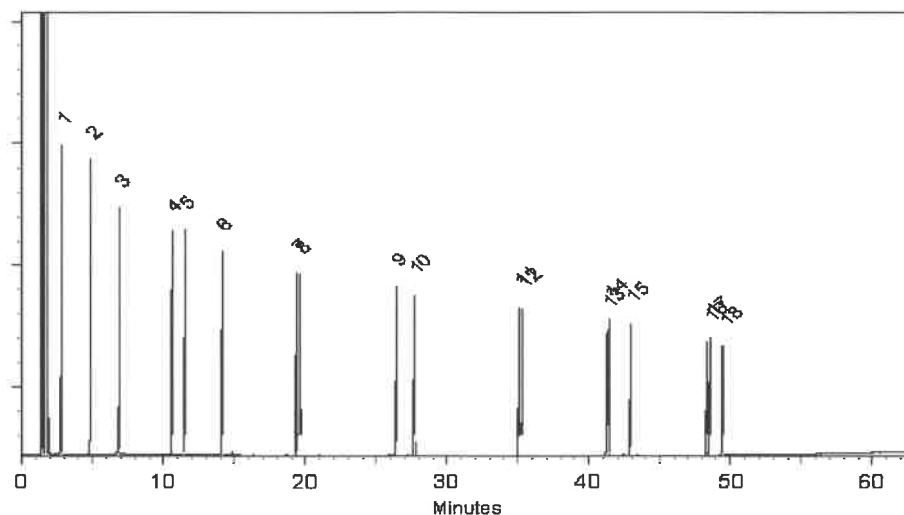
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0 µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* 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.

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

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

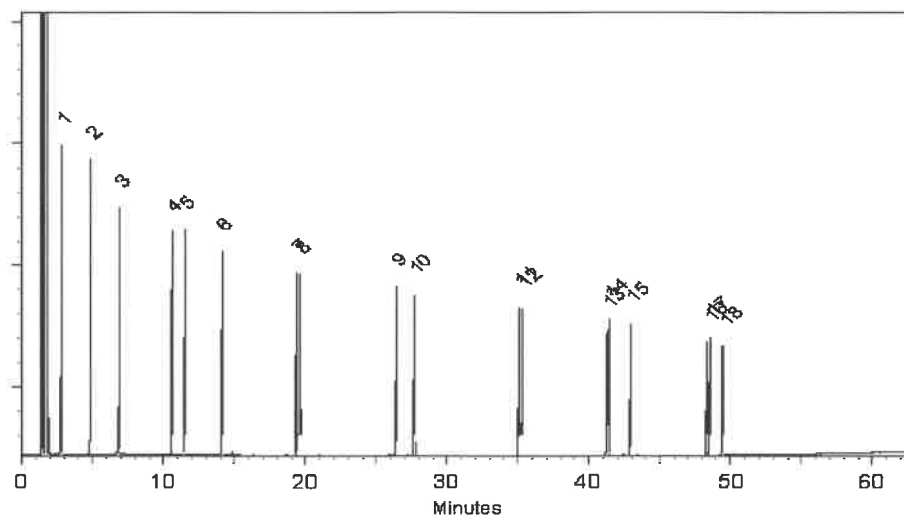
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0 µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* 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.

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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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

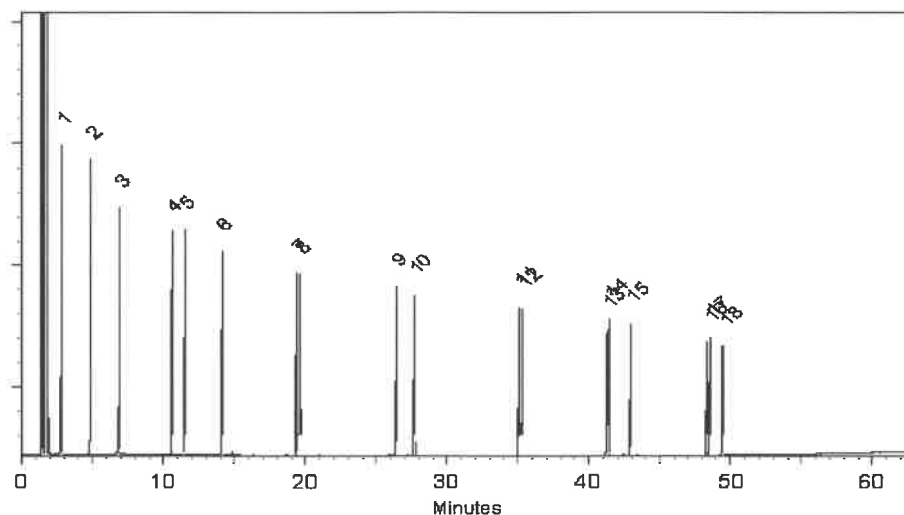
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0 µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* 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



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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.

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** 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.)

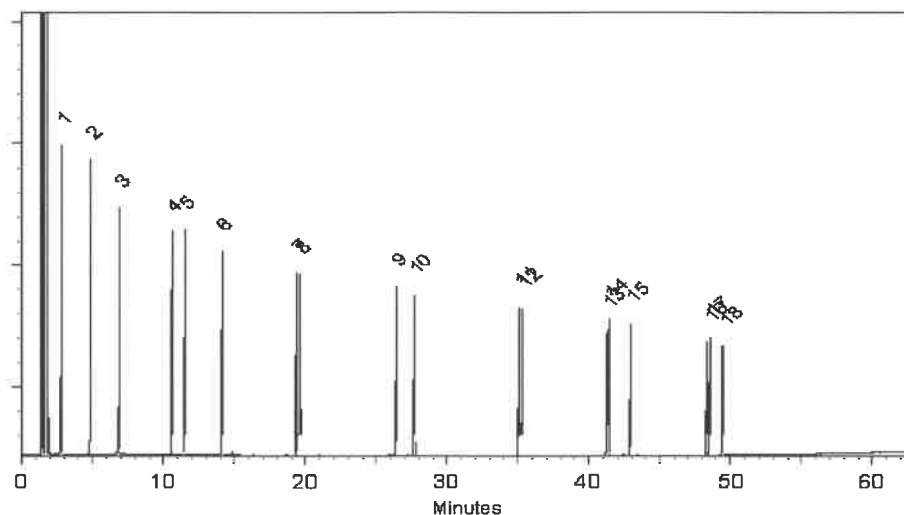
Inj. Temp:
250°C

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:

- 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.)

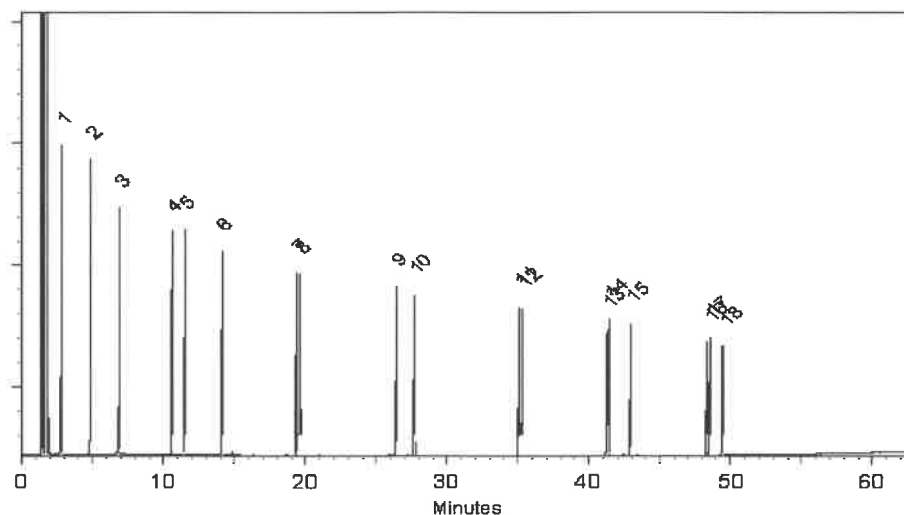
Inj. Temp:
250°C

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.
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- Purity values are rounded to the nearest whole number.

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- 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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Bellefonte, PA 16823-8812
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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
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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
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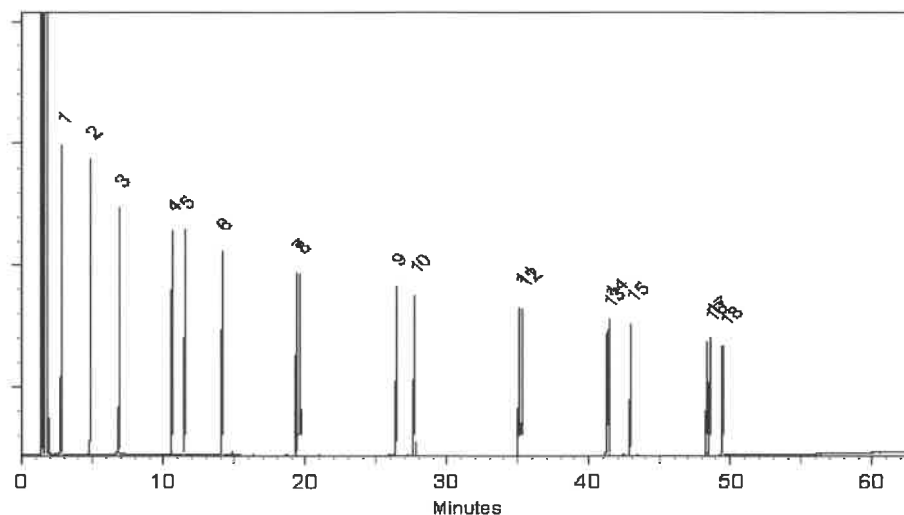
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0 µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* 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.
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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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- 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

REPORT TO BE SENT TO:

COMPANY: Geac Inc
ADDRESS: 8 CARRIAGE Lane
CITY: Succasunna STATE: NJ ZIP: 07876
ATTENTION: BL
PHONE: _____ FAX: _____

CLIENT PROJECT INFORMATION

PROJECT NAME: Stockton
PROJECT NO.: _____ LOCATION: _____
PROJECT MANAGER: BL
e-mail: gary@g-environmental.com
PHONE: _____ FAX: _____

CLIENT BILLING INFORMATION

BILL TO: Geac Inc PO#: _____
ADDRESS: 8 CARRIAGE
CITY: Succasunna STATE: NJ ZIP: 07876
ATTENTION: _____ PHONE: _____

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH): SK EPH-3 days DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: _____ DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

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

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										← Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-OTHER
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	P1	Soil		X	3/27/25	0854		X		X							
2.	P2				↑	0856				X							
3.	P3					0900				X							
4.	P4				↓	0915				X							
5.	P5				3/27/25	0930		X		X							
6.	P6				↑	0935				X							
7.	T1				↑	1143		X									
8.	T2				↑	1155		X									
9.	T3				↓	1205		X									
	T4	Soil		X	3/27/25	1210		X									

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

QUISHED BY SAMPLER:	DATE/TIME: <u>1100</u>	RECEIVED BY:	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP
SHED BY SAMPLER:	DATE/TIME: <u>3/28/25</u>	RECEIVED BY:	Comments: <u>EPH Cat 2 (Contingency) 2-methyl naphthalene</u>
ED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	CLIENT: ☐ Hand Delivered ☐ Other
			Shipment Complete ☐ YES ☐ NO

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: BECP INC
ADDRESS: 8 CARRIAGE
CITY: Succasham STATE: NJ ZIP:
ATTENTION:
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Stockton
PROJECT NO.: LOCATION: NJ
PROJECT MANAGER: Gr
e-mail:
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: BECP INC PO#:
ADDRESS: 8 CARRIAGE
CITY: Succasham STATE: NJ ZIP:
ATTENTION: PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) EPH 3 day TAT DAYS*
HARDCOPY (DATA PACKAGE): Standard DAYS*
EDD: Standard DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

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

TO VIALS THIS
EPH COTL
CONTINGENCY
2nd day
Negotiation

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER	
1.	T5	501		X	3/27/25	1215	1	X										
2.	T6					1216	1	X										
3.	D1	501				1221	1			X								
4.	D2					1228	1			X								
5.	D3					1230	1			X								
6.	D4					1245	1			X								
7.	D5	501		X	3/27/25	1252	1			X								
8.																		
9.																		
10.																		

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

RELINQUISHED BY SAMPLER: 1. <u>Ad</u>	DATE/TIME: <u>1100</u> <u>3/28/25</u>	RECEIVED BY: 1. <u>[Signature]</u>	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP <u>3-8</u> °C
RELINQUISHED BY SAMPLER: 2.	DATE/TIME:	RECEIVED BY: 2.	Comments: <u>EPH 3 day TAT</u>
RELINQUISHED BY SAMPLER: 3.	DATE/TIME:	RECEIVED BY: 3.	Page ____ of CLIENT: ☐ Hand Delivered ☐ Other Shipment Complete ☐ YES ☐ NO

CLIENT INFORMATION

COMPANY: Geop INC
ADDRESS: 8 Carrinze
CITY: Secaucus STATE: NJ ZIP: 07076
ATTENTION:
PHONE: FAX:

CLIENT PROJECT INFORMATION

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

CLIENT BILLING INFORMATION

BILL TO: Geop INC PO#:
ADDRESS:
CITY: Secaucus STATE: NJ ZIP:
ATTENTION: PHONE:
ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) EPH 3/28/07 DAYS*
HARDCOPY (DATA PACKAGE) STANDARD DAYS*
EDD: STANDARD DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

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

1 2 3 4 5 6 7 8 9
EPH 3/28/07 (contingency PAF)

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	K1P	Soil	X	X	3/28/07		1	X									
2.	K1	Soil		X			1	X									
3.	K2	Soil		X			2	X									
4.	K3	Soil		X	3/28/07		2	X									
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER:	DATE/TIME: <u>1100</u>	RECEIVED BY: <u>[Signature]</u>	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP <u>3.8°C</u>
1. <u>[Signature]</u>	DATE/TIME: <u>3/28/07</u>	1. <u>[Signature]</u>	Comments: <u>EPH 3/28/07 (contingency PAF)</u>
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
2.		2.	
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
3.		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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1675	GENV01	Order Date : 3/28/2025 11:22:41 AM	Project Mgr :
Client Name : G Environmental		Project Name : Stockton	Report Type : Level 1 NJ Red.
Client Contact : Gary Landis		Receive DateTime : 3/28/2025 11:00:00 AM	EDD Type : Excel NJ
Invoice Name : G Environmental		Purchase Order :	Hard Copy Date :
Invoice Contact : Gary Landis			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1675-01	P1	Solid	03/27/2025	08:54	VOC-TCLVOA-10		8260D		10 Bus. Days
Q1675-05	P5	Solid	03/27/2025	09:30	VOC-TCLVOA-10		8260D		10 Bus. Days
Q1675-06	P6	Solid	03/27/2025	09:35	VOC-TCLVOA-10		8260D		10 Bus. Days
Q1675-07	T1	Solid	03/27/2025	11:43	VOC-TCLVOA-10		8260D		10 Bus. Days
Q1675-08	T2	Solid	03/27/2025	11:55	VOC-TCLVOA-10		8260D		10 Bus. Days
Q1675-09	T3	Solid	03/27/2025	12:05	VOC-TCLVOA-10		8260D		10 Bus. Days
Q1675-10	T4	Solid	03/27/2025	12:10	VOC-TCLVOA-10		8260D		10 Bus. Days
Q1675-11	T5	Solid	03/27/2025	12:15	VOC-TCLVOA-10		8260D		10 Bus. Days

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1675 GENV01
Client Name : G Environmental
Client Contact : Gary Landis
Invoice Name : G Environmental
Invoice Contact : Gary Landis

Order Date : 3/28/2025 11:22:41 AM
Project Name : Stockton
Receive DateTime : 3/28/2025 11:00:00 AM
Purchase Order :

Project Mgr :
Report Type : ~~Level 1~~ NJ. Red.
EDD Type : Excel NJ
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1675-12	T6	Solid	03/27/2025	12:16	VOC-TCLVOA-10		8260D	10 Bus. Days	
					VOC-TCLVOA-10		8260D	10 Bus. Days	

Relinquished By : 
Date / Time : 3/28/25 12:15

Received By : 
Date / Time : 3-28-25 12:15
Storage Area : VOA Refridgerator Room