

Cover Page

Order ID : Q2147

Project ID : 98 Morse Ave Nutley

Client : Sciacca General Contractors, LLC

Lab Sample Number

Q2147-01
Q2147-02
Q2147-03
Q2147-04
Q2147-05
Q2147-06
Q2147-07

Client Sample Number

WASTE
VOC
1
2
3
4
5

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: 6/4/2025

DATA REPORTING QUALIFIERS- ORGANIC

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2147

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: MAHESH PATEL

Date: 06/04/2025

LAB CHRONICLE

OrderID: Q2147	OrderDate: 5/28/2025 1:30:00 PM
Client: Sciacca General Contractors, LLC	Project: 98 Morse Ave Nutley
Contact: Rosanne Scirica	Location: L41,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2147-03	1	Solid	EPH_F2	NJEPH	05/27/25	06/03/25	06/03/25	05/28/25
Q2147-04	2	Solid	EPH_F2	NJEPH	05/27/25	06/03/25	06/03/25	05/28/25
Q2147-05	3	Solid	EPH_F2	NJEPH	05/27/25	06/03/25	06/03/25	05/28/25
Q2147-06	4	Solid	EPH_F2	NJEPH	05/27/25	06/03/25	06/03/25	05/28/25
Q2147-07	5	Solid	EPH_F2	NJEPH	05/27/25	06/03/25	06/03/25	05/28/25



QC SUMMARY

SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: SCIA01
Lab Code: CHEM CASE No.: Q2147 SAS No.: Q2147 SDG No.: Q2147
Run Number: FE060325AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)	ortho-Terphenyl (SURR)		TOT OUT
PB168239BL	84	80		0
PB168239BS	80	72		0
PB168239BSD	79	71		0
1	83	66		0
2	63	59		0
3	79	70		0
3MS	77	66		0
3MSD	72	62		0
4	65	56		0
5	52	47		0

QC LIMITS

1-chlorooctadecane (SURR)

(40-140)

ortho-Terphenyl (SURR)

(40-140)

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

SOIL EPH SURROGATE RECOVERY

QC LIMITS

1-chlorooctadecane (SURR)

(40-140)

ortho-Terphenyl (SURR)

(40-140)

Column to be used to flag recovery values

* Values outside of contract required QC Limits

D Surrogate diluted out

SOLID EPH_F2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Chemtech</u>	Client:	<u>Sciacca General Contractors, LLC</u>	
Lab Code:	<u>CHEM</u>	Cas No:	<u>Q2147</u>	SAS No : <u>Q2147</u> SDG No: <u>Q2147</u>
Sample No :	<u>Q2147-05MS</u>	Datafile:	<u>FE054155.D</u>	Client ID : <u>3MS</u>

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

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	MS/MSD CONCENTRATION	% REC	Qual	QC LIMITS
						(40-140)

SOLID EPH_F2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Chemtech</u>	Client:	<u>Sciacca General Contractors, LLC</u>	
Lab Code:	<u>CHEM</u>	Cas No:	<u>Q2147</u>	SAS No : <u>Q2147</u> SDG No: <u>Q2147</u>
Sample No :	<u>Q2147-05MSD</u>	Datafile:	<u>FE054156.D</u> Client ID : <u>3MSD</u>	

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS QC Limit Of RPD
Aliphatic C28-C40	34.7	21.0	56.7	102		7.55 (40-140) 50
Aliphatic C9-C28	115.6	15.4	99.5	73		6.3 (40-140) 50

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	MS/MSD CONCENTRATION	% REC	Qual	QC LIMITS
						(40-140)

SOLID EPH_F2 LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Chemtech</u>	Client:	<u>Sciacca General Contractors, LLC</u>	
Lab Code:	<u>CHEM</u>	Cas No:	<u>Q2147</u>	SAS No : <u>Q2147</u> SDG No: <u>Q2147</u>
Sample No :	<u>PB168239BS</u>	Datafile:	<u>FE054150.D</u>	Client ID : <u>PB168239BS</u>

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

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
n-Nonane (C9)	300	34.95	12	*	(40-140)
n-Decane (C10)	300	36.34	12	*	(40-140)
Naphthalene (C11.7)	300	40.36	13	*	(40-140)
n-Dodecane (C12)	300	37.77	13	*	(40-140)
2-methylnaphthalene (C12.89)	200	37.29	19	*	(40-140)
n-Tetradecane (C14)	200	38.11	19	*	(40-140)
n-Hexadecane (C16)	200	38.11	19	*	(40-140)
n-Octadecane (C18)	300	37.45	12	*	(40-140)
n-Eicosane (C20)	300	39.03	13	*	(40-140)
n-Heneicosane (C21)	300	37.83	13	*	(40-140)
n-Docosane (C22)	400	37.88	9	*	(40-140)
n-Tetracosane (C24)	400	83.21	21	*	(40-140)
n-Hexacosane (C26)	400	38.76	10	*	(40-140)
n-Octacosane (C28)	400	41.06	10	*	(40-140)
n-Tricontane (C30)	600	38.26	6	*	(40-140)
n-Dotriacontane (C32)	600	38.76	6	*	(40-140)
n-Tetratriacontane (C34)	600	40.28	7	*	(40-140)
n-Hexatriacontane (C36)	600	41.13	7	*	(40-140)
n-Octatriacontane (C38)	600	44.82	7	*	(40-140)
n-Tetracontane (C40)	600	49.52	8	*	(40-140)

SOLID EPH_F2 LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Chemtech</u>	Client:	<u>Sciacca General Contractors, LLC</u>	
Lab Code:	<u>CHEM</u>	Cas No:	<u>Q2147</u>	SAS No : <u>Q2147</u> SDG No: <u>Q2147</u>
Sample No :	<u>PB168239BSD</u>	Datafile:	<u>FE054151.D</u>	Client ID : <u>PB168239BSD</u>

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

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS	QC Limit Of RPD
n-Nonane (C9)	300	34.03	11	*	8.7 (40-140)	25
n-Decane (C10)	300	35.03	12	*	0 (40-140)	25
Naphthalene (C11.7)	300	39.08	13	*	0 (40-140)	25
n-Dodecane (C12)	300	36.65	12	*	8 (40-140)	25
2-methylnaphthalene (C12.89)	200	36.24	18	*	5.41 (40-140)	25
n-Tetradecane (C14)	200	36.85	18	*	5.41 (40-140)	25
n-Hexadecane (C16)	200	37.16	19	*	0 (40-140)	25
n-Octadecane (C18)	300	36.60	12	*	0 (40-140)	25
n-Eicosane (C20)	300	38.19	13	*	0 (40-140)	25
n-Heneicosane (C21)	300	36.95	12	*	8 (40-140)	25
n-Docosane (C22)	400	37.05	9	*	0 (40-140)	25
n-Tetracosane (C24)	400	81.08	20	*	4.88 (40-140)	25
n-Hexacosane (C26)	400	37.82	9	*	10.53 (40-140)	25
n-Octacosane (C28)	400	39.92	10	*	0 (40-140)	25
n-Tricontane (C30)	600	37.06	6	*	0 (40-140)	25
n-Dotriacontane (C32)	600	37.09	6	*	0 (40-140)	25
n-Tetratriacontane (C34)	600	37.60	6	*	15.38 (40-140)	25
n-Hexatriacontane (C36)	600	36.95	6	*	15.38 (40-140)	25
n-Octatriacontane (C38)	600	35.85	6	*	15.38 (40-140)	25
n-Tetracontane (C40)	600	35.93	6	*	28.57 (40-140)	25

4B
METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168239BL

Lab Name: CHEMTECH

Contract: SCIA01

Lab Code: CHEM Case No.: Q2147

SAS No.: Q2147 SDG NO.: Q2147

Instrument ID: FID_E

Lab Sample ID: PB168239BL

Matrix: (soil/water) Solid

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

Level: (low/med) low

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

EPA SAMPLE NO.	LAB SAMPLE ID
PB168239BS	PB168239BS
PB168239BSD	PB168239BSD
1	Q2147-03
2	Q2147-04
3	Q2147-05
3MS	Q2147-05MS
3MSD	Q2147-05MSD
4	Q2147-06
5	Q2147-07

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	Sciaccia General Contractors, LLC	Date Collected:	05/27/25
Project:	98 Morse Ave Nutley	Date Received:	05/28/25
Client Sample ID:	1	SDG No.:	Q2147
Lab Sample ID:	Q2147-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	86.2
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:		Final Vol:	2000 uL
Prep Method :		Test:	EPH_F2

Prep Date :	Date Analyzed :	Prep Batch ID
06/03/25 10:00	06/03/25 15:25	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	25.6		1	1.05	4.63	mg/kg	FE054152.D
Total EPH	Total EPH	25.6			1.05	4.63	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	05/27/25
Project:	98 Morse Ave Nutley	Date Received:	05/28/25
Client Sample ID:	1	SDG No.:	Q2147
Lab Sample ID:	Q2147-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	86.2
Sample Wt/Vol:	30.06 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE054152.D	1	06/03/25	06/03/25	PB168239

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	25.6		1.05	4.63	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	20.4		1.37	2.32	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	41.7		40 - 140	83%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	32.8		40 - 140	66%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2147-03	Acq On:	03 Jun 2025 15:25
Client Sample ID:	1	Operator:	YP\AJ
Data file:	FE054152.D	Misc:	
Instrument:	FID_E	ALS Vial:	9
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.085	6.730	224417	1.655	300	ug/ml
Aliphatic C12-C16	6.731	10.178	1697150	12.577	200	ug/ml
Aliphatic C16-C21	10.179	13.552	19961887	151.329	300	ug/ml
Aliphatic C21-C28	13.553	17.220	20767030	167.237	400	ug/ml
Aliphatic C28-C40	17.221	22.091	30468249	263.952	600	ug/ml
Aliphatic EPH	3.085	22.091	73118733	596.751		ug/ml
ortho-Terphenyl (SURR)	11.838	11.838	5334008	32.82		ug/ml
1-chlorooctadecane (SURR)	13.284	13.284	4947176	41.73		ug/ml
Aliphatic C9-C28	3.085	17.220	42650484	332.798	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054152.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 15:25
Operator : YP\AJ
Sample : Q2147-03
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
1

Integration File: autoint1.e
Quant Time: Jun 04 02:51:57 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.838	5334008	32.822 ug/ml
Spiked Amount	50.000	Recovery	= 65.64%
12) S 1-chlorooctadecane (S...	13.284	4947176	41.731 ug/ml
Spiked Amount	50.000	Recovery	= 83.46%

Target Compounds

(f)=RT Delta > 1/2 Window

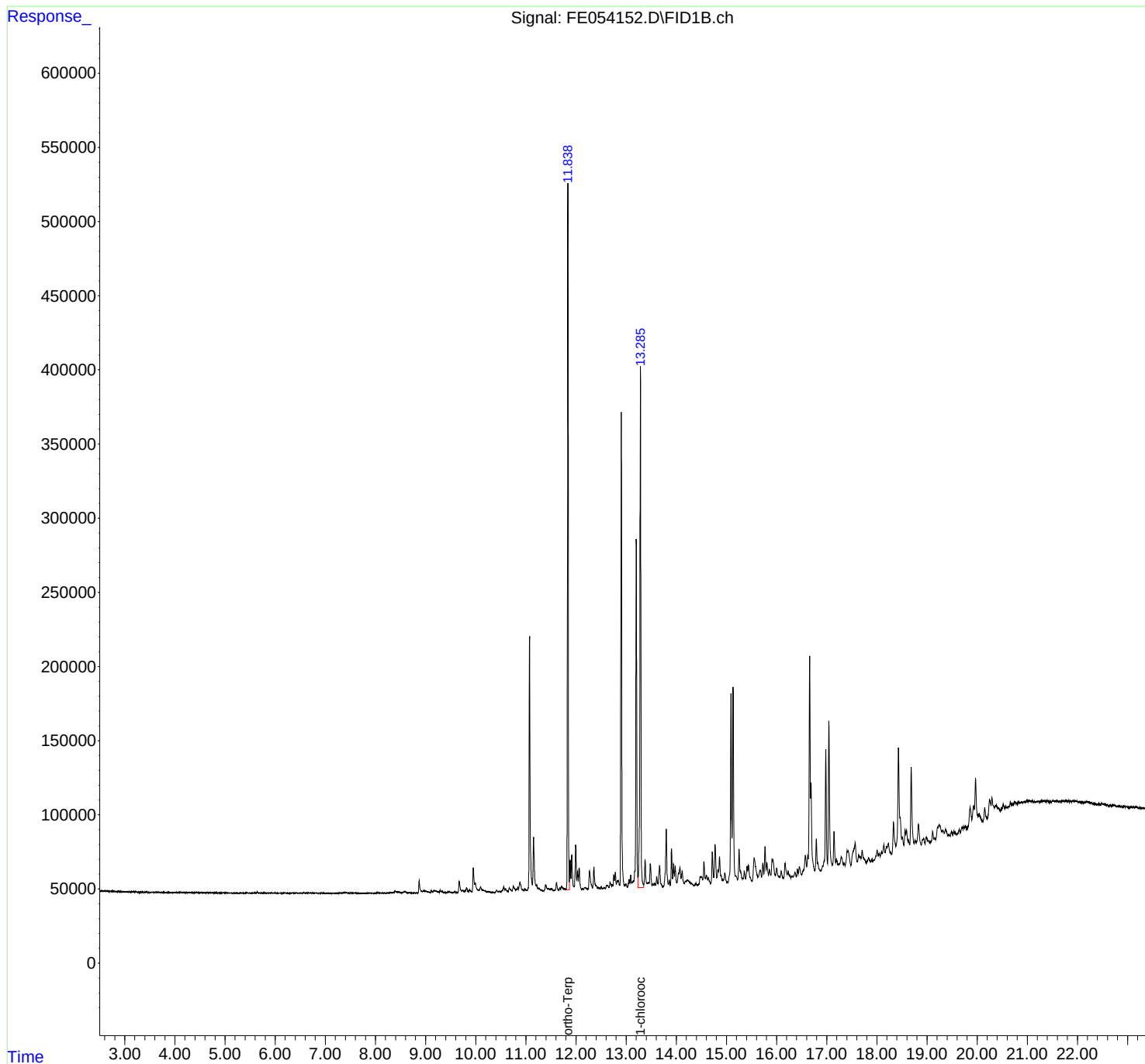
(m)=manual int.

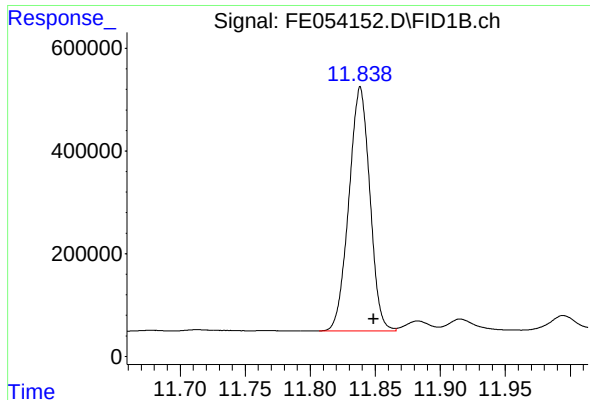
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054152.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 15:25
Operator : YP\AJ
Sample : Q2147-03
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
1

Integration File: autoint1.e
Quant Time: Jun 04 02:51:57 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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

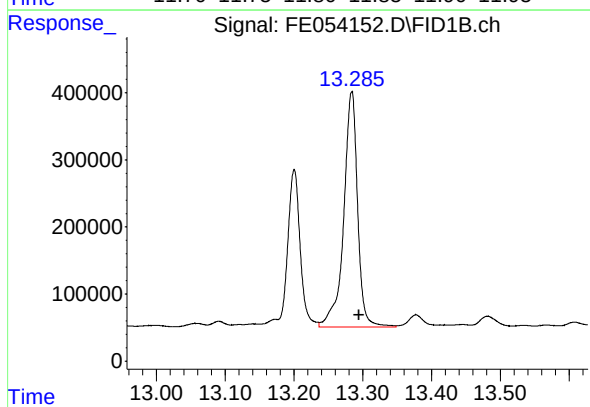




#9 ortho-Terphenyl (SURR)

R.T.: 11.838 min
Delta R.T.: -0.010 min
Response: 5334008
Conc: 32.82 ug/ml

Instrument :
FID_E
ClientSampleId :
1



#12 1-chlorooctadecane (SURR)

R.T.: 13.284 min
Delta R.T.: -0.011 min
Response: 4947176
Conc: 41.73 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054152.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 15:25
Sample : Q2147-03
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.882	2.865	2.916	VV	119	1897	0.04%	0.002%
2	2.924	2.916	2.938	PV	41	432	0.01%	0.001%
3	2.945	2.938	3.071	PV	110	5200	0.10%	0.007%
4	3.079	3.071	3.089	VV	55	291	0.01%	0.000%
5	3.112	3.089	3.124	PV	107	1162	0.02%	0.001%
6	3.186	3.124	3.208	VV	155	3303	0.06%	0.004%
7	3.220	3.208	3.264	VV	96	2002	0.04%	0.003%
8	3.284	3.264	3.314	PV	130	1391	0.03%	0.002%
9	3.325	3.314	3.398	VV	87	2100	0.04%	0.003%
10	3.427	3.398	3.443	VV	112	1714	0.03%	0.002%
11	3.453	3.443	3.511	VV	154	1303	0.02%	0.002%
12	3.527	3.511	3.538	PV	124	1067	0.02%	0.001%
13	3.545	3.538	3.551	VV	88	439	0.01%	0.001%
14	3.558	3.551	3.579	VV	82	798	0.01%	0.001%
15	3.595	3.579	3.632	VV	108	1588	0.03%	0.002%
16	3.655	3.632	3.673	VV	128	1754	0.03%	0.002%
17	3.683	3.673	3.702	VV	84	1123	0.02%	0.001%
18	3.712	3.702	3.765	VV	94	2068	0.04%	0.003%
19	3.775	3.765	3.807	PV	114	1154	0.02%	0.001%
20	3.817	3.807	3.825	VV	83	591	0.01%	0.001%
21	3.832	3.825	3.844	VV	93	643	0.01%	0.001%
22	3.851	3.844	3.858	VV	78	398	0.01%	0.001%
23	3.876	3.858	3.926	VV	134	2711	0.05%	0.003%
24	3.933	3.926	3.951	VV	130	808	0.02%	0.001%
25	3.954	3.951	4.051	PV	102	4675	0.09%	0.006%
26	4.060	4.051	4.084	VV	82	1979	0.04%	0.002%
27	4.097	4.084	4.112	VV	178	1867	0.03%	0.002%
28	4.137	4.112	4.154	VV	148	2422	0.05%	0.003%
29	4.188	4.154	4.234	VV	162	4657	0.09%	0.006%
30	4.254	4.234	4.272	VV	153	2880	0.05%	0.004%
31	4.280	4.272	4.299	VV	159	1845	0.03%	0.002%
32	4.315	4.299	4.400	VV	161	5068	0.09%	0.006%
33	4.448	4.400	4.484	VV	225	4790	0.09%	0.006%
34	4.489	4.484	4.557	VV	151	3331	0.06%	0.004%
35	4.579	4.557	4.610	VV	136	2386	0.04%	0.003%
36	4.629	4.610	4.691	VV	252	5530	0.10%	0.007%

					rteres			
37	4.697	4.691	4.711	VV	79	872	0.02%	0.001%
38	4.716	4.711	4.749	VV	115	1759	0.03%	0.002%
39	4.761	4.749	4.801	VV	140	2172	0.04%	0.003%
40	4.813	4.801	4.849	VV	67	1404	0.03%	0.002%
41	4.859	4.849	4.901	PV	99	2334	0.04%	0.003%
42	4.911	4.901	4.919	VV	135	784	0.01%	0.001%
43	4.964	4.919	5.058	VV	174	6184	0.12%	0.008%
44	5.085	5.058	5.111	PV	60	1117	0.02%	0.001%
45	5.122	5.111	5.371	VV	142	6480	0.12%	0.008%
46	5.437	5.371	5.514	VV	244	8724	0.16%	0.011%
47	5.531	5.514	5.573	PV	133	2768	0.05%	0.003%
48	5.644	5.573	5.677	VV	824	16220	0.30%	0.020%
49	5.792	5.677	5.831	VV	217	13144	0.25%	0.017%
50	5.851	5.831	6.031	VV	235	16898	0.32%	0.021%
51	6.071	6.031	6.105	VV	131	3970	0.07%	0.005%
52	6.127	6.105	6.147	VV	130	1989	0.04%	0.003%
53	6.200	6.147	6.252	PV	303	9976	0.19%	0.013%
54	6.267	6.252	6.304	VV	166	3521	0.07%	0.004%
55	6.342	6.304	6.374	VV	275	7830	0.15%	0.010%
56	6.446	6.374	6.478	VV	263	12295	0.23%	0.015%
57	6.518	6.478	6.601	VV	293	17908	0.33%	0.023%
58	6.620	6.601	6.688	VV	220	9830	0.18%	0.012%
59	6.710	6.688	6.761	VV	230	6691	0.12%	0.008%
60	6.783	6.761	6.893	VV	185	12000	0.22%	0.015%
61	6.923	6.893	6.995	VV	212	7172	0.13%	0.009%
62	7.031	6.995	7.065	VV	168	4126	0.08%	0.005%
63	7.091	7.065	7.125	VV	107	2424	0.05%	0.003%
64	7.223	7.125	7.267	PV	181	8924	0.17%	0.011%
65	7.382	7.267	7.450	VV	756	35913	0.67%	0.045%
66	7.474	7.450	7.571	VV	362	19084	0.36%	0.024%
67	7.584	7.571	7.724	VV	352	12924	0.24%	0.016%
68	7.753	7.724	7.798	VV	129	2738	0.05%	0.003%
69	7.809	7.798	7.828	PV	78	1082	0.02%	0.001%
70	7.863	7.828	7.981	VV	376	14371	0.27%	0.018%
71	8.035	7.981	8.124	VV	519	20684	0.39%	0.026%
72	8.185	8.124	8.202	VV	250	8560	0.16%	0.011%
73	8.219	8.202	8.257	VV	237	5994	0.11%	0.008%
74	8.295	8.257	8.319	VV	461	12790	0.24%	0.016%
75	8.392	8.319	8.448	VV	1453	56626	1.06%	0.071%
76	8.468	8.448	8.528	VV	923	27625	0.52%	0.035%
77	8.579	8.528	8.649	VV	1227	44272	0.83%	0.056%
78	8.670	8.649	8.805	VV	309	12239	0.23%	0.015%
79	8.873	8.805	8.934	PV	8128	151874	2.84%	0.191%
80	8.970	8.934	9.087	VV	1752	99669	1.86%	0.125%
81	9.117	9.087	9.140	VV	1536	28661	0.54%	0.036%
82	9.171	9.140	9.267	VV	1690	83393	1.56%	0.105%
83	9.293	9.267	9.316	VV	1681	30017	0.56%	0.038%
84	9.331	9.316	9.421	VV	1167	26321	0.49%	0.033%
85	9.444	9.421	9.463	VV	978	12338	0.23%	0.016%
86	9.483	9.463	9.547	VV	812	16164	0.30%	0.020%
87	9.582	9.547	9.612	VV	756	13240	0.25%	0.017%
88	9.673	9.612	9.728	VV	7460	162284	3.03%	0.204%
89	9.742	9.728	9.767	VV	1663	29458	0.55%	0.037%

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90	9.818	9.767	9.858	VV	3306	88784	1.66%	0.112%
91	9.879	9.858	9.924	VV	1795	45960	0.86%	0.058%
92	9.954	9.924	10.056	VV	16412	428784	8.01%	0.540%
93	10.099	10.056	10.219	VV	3908	170655	3.19%	0.215%
94	10.254	10.219	10.324	VV	635	21231	0.40%	0.027%
95	10.348	10.324	10.378	PV	201	2683	0.05%	0.003%
96	10.419	10.378	10.447	PV	1720	26284	0.49%	0.033%
97	10.467	10.447	10.493	VV	729	14854	0.28%	0.019%
98	10.560	10.493	10.640	VV	3544	135624	2.53%	0.171%
99	10.672	10.640	10.721	VV	2752	70917	1.32%	0.089%
100	10.752	10.721	10.801	VV	3509	98624	1.84%	0.124%
101	10.883	10.801	10.961	VV	6416	250877	4.69%	0.316%
102	10.978	10.961	11.023	VV	2063	43217	0.81%	0.054%
103	11.074	11.023	11.131	VV	168208	2283426	42.65%	2.875%
104	11.156	11.131	11.351	VV	36254	754118	14.09%	0.949%
105	11.396	11.351	11.492	VV	4172	132775	2.48%	0.167%
106	11.515	11.492	11.554	VV	1370	28818	0.54%	0.036%
107	11.611	11.554	11.654	PV	5323	91590	1.71%	0.115%
108	11.678	11.654	11.693	VV	1833	22983	0.43%	0.029%
109	11.714	11.693	11.804	VV	2924	85278	1.59%	0.107%
110	11.838	11.804	11.868	VV	472615	5353289	100.00%	6.740%
111	11.916	11.868	11.964	VV	23621	629265	11.75%	0.792%
112	11.995	11.964	12.045	VV	30337	620177	11.58%	0.781%
113	12.063	12.045	12.114	VV	14725	236845	4.42%	0.298%
114	12.131	12.114	12.149	VV	837	11055	0.21%	0.014%
115	12.183	12.149	12.238	VV	1412	45545	0.85%	0.057%
116	12.271	12.238	12.331	VV	12121	269151	5.03%	0.339%
117	12.357	12.331	12.474	VV	14873	302129	5.64%	0.380%
118	12.502	12.474	12.526	VV	1675	25865	0.48%	0.033%
119	12.562	12.526	12.583	VV	1006	20282	0.38%	0.026%
120	12.626	12.583	12.658	VV	2502	71695	1.34%	0.090%
121	12.679	12.658	12.734	VV	4611	123431	2.31%	0.155%
122	12.784	12.734	12.874	VV	11076	461856	8.63%	0.581%
123	12.902	12.874	12.970	VV	319774	3976955	74.29%	5.007%
124	12.997	12.970	13.028	VV	2782	69044	1.29%	0.087%
125	13.091	13.028	13.113	VV	8867	231418	4.32%	0.291%
126	13.200	13.113	13.238	VV	235755	3159508	59.02%	3.978%
127	13.283	13.238	13.346	VV	354940	4948646	92.44%	6.231%
128	13.378	13.346	13.428	VV	18285	325209	6.07%	0.409%
129	13.482	13.428	13.518	VV	15909	335807	6.27%	0.423%
130	13.535	13.518	13.550	VV	2340	34705	0.65%	0.044%
131	13.568	13.550	13.583	VV	2704	40410	0.75%	0.051%
132	13.608	13.583	13.634	VV	7035	124456	2.32%	0.157%
133	13.665	13.634	13.731	VV	14381	289391	5.41%	0.364%
134	13.798	13.731	13.841	VV	39024	694477	12.97%	0.874%
135	13.859	13.841	13.877	VV	4234	59897	1.12%	0.075%
136	13.904	13.877	13.926	VV	25280	353938	6.61%	0.446%
137	13.944	13.926	13.962	VV	15225	229227	4.28%	0.289%
138	13.977	13.962	14.009	VV	14013	220720	4.12%	0.278%
139	14.070	14.009	14.094	VV	13087	404536	7.56%	0.509%
140	14.115	14.094	14.161	VV	10309	217496	4.06%	0.274%
141	14.229	14.161	14.351	VV	4130	289713	5.41%	0.365%

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142	14.390	14.351	14.420	PV	1712	33835	0.63%	0.043%
143	14.501	14.420	14.524	VV	5946	222507	4.16%	0.280%
144	14.551	14.524	14.584	VV	15360	287126	5.36%	0.362%
145	14.601	14.584	14.688	VV	6469	230261	4.30%	0.290%
146	14.717	14.688	14.744	VV	21843	338601	6.33%	0.426%
147	14.773	14.744	14.811	VV	26729	529630	9.89%	0.667%
148	14.860	14.811	14.939	VV	18248	567189	10.60%	0.714%
149	14.968	14.939	15.026	VV	6909	150830	2.82%	0.190%
150	15.090	15.026	15.110	VV	125919	1775553	33.17%	2.235%
151	15.131	15.110	15.219	VV	132197	2053938	38.37%	2.586%
152	15.251	15.219	15.321	VV	22222	486820	9.09%	0.613%
153	15.356	15.321	15.380	VV	7028	139244	2.60%	0.175%
154	15.438	15.380	15.511	VV	11022	404025	7.55%	0.509%
155	15.554	15.511	15.628	PV	15412	533400	9.96%	0.672%
156	15.674	15.628	15.699	VV	6919	196112	3.66%	0.247%
157	15.726	15.699	15.744	VV	11209	181842	3.40%	0.229%
158	15.768	15.744	15.838	VV	22522	577464	10.79%	0.727%
159	15.857	15.838	15.884	VV	6706	131121	2.45%	0.165%
160	15.915	15.884	15.978	VV	12620	450897	8.42%	0.568%
161	16.001	15.978	16.068	VV	7205	176012	3.29%	0.222%
162	16.092	16.068	16.136	VV	4890	89283	1.67%	0.112%
163	16.169	16.136	16.210	VV	9998	214634	4.01%	0.270%
164	16.230	16.210	16.287	VV	4544	96100	1.80%	0.121%
165	16.365	16.287	16.390	PV	3284	71033	1.33%	0.089%
166	16.416	16.390	16.432	PV	4943	67019	1.25%	0.084%
167	16.455	16.432	16.501	VV	6436	143611	2.68%	0.181%
168	16.573	16.501	16.599	VV	13123	354252	6.62%	0.446%
169	16.659	16.599	16.759	VV	146457	3245916	60.63%	4.087%
170	16.792	16.759	16.881	VV	22849	469885	8.78%	0.592%
171	16.981	16.881	17.013	VV	82085	1348080	25.18%	1.697%
172	17.043	17.013	17.109	VV	99418	1662524	31.06%	2.093%
173	17.145	17.109	17.178	VV	25441	455824	8.51%	0.574%
174	17.193	17.178	17.237	VV	6557	158201	2.96%	0.199%
175	17.290	17.237	17.331	VV	7416	247374	4.62%	0.311%
176	17.346	17.331	17.366	VV	3052	49485	0.92%	0.062%
177	17.426	17.366	17.480	VV	10626	419116	7.83%	0.528%
178	17.566	17.480	17.610	VV	15099	605926	11.32%	0.763%
179	17.637	17.610	17.683	VV	5984	199079	3.72%	0.251%
180	17.707	17.683	17.788	VV	9212	247447	4.62%	0.312%
181	17.836	17.788	17.873	PV	2870	67564	1.26%	0.085%
182	17.901	17.873	17.921	VV	1377	19640	0.37%	0.025%
183	18.005	17.921	18.028	VV	6800	169709	3.17%	0.214%
184	18.045	18.028	18.066	VV	4310	77065	1.44%	0.097%
185	18.092	18.066	18.108	VV	5077	95793	1.79%	0.121%
186	18.138	18.108	18.163	VV	9352	210546	3.93%	0.265%
187	18.226	18.163	18.294	VV	9618	444060	8.30%	0.559%
188	18.332	18.294	18.378	VV	22909	545201	10.18%	0.686%
189	18.430	18.378	18.535	VV	72127	2135428	39.89%	2.689%
190	18.590	18.535	18.654	VV	15786	760795	14.21%	0.958%
191	18.685	18.654	18.744	VV	57149	1160438	21.68%	1.461%
192	18.762	18.744	18.781	VV	7518	143601	2.68%	0.181%
193	18.829	18.781	18.882	VV	17432	551622	10.30%	0.695%
194	18.930	18.882	18.959	VV	7402	255712	4.78%	0.322%

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195	18.991	18.959	19.054	VV	7298	296597	5.54%	0.373%
196	19.113	19.054	19.168	VV	10321	383622	7.17%	0.483%
197	19.244	19.168	19.301	VV	13692	848722	15.85%	1.069%
198	19.317	19.301	19.343	VV	9170	219601	4.10%	0.276%
199	19.370	19.343	19.461	VV	9609	484226	9.05%	0.610%
200	19.487	19.461	19.518	VV	7046	206018	3.85%	0.259%
201	19.539	19.518	19.598	VV	7005	276740	5.17%	0.348%
202	19.644	19.598	19.667	VV	7528	242701	4.53%	0.306%
203	19.699	19.667	19.721	VV	8609	240776	4.50%	0.303%
204	19.767	19.721	19.791	VV	9024	336211	6.28%	0.423%
205	19.860	19.791	19.894	VV	20605	797675	14.90%	1.004%
206	19.968	19.894	20.018	VV	39416	1557425	29.09%	1.961%
207	20.037	20.018	20.109	VV	14379	667189	12.46%	0.840%
208	20.152	20.109	20.199	VV	18089	680496	12.71%	0.857%
209	20.251	20.199	20.278	VV	22369	806909	15.07%	1.016%
210	20.296	20.278	20.344	VV	23474	773640	14.45%	0.974%
211	20.375	20.344	20.458	VV	17564	1093466	20.43%	1.377%
212	20.521	20.458	20.558	VV	17243	903007	16.87%	1.137%
213	20.573	20.558	20.590	VV	14731	287950	5.38%	0.363%
214	20.663	20.590	20.704	VV	17328	1050399	19.62%	1.322%
215	20.759	20.704	20.804	VV	16678	961227	17.96%	1.210%
216	20.829	20.804	20.858	VV	16242	513060	9.58%	0.646%
217	20.881	20.858	20.906	VV	15966	446079	8.33%	0.562%
218	20.938	20.906	20.971	VV	15632	599715	11.20%	0.755%
219	20.994	20.971	21.011	VV	15771	374224	6.99%	0.471%
220	21.037	21.011	21.074	VV	15533	577883	10.79%	0.728%
221	21.094	21.074	21.161	VV	15011	743242	13.88%	0.936%
222	21.198	21.161	21.246	VV	13674	690464	12.90%	0.869%
223	21.326	21.246	21.374	VV	13068	990872	18.51%	1.248%
224	21.405	21.374	21.436	VV	12266	446801	8.35%	0.563%
225	21.515	21.436	21.544	VV	11564	740303	13.83%	0.932%
226	21.554	21.544	21.566	VV	10929	144056	2.69%	0.181%
227	21.584	21.566	21.671	VV	10845	647640	12.10%	0.815%
228	21.724	21.671	21.741	VV	10081	409973	7.66%	0.516%
229	21.777	21.741	21.808	VV	9451	375658	7.02%	0.473%
230	21.825	21.808	21.843	VV	8915	184706	3.45%	0.233%
231	21.860	21.843	21.891	VV	8570	238751	4.46%	0.301%
232	21.914	21.891	21.941	VV	8401	242627	4.53%	0.305%
233	21.954	21.941	22.044	VV	7927	447439	8.36%	0.563%
234	22.063	22.044	22.081	VV	6441	134558	2.51%	0.169%
235	22.098	22.081	22.127	VV	5986	156698	2.93%	0.197%
236	22.191	22.127	22.411	VV	5428	665347	12.43%	0.838%
237	22.424	22.411	22.452	VV	2072	44050	0.82%	0.055%
238	22.483	22.452	22.568	VV	1849	79828	1.49%	0.101%
Sum of corrected areas:					79425773			

Aliphatic EPH 051425.M Wed Jun 04 04:31:57 2025

Report of Analysis

Client:	Sciaccia General Contractors, LLC	Date Collected:	05/27/25
Project:	98 Morse Ave Nutley	Date Received:	05/28/25
Client Sample ID:	2	SDG No.:	Q2147
Lab Sample ID:	Q2147-04	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	85.2
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
06/03/25 10:00	06/03/25 15:55	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	5.07		1	1.07	4.68	mg/kg	FE054153.D
Total EPH	Total EPH	5.07			1.07	4.68	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	05/27/25
Project:	98 Morse Ave Nutley	Date Received:	05/28/25
Client Sample ID:	2	SDG No.:	Q2147
Lab Sample ID:	Q2147-04	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	85.2
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE054153.D	1	06/03/25	06/03/25	PB168239

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	5.07		1.07	4.68	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	10.7		1.38	2.35	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	31.4		40 - 140	63%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	29.4		40 - 140	59%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2147-04	Acq On:	03 Jun 2025 15:55
Client Sample ID:	2	Operator:	YP\AJ
Data file:	FE054153.D	Misc:	
Instrument:	FID_E	ALS Vial:	10
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.085	6.730	197601	1.458	300	ug/ml
Aliphatic C12-C16	6.731	10.178	725046	5.373	200	ug/ml
Aliphatic C16-C21	10.179	13.552	5003539	37.931	300	ug/ml
Aliphatic C21-C28	13.553	17.220	2672377	21.521	400	ug/ml
Aliphatic C28-C40	17.221	22.091	15756899	136.505	600	ug/ml
Aliphatic EPH	3.085	22.091	24355462	202.788		ug/ml
ortho-Terphenyl (SURR)	11.837	11.837	4769125	29.35		ug/ml
1-chlorooctadecane (SURR)	13.283	13.283	3726369	31.43		ug/ml
Aliphatic C9-C28	3.085	17.220	8598563	66.283	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054153.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 15:55
Operator : YP\AJ
Sample : Q2147-04
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
2

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

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.837	4769125	29.346 ug/ml
Spiked Amount	50.000	Recovery	= 58.69%
12) S 1-chlorooctadecane (S...	13.283	3726369	31.433 ug/ml
Spiked Amount	50.000	Recovery	= 62.87%

Target Compounds

(f)=RT Delta > 1/2 Window

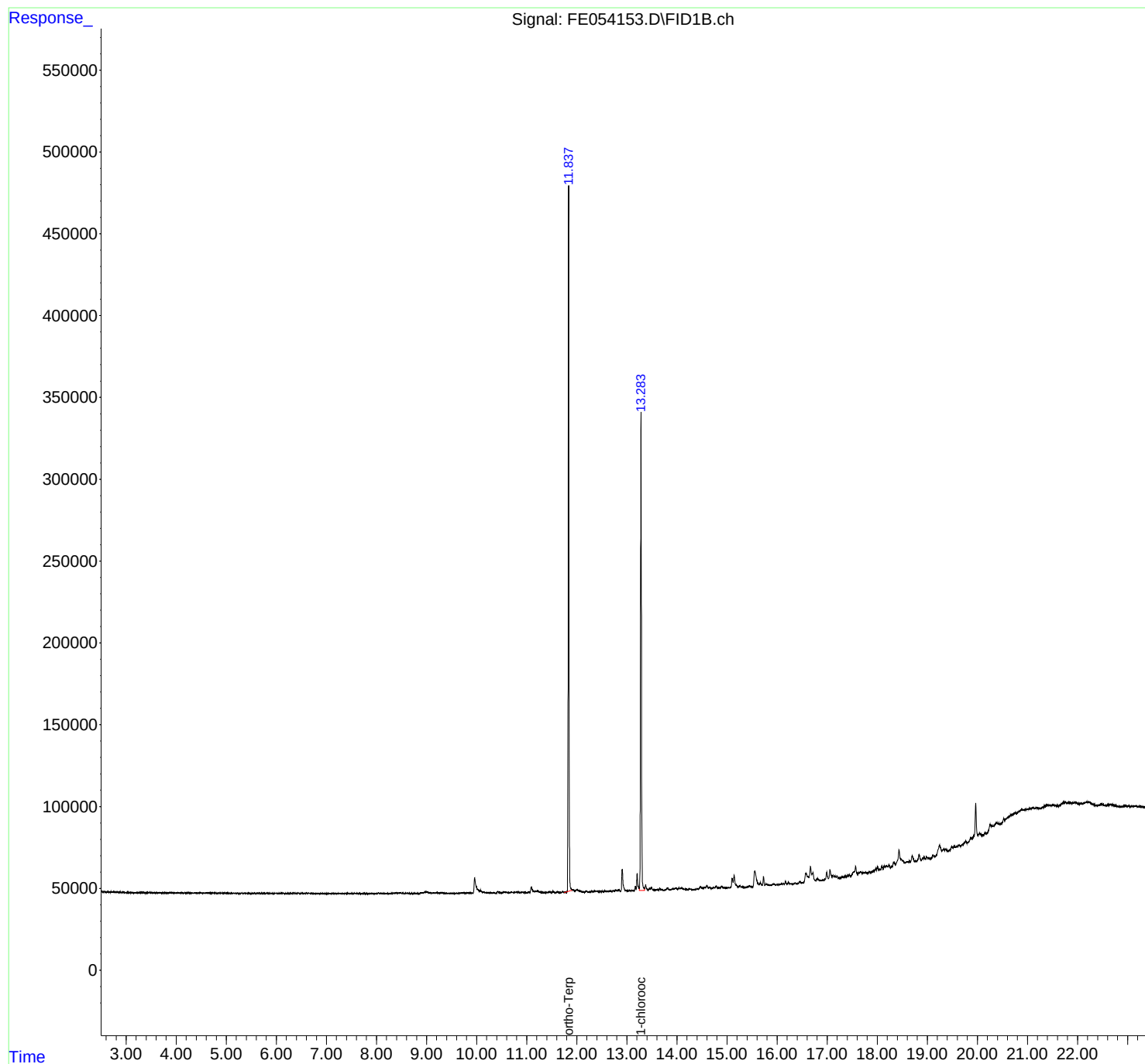
(m)=manual int.

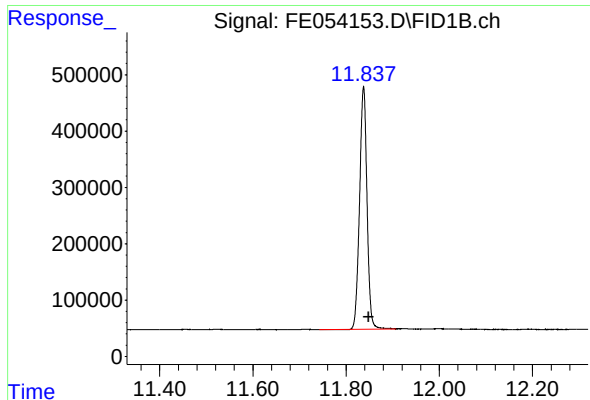
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054153.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 15:55
Operator : YP\AJ
Sample : Q2147-04
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
2

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

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

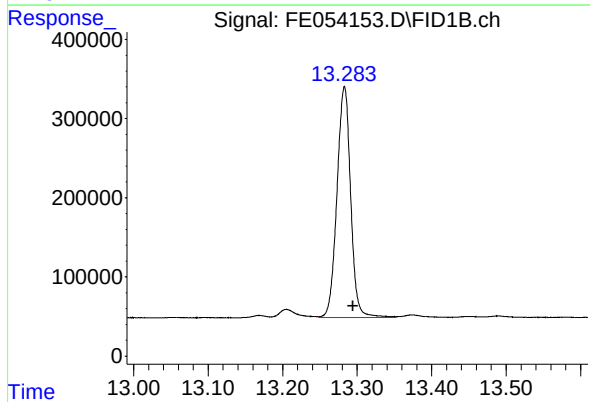




#9 ortho-Terphenyl (SURR)

R.T.: 11.837 min
Delta R.T.: -0.011 min
Response: 4769125
Conc: 29.35 ug/ml

Instrument :
FID_E
ClientSampleId :
2



#12 1-chlorooctadecane (SURR)

R.T.: 13.283 min
Delta R.T.: -0.012 min
Response: 3726369
Conc: 31.43 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054153.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 15:55
Sample : Q2147-04
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.953	2.888	2.964	BV	107	849	0.02%	0.003%
2	2.971	2.964	3.010	PV	78	512	0.01%	0.002%
3	3.023	3.010	3.091	PV	75	1962	0.04%	0.007%
4	3.118	3.091	3.126	VV	95	1103	0.02%	0.004%
5	3.132	3.126	3.157	PV	66	901	0.02%	0.003%
6	3.200	3.157	3.281	VV	146	5368	0.11%	0.018%
7	3.297	3.281	3.318	VV	97	1275	0.03%	0.004%
8	3.328	3.318	3.337	VV	128	774	0.02%	0.003%
9	3.347	3.337	3.388	VV	101	2130	0.04%	0.007%
10	3.409	3.388	3.455	VV	130	3498	0.07%	0.012%
11	3.458	3.455	3.501	VV	118	2429	0.05%	0.008%
12	3.528	3.501	3.585	VV	126	4764	0.10%	0.016%
13	3.615	3.585	3.630	PV	133	2154	0.04%	0.007%
14	3.650	3.630	3.697	VV	123	2941	0.06%	0.010%
15	3.705	3.697	3.724	VV	133	900	0.02%	0.003%
16	3.736	3.724	3.759	VV	102	1144	0.02%	0.004%
17	3.791	3.759	3.825	VV	122	2712	0.06%	0.009%
18	3.840	3.825	3.910	VV	123	2567	0.05%	0.009%
19	3.920	3.910	3.965	VV	135	2084	0.04%	0.007%
20	3.971	3.965	4.015	VV	71	1685	0.03%	0.006%
21	4.019	4.015	4.028	VV	105	554	0.01%	0.002%
22	4.032	4.028	4.078	VV	110	1692	0.03%	0.006%
23	4.088	4.078	4.121	VV	132	1862	0.04%	0.006%
24	4.128	4.121	4.145	VV	126	1177	0.02%	0.004%
25	4.151	4.145	4.210	VV	139	3525	0.07%	0.012%
26	4.218	4.210	4.243	VV	147	1783	0.04%	0.006%
27	4.254	4.243	4.268	VV	100	1295	0.03%	0.004%
28	4.283	4.268	4.427	VV	147	8667	0.18%	0.029%
29	4.443	4.427	4.568	VV	200	8739	0.18%	0.029%
30	4.574	4.568	4.589	VV	116	1119	0.02%	0.004%
31	4.627	4.589	4.714	VV	210	6942	0.14%	0.023%
32	4.732	4.714	4.766	VV	108	2715	0.06%	0.009%
33	4.775	4.766	4.831	VV	99	2084	0.04%	0.007%
34	4.873	4.831	4.892	VV	176	3304	0.07%	0.011%
35	4.934	4.892	4.976	VV	139	4080	0.08%	0.014%
36	4.994	4.976	5.060	VV	132	3526	0.07%	0.012%

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37	5.114	5.060	5.280	VV	165	7511	0.15%	0.025%
38	5.300	5.280	5.328	VV	110	1368	0.03%	0.005%
39	5.332	5.328	5.351	VV	76	588	0.01%	0.002%
40	5.435	5.351	5.514	VV	182	7989	0.16%	0.027%
41	5.560	5.514	5.618	VV	188	5705	0.12%	0.019%
42	5.635	5.618	5.667	VV	140	2787	0.06%	0.009%
43	5.704	5.667	5.772	PV	204	6687	0.14%	0.022%
44	5.791	5.772	5.829	VV	214	4049	0.08%	0.013%
45	5.856	5.829	5.885	VV	170	3445	0.07%	0.011%
46	5.893	5.885	6.030	VV	124	7831	0.16%	0.026%
47	6.062	6.030	6.105	VV	139	3521	0.07%	0.012%
48	6.129	6.105	6.167	VV	134	3317	0.07%	0.011%
49	6.206	6.167	6.251	VV	143	5135	0.11%	0.017%
50	6.265	6.251	6.309	VV	125	3396	0.07%	0.011%
51	6.342	6.309	6.380	VV	169	5862	0.12%	0.019%
52	6.406	6.380	6.481	VV	213	9401	0.19%	0.031%
53	6.503	6.481	6.595	VV	261	12676	0.26%	0.042%
54	6.622	6.595	6.676	VV	230	8823	0.18%	0.029%
55	6.694	6.676	6.749	VV	178	6017	0.12%	0.020%
56	6.800	6.749	6.818	VV	133	3240	0.07%	0.011%
57	6.888	6.818	6.985	VV	109	9040	0.19%	0.030%
58	7.000	6.985	7.045	VV	68	2313	0.05%	0.008%
59	7.058	7.045	7.101	VV	70	1995	0.04%	0.007%
60	7.117	7.101	7.175	PV	101	3121	0.06%	0.010%
61	7.196	7.175	7.231	VV	158	3146	0.06%	0.010%
62	7.241	7.231	7.311	VV	151	4869	0.10%	0.016%
63	7.384	7.311	7.479	VV	250	16635	0.34%	0.055%
64	7.604	7.479	7.635	VV	257	16918	0.35%	0.056%
65	7.651	7.635	7.705	VV	124	3752	0.08%	0.012%
66	7.715	7.705	7.841	VV	88	5585	0.11%	0.019%
67	7.862	7.841	7.964	PV	259	9346	0.19%	0.031%
68	8.035	7.964	8.126	VV	428	19551	0.40%	0.065%
69	8.146	8.126	8.167	VV	216	2590	0.05%	0.009%
70	8.385	8.167	8.425	VV	404	30618	0.63%	0.102%
71	8.474	8.425	8.561	VV	529	26735	0.55%	0.089%
72	8.590	8.561	8.673	VV	298	13460	0.28%	0.045%
73	8.692	8.673	8.735	VV	125	3590	0.07%	0.012%
74	8.751	8.735	8.771	VV	108	1867	0.04%	0.006%
75	8.788	8.771	8.815	VV	154	2214	0.05%	0.007%
76	8.894	8.815	8.931	VV	415	15537	0.32%	0.052%
77	8.978	8.931	9.143	VV	1056	73027	1.50%	0.242%
78	9.206	9.143	9.275	VV	652	28644	0.59%	0.095%
79	9.298	9.275	9.425	VV	624	22167	0.45%	0.074%
80	9.478	9.425	9.518	VV	199	6588	0.14%	0.022%
81	9.528	9.518	9.568	VV	100	2564	0.05%	0.009%
82	9.593	9.568	9.608	PV	103	1423	0.03%	0.005%
83	9.688	9.608	9.738	VV	344	11956	0.25%	0.040%
84	9.752	9.738	9.781	VV	207	4269	0.09%	0.014%
85	9.827	9.781	9.888	VV	235	9240	0.19%	0.031%
86	9.905	9.888	9.928	VV	308	3790	0.08%	0.013%
87	9.962	9.928	10.061	VV	9238	286740	5.88%	0.952%
88	10.076	10.061	10.165	VV	1720	55254	1.13%	0.183%
89	10.178	10.165	10.324	VV	416	23262	0.48%	0.077%

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90	10.342	10.324	10.385	VV	177	3322	0.07%	0.011%
91	10.421	10.385	10.498	VV	917	23806	0.49%	0.079%
92	10.554	10.498	10.647	VV	707	38644	0.79%	0.128%
93	10.697	10.647	10.760	VV	689	27069	0.55%	0.090%
94	10.818	10.760	10.868	VV	788	28114	0.58%	0.093%
95	10.891	10.868	10.985	VV	433	21301	0.44%	0.071%
96	11.039	10.985	11.060	VV	624	11490	0.24%	0.038%
97	11.092	11.060	11.151	VV	3447	87184	1.79%	0.289%
98	11.176	11.151	11.198	VV	934	23613	0.48%	0.078%
99	11.219	11.198	11.364	VV	1507	50392	1.03%	0.167%
100	11.455	11.364	11.482	VV	646	17815	0.37%	0.059%
101	11.523	11.482	11.581	VV	798	18566	0.38%	0.062%
102	11.611	11.581	11.653	VV	475	9275	0.19%	0.031%
103	11.714	11.653	11.745	PV	798	13080	0.27%	0.043%
104	11.763	11.745	11.793	VV	283	4555	0.09%	0.015%
105	11.837	11.793	11.961	PV	433658	4879656	100.00%	16.193%
106	12.001	11.961	12.059	VV	1689	69145	1.42%	0.229%
107	12.073	12.059	12.115	VV	797	16054	0.33%	0.053%
108	12.130	12.115	12.158	VV	358	3879	0.08%	0.013%
109	12.193	12.158	12.221	VV	626	11343	0.23%	0.038%
110	12.245	12.221	12.266	PV	162	3408	0.07%	0.011%
111	12.297	12.266	12.335	VV	383	11878	0.24%	0.039%
112	12.355	12.335	12.375	VV	655	12056	0.25%	0.040%
113	12.395	12.375	12.435	VV	590	13867	0.28%	0.046%
114	12.464	12.435	12.498	VV	224	6725	0.14%	0.022%
115	12.503	12.498	12.528	VV	183	1952	0.04%	0.006%
116	12.563	12.528	12.598	VV	775	14963	0.31%	0.050%
117	12.621	12.598	12.665	VV	377	11048	0.23%	0.037%
118	12.682	12.665	12.701	VV	302	5104	0.10%	0.017%
119	12.724	12.701	12.745	VV	637	9497	0.19%	0.032%
120	12.784	12.745	12.815	VV	975	25304	0.52%	0.084%
121	12.836	12.815	12.878	VV	1164	22866	0.47%	0.076%
122	12.908	12.878	13.031	VV	13463	248482	5.09%	0.825%
123	13.053	13.031	13.078	VV	509	9412	0.19%	0.031%
124	13.097	13.078	13.136	VV	363	9583	0.20%	0.032%
125	13.206	13.136	13.248	VV	10659	216930	4.45%	0.720%
126	13.282	13.248	13.350	VV	290575	3745756	76.76%	12.430%
127	13.374	13.350	13.422	VV	3655	75174	1.54%	0.249%
128	13.450	13.422	13.468	VV	1519	28821	0.59%	0.096%
129	13.490	13.468	13.568	VV	2243	52066	1.07%	0.173%
130	13.580	13.568	13.598	VV	466	6637	0.14%	0.022%
131	13.663	13.598	13.748	VV	997	44423	0.91%	0.147%
132	13.811	13.748	13.875	VV	1529	48878	1.00%	0.162%
133	13.916	13.875	13.935	VV	960	23147	0.47%	0.077%
134	13.984	13.935	14.013	VV	1502	43858	0.90%	0.146%
135	14.039	14.013	14.058	VV	1311	24530	0.50%	0.081%
136	14.098	14.058	14.158	VV	1249	50049	1.03%	0.166%
137	14.181	14.158	14.218	VV	666	13073	0.27%	0.043%
138	14.253	14.218	14.365	VV	612	24760	0.51%	0.082%
139	14.401	14.365	14.427	PV	643	13773	0.28%	0.046%
140	14.473	14.427	14.525	VV	1744	56838	1.16%	0.189%
141	14.599	14.525	14.625	VV	2399	76745	1.57%	0.255%

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142	14.654	14.625	14.698	VV	1047	31004	0.64%	0.103%
143	14.735	14.698	14.758	VV	1030	25254	0.52%	0.084%
144	14.783	14.758	14.825	VV	1575	37854	0.78%	0.126%
145	14.848	14.825	14.865	VV	667	13233	0.27%	0.044%
146	14.893	14.865	14.958	VV	1538	38078	0.78%	0.126%
147	14.980	14.958	15.045	VV	439	15248	0.31%	0.051%
148	15.103	15.045	15.120	VV	5964	103200	2.11%	0.342%
149	15.141	15.120	15.228	VV	7823	187862	3.85%	0.623%
150	15.256	15.228	15.361	VV	1259	38476	0.79%	0.128%
151	15.449	15.361	15.506	PV	734	26335	0.54%	0.087%
152	15.554	15.506	15.640	PV	9749	345933	7.09%	1.148%
153	15.663	15.640	15.697	VV	2432	53063	1.09%	0.176%
154	15.727	15.697	15.758	VV	5847	90696	1.86%	0.301%
155	15.780	15.758	15.852	VV	1484	49076	1.01%	0.163%
156	15.873	15.852	15.895	VV	563	10747	0.22%	0.036%
157	15.930	15.895	15.988	VV	944	36206	0.74%	0.120%
158	16.009	15.988	16.027	VV	427	8487	0.17%	0.028%
159	16.125	16.027	16.145	VV	704	37950	0.78%	0.126%
160	16.167	16.145	16.200	VV	1726	32505	0.67%	0.108%
161	16.229	16.200	16.261	VV	1471	29085	0.60%	0.097%
162	16.286	16.261	16.328	VV	366	8867	0.18%	0.029%
163	16.366	16.328	16.401	VV	609	13412	0.27%	0.045%
164	16.458	16.401	16.517	PV	1322	35178	0.72%	0.117%
165	16.575	16.517	16.630	VV	5853	222747	4.56%	0.739%
166	16.666	16.630	16.701	VV	9529	247276	5.07%	0.821%
167	16.713	16.701	16.770	VV	5536	111427	2.28%	0.370%
168	16.803	16.770	16.895	VV	1882	55801	1.14%	0.185%
169	16.990	16.895	17.023	VV	4689	96244	1.97%	0.319%
170	17.056	17.023	17.097	VV	6038	134155	2.75%	0.445%
171	17.116	17.097	17.140	VV	2269	46517	0.95%	0.154%
172	17.157	17.140	17.176	VV	1725	29904	0.61%	0.099%
173	17.195	17.176	17.258	VV	1716	33846	0.69%	0.112%
174	17.301	17.258	17.323	PV	757	14032	0.29%	0.047%
175	17.361	17.323	17.384	VV	566	13042	0.27%	0.043%
176	17.443	17.384	17.471	VV	833	25114	0.51%	0.083%
177	17.567	17.471	17.611	VV	5538	168674	3.46%	0.560%
178	17.673	17.611	17.701	VV	1679	63968	1.31%	0.212%
179	17.730	17.701	17.755	VV	922	25003	0.51%	0.083%
180	17.767	17.755	17.811	VV	896	14768	0.30%	0.049%
181	17.840	17.811	17.878	PV	419	10157	0.21%	0.034%
182	18.004	17.878	18.058	PV	2574	102135	2.09%	0.339%
183	18.094	18.058	18.121	VV	2219	49574	1.02%	0.165%
184	18.143	18.121	18.211	VV	2189	89217	1.83%	0.296%
185	18.232	18.211	18.268	VV	2629	48769	1.00%	0.162%
186	18.329	18.268	18.365	VV	3225	100410	2.06%	0.333%
187	18.434	18.365	18.554	VV	9798	436188	8.94%	1.447%
188	18.601	18.554	18.621	VV	1543	56515	1.16%	0.188%
189	18.696	18.621	18.778	VV	4374	167979	3.44%	0.557%
190	18.836	18.778	18.878	VV	4286	106702	2.19%	0.354%
191	18.937	18.878	18.960	VV	2080	60886	1.25%	0.202%
192	18.988	18.960	19.050	VV	1665	46409	0.95%	0.154%
193	19.112	19.050	19.133	PV	1942	32939	0.68%	0.109%
194	19.243	19.133	19.291	VV	6418	297337	6.09%	0.987%

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195	19.327	19.291	19.343	VV	3346	93414	1.91%	0.310%
196	19.360	19.343	19.418	VV	3290	107079	2.19%	0.355%
197	19.486	19.418	19.511	VV	3478	129714	2.66%	0.430%
198	19.538	19.511	19.560	VV	3099	81276	1.67%	0.270%
199	19.638	19.560	19.666	VV	2847	163229	3.35%	0.542%
200	19.767	19.666	19.801	VV	4307	259587	5.32%	0.861%
201	19.966	19.801	20.012	VV	25689	921533	18.89%	3.058%
202	20.039	20.012	20.098	VV	6718	293981	6.02%	0.976%
203	20.155	20.098	20.173	VV	5668	229294	4.70%	0.761%
204	20.255	20.173	20.277	VV	9895	455783	9.34%	1.513%
205	20.295	20.277	20.313	VV	8908	190924	3.91%	0.634%
206	20.383	20.313	20.451	VV	9521	742766	15.22%	2.465%
207	20.525	20.451	20.548	VV	10864	542566	11.12%	1.801%
208	20.755	20.548	20.775	VV	12439	1560775	31.99%	5.179%
209	20.884	20.775	20.926	VV	13341	1150685	23.58%	3.819%
210	20.952	20.926	20.973	VV	12639	352178	7.22%	1.169%
211	21.038	20.973	21.061	VV	12431	650450	13.33%	2.159%
212	21.096	21.061	21.145	VV	12253	598888	12.27%	1.987%
213	21.188	21.145	21.245	VV	11578	678557	13.91%	2.252%
214	21.411	21.245	21.464	VV	11073	1418848	29.08%	4.708%
215	21.500	21.464	21.615	VV	10299	880362	18.04%	2.921%
216	21.763	21.615	21.790	VV	9530	970885	19.90%	3.222%
217	21.816	21.790	21.884	VV	8867	475666	9.75%	1.578%
218	21.949	21.884	22.031	VV	7656	639814	13.11%	2.123%
219	22.056	22.031	22.098	VV	6052	238827	4.89%	0.793%
220	22.185	22.098	22.375	VV	5814	744406	15.26%	2.470%
221	22.409	22.375	22.428	VV	1805	54555	1.12%	0.181%
222	22.489	22.428	22.582	VV	1757	96649	1.98%	0.321%
					Sum of corrected areas:	30134052		

Aliphatic EPH 051425.M Wed Jun 04 04:33:37 2025

Report of Analysis

Client:	Sciaccia General Contractors, LLC	Date Collected:	05/27/25
Project:	98 Morse Ave Nutley	Date Received:	05/28/25
Client Sample ID:	3	SDG No.:	Q2147
Lab Sample ID:	Q2147-05	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	86.3
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

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

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	15.4		1	1.05	4.63	mg/kg	FE054154.D
Total EPH	Total EPH	15.4			1.05	4.63	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	05/27/25
Project:	98 Morse Ave Nutley	Date Received:	05/28/25
Client Sample ID:	3	SDG No.:	Q2147
Lab Sample ID:	Q2147-05	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	86.3
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE054154.D	1	06/03/25	06/03/25	PB168239

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	15.4		1.05	4.63	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	21.0		1.37	2.31	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	39.6		40 - 140	79%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	34.8		40 - 140	70%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2147-05	Acq On:	03 Jun 2025 16:25
Client Sample ID:	3	Operator:	YP\AJ
Data file:	FE054154.D	Misc:	
Instrument:	FID_E	ALS Vial:	11
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.085	6.730	512642	3.782	300	ug/ml
Aliphatic C12-C16	6.731	10.178	1534113	11.369	200	ug/ml
Aliphatic C16-C21	10.179	13.552	12380533	93.855	300	ug/ml
Aliphatic C21-C28	13.553	17.220	11225279	90.397	400	ug/ml
Aliphatic C28-C40	17.221	22.091	31447277	272.434	600	ug/ml
Aliphatic EPH	3.085	22.091	57099844	471.837		ug/ml
ortho-Terphenyl (SURR)	11.838	11.838	5657146	34.81		ug/ml
1-chlorooctadecane (SURR)	13.283	13.283	4694741	39.6		ug/ml
Aliphatic C9-C28	3.085	17.220	25652567	199.403	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054154.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 16:25
 Operator : YP\AJ
 Sample : Q2147-05
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 3

Integration File: autoint1.e
 Quant Time: Jun 04 02:52:29 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 12:15:41 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.838	5657146	34.811 ug/ml
Spiked Amount 50.000		Recovery =	69.62%
12) S 1-chlorooctadecane (S...	13.283	4694741	39.602 ug/ml
Spiked Amount 50.000		Recovery =	79.20%

Target Compounds

(f)=RT Delta > 1/2 Window

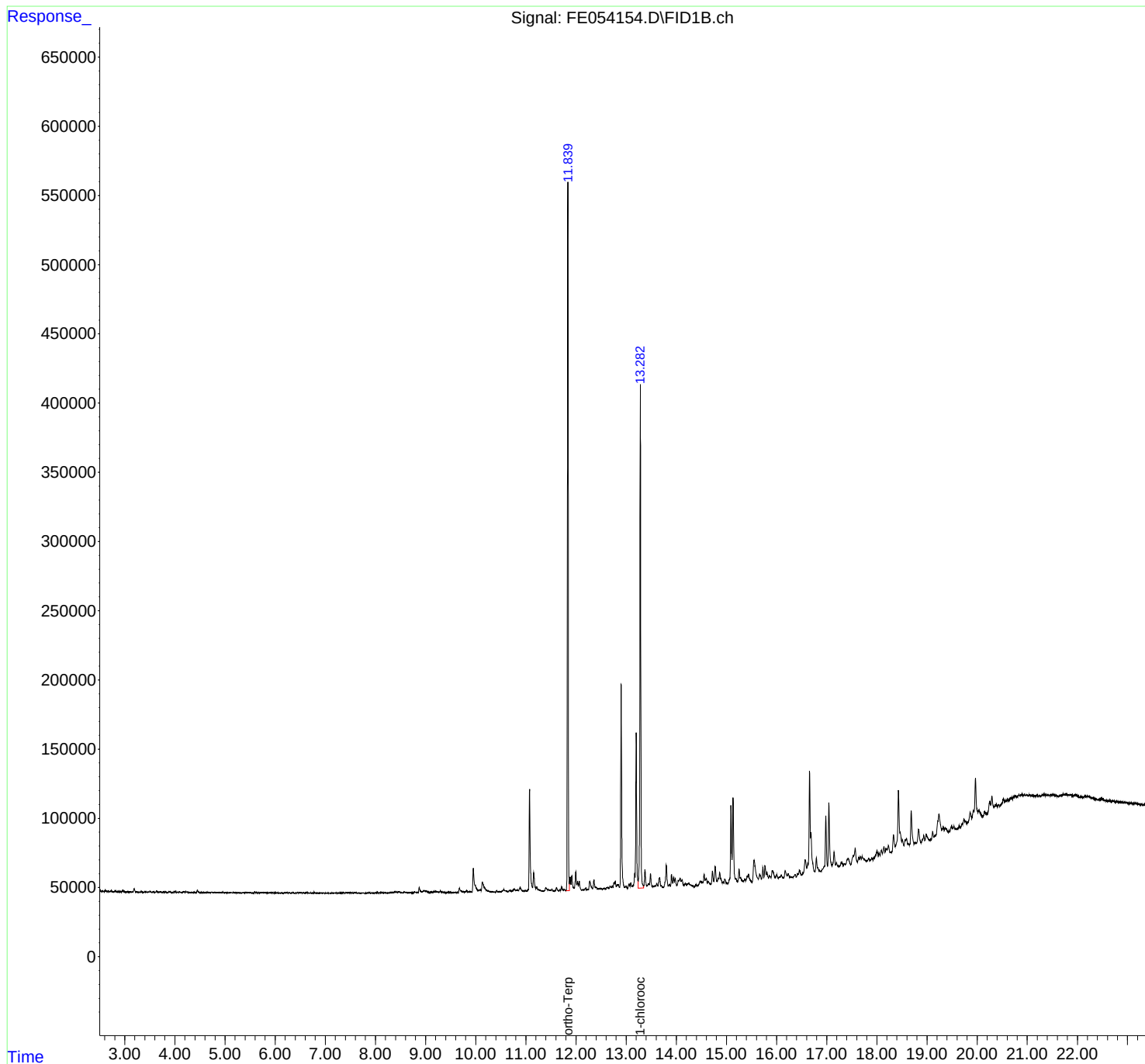
(m)=manual int.

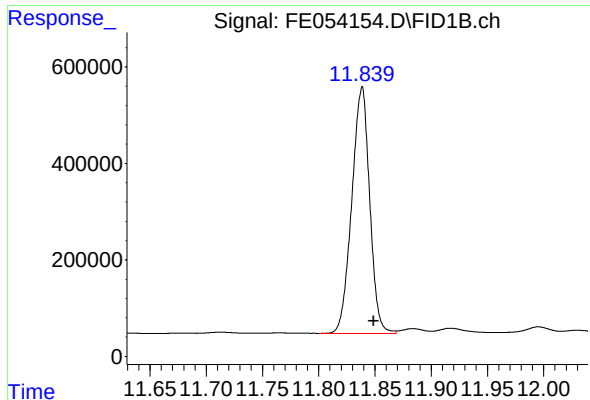
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054154.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 16:25
Operator : YP\AJ
Sample : Q2147-05
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
3

Integration File: autoint1.e
Quant Time: Jun 04 02:52:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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

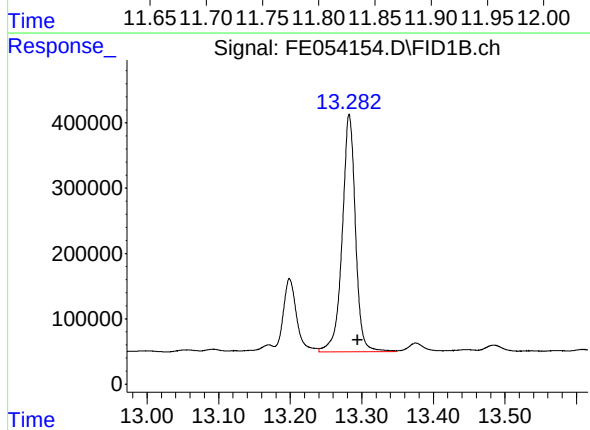




#9 ortho-Terphenyl (SURR)

R.T.: 11.838 min
Delta R.T.: -0.010 min
Response: 5657146
Conc: 34.81 ug/ml

Instrument :
FID_E
ClientSampleId :
3



#12 1-chlorooctadecane (SURR)

R.T.: 13.283 min
Delta R.T.: -0.012 min
Response: 4694741
Conc: 39.60 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054154.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 16:25
Sample : Q2147-05
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.818	2.804	2.841	PH	1059	9707	0.17%	0.015%
2	2.850	2.841	2.863	PV	199	1549	0.03%	0.002%
3	2.880	2.863	2.931	VV	374	5197	0.09%	0.008%
4	2.961	2.931	2.979	PV	1104	16888	0.29%	0.026%
5	2.990	2.979	3.018	VV	560	6461	0.11%	0.010%
6	3.049	3.018	3.077	VV	244	4375	0.08%	0.007%
7	3.101	3.077	3.124	PV	164	2488	0.04%	0.004%
8	3.144	3.124	3.155	VV	246	2989	0.05%	0.005%
9	3.186	3.155	3.228	VV	2736	44164	0.76%	0.069%
10	3.234	3.228	3.284	VV	317	4098	0.07%	0.006%
11	3.326	3.284	3.343	PV	586	7917	0.14%	0.012%
12	3.355	3.343	3.384	VV	333	4606	0.08%	0.007%
13	3.397	3.384	3.414	VV	273	3678	0.06%	0.006%
14	3.428	3.414	3.454	VV	306	4726	0.08%	0.007%
15	3.467	3.454	3.481	VV	314	3470	0.06%	0.005%
16	3.498	3.481	3.543	VV	1060	16761	0.29%	0.026%
17	3.557	3.543	3.598	VV	332	7952	0.14%	0.012%
18	3.635	3.598	3.677	VV	949	19085	0.33%	0.030%
19	3.716	3.677	3.751	VV	505	13536	0.23%	0.021%
20	3.775	3.751	3.795	VV	491	7941	0.14%	0.012%
21	3.819	3.795	3.847	VV	396	6529	0.11%	0.010%
22	3.881	3.847	3.899	VV	571	9634	0.17%	0.015%
23	3.906	3.899	3.935	VV	507	5462	0.09%	0.009%
24	3.984	3.935	4.000	PV	941	14172	0.24%	0.022%
25	4.017	4.000	4.038	VV	850	11546	0.20%	0.018%
26	4.060	4.038	4.072	VV	453	7094	0.12%	0.011%
27	4.095	4.072	4.135	VV	720	13187	0.23%	0.021%
28	4.179	4.135	4.204	VV	710	18382	0.32%	0.029%
29	4.214	4.204	4.274	VV	571	16069	0.28%	0.025%
30	4.281	4.274	4.298	VV	257	2728	0.05%	0.004%
31	4.333	4.298	4.367	VV	322	7322	0.13%	0.011%
32	4.385	4.367	4.410	VV	330	5602	0.10%	0.009%
33	4.449	4.410	4.508	VV	2036	32672	0.56%	0.051%
34	4.522	4.508	4.554	VV	295	4040	0.07%	0.006%
35	4.571	4.554	4.604	VV	278	4184	0.07%	0.007%
36	4.628	4.604	4.642	VV	383	5518	0.10%	0.009%

					rteres			
37	4.652	4.642	4.712	VV	308	9028	0.16%	0.014%
38	4.733	4.712	4.746	VV	565	6738	0.12%	0.011%
39	4.755	4.746	4.773	VV	397	4580	0.08%	0.007%
40	4.785	4.773	4.797	VV	297	3617	0.06%	0.006%
41	4.808	4.797	4.830	VV	304	4544	0.08%	0.007%
42	4.869	4.830	4.878	VV	208	4773	0.08%	0.007%
43	4.889	4.878	4.899	VV	244	2535	0.04%	0.004%
44	4.912	4.899	4.931	VV	235	3452	0.06%	0.005%
45	4.955	4.931	5.001	VV	564	9775	0.17%	0.015%
46	5.016	5.001	5.054	VV	154	3672	0.06%	0.006%
47	5.061	5.054	5.104	VV	112	2682	0.05%	0.004%
48	5.128	5.104	5.151	VV	340	5199	0.09%	0.008%
49	5.160	5.151	5.184	VV	241	3275	0.06%	0.005%
50	5.203	5.184	5.219	VV	265	3236	0.06%	0.005%
51	5.227	5.219	5.251	VV	170	1713	0.03%	0.003%
52	5.272	5.251	5.321	PV	240	3665	0.06%	0.006%
53	5.335	5.321	5.358	PV	110	1161	0.02%	0.002%
54	5.431	5.358	5.457	VV	337	9992	0.17%	0.016%
55	5.469	5.457	5.512	VV	231	5178	0.09%	0.008%
56	5.527	5.512	5.574	VV	123	2325	0.04%	0.004%
57	5.597	5.574	5.656	VV	972	15616	0.27%	0.024%
58	5.714	5.656	5.737	VV	276	6789	0.12%	0.011%
59	5.769	5.737	5.814	VV	366	9768	0.17%	0.015%
60	5.825	5.814	5.834	VV	178	1830	0.03%	0.003%
61	5.858	5.834	5.881	VV	261	4545	0.08%	0.007%
62	5.905	5.881	5.935	VV	300	6396	0.11%	0.010%
63	5.947	5.935	5.962	VV	134	1898	0.03%	0.003%
64	5.974	5.962	5.980	VV	114	1189	0.02%	0.002%
65	5.988	5.980	6.054	VV	178	3859	0.07%	0.006%
66	6.066	6.054	6.109	VV	123	2025	0.03%	0.003%
67	6.119	6.109	6.139	VV	83	1126	0.02%	0.002%
68	6.191	6.139	6.216	VV	290	7033	0.12%	0.011%
69	6.224	6.216	6.245	VV	209	2669	0.05%	0.004%
70	6.269	6.245	6.292	VV	172	3349	0.06%	0.005%
71	6.302	6.292	6.314	VV	144	1348	0.02%	0.002%
72	6.339	6.314	6.379	VV	340	7113	0.12%	0.011%
73	6.444	6.379	6.464	VV	255	7089	0.12%	0.011%
74	6.486	6.464	6.491	VV	222	2707	0.05%	0.004%
75	6.517	6.491	6.608	VV	288	13719	0.24%	0.021%
76	6.632	6.608	6.681	VV	445	9229	0.16%	0.014%
77	6.695	6.681	6.734	VV	183	4653	0.08%	0.007%
78	6.776	6.734	6.809	VV	421	7374	0.13%	0.011%
79	6.818	6.809	6.827	VV	167	1551	0.03%	0.002%
80	6.839	6.827	6.884	VV	172	4498	0.08%	0.007%
81	6.889	6.884	6.898	VV	151	1011	0.02%	0.002%
82	6.918	6.898	6.968	VV	192	4143	0.07%	0.006%
83	6.978	6.968	6.998	VV	64	645	0.01%	0.001%
84	7.047	6.998	7.074	PV	119	2722	0.05%	0.004%
85	7.144	7.074	7.181	VV	113	4129	0.07%	0.006%
86	7.187	7.181	7.274	VV	99	5727	0.10%	0.009%
87	7.352	7.274	7.385	VV	305	14708	0.25%	0.023%
88	7.413	7.385	7.494	VV	466	19792	0.34%	0.031%
89	7.514	7.494	7.539	VV	284	6982	0.12%	0.011%

					rteres			
90	7.583	7.539	7.699	VV	390	18264	0.32%	0.028%
91	7.753	7.699	7.801	PV	95	3967	0.07%	0.006%
92	7.864	7.801	7.961	VV	451	15118	0.26%	0.024%
93	8.035	7.961	8.141	VV	627	27146	0.47%	0.042%
94	8.214	8.141	8.261	VV	213	12321	0.21%	0.019%
95	8.392	8.261	8.444	VV	869	50290	0.87%	0.078%
96	8.469	8.444	8.544	VV	950	31007	0.54%	0.048%
97	8.580	8.544	8.642	VV	822	28294	0.49%	0.044%
98	8.661	8.642	8.737	VV	260	9340	0.16%	0.015%
99	8.780	8.737	8.844	VV	641	26554	0.46%	0.041%
100	8.874	8.844	8.934	VV	4102	86478	1.49%	0.135%
101	8.972	8.934	9.089	VV	1709	94520	1.63%	0.147%
102	9.117	9.089	9.139	VV	731	16297	0.28%	0.025%
103	9.205	9.139	9.266	VV	1186	60150	1.04%	0.094%
104	9.295	9.266	9.414	VV	1213	41368	0.71%	0.064%
105	9.446	9.414	9.464	PV	418	6913	0.12%	0.011%
106	9.482	9.464	9.553	VV	557	12313	0.21%	0.019%
107	9.581	9.553	9.648	VV	351	7885	0.14%	0.012%
108	9.676	9.648	9.726	PV	3233	71298	1.23%	0.111%
109	9.741	9.726	9.773	VV	896	18704	0.32%	0.029%
110	9.819	9.773	9.860	VV	1337	37450	0.65%	0.058%
111	9.903	9.860	9.924	VV	660	19403	0.33%	0.030%
112	9.954	9.924	10.056	VV	16944	418377	7.22%	0.652%
113	10.136	10.056	10.331	VV	7438	347374	6.00%	0.541%
114	10.343	10.331	10.383	VV	286	4727	0.08%	0.007%
115	10.417	10.383	10.446	PV	1132	18396	0.32%	0.029%
116	10.465	10.446	10.488	VV	483	7761	0.13%	0.012%
117	10.558	10.488	10.640	VV	1837	73293	1.27%	0.114%
118	10.673	10.640	10.721	VV	1121	34422	0.59%	0.054%
119	10.756	10.721	10.801	VV	1797	62175	1.07%	0.097%
120	10.885	10.801	10.964	VV	2937	124186	2.14%	0.194%
121	10.979	10.964	11.021	VV	761	16290	0.28%	0.025%
122	11.075	11.021	11.134	VV	73266	1103317	19.04%	1.720%
123	11.158	11.134	11.341	VV	13390	356462	6.15%	0.556%
124	11.399	11.341	11.483	VV	2697	90297	1.56%	0.141%
125	11.519	11.483	11.554	VV	1239	26875	0.46%	0.042%
126	11.611	11.554	11.658	PV	2537	45601	0.79%	0.071%
127	11.713	11.658	11.748	VV	2715	54160	0.93%	0.084%
128	11.765	11.748	11.801	VV	1072	18471	0.32%	0.029%
129	11.838	11.801	11.900	VV	507966	5793232	100.00%	9.030%
130	11.918	11.900	11.961	VV	10538	193480	3.34%	0.302%
131	11.996	11.961	12.047	VV	13438	313150	5.41%	0.488%
132	12.064	12.047	12.113	VV	6542	111599	1.93%	0.174%
133	12.133	12.113	12.154	PV	617	6699	0.12%	0.010%
134	12.189	12.154	12.238	VV	1312	31336	0.54%	0.049%
135	12.276	12.238	12.334	VV	6507	157035	2.71%	0.245%
136	12.357	12.334	12.438	VV	7407	157378	2.72%	0.245%
137	12.453	12.438	12.484	VV	898	19794	0.34%	0.031%
138	12.500	12.484	12.524	VV	901	15593	0.27%	0.024%
139	12.562	12.524	12.586	VV	1057	23071	0.40%	0.036%
140	12.629	12.586	12.661	VV	1303	44737	0.77%	0.070%
141	12.679	12.661	12.708	VV	2289	46888	0.81%	0.073%

rteres								
142	12.782	12.708	12.804	VV	5749	185261	3.20%	0.289%
143	12.834	12.804	12.868	VV	3316	96153	1.66%	0.150%
144	12.900	12.868	12.971	VV	146400	1950564	33.67%	3.040%
145	12.999	12.971	13.026	VV	1940	42322	0.73%	0.066%
146	13.055	13.026	13.073	VV	3303	58801	1.01%	0.092%
147	13.092	13.073	13.131	VV	4306	87914	1.52%	0.137%
148	13.199	13.131	13.241	VV	109882	1613823	27.86%	2.516%
149	13.282	13.241	13.346	VV	363863	4702726	81.18%	7.330%
150	13.376	13.346	13.414	VV	13401	221411	3.82%	0.345%
151	13.485	13.414	13.552	VV	10194	264365	4.56%	0.412%
152	13.609	13.552	13.632	VV	3285	84581	1.46%	0.132%
153	13.664	13.632	13.731	VV	7090	167995	2.90%	0.262%
154	13.799	13.731	13.842	VV	15864	315066	5.44%	0.491%
155	13.860	13.842	13.878	VV	2135	32054	0.55%	0.050%
156	13.906	13.878	13.927	VV	9221	140005	2.42%	0.218%
157	13.946	13.927	13.963	VV	7325	114424	1.98%	0.178%
158	13.978	13.963	14.010	VV	6610	111916	1.93%	0.174%
159	14.072	14.010	14.104	VV	6548	246439	4.25%	0.384%
160	14.113	14.104	14.156	VV	5241	95265	1.64%	0.148%
161	14.180	14.156	14.207	VV	2722	58072	1.00%	0.091%
162	14.248	14.207	14.361	VV	2598	114839	1.98%	0.179%
163	14.394	14.361	14.428	PV	1130	26511	0.46%	0.041%
164	14.475	14.428	14.524	VV	3607	136348	2.35%	0.213%
165	14.555	14.524	14.685	VV	8299	330574	5.71%	0.515%
166	14.720	14.685	14.746	VV	10025	171592	2.96%	0.267%
167	14.775	14.746	14.811	VV	13321	265573	4.58%	0.414%
168	14.865	14.811	14.948	VV	8553	312171	5.39%	0.487%
169	14.969	14.948	15.031	VV	3504	74080	1.28%	0.115%
170	15.090	15.031	15.109	VV	55509	818795	14.13%	1.276%
171	15.130	15.109	15.221	VV	61449	1087742	18.78%	1.696%
172	15.251	15.221	15.340	VV	9938	253351	4.37%	0.395%
173	15.363	15.340	15.382	VV	2579	47077	0.81%	0.073%
174	15.440	15.382	15.508	VV	5889	204043	3.52%	0.318%
175	15.551	15.508	15.633	PV	15714	515233	8.89%	0.803%
176	15.663	15.633	15.697	VV	4894	122073	2.11%	0.190%
177	15.726	15.697	15.746	VV	9578	144926	2.50%	0.226%
178	15.769	15.746	15.839	VV	10634	295189	5.10%	0.460%
179	15.860	15.839	15.888	VV	3007	66524	1.15%	0.104%
180	15.918	15.888	15.976	VV	6098	212785	3.67%	0.332%
181	16.001	15.976	16.038	VV	3329	73251	1.26%	0.114%
182	16.093	16.038	16.138	VV	2788	81013	1.40%	0.126%
183	16.171	16.138	16.208	VV	5472	123898	2.14%	0.193%
184	16.230	16.208	16.320	VV	3290	77933	1.35%	0.121%
185	16.366	16.320	16.392	PV	2072	39801	0.69%	0.062%
186	16.457	16.392	16.501	PV	4455	131326	2.27%	0.205%
187	16.571	16.501	16.602	VV	11022	304892	5.26%	0.475%
188	16.657	16.602	16.761	VV	74061	1769306	30.54%	2.758%
189	16.793	16.761	16.878	VV	10676	223772	3.86%	0.349%
190	16.981	16.878	17.014	VV	39209	656305	11.33%	1.023%
191	17.043	17.014	17.104	VV	47122	834552	14.41%	1.301%
192	17.146	17.104	17.178	VV	12032	260569	4.50%	0.406%
193	17.193	17.178	17.244	VV	4017	83418	1.44%	0.130%
194	17.292	17.244	17.330	VV	3161	99738	1.72%	0.155%

					rteres			
195	17.429	17.330	17.478	VV	4956	218957	3.78%	0.341%
196	17.566	17.478	17.611	VV	11392	388405	6.70%	0.605%
197	17.637	17.611	17.653	VV	4017	71015	1.23%	0.111%
198	17.671	17.653	17.691	VV	4309	76554	1.32%	0.119%
199	17.707	17.691	17.788	VV	3959	121844	2.10%	0.190%
200	17.835	17.788	17.874	VV	1882	36325	0.63%	0.057%
201	17.902	17.874	17.920	PV	1587	23786	0.41%	0.037%
202	18.002	17.920	18.028	VV	6191	174868	3.02%	0.273%
203	18.045	18.028	18.064	VV	3359	55010	0.95%	0.086%
204	18.089	18.064	18.111	VV	5469	107277	1.85%	0.167%
205	18.139	18.111	18.161	VV	7287	155135	2.68%	0.242%
206	18.230	18.161	18.268	VV	7648	316181	5.46%	0.493%
207	18.332	18.268	18.370	VV	14328	395073	6.82%	0.616%
208	18.430	18.370	18.538	VV	45491	1463151	25.26%	2.281%
209	18.590	18.538	18.648	VV	9412	443715	7.66%	0.692%
210	18.685	18.648	18.748	VV	28288	676967	11.69%	1.055%
211	18.763	18.748	18.781	VV	4614	87310	1.51%	0.136%
212	18.832	18.781	18.888	VV	13831	452135	7.80%	0.705%
213	18.936	18.888	18.958	VV	8528	250841	4.33%	0.391%
214	18.986	18.958	19.048	VV	8874	328257	5.67%	0.512%
215	19.112	19.048	19.137	VV	9505	296888	5.12%	0.463%
216	19.238	19.137	19.294	VV	21220	1118104	19.30%	1.743%
217	19.321	19.294	19.343	VV	10361	284828	4.92%	0.444%
218	19.361	19.343	19.420	VV	9796	394710	6.81%	0.615%
219	19.489	19.420	19.514	VV	9805	441600	7.62%	0.688%
220	19.536	19.514	19.603	VV	9284	421532	7.28%	0.657%
221	19.646	19.603	19.668	VV	8911	300979	5.20%	0.469%
222	19.737	19.668	19.791	VV	12595	749997	12.95%	1.169%
223	19.862	19.791	19.893	VV	16643	758609	13.09%	1.182%
224	19.966	19.893	20.015	VV	40415	1516609	26.18%	2.364%
225	20.035	20.015	20.101	VV	16072	742186	12.81%	1.157%
226	20.152	20.101	20.189	VV	14046	675197	11.65%	1.052%
227	20.252	20.189	20.272	VV	20452	809259	13.97%	1.261%
228	20.295	20.272	20.334	VV	24402	738111	12.74%	1.151%
229	20.380	20.334	20.404	VV	17455	708873	12.24%	1.105%
230	20.427	20.404	20.449	VV	17250	443092	7.65%	0.691%
231	20.524	20.449	20.577	VV	20178	1375459	23.74%	2.144%
232	20.760	20.577	20.796	VV	20428	2534241	43.74%	3.950%
233	20.834	20.796	20.854	VV	20411	682623	11.78%	1.064%
234	20.885	20.854	20.917	VV	19903	754320	13.02%	1.176%
235	20.940	20.917	20.976	VV	19564	671963	11.60%	1.047%
236	20.996	20.976	21.021	VV	18677	502513	8.67%	0.783%
237	21.038	21.021	21.077	VV	18552	606089	10.46%	0.945%
238	21.101	21.077	21.173	VV	17645	983989	16.99%	1.534%
239	21.196	21.173	21.218	VV	16769	444679	7.68%	0.693%
240	21.234	21.218	21.262	VV	16363	428264	7.39%	0.668%
241	21.373	21.262	21.398	VV	15663	1268314	21.89%	1.977%
242	21.415	21.398	21.434	VV	15076	327602	5.65%	0.511%
243	21.502	21.434	21.628	VV	14374	1585445	27.37%	2.471%
244	21.755	21.628	21.811	VV	12549	1333387	23.02%	2.078%
245	21.820	21.811	21.841	VV	11476	203560	3.51%	0.317%
246	21.857	21.841	21.934	VV	10963	582438	10.05%	0.908%

					rteres				
247	21.955	21.934	22.041	VV	10294	590130	10.19%	0.920%	
248	22.067	22.041	22.091	VV	7919	229143	3.96%	0.357%	
249	22.153	22.091	22.427	VV	7335	1062907	18.35%	1.657%	
250	22.487	22.427	22.582	VV	2674	154477	2.67%	0.241%	

Sum of corrected areas: 64154638

Aliphatic EPH 051425.M Wed Jun 04 04:33:59 2025

Report of Analysis

Client:	Sciaccia General Contractors, LLC	Date Collected:	05/27/25
Project:	98 Morse Ave Nutley	Date Received:	05/28/25
Client Sample ID:	4	SDG No.:	Q2147
Lab Sample ID:	Q2147-06	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	85.2
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
06/03/25 10:00	06/03/25 17:56	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	11.2		1	1.07	4.68	mg/kg	FE054157.D
Total EPH	Total EPH	11.2			1.07	4.68	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	05/27/25
Project:	98 Morse Ave Nutley	Date Received:	05/28/25
Client Sample ID:	4	SDG No.:	Q2147
Lab Sample ID:	Q2147-06	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	85.2
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE054157.D	1	06/03/25	06/03/25	PB168239

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	11.2		1.07	4.68	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	31.0		1.38	2.35	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	32.4		40 - 140	65%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	28.0		40 - 140	56%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2147-06	Acq On:	03 Jun 2025 17:56
Client Sample ID:	4	Operator:	YP\AJ
Data file:	FE054157.D	Misc:	
Instrument:	FID_E	ALS Vial:	14
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.085	6.730	789835	5.826	300	ug/ml
Aliphatic C12-C16	6.731	10.178	1117068	8.278	200	ug/ml
Aliphatic C16-C21	10.179	13.552	6555704	49.698	300	ug/ml
Aliphatic C21-C28	13.553	17.220	9803241	78.946	400	ug/ml
Aliphatic C28-C40	17.221	22.091	45776422	396.57	600	ug/ml
Aliphatic EPH	3.085	22.091	64042270	539.318		ug/ml
ortho-Terphenyl (SURR)	11.837	11.837	4550399	28		ug/ml
1-chlorooctadecane (SURR)	13.282	13.282	3835715	32.36		ug/ml
Aliphatic C9-C28	3.085	17.220	18265848	142.748	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054157.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 17:56
 Operator : YP\AJ
 Sample : Q2147-06
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 4

Integration File: autoint1.e
 Quant Time: Jun 04 02:53:26 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 12:15:41 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.837	4550399	28.000 ug/ml
Spiked Amount	50.000	Recovery	= 56.00%
12) S 1-chlorooctadecane (S...	13.282	3835715	32.355 ug/ml
Spiked Amount	50.000	Recovery	= 64.71%

Target Compounds

(f)=RT Delta > 1/2 Window

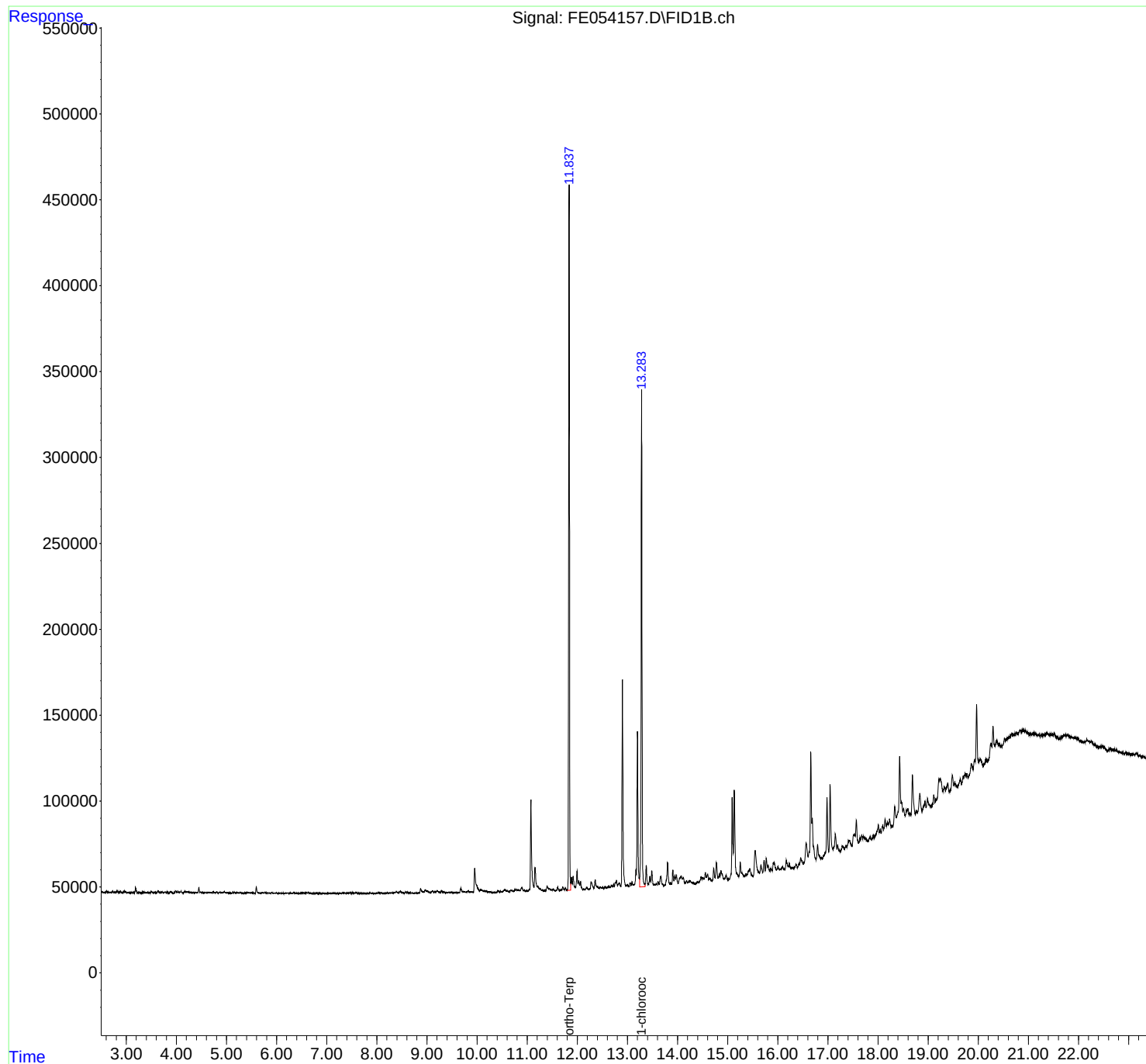
(m)=manual int.

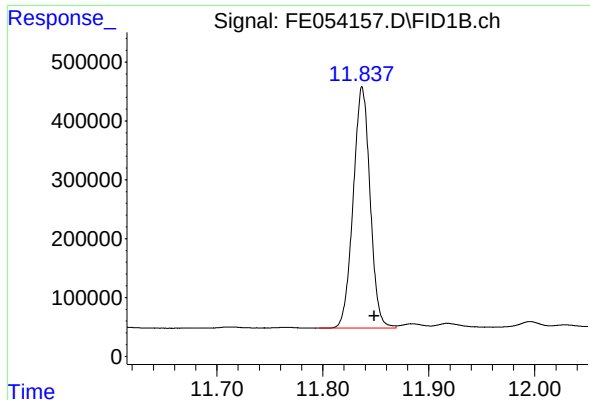
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054157.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 17:56
Operator : YP\AJ
Sample : Q2147-06
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
4

Integration File: autoint1.e
Quant Time: Jun 04 02:53:26 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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

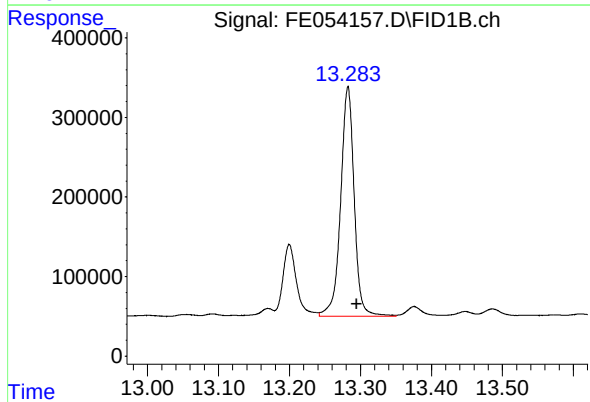




#9 ortho-Terphenyl (SURR)

R.T.: 11.837 min
Delta R.T.: -0.011 min
Response: 4550399
Conc: 28.00 ug/ml

Instrument :
FID_E
ClientSampleId :
4



#12 1-chlorooctadecane (SURR)

R.T.: 13.282 min
Delta R.T.: -0.012 min
Response: 3835715
Conc: 32.36 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054157.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 17:56
 Sample : Q2147-06
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.818	2.804	2.838	PH	738	7883	0.17%	0.011%
2	2.848	2.838	2.861	PV	188	1478	0.03%	0.002%
3	2.881	2.861	2.923	VV	488	6692	0.15%	0.009%
4	2.960	2.923	2.979	PV	1002	14220	0.31%	0.019%
5	2.990	2.979	3.028	VV	378	6145	0.14%	0.008%
6	3.050	3.028	3.118	VV	236	3723	0.08%	0.005%
7	3.140	3.118	3.156	PV	212	2703	0.06%	0.004%
8	3.186	3.156	3.221	VV	2677	40846	0.90%	0.055%
9	3.232	3.221	3.283	VV	307	4855	0.11%	0.007%
10	3.326	3.283	3.343	PV	520	7972	0.18%	0.011%
11	3.356	3.343	3.375	VV	311	3782	0.08%	0.005%
12	3.396	3.375	3.415	VV	252	4401	0.10%	0.006%
13	3.429	3.415	3.450	VV	329	4018	0.09%	0.005%
14	3.465	3.450	3.479	VV	324	3652	0.08%	0.005%
15	3.498	3.479	3.541	VV	1166	18508	0.41%	0.025%
16	3.556	3.541	3.595	VV	454	9620	0.21%	0.013%
17	3.634	3.595	3.675	VV	1276	23666	0.52%	0.032%
18	3.716	3.675	3.751	VV	640	18091	0.40%	0.024%
19	3.777	3.751	3.804	VV	785	15061	0.33%	0.020%
20	3.818	3.804	3.848	VV	624	7668	0.17%	0.010%
21	3.880	3.848	3.898	PV	791	13058	0.29%	0.018%
22	3.905	3.898	3.938	VV	607	7671	0.17%	0.010%
23	3.984	3.938	4.000	VV	1321	20543	0.45%	0.028%
24	4.016	4.000	4.036	VV	1176	15553	0.34%	0.021%
25	4.061	4.036	4.075	VV	573	11136	0.24%	0.015%
26	4.094	4.075	4.136	VV	1172	18517	0.41%	0.025%
27	4.175	4.136	4.201	VV	1139	27557	0.61%	0.037%
28	4.216	4.201	4.241	VV	826	15496	0.34%	0.021%
29	4.250	4.241	4.271	VV	559	8177	0.18%	0.011%
30	4.279	4.271	4.301	VV	409	4884	0.11%	0.007%
31	4.336	4.301	4.363	VV	482	9528	0.21%	0.013%
32	4.383	4.363	4.410	VV	594	9831	0.22%	0.013%
33	4.448	4.410	4.504	VV	3263	52279	1.15%	0.070%
34	4.520	4.504	4.554	VV	440	9087	0.20%	0.012%
35	4.571	4.554	4.601	VV	370	6966	0.15%	0.009%
36	4.626	4.601	4.644	VV	525	10261	0.23%	0.014%

					rteres			
37	4.656	4.644	4.668	VV	440	5988	0.13%	0.008%
38	4.674	4.668	4.688	VV	410	3816	0.08%	0.005%
39	4.696	4.688	4.718	VV	300	4653	0.10%	0.006%
40	4.732	4.718	4.771	VV	979	18447	0.41%	0.025%
41	4.787	4.771	4.801	VV	585	8656	0.19%	0.012%
42	4.809	4.801	4.836	VV	667	8619	0.19%	0.012%
43	4.874	4.836	4.897	VV	476	13768	0.30%	0.019%
44	4.913	4.897	4.931	VV	498	7742	0.17%	0.010%
45	4.955	4.931	5.001	VV	1196	20470	0.45%	0.028%
46	5.030	5.001	5.049	VV	363	6671	0.15%	0.009%
47	5.063	5.049	5.101	VV	265	5583	0.12%	0.008%
48	5.128	5.101	5.148	VV	553	8954	0.20%	0.012%
49	5.161	5.148	5.182	VV	639	7734	0.17%	0.010%
50	5.205	5.182	5.254	VV	635	13280	0.29%	0.018%
51	5.272	5.254	5.311	VV	554	9266	0.20%	0.012%
52	5.329	5.311	5.343	VV	190	2506	0.06%	0.003%
53	5.368	5.343	5.381	VV	286	4432	0.10%	0.006%
54	5.390	5.381	5.403	VV	305	3250	0.07%	0.004%
55	5.431	5.403	5.457	VV	549	11898	0.26%	0.016%
56	5.466	5.457	5.494	VV	428	6668	0.15%	0.009%
57	5.498	5.494	5.551	VV	286	6727	0.15%	0.009%
58	5.558	5.551	5.570	VV	198	1289	0.03%	0.002%
59	5.595	5.570	5.668	VV	3737	56180	1.23%	0.076%
60	5.718	5.668	5.746	VV	360	12218	0.27%	0.016%
61	5.770	5.746	5.831	VV	601	15805	0.35%	0.021%
62	5.855	5.831	5.871	VV	298	5104	0.11%	0.007%
63	5.899	5.871	5.938	VV	469	10969	0.24%	0.015%
64	5.950	5.938	5.971	VV	224	3324	0.07%	0.004%
65	5.984	5.971	6.031	VV	330	6667	0.15%	0.009%
66	6.045	6.031	6.054	VV	167	1601	0.04%	0.002%
67	6.072	6.054	6.108	VV	235	4843	0.11%	0.007%
68	6.126	6.108	6.154	VV	170	2914	0.06%	0.004%
69	6.187	6.154	6.245	VV	317	11758	0.26%	0.016%
70	6.273	6.245	6.295	VV	321	5421	0.12%	0.007%
71	6.341	6.295	6.388	VV	501	12698	0.28%	0.017%
72	6.405	6.388	6.428	VV	191	4311	0.09%	0.006%
73	6.437	6.428	6.480	VV	254	6736	0.15%	0.009%
74	6.496	6.480	6.533	VV	328	9139	0.20%	0.012%
75	6.548	6.533	6.582	VV	277	7326	0.16%	0.010%
76	6.593	6.582	6.604	VV	279	3093	0.07%	0.004%
77	6.631	6.604	6.681	VV	696	15632	0.34%	0.021%
78	6.704	6.681	6.746	VV	298	8292	0.18%	0.011%
79	6.782	6.746	6.808	VV	408	8227	0.18%	0.011%
80	6.815	6.808	6.844	VV	209	3338	0.07%	0.004%
81	6.856	6.844	6.876	VV	157	2324	0.05%	0.003%
82	6.885	6.876	6.943	VV	155	4308	0.09%	0.006%
83	6.957	6.943	7.011	VV	213	2796	0.06%	0.004%
84	7.044	7.011	7.074	PV	171	3188	0.07%	0.004%
85	7.086	7.074	7.127	VV	126	2212	0.05%	0.003%
86	7.163	7.127	7.178	VV	186	3864	0.08%	0.005%
87	7.210	7.178	7.234	VV	143	4350	0.10%	0.006%
88	7.252	7.234	7.289	VV	231	6727	0.15%	0.009%
89	7.308	7.289	7.327	VV	309	5581	0.12%	0.008%

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90	7.351	7.327	7.390	VV	399	11354	0.25%	0.015%
91	7.410	7.390	7.444	VV	412	9852	0.22%	0.013%
92	7.483	7.444	7.498	VV	396	10294	0.23%	0.014%
93	7.525	7.498	7.541	VV	338	7323	0.16%	0.010%
94	7.583	7.541	7.727	VV	635	24295	0.53%	0.033%
95	7.753	7.727	7.787	VV	203	3267	0.07%	0.004%
96	7.801	7.787	7.824	PV	137	1399	0.03%	0.002%
97	7.862	7.824	7.901	VV	444	9791	0.22%	0.013%
98	7.921	7.901	7.934	VV	193	2621	0.06%	0.004%
99	7.949	7.934	7.969	VV	201	2641	0.06%	0.004%
100	8.005	7.969	8.024	VV	346	7076	0.16%	0.010%
101	8.034	8.024	8.085	VV	560	11618	0.26%	0.016%
102	8.098	8.085	8.141	VV	248	6152	0.14%	0.008%
103	8.185	8.141	8.195	VV	219	5511	0.12%	0.007%
104	8.208	8.195	8.243	VV	259	5701	0.13%	0.008%
105	8.283	8.243	8.309	VV	428	10181	0.22%	0.014%
106	8.391	8.309	8.412	VV	674	27926	0.61%	0.038%
107	8.431	8.412	8.443	VV	576	9211	0.20%	0.012%
108	8.468	8.443	8.550	VV	1050	33009	0.73%	0.044%
109	8.583	8.550	8.651	VV	681	23881	0.52%	0.032%
110	8.666	8.651	8.681	VV	229	3527	0.08%	0.005%
111	8.695	8.681	8.703	VV	214	1929	0.04%	0.003%
112	8.710	8.703	8.725	VV	176	1405	0.03%	0.002%
113	8.762	8.752	8.774	VV	77	535	0.01%	0.001%
114	8.781	8.774	8.787	VV	71	488	0.01%	0.001%
115	8.795	8.787	8.807	VV	113	708	0.02%	0.001%
116	8.824	8.807	8.844	PV	111	1756	0.04%	0.002%
117	8.874	8.844	8.929	VV	2681	57043	1.25%	0.077%
118	8.971	8.929	9.078	VV	1655	83180	1.83%	0.112%
119	9.107	9.078	9.146	VV	1127	30140	0.66%	0.041%
120	9.209	9.146	9.260	VV	1166	48797	1.07%	0.066%
121	9.294	9.260	9.334	VV	1085	27276	0.60%	0.037%
122	9.339	9.334	9.413	VV	555	10466	0.23%	0.014%
123	9.441	9.413	9.464	VV	310	5806	0.13%	0.008%
124	9.479	9.464	9.511	VV	387	7174	0.16%	0.010%
125	9.519	9.511	9.548	VV	173	2200	0.05%	0.003%
126	9.579	9.548	9.616	PV	199	3403	0.07%	0.005%
127	9.675	9.616	9.728	VV	2678	61041	1.34%	0.082%
128	9.744	9.728	9.771	VV	744	14965	0.33%	0.020%
129	9.818	9.771	9.860	VV	1038	30572	0.67%	0.041%
130	9.878	9.860	9.891	VV	510	7874	0.17%	0.011%
131	9.906	9.891	9.925	VV	555	8048	0.18%	0.011%
132	9.954	9.925	10.058	VV	14300	359794	7.91%	0.484%
133	10.076	10.058	10.134	VV	2038	62472	1.37%	0.084%
134	10.147	10.134	10.168	VV	854	16451	0.36%	0.022%
135	10.180	10.168	10.221	VV	778	19077	0.42%	0.026%
136	10.234	10.221	10.298	VV	430	12543	0.28%	0.017%
137	10.308	10.298	10.322	VV	102	1111	0.02%	0.001%
138	10.339	10.322	10.374	VV	155	2722	0.06%	0.004%
139	10.419	10.374	10.444	PV	1273	19775	0.43%	0.027%
140	10.466	10.444	10.484	VV	666	10462	0.23%	0.014%
141	10.558	10.484	10.584	VV	1576	54289	1.19%	0.073%

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142	10.600	10.584	10.644	VV	906	21184	0.47%	0.028%
143	10.670	10.644	10.683	VV	1124	17250	0.38%	0.023%
144	10.697	10.683	10.718	VV	1036	16565	0.36%	0.022%
145	10.774	10.718	10.799	VV	1496	48469	1.06%	0.065%
146	10.816	10.799	10.831	VV	1342	20461	0.45%	0.028%
147	10.840	10.831	10.856	VV	1085	13080	0.29%	0.018%
148	10.887	10.856	10.931	VV	2283	64223	1.41%	0.086%
149	10.945	10.931	10.963	VV	726	11054	0.24%	0.015%
150	10.980	10.963	11.016	VV	582	14792	0.33%	0.020%
151	11.042	11.016	11.050	VV	1430	18755	0.41%	0.025%
152	11.076	11.050	11.134	VV	52562	815635	17.92%	1.097%
153	11.158	11.134	11.203	VV	13871	276983	6.09%	0.372%
154	11.215	11.203	11.342	VV	3005	95628	2.10%	0.129%
155	11.399	11.342	11.437	VV	2836	67717	1.49%	0.091%
156	11.449	11.437	11.483	VV	1175	24201	0.53%	0.033%
157	11.520	11.483	11.554	VV	1228	25799	0.57%	0.035%
158	11.565	11.554	11.578	PV	143	1213	0.03%	0.002%
159	11.611	11.578	11.656	VV	1975	33107	0.73%	0.045%
160	11.677	11.656	11.690	VV	547	6322	0.14%	0.009%
161	11.712	11.690	11.748	VV	2097	33399	0.73%	0.045%
162	11.765	11.748	11.796	VV	1371	19690	0.43%	0.026%
163	11.837	11.796	11.869	VV	408956	4551245	100.00%	6.120%
164	11.885	11.869	11.901	VV	7401	107267	2.36%	0.144%
165	11.918	11.901	11.961	VV	8123	148232	3.26%	0.199%
166	11.996	11.961	12.016	VV	11007	177984	3.91%	0.239%
167	12.029	12.016	12.048	VV	5334	83622	1.84%	0.112%
168	12.065	12.048	12.113	VV	4884	85130	1.87%	0.114%
169	12.131	12.113	12.154	VV	493	5582	0.12%	0.008%
170	12.190	12.154	12.217	PV	1323	25366	0.56%	0.034%
171	12.279	12.217	12.332	VV	4461	110332	2.42%	0.148%
172	12.357	12.332	12.392	VV	5552	98243	2.16%	0.132%
173	12.404	12.392	12.433	VV	1550	24639	0.54%	0.033%
174	12.456	12.433	12.483	VV	984	23005	0.51%	0.031%
175	12.502	12.483	12.523	VV	987	16998	0.37%	0.023%
176	12.560	12.523	12.590	VV	1034	25893	0.57%	0.035%
177	12.616	12.590	12.658	VV	1145	35974	0.79%	0.048%
178	12.678	12.658	12.706	VV	1966	37191	0.82%	0.050%
179	12.723	12.706	12.738	VV	2391	29589	0.65%	0.040%
180	12.758	12.738	12.767	VV	3313	41956	0.92%	0.056%
181	12.782	12.767	12.804	VV	4586	72153	1.59%	0.097%
182	12.836	12.804	12.869	VV	2793	80668	1.77%	0.108%
183	12.900	12.869	12.974	VV	120660	1609682	35.37%	2.165%
184	13.000	12.974	13.029	VV	1678	37850	0.83%	0.051%
185	13.055	13.029	13.074	VV	2577	46705	1.03%	0.063%
186	13.091	13.074	13.111	VV	3349	48743	1.07%	0.066%
187	13.122	13.111	13.131	VV	1503	16821	0.37%	0.023%
188	13.200	13.131	13.240	VV	90427	1344309	29.54%	1.808%
189	13.282	13.240	13.351	VV	287076	3845977	84.50%	5.172%
190	13.376	13.351	13.415	VV	12159	191114	4.20%	0.257%
191	13.448	13.415	13.464	VV	5897	95837	2.11%	0.129%
192	13.486	13.464	13.520	VV	9020	152155	3.34%	0.205%
193	13.537	13.520	13.552	VV	1018	17158	0.38%	0.023%
194	13.576	13.552	13.590	VV	1413	24532	0.54%	0.033%

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195	13.610	13.590	13.634	VV	2510	44261	0.97%	0.060%
196	13.665	13.634	13.731	VV	5482	126374	2.78%	0.170%
197	13.800	13.731	13.844	VV	13375	261079	5.74%	0.351%
198	13.861	13.844	13.879	VV	1554	23746	0.52%	0.032%
199	13.907	13.879	13.928	VV	8969	133591	2.94%	0.180%
200	13.946	13.928	13.963	VV	5815	90778	1.99%	0.122%
201	13.979	13.963	14.014	VV	5984	101722	2.24%	0.137%
202	14.041	14.014	14.054	VV	4052	74052	1.63%	0.100%
203	14.072	14.054	14.092	VV	5260	98168	2.16%	0.132%
204	14.115	14.092	14.158	VV	4068	104333	2.29%	0.140%
205	14.178	14.158	14.204	VV	2257	43829	0.96%	0.059%
206	14.251	14.204	14.292	VV	2154	79415	1.74%	0.107%
207	14.303	14.292	14.361	VV	997	22835	0.50%	0.031%
208	14.398	14.361	14.426	PV	1179	31074	0.68%	0.042%
209	14.470	14.426	14.494	VV	3846	95868	2.11%	0.129%
210	14.508	14.494	14.526	VV	3157	52130	1.15%	0.070%
211	14.555	14.526	14.576	VV	5978	117230	2.58%	0.158%
212	14.598	14.576	14.623	VV	4848	100596	2.21%	0.135%
213	14.639	14.623	14.688	VV	2433	61907	1.36%	0.083%
214	14.720	14.688	14.748	VV	7859	137716	3.03%	0.185%
215	14.776	14.748	14.813	VV	10766	215237	4.73%	0.289%
216	14.837	14.813	14.848	VV	3878	62852	1.38%	0.085%
217	14.868	14.848	14.919	VV	5952	151756	3.33%	0.204%
218	14.930	14.919	14.941	VV	1064	13223	0.29%	0.018%
219	14.970	14.941	15.034	VV	2858	60095	1.32%	0.081%
220	15.091	15.034	15.111	VV	47498	682376	14.99%	0.918%
221	15.131	15.111	15.221	VV	51404	925318	20.33%	1.244%
222	15.251	15.221	15.345	VV	9290	225355	4.95%	0.303%
223	15.365	15.345	15.382	VV	1980	31805	0.70%	0.043%
224	15.417	15.382	15.426	VV	3853	66822	1.47%	0.090%
225	15.441	15.426	15.504	VV	4723	99261	2.18%	0.133%
226	15.547	15.504	15.633	PV	14820	450891	9.91%	0.606%
227	15.663	15.633	15.698	VV	5777	124976	2.75%	0.168%
228	15.727	15.698	15.748	VV	8020	124546	2.74%	0.167%
229	15.770	15.748	15.793	VV	8929	149956	3.29%	0.202%
230	15.808	15.793	15.841	VV	4850	91404	2.01%	0.123%
231	15.861	15.841	15.887	VV	2581	52826	1.16%	0.071%
232	15.912	15.887	15.920	VV	5588	74481	1.64%	0.100%
233	15.930	15.920	15.978	VV	5528	114065	2.51%	0.153%
234	16.001	15.978	16.038	VV	2749	61360	1.35%	0.083%
235	16.096	16.038	16.142	VV	2138	73253	1.61%	0.099%
236	16.170	16.142	16.209	VV	5715	117353	2.58%	0.158%
237	16.229	16.209	16.260	VV	2881	55377	1.22%	0.074%
238	16.277	16.260	16.298	VV	685	11408	0.25%	0.015%
239	16.307	16.298	16.321	VV	349	3931	0.09%	0.005%
240	16.367	16.321	16.393	VV	2044	41530	0.91%	0.056%
241	16.421	16.393	16.434	PV	2010	28994	0.64%	0.039%
242	16.457	16.434	16.506	VV	4965	128266	2.82%	0.172%
243	16.566	16.506	16.604	VV	12529	353163	7.76%	0.475%
244	16.658	16.604	16.679	VV	64358	1064432	23.39%	1.431%
245	16.687	16.679	16.764	VV	25797	473025	10.39%	0.636%
246	16.794	16.764	16.888	VV	9319	199001	4.37%	0.268%

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247	16.982	16.888	17.016	PV	34463	557425	12.25%	0.750%
248	17.044	17.016	17.100	VV	41055	714506	15.70%	0.961%
249	17.148	17.100	17.179	VV	11477	288335	6.34%	0.388%
250	17.193	17.179	17.249	VV	4641	89401	1.96%	0.120%
251	17.291	17.249	17.330	VV	2958	78023	1.71%	0.105%
252	17.356	17.330	17.369	VV	2064	34900	0.77%	0.047%
253	17.409	17.369	17.417	VV	4546	80377	1.77%	0.108%
254	17.433	17.417	17.480	VV	4549	110826	2.44%	0.149%
255	17.513	17.480	17.531	VV	7190	155506	3.42%	0.209%
256	17.567	17.531	17.615	VV	14932	346886	7.62%	0.466%
257	17.639	17.615	17.652	VV	3971	63243	1.39%	0.085%
258	17.673	17.652	17.693	VV	5206	97612	2.14%	0.131%
259	17.708	17.693	17.798	VV	4050	140928	3.10%	0.190%
260	17.840	17.798	17.878	PV	1878	47434	1.04%	0.064%
261	17.901	17.878	17.921	VV	2243	37815	0.83%	0.051%
262	18.006	17.921	18.028	VV	7570	225483	4.95%	0.303%
263	18.044	18.028	18.063	VV	4689	73943	1.62%	0.099%
264	18.092	18.063	18.111	VV	5916	125898	2.77%	0.169%
265	18.141	18.111	18.162	VV	9299	197666	4.34%	0.266%
266	18.193	18.162	18.209	VV	6485	166197	3.65%	0.223%
267	18.231	18.209	18.264	VV	8487	199243	4.38%	0.268%
268	18.276	18.264	18.298	VV	3802	69053	1.52%	0.093%
269	18.334	18.298	18.364	VV	14462	364047	8.00%	0.490%
270	18.431	18.364	18.495	VV	42486	1338086	29.40%	1.799%
271	18.510	18.495	18.544	VV	11254	273452	6.01%	0.368%
272	18.567	18.544	18.578	VV	9983	180231	3.96%	0.242%
273	18.593	18.578	18.654	VV	10151	359168	7.89%	0.483%
274	18.687	18.654	18.744	VV	29154	746290	16.40%	1.004%
275	18.834	18.744	18.880	VV	16637	724729	15.92%	0.975%
276	18.936	18.880	18.959	VV	11026	397705	8.74%	0.535%
277	18.988	18.959	19.046	VV	11356	448195	9.85%	0.603%
278	19.112	19.046	19.137	VV	12802	465482	10.23%	0.626%
279	19.241	19.137	19.295	VV	20803	1409193	30.96%	1.895%
280	19.322	19.295	19.348	VV	14860	429621	9.44%	0.578%
281	19.392	19.348	19.428	VV	16355	662328	14.55%	0.891%
282	19.483	19.428	19.514	VV	20130	775389	17.04%	1.043%
283	19.532	19.514	19.594	VV	15088	647140	14.22%	0.870%
284	19.642	19.594	19.668	VV	16115	626991	13.78%	0.843%
285	19.699	19.668	19.708	VV	16987	360429	7.92%	0.485%
286	19.738	19.708	19.758	VV	18026	511341	11.24%	0.688%
287	19.771	19.758	19.794	VV	17676	364354	8.01%	0.490%
288	19.862	19.794	19.891	VV	22560	1081905	23.77%	1.455%
289	19.927	19.891	19.941	VV	24176	662415	14.55%	0.891%
290	19.967	19.941	20.008	VV	55771	1356533	29.81%	1.824%
291	20.039	20.008	20.100	VV	23294	1185255	26.04%	1.594%
292	20.148	20.100	20.186	VV	21795	1049920	23.07%	1.412%
293	20.250	20.186	20.270	VV	29884	1259962	27.68%	1.694%
294	20.295	20.270	20.329	VV	39500	1133293	24.90%	1.524%
295	20.369	20.329	20.452	VV	30484	2073875	45.57%	2.789%
296	20.463	20.452	20.474	VV	26201	352280	7.74%	0.474%
297	20.526	20.474	20.550	VV	29916	1275056	28.02%	1.715%
298	20.563	20.550	20.573	VV	29361	397009	8.72%	0.534%
299	20.594	20.573	20.612	VV	29854	691001	15.18%	0.929%

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300	20.671	20.612	20.694	VV	30982	1477097	32.45%	1.986%
301	20.702	20.694	20.711	VV	29945	299323	6.58%	0.403%
302	20.756	20.711	20.789	VV	30682	1415578	31.10%	1.904%
303	20.836	20.789	20.865	VV	31376	1384101	30.41%	1.861%
304	20.878	20.865	20.931	VV	30760	1193230	26.22%	1.605%
305	20.940	20.931	20.967	VV	29866	634793	13.95%	0.854%
306	20.982	20.967	21.031	VV	28389	1061375	23.32%	1.427%
307	21.042	21.031	21.061	VV	27257	486512	10.69%	0.654%
308	21.075	21.061	21.084	VV	26548	366020	8.04%	0.492%
309	21.092	21.084	21.101	VV	26385	262136	5.76%	0.352%
310	21.109	21.101	21.134	VV	26529	516657	11.35%	0.695%
311	21.142	21.134	21.204	VV	26155	1055444	23.19%	1.419%
312	21.213	21.204	21.238	VV	24806	493377	10.84%	0.663%
313	21.255	21.238	21.285	VV	23997	652686	14.34%	0.878%
314	21.319	21.285	21.358	VV	23504	1016725	22.34%	1.367%
315	21.378	21.358	21.435	VV	23395	1059004	23.27%	1.424%
316	21.466	21.435	21.496	VV	22093	784435	17.24%	1.055%
317	21.512	21.496	21.620	VV	21495	1450622	31.87%	1.951%
318	21.727	21.620	21.764	VV	18657	1559806	34.27%	2.097%
319	21.791	21.764	21.817	VV	17843	554103	12.17%	0.745%
320	21.827	21.817	21.837	VV	16611	199012	4.37%	0.268%
321	21.848	21.837	21.866	VV	16311	278726	6.12%	0.375%
322	21.876	21.866	21.927	VV	15596	550873	12.10%	0.741%
323	21.941	21.927	21.974	VV	15038	407444	8.95%	0.548%
324	21.986	21.974	22.024	VV	14225	392837	8.63%	0.528%
325	22.051	22.024	22.079	VV	11903	370798	8.15%	0.499%
326	22.095	22.079	22.112	VV	10836	213252	4.69%	0.287%
327	22.121	22.112	22.134	VV	10439	130207	2.86%	0.175%
328	22.184	22.134	22.231	VV	10591	580425	12.75%	0.781%
329	22.254	22.231	22.371	VV	9142	591946	13.01%	0.796%
330	22.381	22.371	22.408	VV	4539	93606	2.06%	0.126%
331	22.484	22.408	22.585	VV	3789	276076	6.07%	0.371%
Sum of corrected areas:						74365150		

Aliphatic EPH 051425.M Wed Jun 04 04:35:08 2025

Report of Analysis

Client:	Sciaccia General Contractors, LLC	Date Collected:	05/27/25
Project:	98 Morse Ave Nutley	Date Received:	05/28/25
Client Sample ID:	5	SDG No.:	Q2147
Lab Sample ID:	Q2147-07	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	85.1
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
06/03/25 10:00	06/03/25 18:26	PB168239

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C28	Aliphatic C9-C28	7.64		1	1.07	4.68	mg/kg	FE054158.D
Total EPH	Total EPH	7.64			1.07	4.68	mg/kg	

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	05/27/25
Project:	98 Morse Ave Nutley	Date Received:	05/28/25
Client Sample ID:	5	SDG No.:	Q2147
Lab Sample ID:	Q2147-07	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	85.1
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_F2
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE054158.D	1	06/03/25	06/03/25	PB168239

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	7.64		1.07	4.68	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	16.8		1.38	2.35	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	25.8		40 - 140	52%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	23.4		40 - 140	47%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2147-07	Acq On:	03 Jun 2025 18:26
Client Sample ID:	5	Operator:	YP\AJ
Data file:	FE054158.D	Misc:	
Instrument:	FID_E	ALS Vial:	15
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.085	6.730	254043	1.874	300	ug/ml
Aliphatic C12-C16	6.731	10.178	698091	5.173	200	ug/ml
Aliphatic C16-C21	10.179	13.552	6953541	52.714	300	ug/ml
Aliphatic C21-C28	13.553	17.220	4952557	39.883	400	ug/ml
Aliphatic C28-C40	17.221	22.091	24840369	215.197	600	ug/ml
Aliphatic EPH	3.085	22.091	37698601	314.841		ug/ml
ortho-Terphenyl (SURR)	11.837	11.837	3805179	23.41		ug/ml
1-chlorooctadecane (SURR)	13.282	13.282	3053172	25.75		ug/ml
Aliphatic C9-C28	3.085	17.220	12858232	99.644	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054158.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 18:26
 Operator : YP\AJ
 Sample : Q2147-07
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 5

Integration File: autoint1.e
 Quant Time: Jun 04 02:53:44 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 12:15:41 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.837	3805179	23.415 ug/ml
Spiked Amount 50.000		Recovery =	46.83%
12) S 1-chlorooctadecane (S...	13.282	3053172	25.754 ug/ml
Spiked Amount 50.000		Recovery =	51.51%

Target Compounds

(f)=RT Delta > 1/2 Window

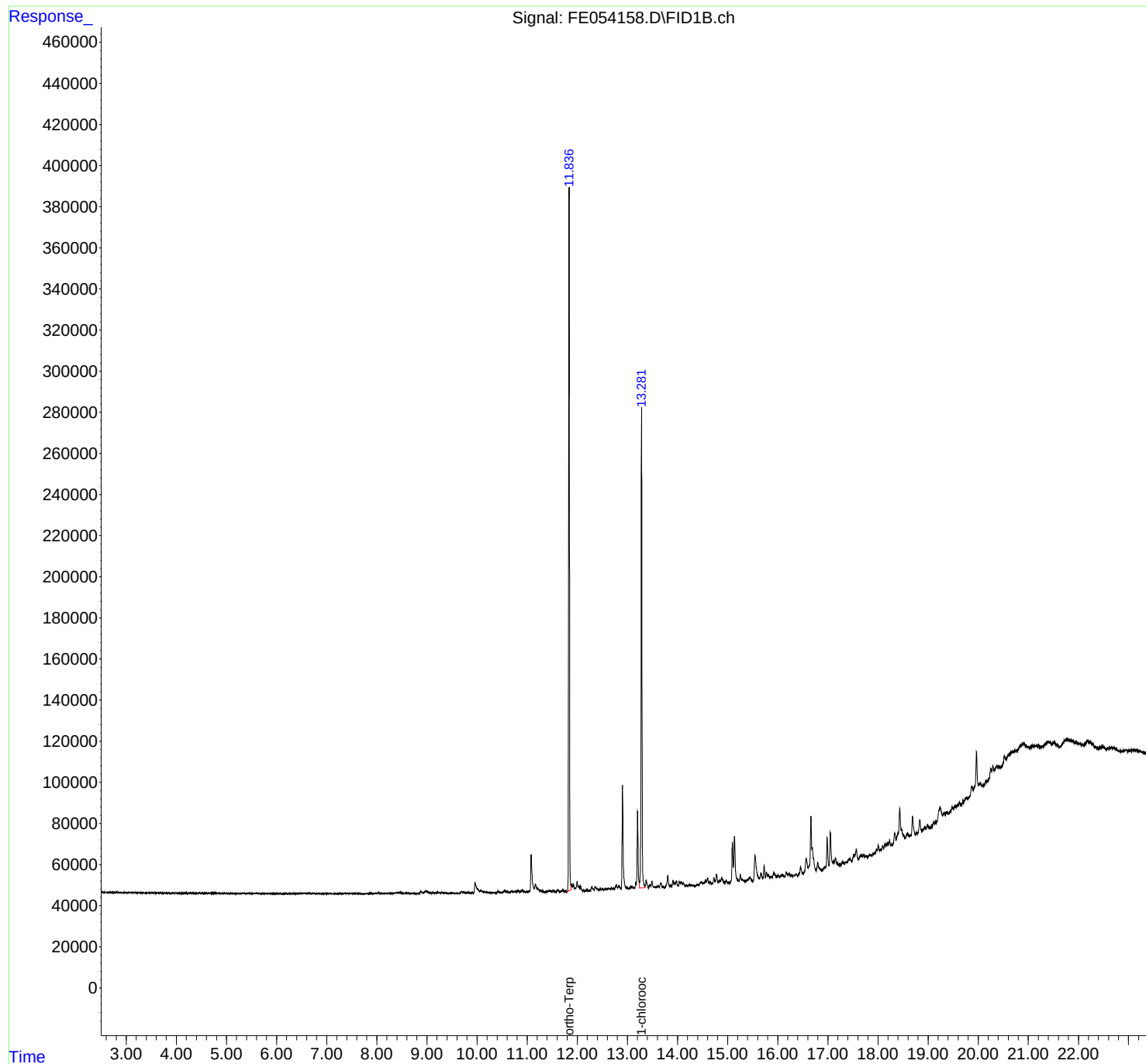
(m)=manual int.

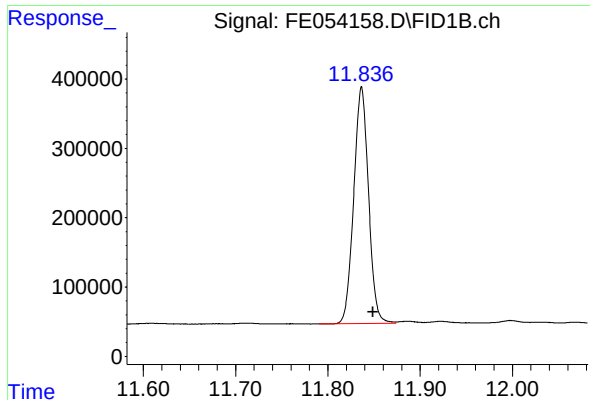
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054158.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 18:26
Operator : YP\AJ
Sample : Q2147-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
5

Integration File: autoint1.e
Quant Time: Jun 04 02:53:44 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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

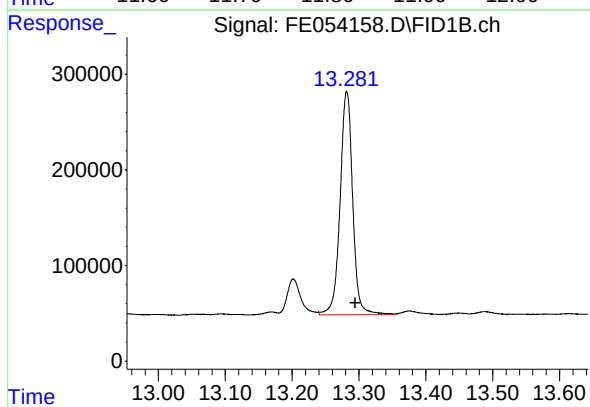




#9 ortho-Terphenyl (SURR)

R.T.: 11.837 min
Delta R.T.: -0.012 min
Response: 3805179
Conc: 23.41 ug/ml

Instrument :
FID_E
ClientSampleId :
5



#12 1-chlorooctadecane (SURR)

R.T.: 13.282 min
Delta R.T.: -0.013 min
Response: 3053172
Conc: 25.75 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054158.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 18:26
Sample : Q2147-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.852	2.805	2.926	BV	58	2432	0.06%	0.006%
2	2.941	2.926	2.952	PV	80	898	0.02%	0.002%
3	2.976	2.952	3.029	VV	125	3446	0.09%	0.008%
4	3.036	3.029	3.068	VV	88	1251	0.03%	0.003%
5	3.092	3.068	3.170	VV	118	4189	0.11%	0.010%
6	3.179	3.170	3.193	VV	124	1177	0.03%	0.003%
7	3.203	3.193	3.279	VV	176	3937	0.10%	0.009%
8	3.287	3.279	3.338	VV	54	1951	0.05%	0.005%
9	3.350	3.338	3.365	VV	105	1108	0.03%	0.003%
10	3.394	3.365	3.409	VV	117	1917	0.05%	0.005%
11	3.462	3.409	3.473	VV	136	3335	0.09%	0.008%
12	3.494	3.473	3.549	VV	125	4163	0.11%	0.010%
13	3.557	3.549	3.616	VV	114	2726	0.07%	0.006%
14	3.642	3.616	3.669	VV	142	3003	0.08%	0.007%
15	3.675	3.669	3.708	VV	86	2257	0.06%	0.005%
16	3.715	3.708	3.758	VV	147	2347	0.06%	0.006%
17	3.775	3.758	3.825	VV	95	3207	0.08%	0.008%
18	3.836	3.825	3.850	VV	113	1138	0.03%	0.003%
19	3.869	3.850	3.888	VV	100	1664	0.04%	0.004%
20	3.894	3.888	3.905	VV	139	1269	0.03%	0.003%
21	3.918	3.905	3.952	VV	147	3058	0.08%	0.007%
22	3.959	3.952	3.968	VV	104	901	0.02%	0.002%
23	3.972	3.968	3.978	VV	127	573	0.01%	0.001%
24	3.988	3.978	4.015	VV	149	2104	0.05%	0.005%
25	4.020	4.015	4.046	VV	134	1491	0.04%	0.004%
26	4.061	4.046	4.085	PV	127	1976	0.05%	0.005%
27	4.091	4.085	4.119	VV	118	2249	0.06%	0.005%
28	4.134	4.119	4.148	VV	172	1834	0.05%	0.004%
29	4.202	4.148	4.210	VV	195	4463	0.11%	0.011%
30	4.219	4.210	4.258	VV	173	3805	0.10%	0.009%
31	4.266	4.258	4.298	VV	188	3318	0.09%	0.008%
32	4.300	4.298	4.323	VV	210	1893	0.05%	0.005%
33	4.347	4.323	4.372	VV	219	4352	0.11%	0.010%
34	4.384	4.372	4.405	VV	158	2444	0.06%	0.006%
35	4.410	4.405	4.433	VV	202	2440	0.06%	0.006%
36	4.447	4.433	4.502	VV	222	6296	0.16%	0.015%

					rteres			
37	4.525	4.502	4.539	VV	183	2915	0.08%	0.007%
38	4.573	4.539	4.625	VV	203	6026	0.16%	0.014%
39	4.635	4.625	4.666	VV	190	3230	0.08%	0.008%
40	4.735	4.666	4.762	VV	179	7102	0.18%	0.017%
41	4.786	4.762	4.862	VV	208	7804	0.20%	0.019%
42	4.874	4.862	4.891	VV	132	1841	0.05%	0.004%
43	4.927	4.891	5.018	VV	172	8362	0.22%	0.020%
44	5.037	5.018	5.060	VV	155	2294	0.06%	0.005%
45	5.085	5.060	5.158	PV	132	4555	0.12%	0.011%
46	5.168	5.158	5.235	VV	93	2537	0.07%	0.006%
47	5.257	5.235	5.321	VV	111	3408	0.09%	0.008%
48	5.336	5.321	5.348	VV	109	1193	0.03%	0.003%
49	5.362	5.348	5.391	VV	163	2200	0.06%	0.005%
50	5.446	5.391	5.520	VV	159	8615	0.22%	0.021%
51	5.539	5.520	5.556	VV	124	1498	0.04%	0.004%
52	5.619	5.556	5.635	VV	125	4599	0.12%	0.011%
53	5.648	5.635	5.674	VV	146	2349	0.06%	0.006%
54	5.699	5.674	5.738	VV	164	4274	0.11%	0.010%
55	5.750	5.738	5.818	VV	178	5901	0.15%	0.014%
56	5.830	5.818	6.010	VV	133	11012	0.28%	0.026%
57	6.068	6.010	6.161	VV	150	8399	0.22%	0.020%
58	6.192	6.161	6.303	VV	167	8645	0.22%	0.021%
59	6.342	6.303	6.383	VV	245	6931	0.18%	0.017%
60	6.405	6.383	6.471	VV	244	9472	0.24%	0.023%
61	6.523	6.471	6.561	VV	285	13315	0.34%	0.032%
62	6.587	6.561	6.671	VV	300	15748	0.41%	0.038%
63	6.716	6.671	6.838	VV	236	17233	0.44%	0.041%
64	6.851	6.838	6.898	VV	181	5617	0.14%	0.013%
65	6.911	6.898	6.991	VV	225	8086	0.21%	0.019%
66	7.036	6.991	7.111	PV	190	8097	0.21%	0.019%
67	7.128	7.111	7.158	VV	158	3081	0.08%	0.007%
68	7.268	7.158	7.303	VV	207	12423	0.32%	0.030%
69	7.349	7.303	7.395	VV	236	10590	0.27%	0.025%
70	7.408	7.395	7.494	VV	257	12510	0.32%	0.030%
71	7.611	7.494	7.731	VV	257	25353	0.65%	0.060%
72	7.756	7.731	7.780	VV	95	1986	0.05%	0.005%
73	7.862	7.780	7.933	PV	518	13308	0.34%	0.032%
74	8.034	7.933	8.141	VV	760	29063	0.75%	0.069%
75	8.153	8.141	8.231	VV	233	7909	0.20%	0.019%
76	8.390	8.231	8.418	VV	543	30845	0.79%	0.073%
77	8.432	8.418	8.449	VV	606	9312	0.24%	0.022%
78	8.474	8.449	8.558	VV	661	23949	0.62%	0.057%
79	8.586	8.558	8.688	VV	316	16814	0.43%	0.040%
80	8.751	8.688	8.777	VV	203	5715	0.15%	0.014%
81	8.879	8.777	8.927	VV	946	30923	0.80%	0.074%
82	8.973	8.927	9.095	VV	1214	69546	1.79%	0.166%
83	9.119	9.095	9.175	VV	436	14898	0.38%	0.035%
84	9.207	9.175	9.274	VV	713	25067	0.65%	0.060%
85	9.297	9.274	9.425	VV	625	24623	0.63%	0.059%
86	9.483	9.425	9.545	VV	326	10715	0.28%	0.026%
87	9.577	9.545	9.611	VV	159	3452	0.09%	0.008%
88	9.626	9.611	9.643	VV	89	1225	0.03%	0.003%
89	9.685	9.643	9.781	PV	939	35018	0.90%	0.083%

					rteres			
90	9.822	9.781	9.888	VV	466	19515	0.50%	0.046%
91	9.906	9.888	9.927	VV	562	7499	0.19%	0.018%
92	9.963	9.927	10.058	VV	5111	177558	4.57%	0.423%
93	10.076	10.058	10.163	VV	1420	53394	1.37%	0.127%
94	10.183	10.163	10.318	VV	596	27099	0.70%	0.065%
95	10.341	10.318	10.366	VV	176	2853	0.07%	0.007%
96	10.420	10.366	10.448	PV	1104	19031	0.49%	0.045%
97	10.463	10.448	10.498	VV	358	8478	0.22%	0.020%
98	10.556	10.498	10.651	VV	970	51823	1.33%	0.123%
99	10.695	10.651	10.731	VV	860	25827	0.66%	0.062%
100	10.782	10.731	10.800	VV	811	24676	0.64%	0.059%
101	10.818	10.800	10.858	VV	971	22936	0.59%	0.055%
102	10.899	10.858	10.968	VV	1153	44071	1.13%	0.105%
103	10.990	10.968	11.018	VV	501	11869	0.31%	0.028%
104	11.083	11.018	11.141	VV	18380	363482	9.35%	0.866%
105	11.165	11.141	11.355	VV	3996	167020	4.30%	0.398%
106	11.452	11.355	11.488	VV	749	31216	0.80%	0.074%
107	11.521	11.488	11.571	VV	994	19973	0.51%	0.048%
108	11.609	11.571	11.654	VV	1133	21497	0.55%	0.051%
109	11.712	11.654	11.745	PV	1344	26335	0.68%	0.063%
110	11.759	11.745	11.788	VV	362	6131	0.16%	0.015%
111	11.836	11.788	11.905	VV	342084	3885818	100.00%	9.255%
112	11.922	11.905	11.971	VV	3743	90786	2.34%	0.216%
113	11.998	11.971	12.051	VV	4856	125919	3.24%	0.300%
114	12.068	12.051	12.118	VV	2283	44331	1.14%	0.106%
115	12.130	12.118	12.154	VV	341	4258	0.11%	0.010%
116	12.192	12.154	12.225	PV	879	14913	0.38%	0.036%
117	12.243	12.225	12.264	VV	269	3898	0.10%	0.009%
118	12.290	12.264	12.334	VV	1825	41464	1.07%	0.099%
119	12.360	12.334	12.438	VV	2070	60795	1.56%	0.145%
120	12.459	12.438	12.480	VV	759	15476	0.40%	0.037%
121	12.498	12.480	12.527	VV	795	15613	0.40%	0.037%
122	12.563	12.527	12.591	VV	925	21388	0.55%	0.051%
123	12.621	12.591	12.659	VV	755	23550	0.61%	0.056%
124	12.681	12.659	12.708	VV	934	18469	0.48%	0.044%
125	12.722	12.708	12.740	VV	965	12819	0.33%	0.031%
126	12.783	12.740	12.808	VV	2361	57227	1.47%	0.136%
127	12.835	12.808	12.871	VV	1929	45302	1.17%	0.108%
128	12.903	12.871	13.027	VV	49856	769950	19.81%	1.834%
129	13.057	13.027	13.078	VV	923	20660	0.53%	0.049%
130	13.094	13.078	13.135	VV	1349	27909	0.72%	0.066%
131	13.202	13.135	13.241	VV	37611	589087	15.16%	1.403%
132	13.282	13.241	13.355	VV	234448	3078464	79.22%	7.332%
133	13.376	13.355	13.424	VV	4139	84060	2.16%	0.200%
134	13.449	13.424	13.464	VV	1841	30246	0.78%	0.072%
135	13.488	13.464	13.564	VV	3286	75286	1.94%	0.179%
136	13.614	13.564	13.634	VV	1118	26033	0.67%	0.062%
137	13.669	13.634	13.744	VV	2495	59222	1.52%	0.141%
138	13.804	13.744	13.880	PV	5446	133880	3.45%	0.319%
139	13.911	13.880	13.932	VV	3443	57053	1.47%	0.136%
140	13.980	13.932	14.010	VV	3084	91801	2.36%	0.219%
141	14.039	14.010	14.058	VV	2493	48266	1.24%	0.115%

					rteres			
142	14.074	14.058	14.160	VV	2450	91965	2.37%	0.219%
143	14.179	14.160	14.215	VV	653	14686	0.38%	0.035%
144	14.249	14.215	14.355	VV	892	38962	1.00%	0.093%
145	14.396	14.355	14.420	PV	783	15461	0.40%	0.037%
146	14.470	14.420	14.525	VV	1961	77222	1.99%	0.184%
147	14.562	14.525	14.577	VV	2531	55895	1.44%	0.133%
148	14.599	14.577	14.625	VV	3532	64360	1.66%	0.153%
149	14.648	14.625	14.686	VV	1360	37611	0.97%	0.090%
150	14.726	14.686	14.755	VV	3165	68976	1.78%	0.164%
151	14.779	14.755	14.818	VV	4824	100100	2.58%	0.238%
152	14.885	14.818	14.948	VV	2865	115891	2.98%	0.276%
153	14.975	14.948	15.037	VV	1294	31336	0.81%	0.075%
154	15.095	15.037	15.114	VV	19712	296620	7.63%	0.706%
155	15.135	15.114	15.221	VV	22388	461804	11.88%	1.100%
156	15.253	15.221	15.353	VV	3714	101179	2.60%	0.241%
157	15.444	15.353	15.508	VV	2061	79679	2.05%	0.190%
158	15.546	15.508	15.638	PV	12475	371448	9.56%	0.885%
159	15.665	15.638	15.698	VV	3397	73881	1.90%	0.176%
160	15.727	15.698	15.752	VV	6965	103765	2.67%	0.247%
161	15.774	15.752	15.844	VV	3622	107554	2.77%	0.256%
162	15.866	15.844	15.887	VV	1113	23137	0.60%	0.055%
163	15.921	15.887	15.981	VV	2369	87472	2.25%	0.208%
164	16.004	15.981	16.038	VV	1295	30729	0.79%	0.073%
165	16.097	16.038	16.139	VV	1187	47826	1.23%	0.114%
166	16.169	16.139	16.209	VV	2486	60729	1.56%	0.145%
167	16.228	16.209	16.265	VV	1579	31860	0.82%	0.076%
168	16.280	16.265	16.321	VV	387	9653	0.25%	0.023%
169	16.368	16.321	16.395	VV	879	18245	0.47%	0.043%
170	16.456	16.395	16.501	PV	3936	88854	2.29%	0.212%
171	16.566	16.501	16.607	VV	6902	211146	5.43%	0.503%
172	16.661	16.607	16.768	VV	27473	767711	19.76%	1.828%
173	16.797	16.768	16.884	VV	4239	102572	2.64%	0.244%
174	16.985	16.884	17.019	PV	15031	258755	6.66%	0.616%
175	17.049	17.019	17.101	VV	17284	337182	8.68%	0.803%
176	17.152	17.101	17.261	VV	4234	152036	3.91%	0.362%
177	17.297	17.261	17.331	PV	1057	27627	0.71%	0.066%
178	17.362	17.331	17.388	VV	844	19991	0.51%	0.048%
179	17.438	17.388	17.478	VV	1827	64568	1.66%	0.154%
180	17.519	17.478	17.538	VV	2823	70188	1.81%	0.167%
181	17.566	17.538	17.613	VV	5622	122798	3.16%	0.292%
182	17.671	17.613	17.691	VV	1898	59894	1.54%	0.143%
183	17.711	17.691	17.744	VV	1683	36559	0.94%	0.087%
184	17.767	17.744	17.790	VV	804	15726	0.40%	0.037%
185	17.846	17.790	17.871	VV	637	17879	0.46%	0.043%
186	18.005	17.871	18.055	PV	3467	126653	3.26%	0.302%
187	18.094	18.055	18.111	VV	2194	49160	1.27%	0.117%
188	18.231	18.111	18.261	VV	3346	193633	4.98%	0.461%
189	18.334	18.261	18.361	VV	5891	160110	4.12%	0.381%
190	18.434	18.361	18.544	VV	16860	630780	16.23%	1.502%
191	18.597	18.544	18.623	VV	2595	100383	2.58%	0.239%
192	18.689	18.623	18.745	VV	10183	251334	6.47%	0.599%
193	18.835	18.745	18.881	VV	6901	187203	4.82%	0.446%
194	18.938	18.881	18.961	VV	2589	77541	2.00%	0.185%

					rteres			
195	18.987	18.961	19.044	VV	2446	75640	1.95%	0.180%
196	19.114	19.044	19.134	VV	2978	86352	2.22%	0.206%
197	19.239	19.134	19.288	VV	8707	452718	11.65%	1.078%
198	19.321	19.288	19.341	VV	4931	143221	3.69%	0.341%
199	19.364	19.341	19.413	VV	4633	183719	4.73%	0.438%
200	19.482	19.413	19.508	VV	5993	260969	6.72%	0.622%
201	19.538	19.508	19.567	VV	5942	191220	4.92%	0.455%
202	19.625	19.567	19.665	VV	6388	333115	8.57%	0.793%
203	19.769	19.665	19.791	VV	7577	487552	12.55%	1.161%
204	19.872	19.791	19.901	VV	11701	584503	15.04%	1.392%
205	19.966	19.901	20.018	VV	27630	1005659	25.88%	2.395%
206	20.039	20.018	20.091	VV	11242	464642	11.96%	1.107%
207	20.294	20.091	20.321	VV	17055	1727385	44.45%	4.114%
208	20.367	20.321	20.408	VV	16133	802064	20.64%	1.910%
209	20.426	20.408	20.454	VV	15197	418248	10.76%	0.996%
210	20.523	20.454	20.544	VV	19565	901046	23.19%	2.146%
211	20.692	20.544	20.706	VV	19733	1831228	47.13%	4.361%
212	20.908	20.706	21.021	VV	21041	3742649	96.32%	8.914%
213	21.098	21.021	21.130	VV	18056	1166990	30.03%	2.779%
214	21.162	21.130	21.251	VV	17325	1213723	31.23%	2.891%
215	21.396	21.251	21.468	VV	16698	2063495	53.10%	4.915%
216	21.511	21.468	21.611	VV	15107	1193854	30.72%	2.843%
217	21.753	21.611	21.831	VV	13769	1678068	43.18%	3.997%
218	21.853	21.831	21.921	VV	12188	626362	16.12%	1.492%
219	21.941	21.921	22.108	VV	10378	993920	25.58%	2.367%
220	22.184	22.108	22.377	VV	8290	996992	25.66%	2.375%
221	22.481	22.377	22.561	VV	2350	204525	5.26%	0.487%
Sum of corrected areas:							41986606	

Aliphatic EPH 051425.M Wed Jun 04 04:35:32 2025



CALIBRATION SUMMARY

Initial Calibration Report for SequenceID : FE051425AL

AreaCount

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

AVG Response Factor

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

Concentration

Parameter Range	FE053808.D	FE053809.D	FE053810.D	FE053811.D	FE053812.D	
Aliphatic C9-C12	300.000	150.000	60.000	30.000	15.000	
Aliphatic C12-C16	200.000	100.000	40.000	20.000	10.000	
Aliphatic C16-C21	300.000	150.000	60.000	30.000	15.000	
Aliphatic C21-C28	400.000	200.000	80.000	40.000	20.000	
Aliphatic C28-C40	600.000	300.000	120.000	60.000	30.000	
Aliphatic EPH	1800.000	900.000	360.000	180.000	90.000	

Response Factor

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

Initial Calibration Report for SequenceID : FE051425AL

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

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

Instrument :
 FID_E
 ClientSampleId :
 100 PPM ALIPHATIC HC STD1

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

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

Compound	R.T.	Response	Conc Units

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

(f)=RT Delta > 1/2 Window

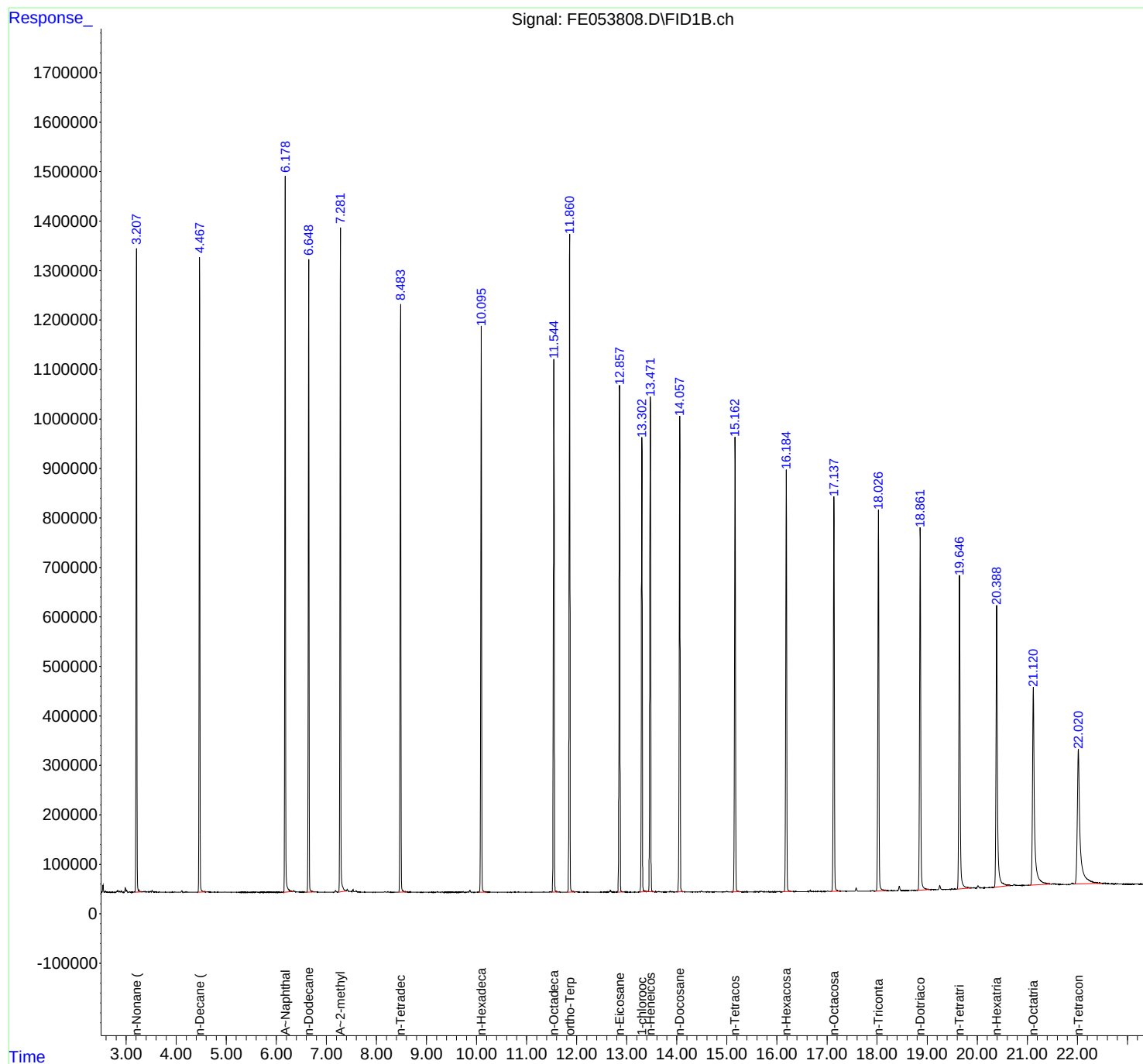
(m)=manual int.

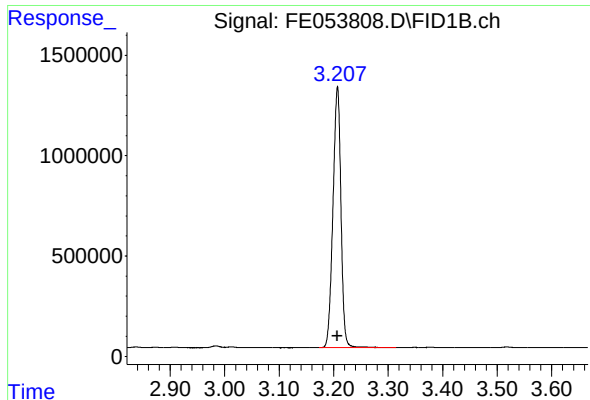
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053808.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 09:48
Operator : YP\AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1

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

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





#1 n-Nonane (C9)

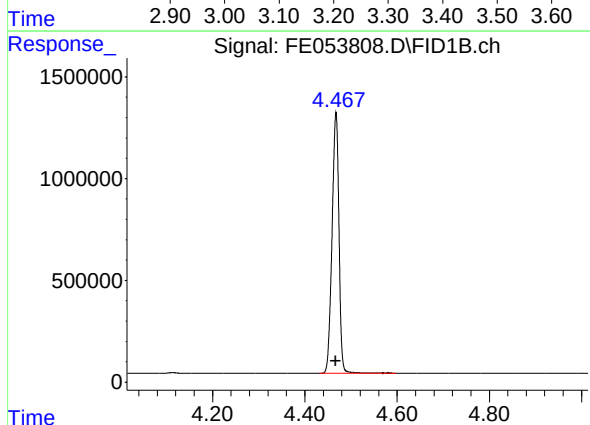
R.T.: 3.207 min
Delta R.T.: 0.000 min
Response: 13229979
Conc: 97.67 ug/ml

Instrument :

FID_E

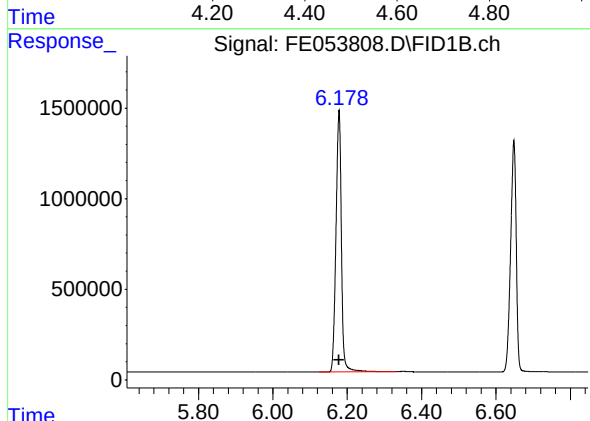
ClientSampleId :

100 PPM ALIPHATIC HC STD1



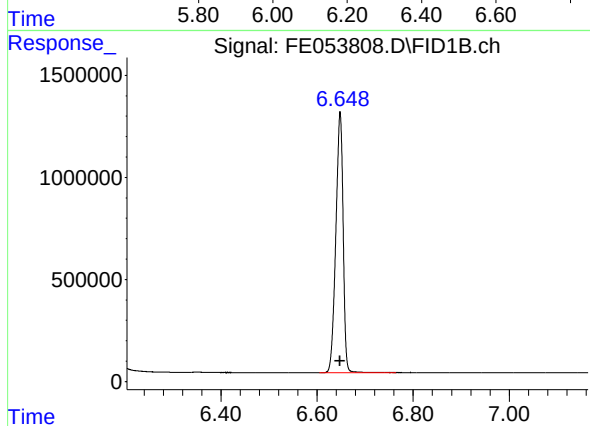
#2 n-Decane (C10)

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



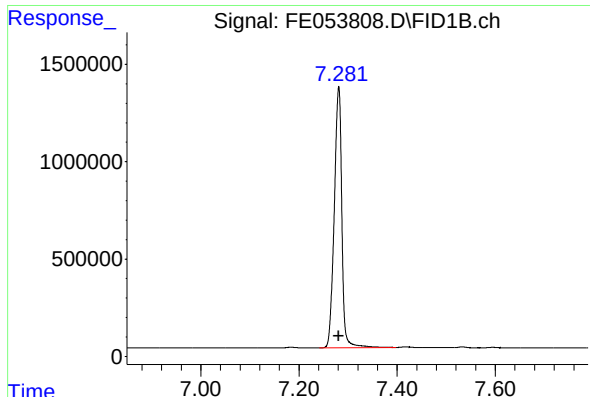
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

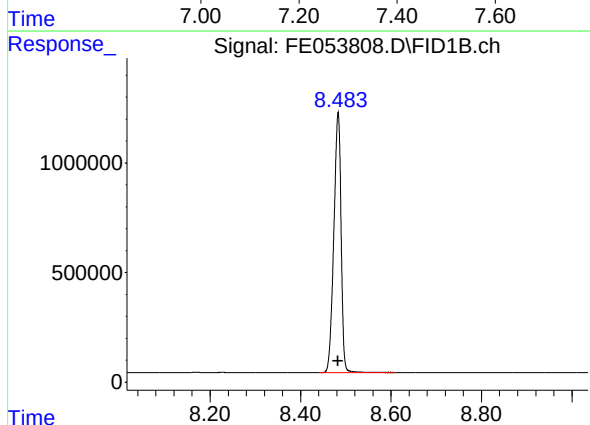
R.T.: 6.648 min
Delta R.T.: 0.000 min
Response: 13419127
Conc: 97.71 ug/ml



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

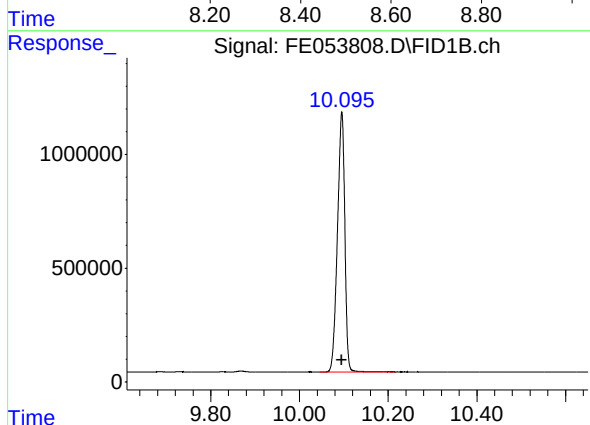
R.T.: 7.281 min
Delta R.T.: 0.000 min
Response: 14358544
Conc: 99.85 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



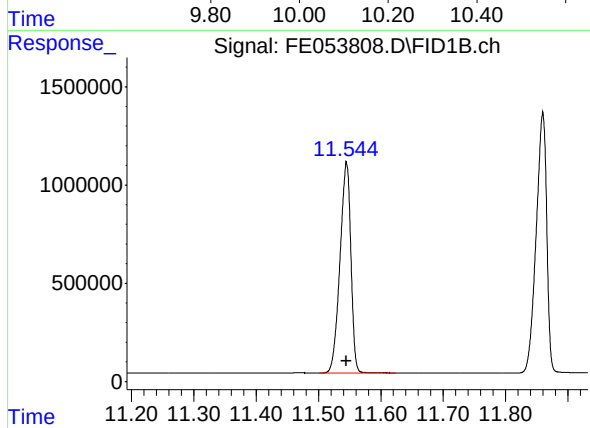
#6 n-Tetradecane (C14)

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



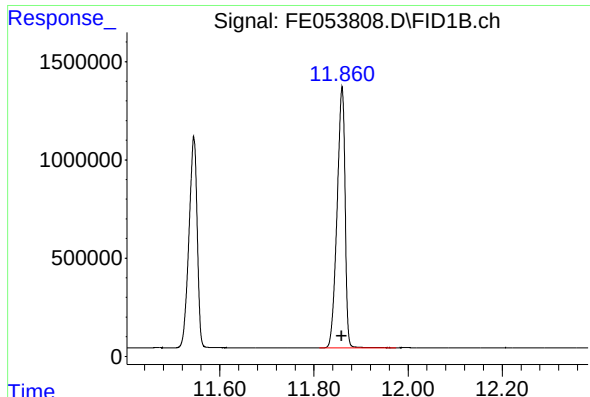
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

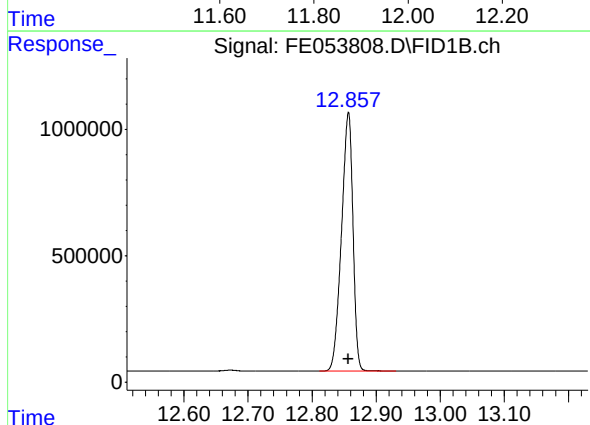
R.T.: 11.545 min
Delta R.T.: 0.000 min
Response: 12994768
Conc: 97.11 ug/ml



#9 ortho-Terphenyl (SURR)

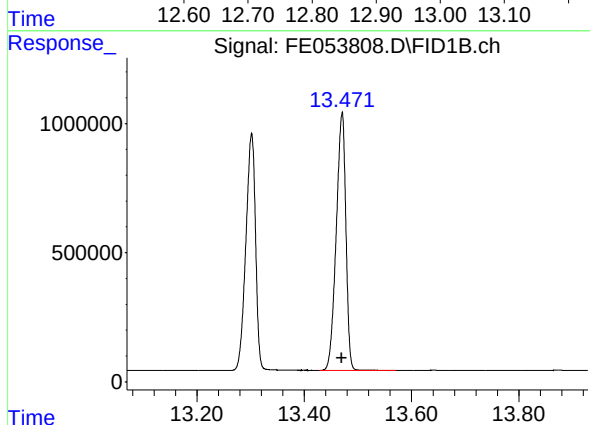
R.T.: 11.859 min
Delta R.T.: 0.000 min
Response: 15622587
Conc: 97.09 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



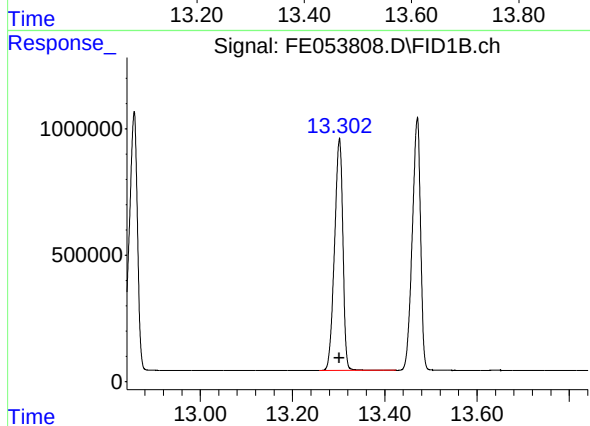
#10 n-Eicosane (C20)

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



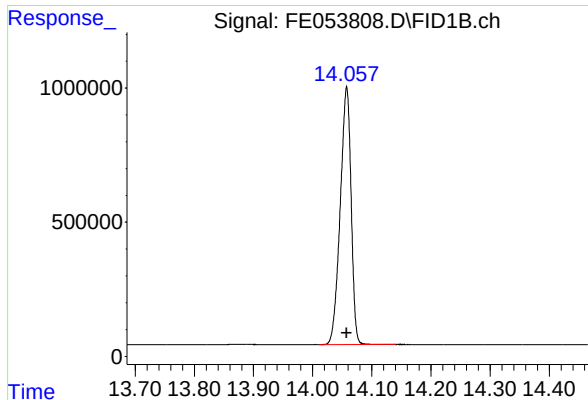
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

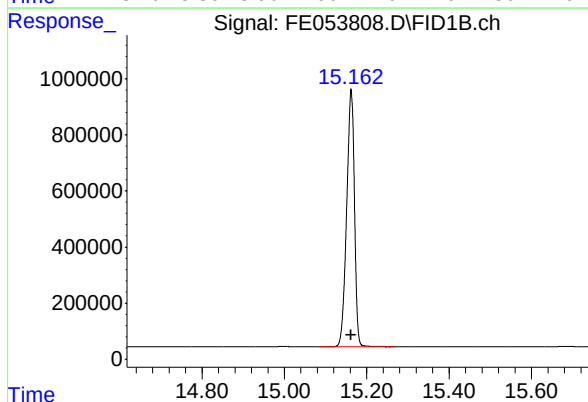
R.T.: 13.301 min
Delta R.T.: 0.000 min
Response: 11527656
Conc: 97.61 ug/ml



#13 n-Docosane (C22)

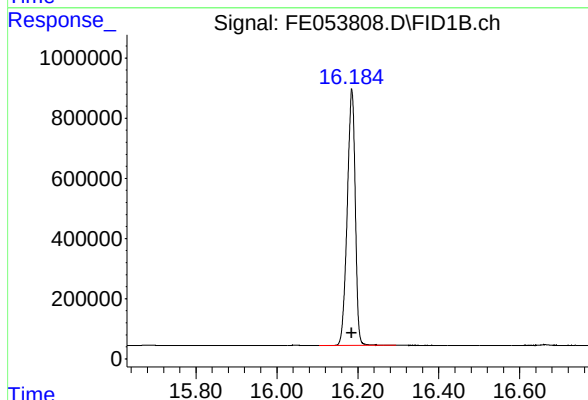
R.T.: 14.057 min
Delta R.T.: 0.000 min
Response: 12254031
Conc: 97.02 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



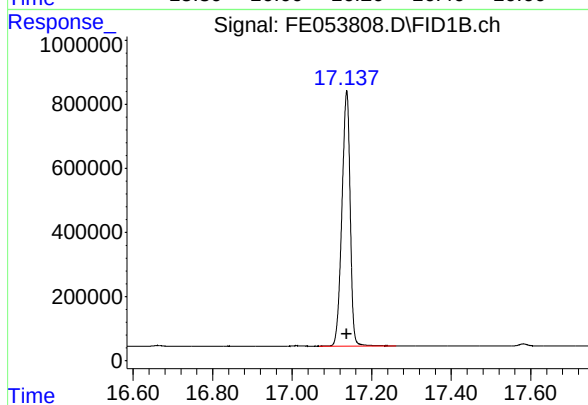
#14 n-Tetracosane (C24)

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



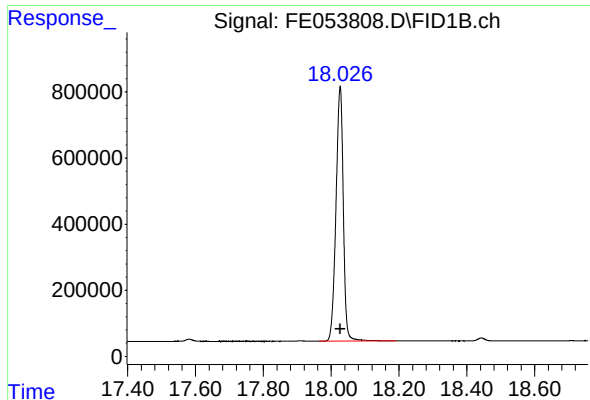
#15 n-Hexacosane (C26)

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



#16 n-Octacosane (C28)

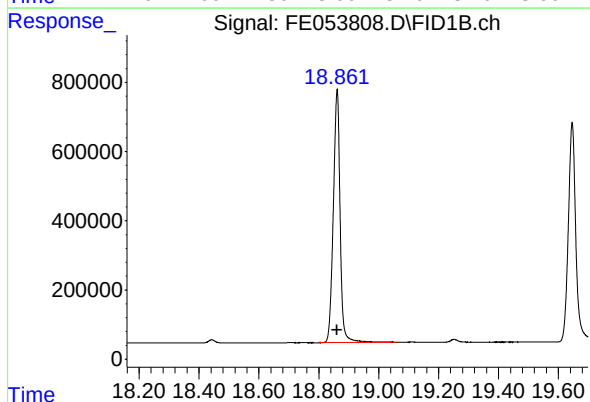
R.T.: 17.137 min
Delta R.T.: 0.000 min
Response: 11457569
Conc: 96.32 ug/ml



#17 n-Tricontane (C30)

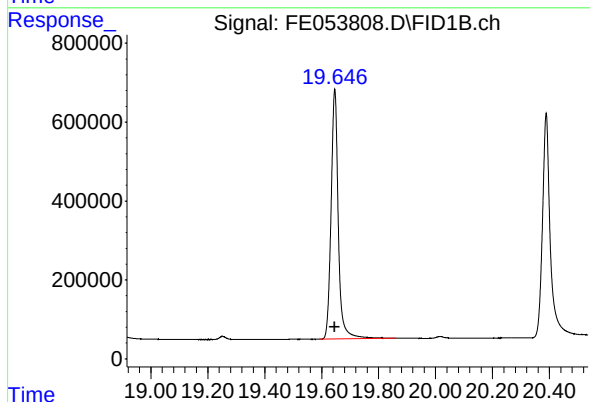
R.T.: 18.026 min
Delta R.T.: 0.000 min
Response: 11534739
Conc: 95.96 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



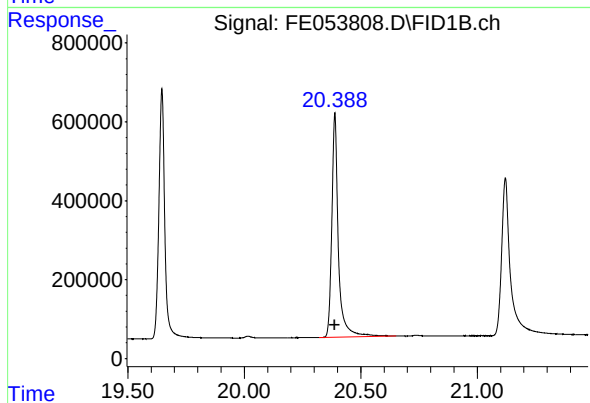
#18 n-Dotriacontane (C32)

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



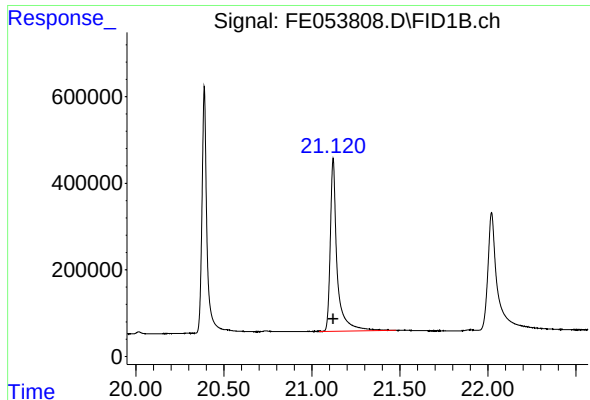
#19 n-Tetratriacontane (C34)

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



#20 n-Hexatriacontane (C36)

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



#21 n-Octatriacontane (C38)

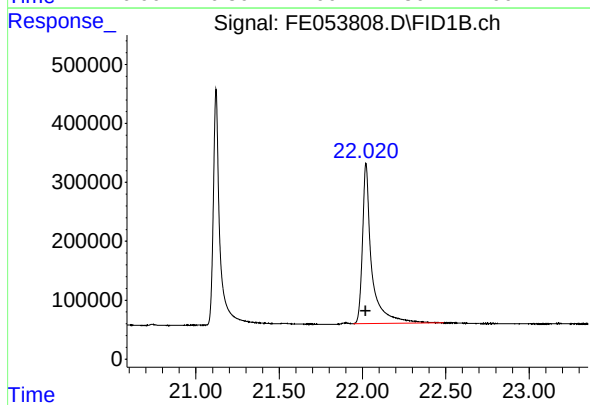
R.T.: 21.121 min
Delta R.T.: 0.000 min
Response: 10825017
Conc: 99.12 ug/ml

Instrument :

FID_E

ClientSampleId :

100 PPM ALIPHATIC HC STD1



#22 n-Tetracontane (C40)

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

rteres

Area Percent Report

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.207	3.173	3.314	VB	1307587	13229979	84.68%	4.818%
2	4.467	4.431	4.598	BB	1286918	13310707	85.20%	4.848%
3	6.178	6.124	6.331	BV	1440540	14593700	93.41%	5.315%
4	6.648	6.604	6.764	BB	1276013	13419127	85.90%	4.887%
5	7.281	7.241	7.398	BV	1343925	14358544	91.91%	5.229%
6	8.483	8.441	8.611	BB	1198037	13205545	84.53%	4.809%
7	10.095	10.044	10.218	BB	1136738	13160502	84.24%	4.793%
8	11.545	11.501	11.624	BB	1071894	12994768	83.18%	4.732%
9	11.859	11.811	11.974	BB	1336882	15622587	100.00%	5.689%
10	12.856	12.811	12.931	BB	1033517	12623579	80.80%	4.597%
11	13.301	13.258	13.424	BB	915097	11527656	73.79%	4.198%
12	13.470	13.428	13.571	BB	1006797	12452566	79.71%	4.535%
13	14.057	14.011	14.141	BB	961072	12254031	78.44%	4.463%
14	15.162	15.084	15.271	BB	912379	11992847	76.77%	4.368%
15	16.185	16.104	16.294	BB	851447	11715780	74.99%	4.267%
16	17.137	17.068	17.261	BB	799170	11457569	73.34%	4.173%
17	18.026	17.964	18.191	BB	775081	11534739	73.83%	4.201%
18	18.861	18.801	19.058	BB	732486	11494537	73.58%	4.186%
19	19.646	19.591	19.861	BB	635241	11142260	71.32%	4.058%
20	20.389	20.321	20.651	BB	567956	11127425	71.23%	4.052%
21	21.121	21.041	21.478	BB	400264	10825017	69.29%	3.942%
22	22.020	21.944	22.488	BB	272238	10544057	67.49%	3.840%
Sum of corrected areas:						274587521		

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

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

Instrument :
 FID_E
 ClientSampleId :
 50 PPM ALIPHATIC HC STD2

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

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

Compound	R.T.	Response	Conc Units

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

(f)=RT Delta > 1/2 Window

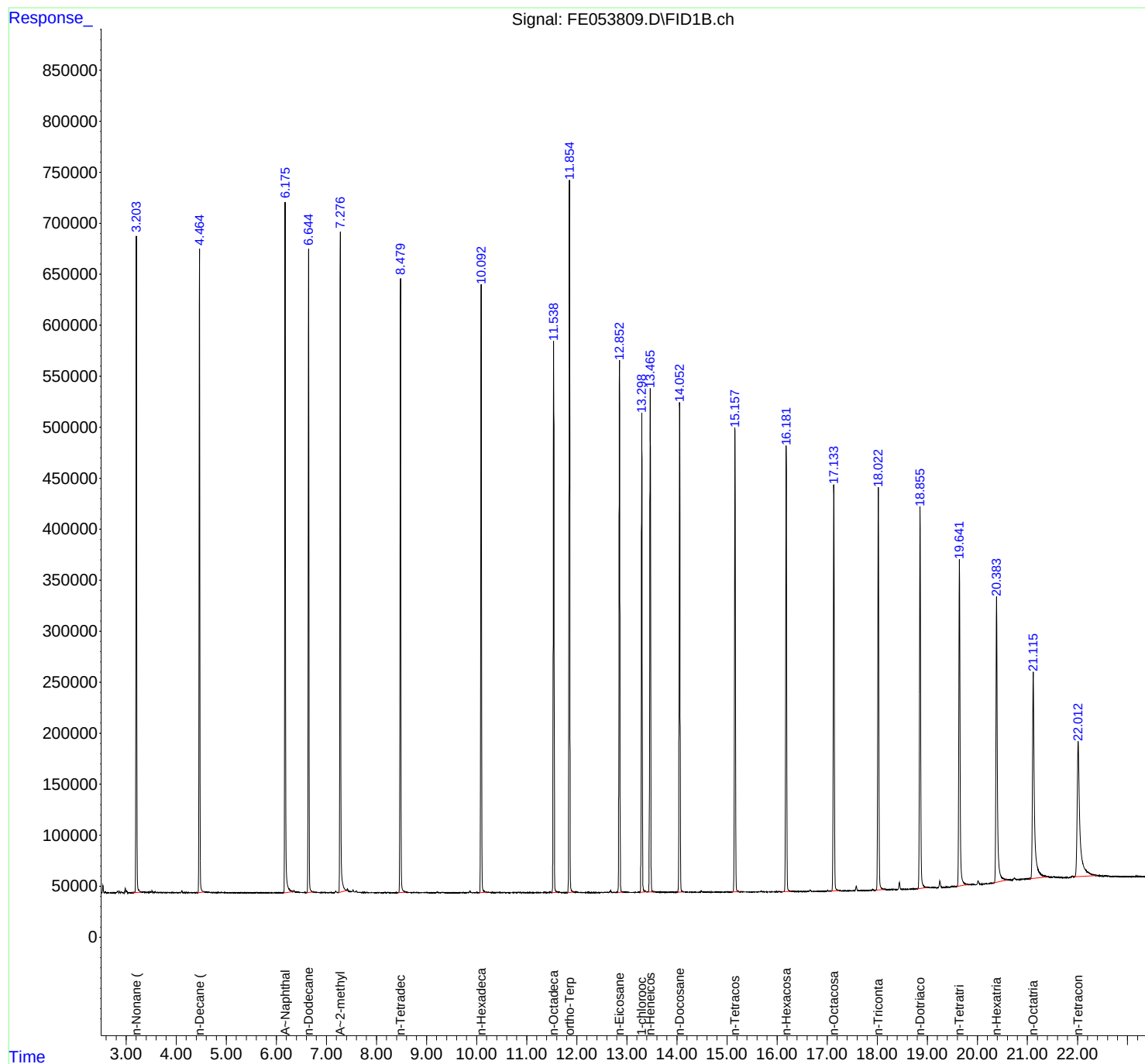
(m)=manual int.

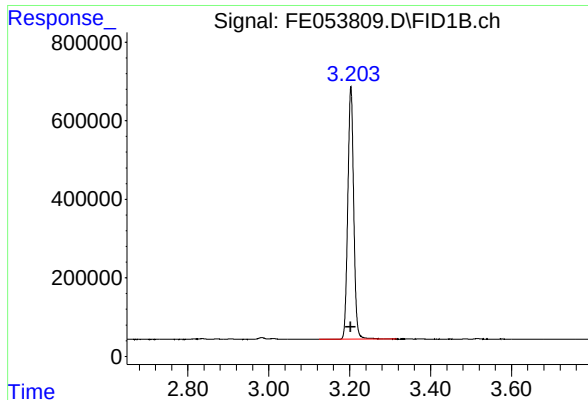
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053809.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 10:18
Operator : YP\AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2

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

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

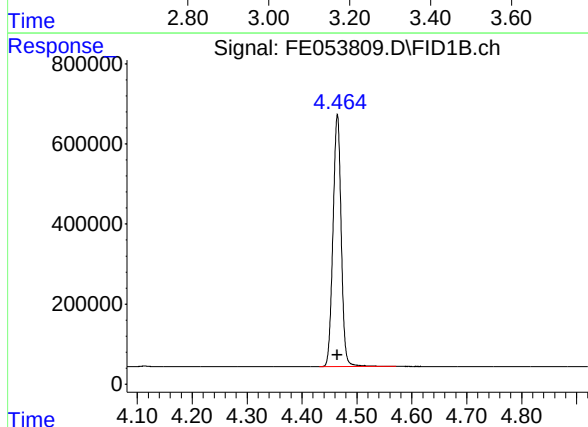




#1 n-Nonane (C9)

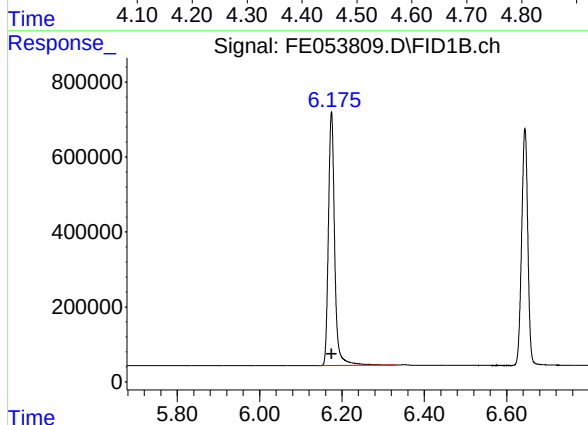
R.T.: 3.203 min
Delta R.T.: 0.000 min
Response: 6521797
Conc: 48.75 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



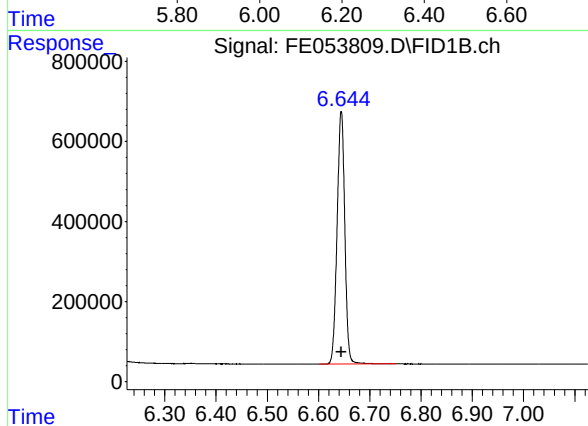
#2 n-Decane (C10)

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



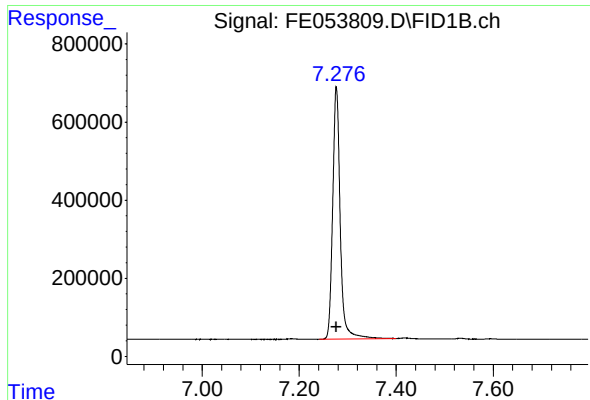
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

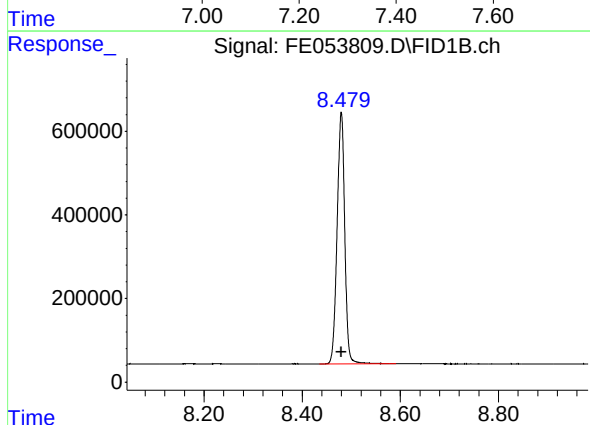
R.T.: 6.644 min
Delta R.T.: 0.000 min
Response: 6609385
Conc: 48.74 ug/ml



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

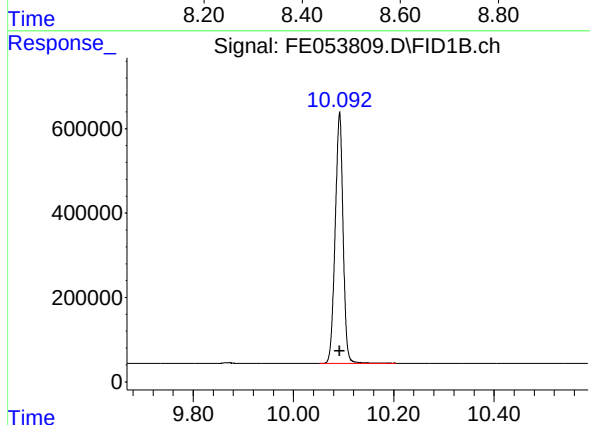
R.T.: 7.277 min
Delta R.T.: 0.000 min
Response: 6992834
Conc: 49.08 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



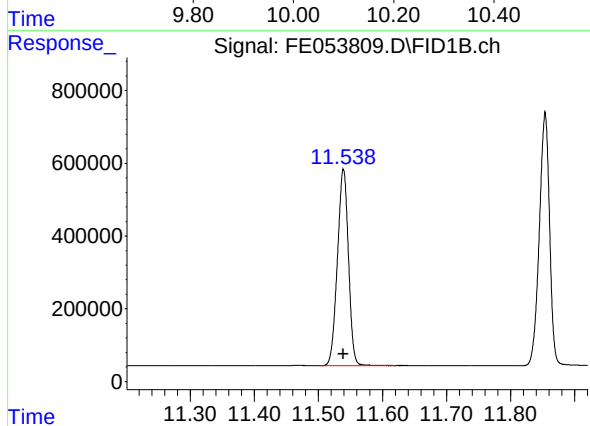
#6 n-Tetradecane (C14)

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



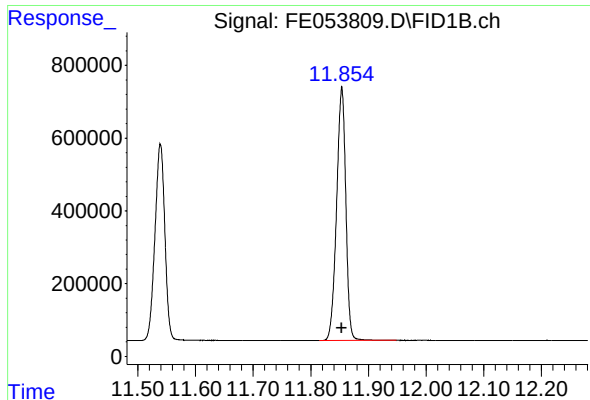
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

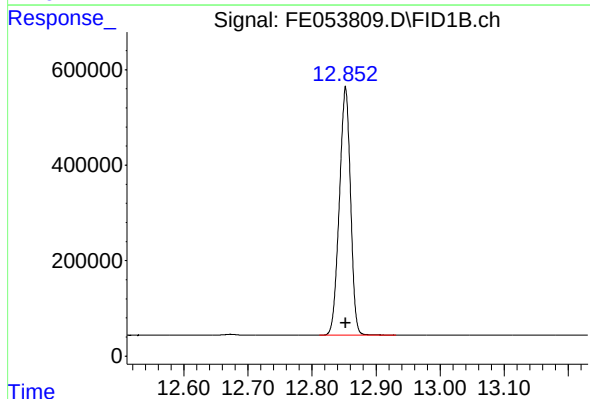
R.T.: 11.539 min
Delta R.T.: 0.000 min
Response: 6432292
Conc: 48.69 ug/ml



#9 ortho-Terphenyl (SURR)

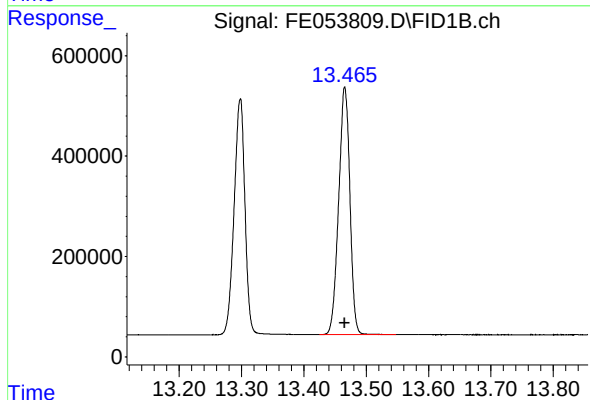
R.T.: 11.854 min
Delta R.T.: 0.000 min
Response: 7743091
Conc: 48.73 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



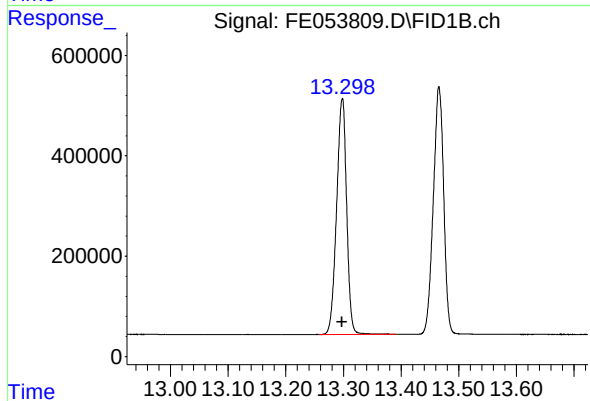
#10 n-Eicosane (C20)

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



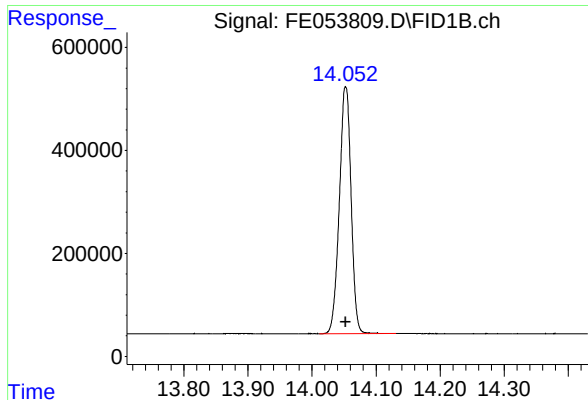
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

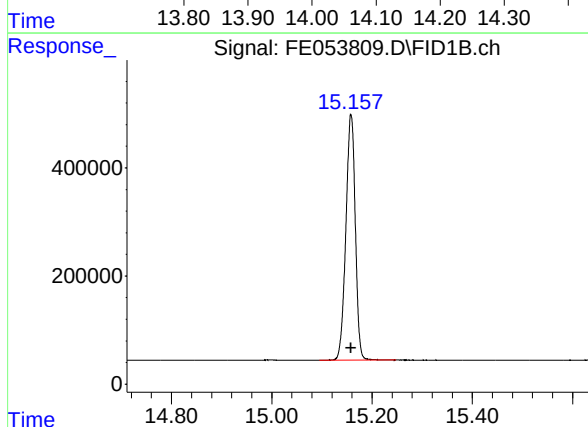
R.T.: 13.298 min
Delta R.T.: 0.000 min
Response: 5688678
Conc: 48.77 ug/ml



#13 n-Docosane (C22)

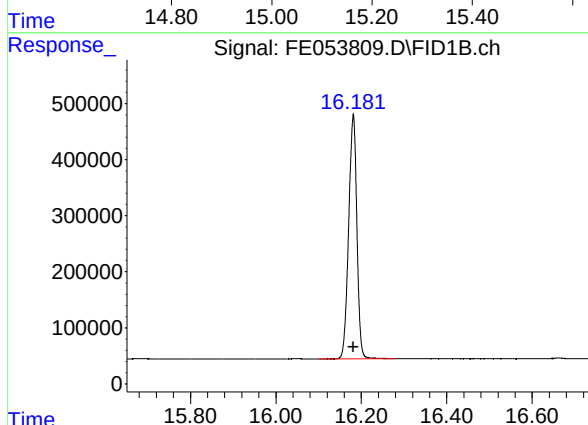
R.T.: 14.053 min
Delta R.T.: 0.000 min
Response: 6073373
Conc: 48.71 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



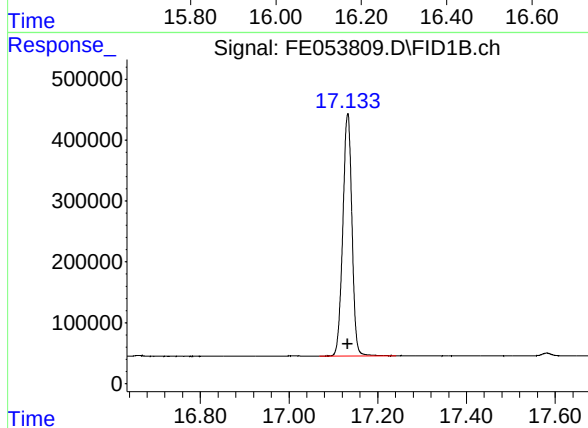
#14 n-Tetracosane (C24)

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



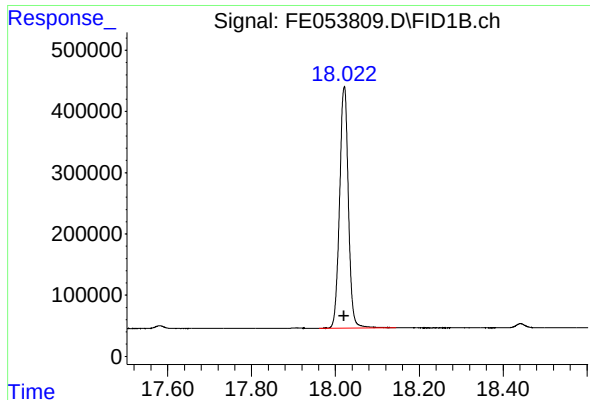
#15 n-Hexacosane (C26)

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



#16 n-Octacosane (C28)

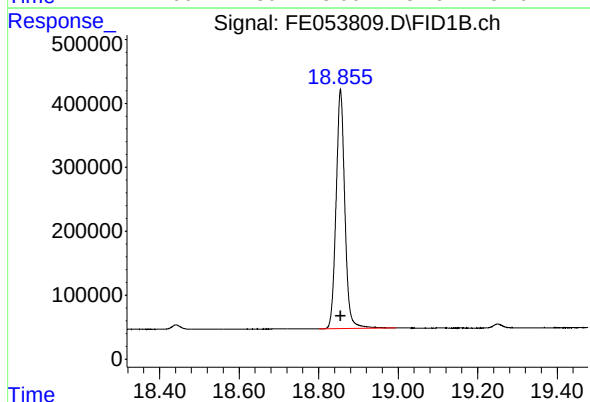
R.T.: 17.132 min
Delta R.T.: 0.000 min
Response: 5702740
Conc: 48.61 ug/ml



#17 n-Tricontane (C30)

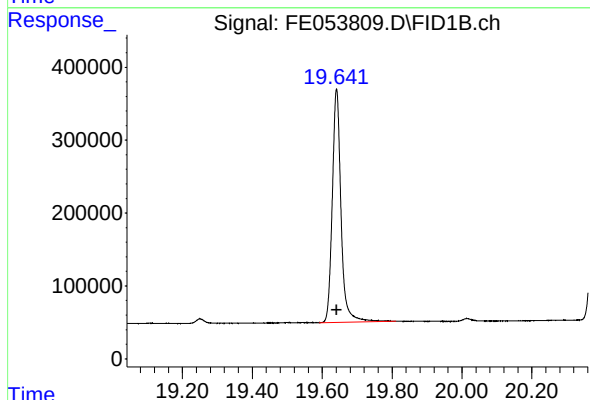
R.T.: 18.021 min
Delta R.T.: 0.000 min
Response: 5742679
Conc: 48.50 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



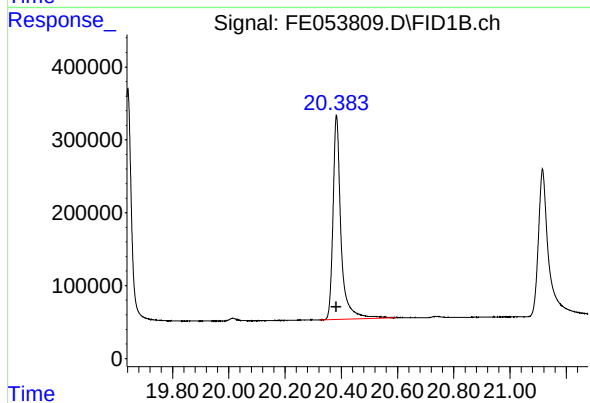
#18 n-Dotriacontane (C32)

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



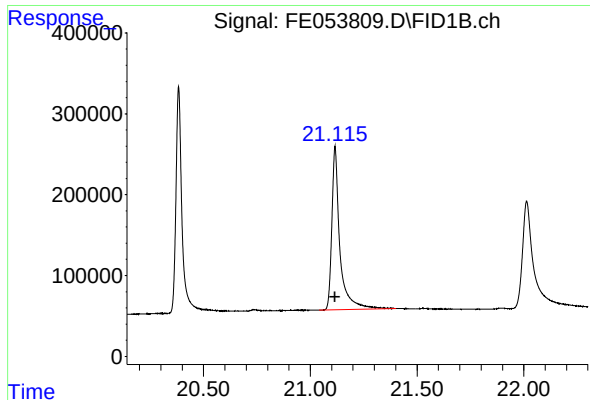
#19 n-Tetratriacontane (C34)

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



#20 n-Hexatriacontane (C36)

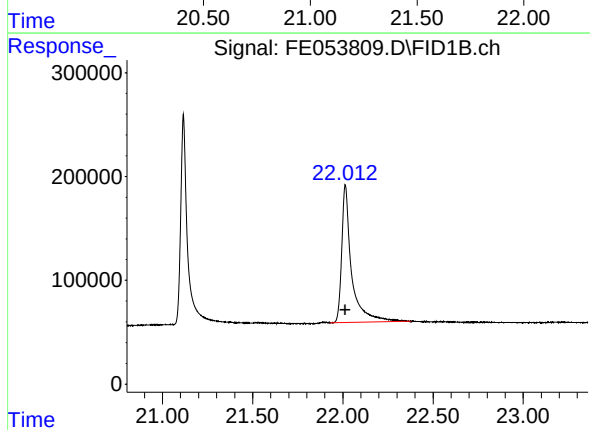
R.T.: 20.383 min
Delta R.T.: 0.000 min
Response: 5509173
Conc: 48.87 ug/ml



#21 n-Octatriacontane (C38)

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

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



#22 n-Tetracontane (C40)

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

rteres

Area Percent Report

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.203	3.124	3.314	BB	642641	6521797	84.23%	4.813%
2	4.464	4.431	4.571	BB	630453	6543240	84.50%	4.829%
3	6.175	6.144	6.331	BV	677050	7153409	92.38%	5.279%
4	6.644	6.601	6.751	BB	633922	6609385	85.36%	4.878%
5	7.277	7.241	7.400	BV	642838	6992834	90.31%	5.161%
6	8.480	8.434	8.591	BB	604116	6512008	84.10%	4.806%
7	10.092	10.051	10.204	BB	588608	6497275	83.91%	4.795%
8	11.539	11.501	11.621	BB	539951	6432292	83.07%	4.747%
9	11.854	11.814	11.948	BB	696859	7743091	100.00%	5.714%
10	12.852	12.811	12.931	BB	514054	6253018	80.76%	4.615%
11	13.298	13.258	13.391	BB	470997	5688678	73.47%	4.198%
12	13.466	13.424	13.548	BB	493882	6168358	79.66%	4.552%
13	14.053	14.011	14.131	BB	484012	6073373	78.44%	4.482%
14	15.158	15.094	15.248	BB	456245	5946887	76.80%	4.389%
15	16.181	16.101	16.281	BB	435935	5815252	75.10%	4.292%
16	17.132	17.068	17.241	BB	397356	5702740	73.65%	4.209%
17	18.021	17.961	18.144	BB	394605	5742679	74.17%	4.238%
18	18.855	18.801	18.994	BB	373623	5718405	73.85%	4.220%
19	19.641	19.591	19.811	BB	320283	5539154	71.54%	4.088%
20	20.383	20.321	20.594	BB	279445	5509173	71.15%	4.066%
21	21.116	21.041	21.401	BB	202000	5288032	68.29%	3.903%
22	22.013	21.928	22.378	BB	132474	5048422	65.20%	3.726%
Sum of corrected areas:						135499500		

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

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

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD3

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

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.850	3311788	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
12) S 1-chlorooctadecane (S...	13.295	2418280	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
Target Compounds			
1) T n-Nonane (C9)	3.202	2772120	20.000 ug/ml
2) T n-Decane (C10)	4.463	2778404	20.000 ug/ml
3) T A~Naphthalene (C11.7)	6.174	2996176	20.000 ug/ml
4) T n-Dodecane (C12)	6.642	2809474	20.000 ug/ml
5) T A~2-methylnaphthalene...	7.276	2880461	20.000 ug/ml
6) T n-Tetradecane (C14)	8.477	2769021	20.000 ug/ml
7) T n-Hexadecane (C16)	10.090	2766354	20.000 ug/ml
8) T n-Octadecane (C18)	11.536	2753858	20.000 ug/ml
10) T n-Eicosane (C20)	12.850	2678807	20.000 ug/ml
11) T n-Heneicosane (C21)	13.463	2637549	20.000 ug/ml
13) T n-Docosane (C22)	14.051	2601518	20.000 ug/ml
14) T n-Tetracosane (C24)	15.156	2551002	20.000 ug/ml
15) T n-Hexacosane (C26)	16.178	2499556	20.000 ug/ml
16) T n-Octacosane (C28)	17.130	2466499	20.000 ug/ml
17) T n-Tricontane (C30)	18.019	2500963	20.000 ug/ml
18) T n-Dotriacontane (C32)	18.853	2504263	20.000 ug/ml
19) T n-Tetratriacontane (C34)	19.639	2399569	20.000 ug/ml
20) T n-Hexatriacontane (C36)	20.381	2335320	20.000 ug/ml
21) T n-Octatriacontane (C38)	21.112	2203566	20.000 ug/ml
22) T n-Tetracontane (C40)	22.008	2016411	20.000 ug/ml

(f)=RT Delta > 1/2 Window

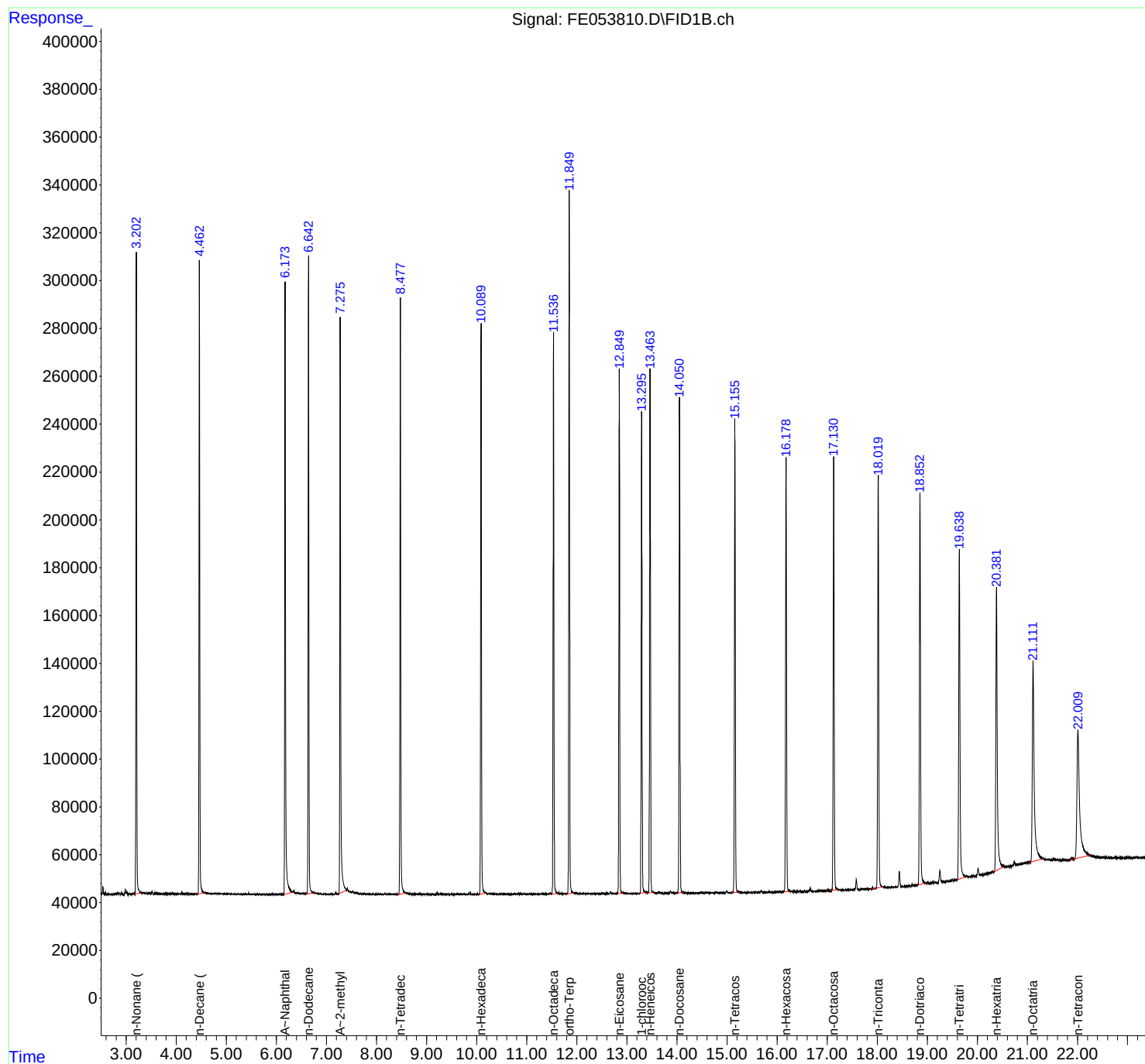
(m)=manual int.

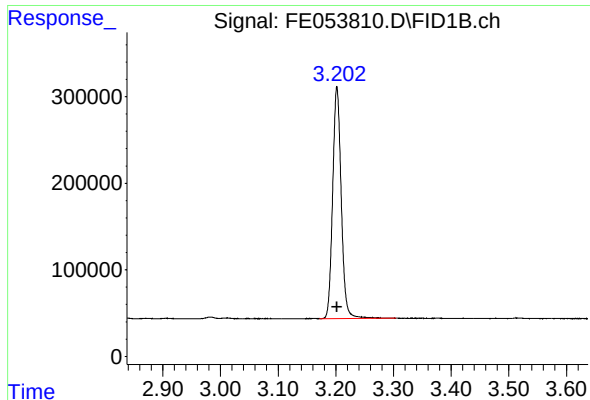
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053810.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 10:48
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3

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

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

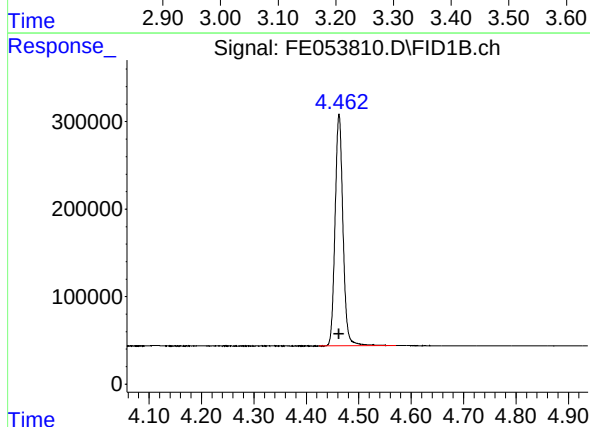




#1 n-Nonane (C9)

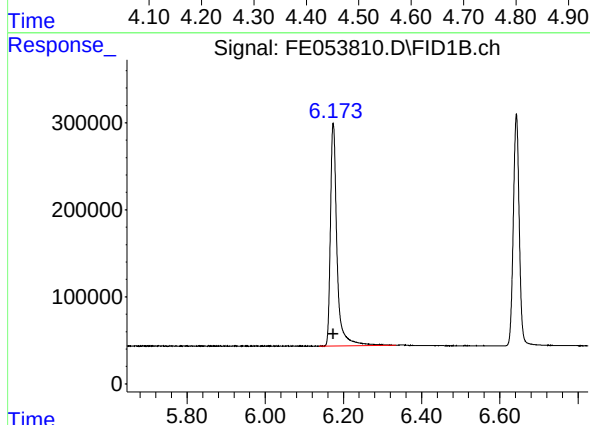
R.T.: 3.202 min
Delta R.T.: 0.000 min
Response: 2772120
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



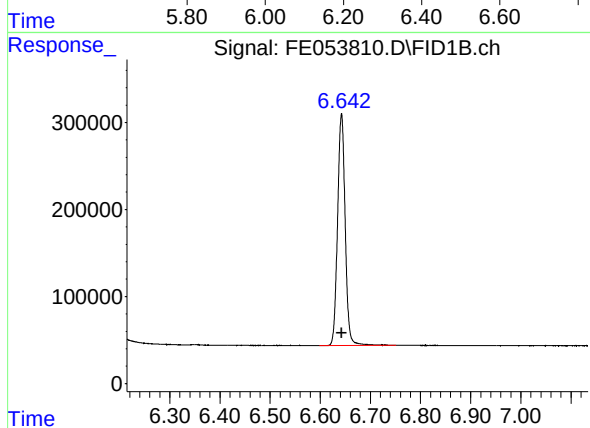
#2 n-Decane (C10)

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



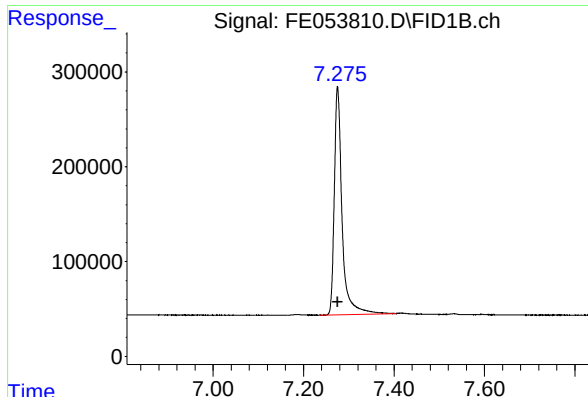
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

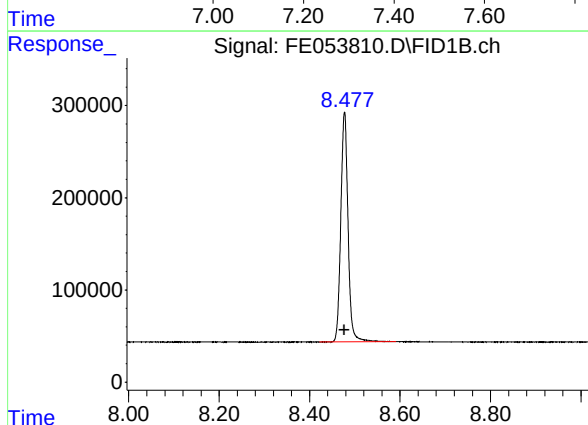
R.T.: 6.642 min
Delta R.T.: 0.000 min
Response: 2809474
Conc: 20.00 ug/ml



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

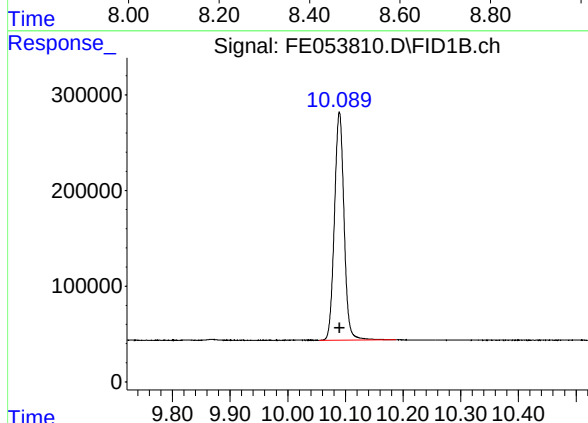
R.T.: 7.276 min
Delta R.T.: 0.000 min
Response: 2880461
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



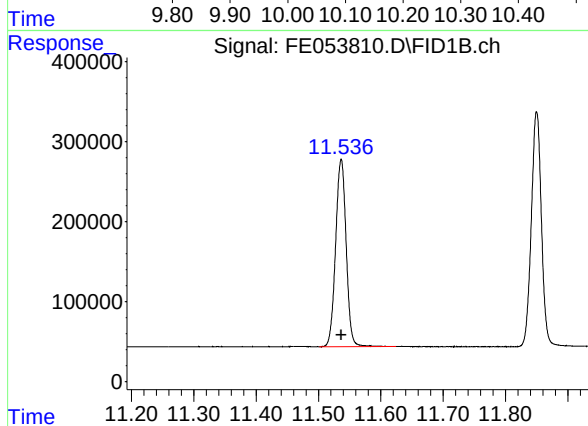
#6 n-Tetradecane (C14)

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



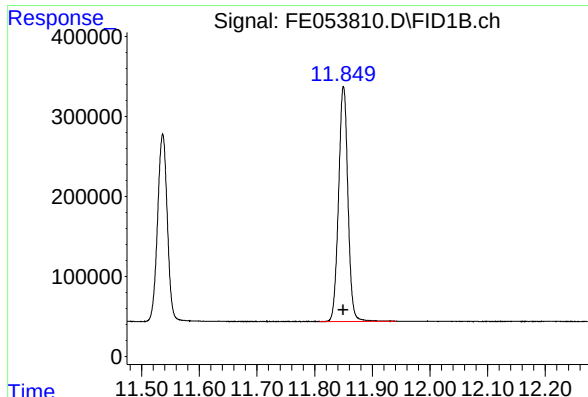
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

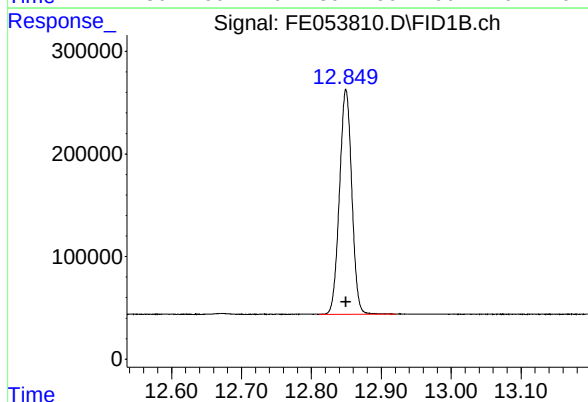
R.T.: 11.536 min
Delta R.T.: 0.000 min
Response: 2753858
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURR)

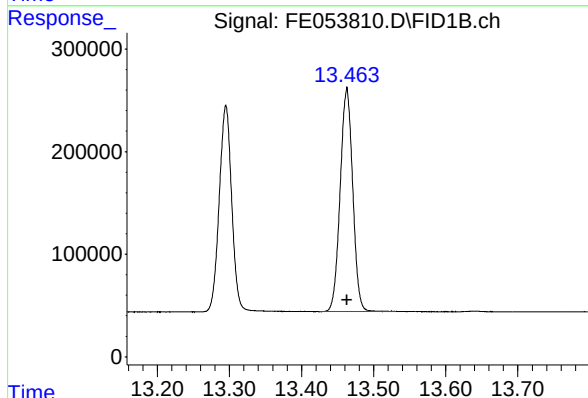
R.T.: 11.850 min
Delta R.T.: 0.000 min
Response: 3311788
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



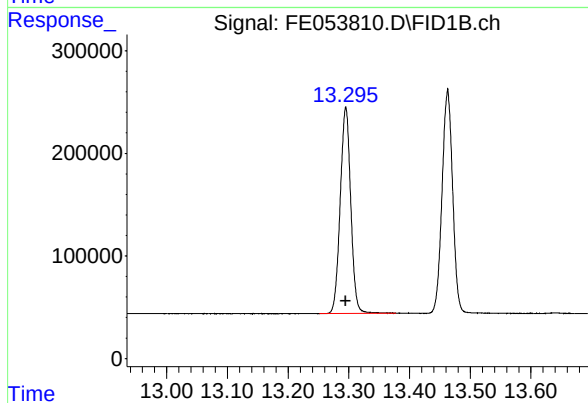
#10 n-Eicosane (C20)

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



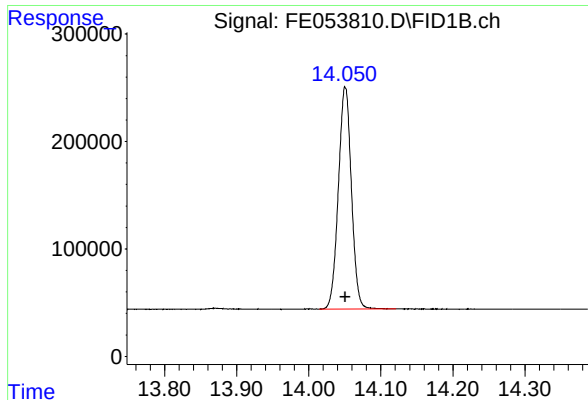
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

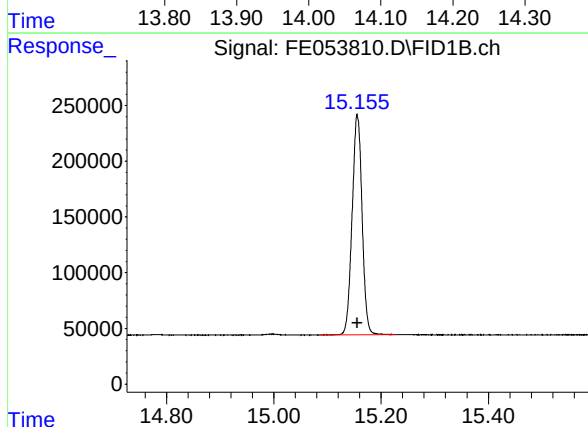
R.T.: 13.295 min
Delta R.T.: 0.000 min
Response: 2418280
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

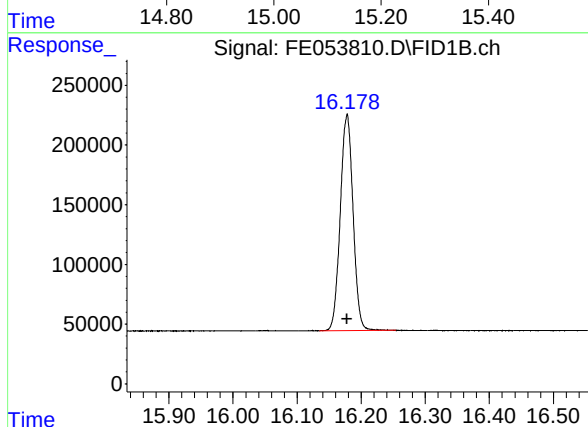
R.T.: 14.051 min
Delta R.T.: 0.000 min
Response: 2601518
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



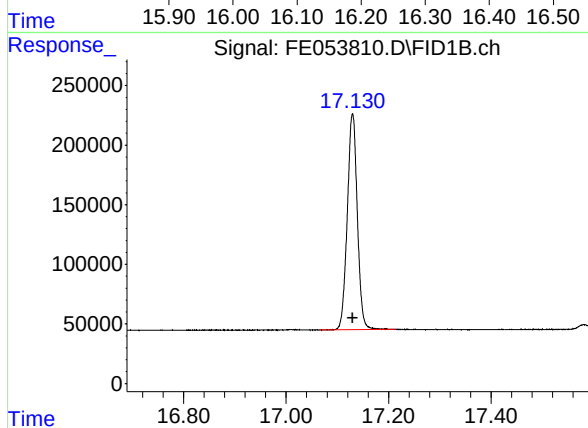
#14 n-Tetracosane (C24)

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



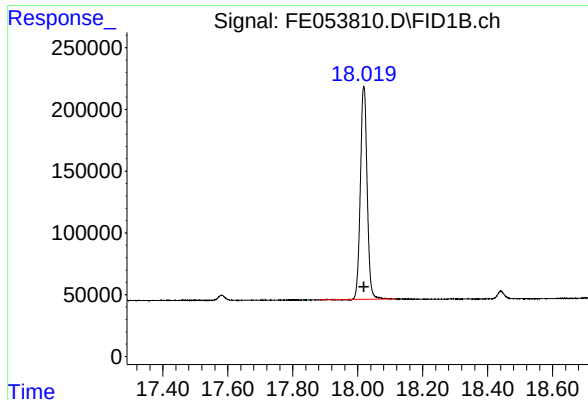
#15 n-Hexacosane (C26)

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



#16 n-Octacosane (C28)

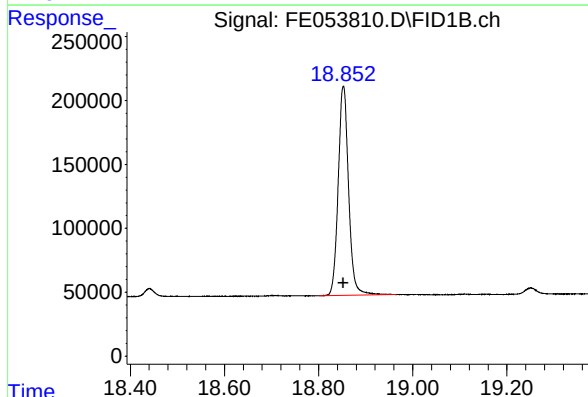
R.T.: 17.130 min
Delta R.T.: 0.000 min
Response: 2466499
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

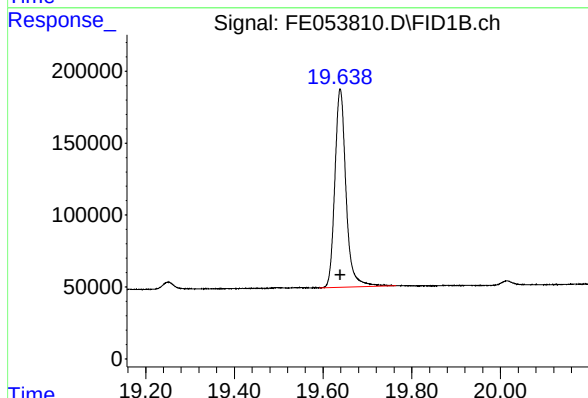
R.T.: 18.019 min
Delta R.T.: 0.000 min
Response: 2500963
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



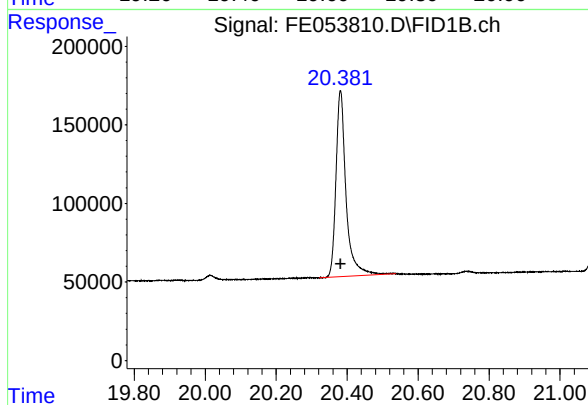
#18 n-Dotriacontane (C32)

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



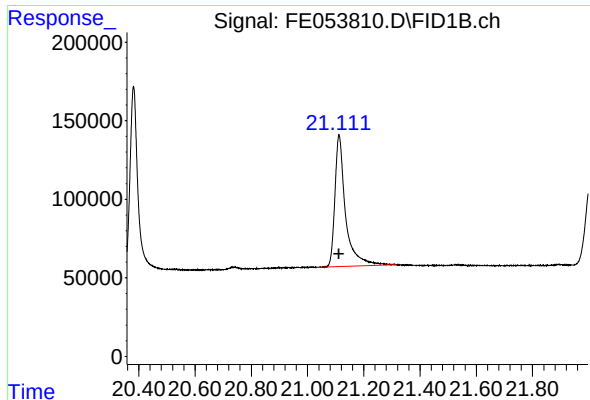
#19 n-Tetatriacontane (C34)

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



#20 n-Hexatriacontane (C36)

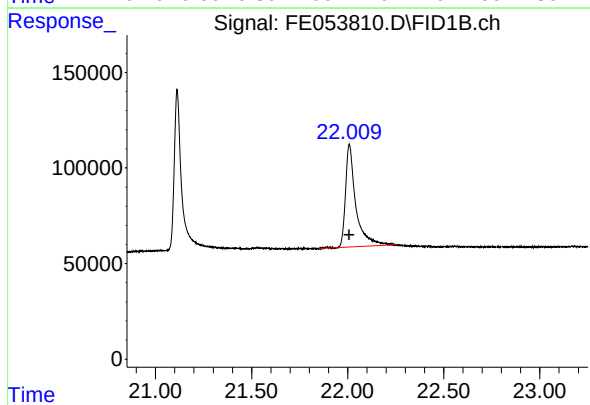
R.T.: 20.381 min
Delta R.T.: 0.000 min
Response: 2335320
Conc: 20.00 ug/ml



#21 n-Octatriacontane (C38)

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

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



#22 n-Tetracontane (C40)

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

rteres

Area Percent Report

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.202	3.171	3.304	BB	266944	2772120	83.70%	4.808%
2	4.463	4.424	4.571	BB	263210	2778404	83.89%	4.819%
3	6.174	6.138	6.334	BB	255229	2996176	90.47%	5.197%
4	6.642	6.598	6.751	BB	264529	2809474	84.83%	4.873%
5	7.276	7.234	7.404	BV	240820	2880461	86.98%	4.996%
6	8.477	8.421	8.591	BB	250175	2769021	83.61%	4.803%
7	10.090	10.054	10.188	BB	238658	2766354	83.53%	4.798%
8	11.536	11.501	11.624	BB	235260	2753858	83.15%	4.777%
9	11.850	11.808	11.941	BB	294328	3311788	100.00%	5.745%
10	12.850	12.811	12.921	BB	217958	2678807	80.89%	4.647%
11	13.295	13.251	13.378	BB	200598	2418280	73.02%	4.195%
12	13.463	13.424	13.531	BB	216778	2637549	79.64%	4.575%
13	14.051	14.014	14.121	BB	207307	2601518	78.55%	4.513%
14	15.156	15.084	15.228	BB	197865	2551002	77.03%	4.425%
15	16.178	16.134	16.254	BB	180346	2499556	75.47%	4.336%
16	17.130	17.064	17.214	BB	181883	2466499	74.48%	4.278%
17	18.019	17.881	18.118	BB	172763	2500963	75.52%	4.338%
18	18.853	18.801	18.964	BB	164448	2504263	75.62%	4.344%
19	19.639	19.591	19.764	BB	138056	2399569	72.46%	4.162%
20	20.381	20.321	20.538	BB	118542	2335320	70.52%	4.051%
21	21.112	21.041	21.314	BB	83955	2203566	66.54%	3.822%
22	22.008	21.851	22.251	BB	53587	2016411	60.89%	3.498%
Sum of corrected areas:							57650958	

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

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

Instrument :
 FID_E
 ClientSampleId :
 10 PPM ALIPHATIC HC STD4

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

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

Compound	R.T.	Response	Conc Units

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

(f)=RT Delta > 1/2 Window

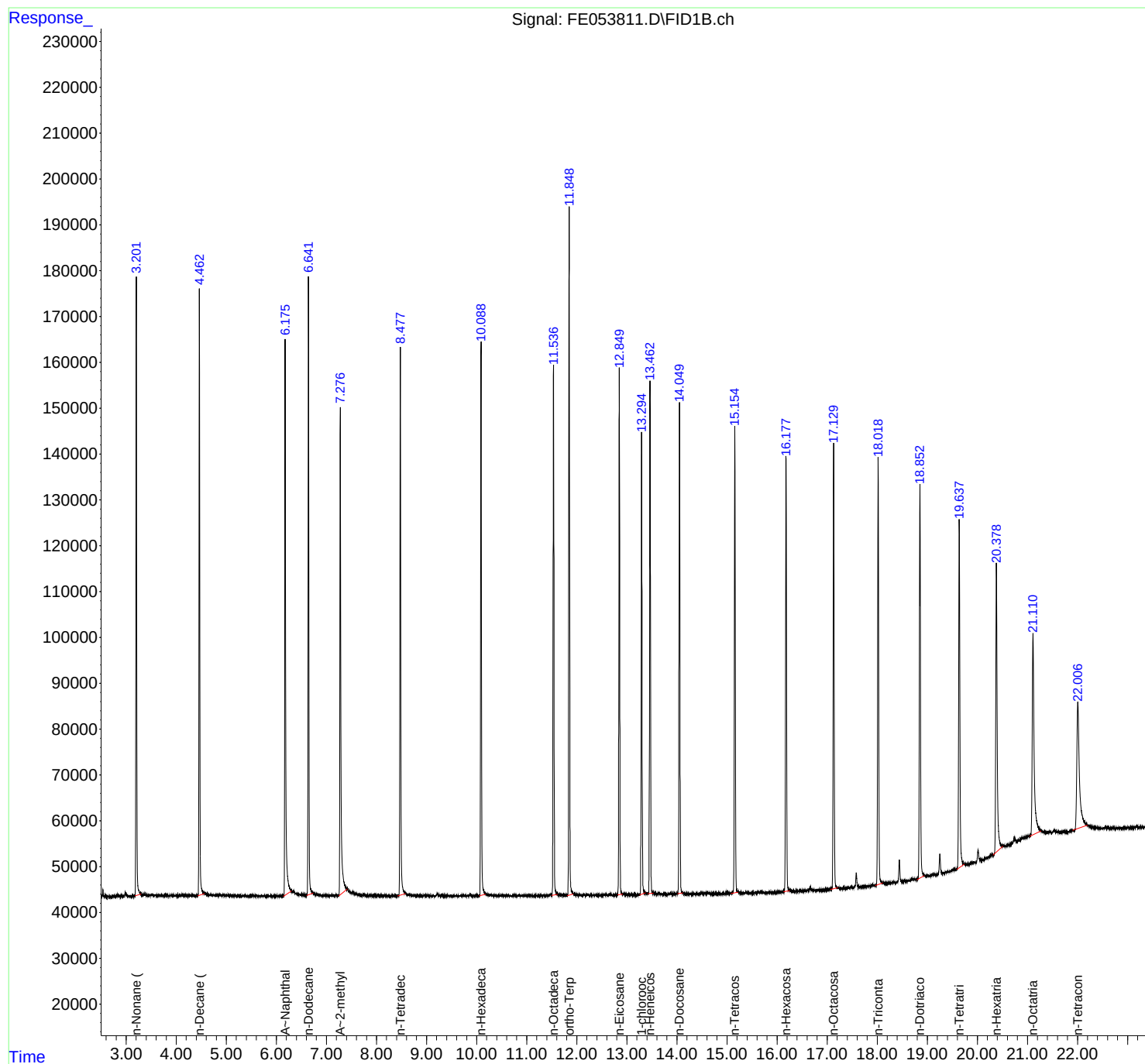
(m)=manual int.

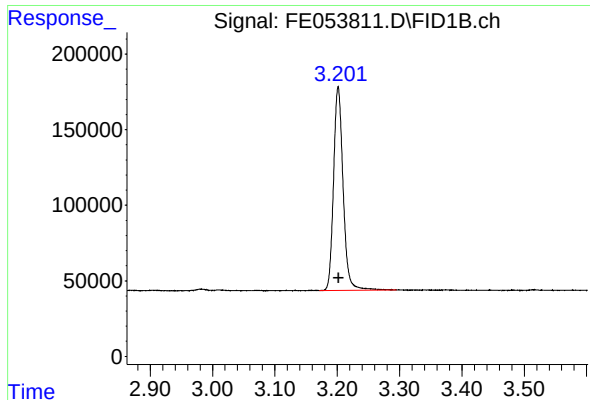
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053811.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 11:18
Operator : YP\AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4

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

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

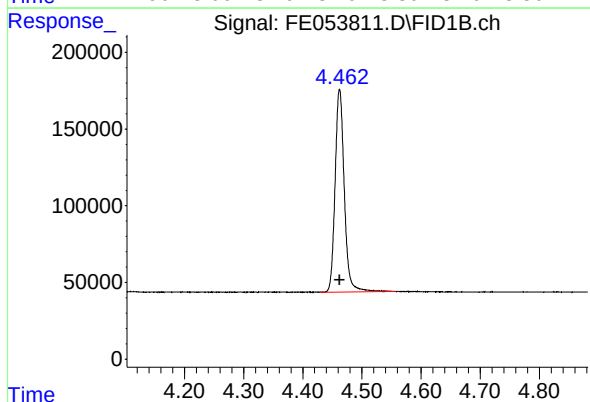




#1 n-Nonane (C9)

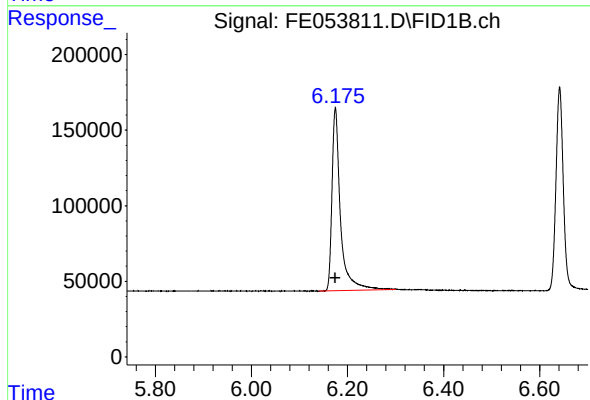
R.T.: 3.202 min
Delta R.T.: 0.000 min
Response: 1431091
Conc: 10.51 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



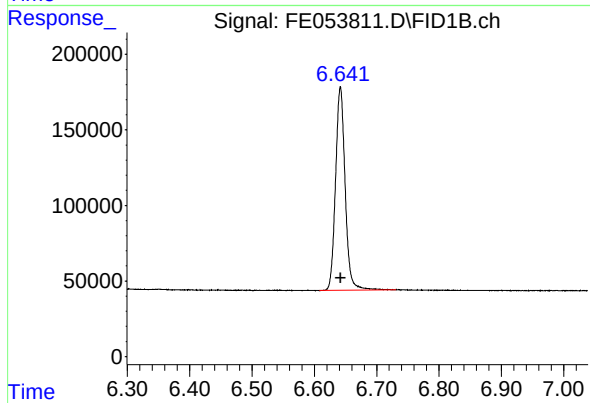
#2 n-Decane (C10)

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



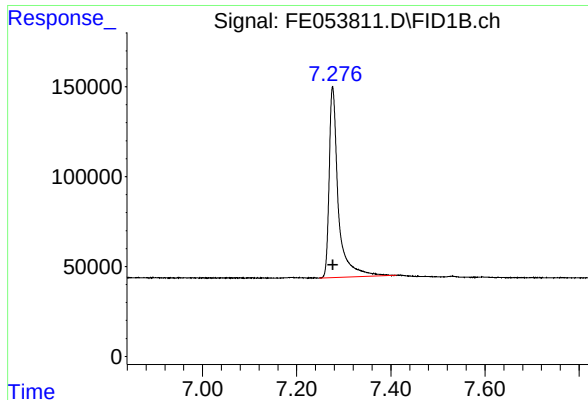
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

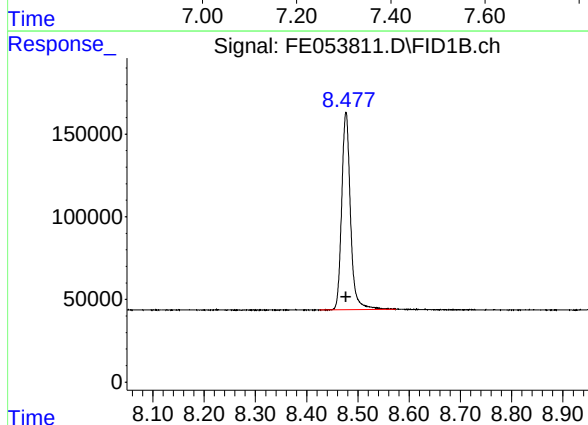
R.T.: 6.642 min
Delta R.T.: 0.000 min
Response: 1441460
Conc: 10.46 ug/ml



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

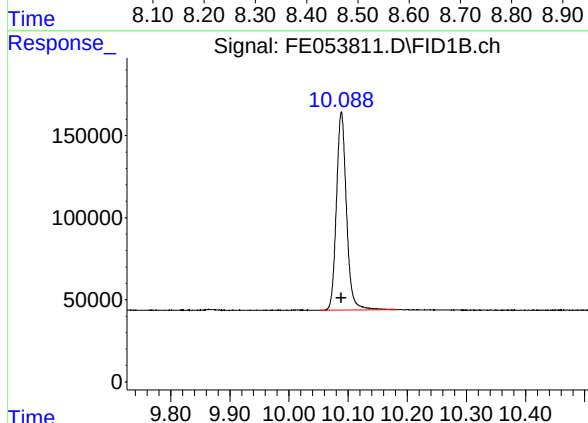
R.T.: 7.277 min
Delta R.T.: 0.000 min
Response: 1432714
Conc: 10.04 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



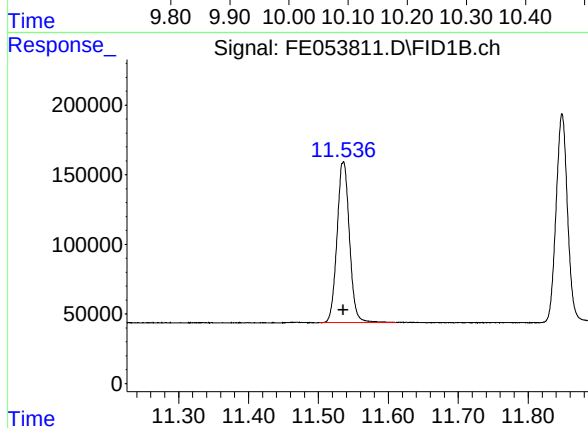
#6 n-Tetradecane (C14)

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



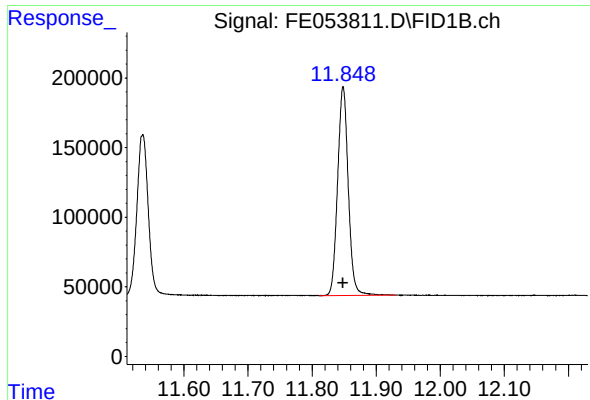
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

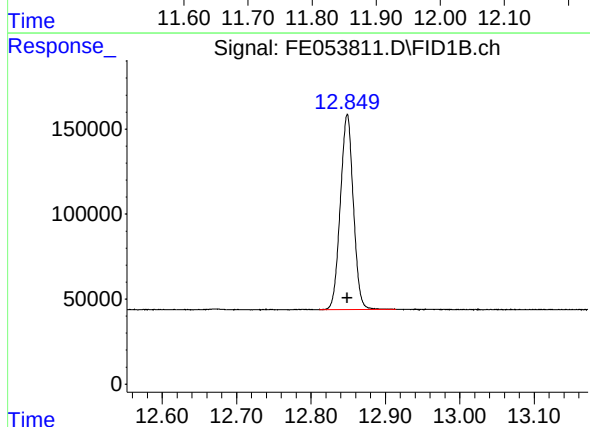
R.T.: 11.536 min
Delta R.T.: 0.000 min
Response: 1425081
Conc: 10.58 ug/ml



#9 ortho-Terphenyl (SURR)

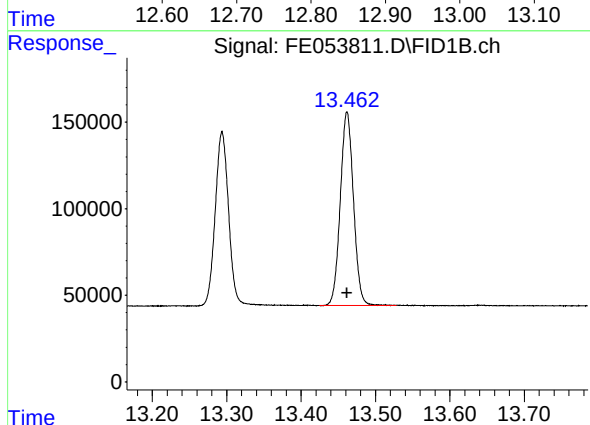
R.T.: 11.848 min
Delta R.T.: 0.000 min
Response: 1724522
Conc: 10.63 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



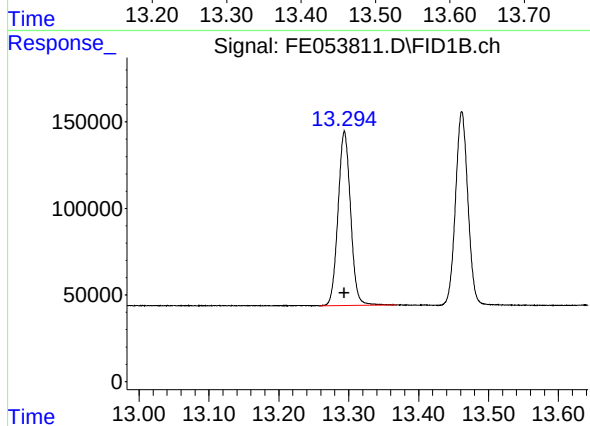
#10 n-Eicosane (C20)

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



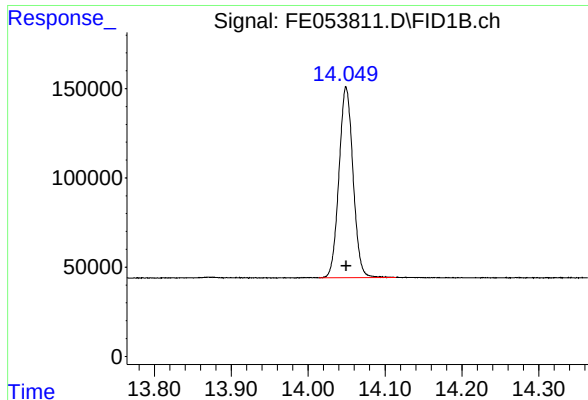
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

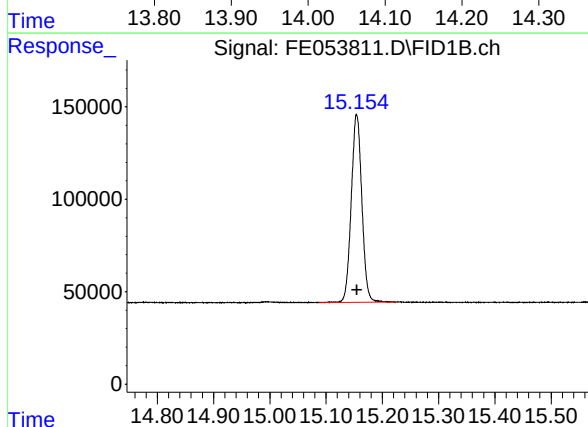
R.T.: 13.294 min
Delta R.T.: 0.000 min
Response: 1252547
Conc: 10.54 ug/ml



#13 n-Docosane (C22)

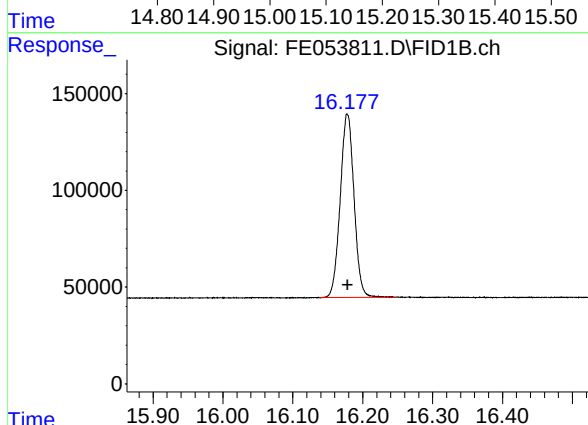
R.T.: 14.050 min
Delta R.T.: 0.000 min
Response: 1350709
Conc: 10.61 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



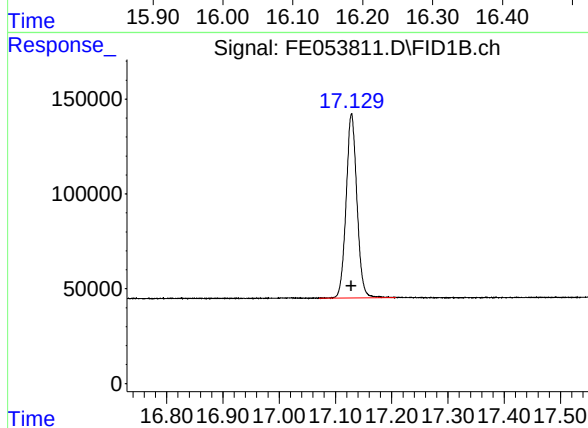
#14 n-Tetracosane (C24)

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



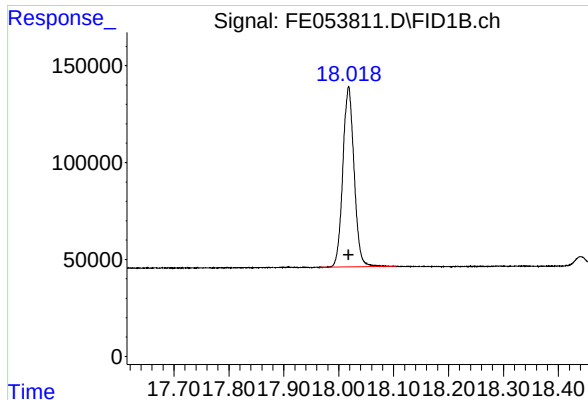
#15 n-Hexacosane (C26)

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



#16 n-Octacosane (C28)

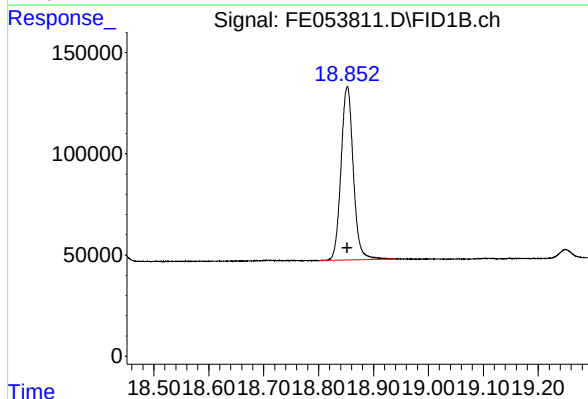
R.T.: 17.129 min
Delta R.T.: 0.000 min
Response: 1292696
Conc: 10.75 ug/ml



#17 n-Tricontane (C30)

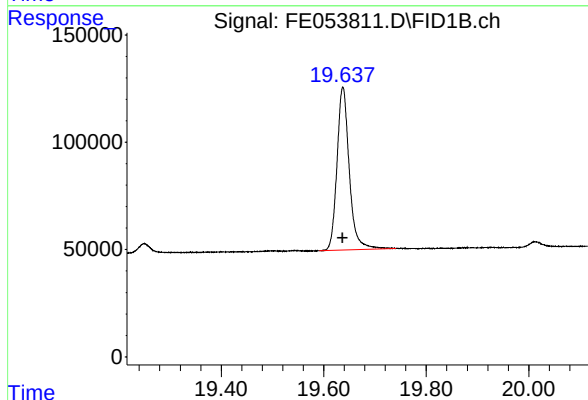
R.T.: 18.018 min
Delta R.T.: 0.000 min
Response: 1326771
Conc: 10.88 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



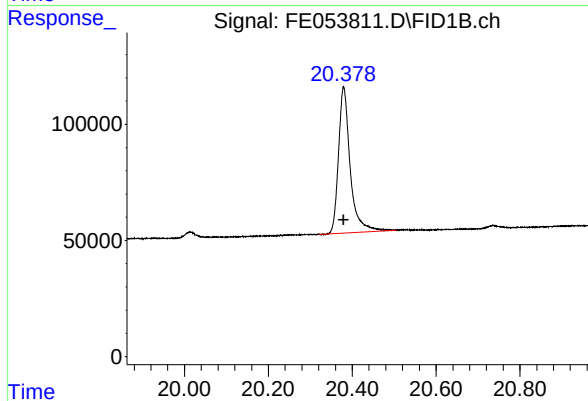
#18 n-Dotriacontane (C32)

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



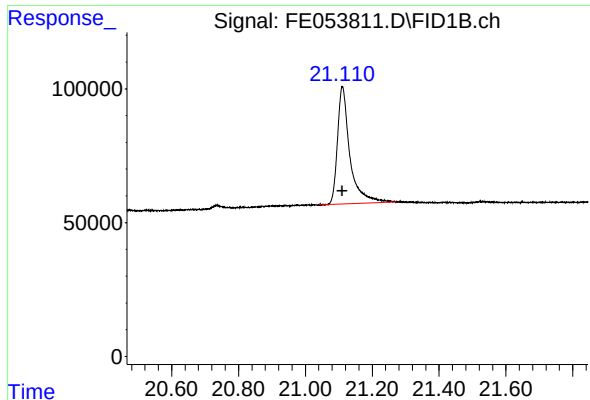
#19 n-Tetatriacontane (C34)

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



#20 n-Hexatriacontane (C36)

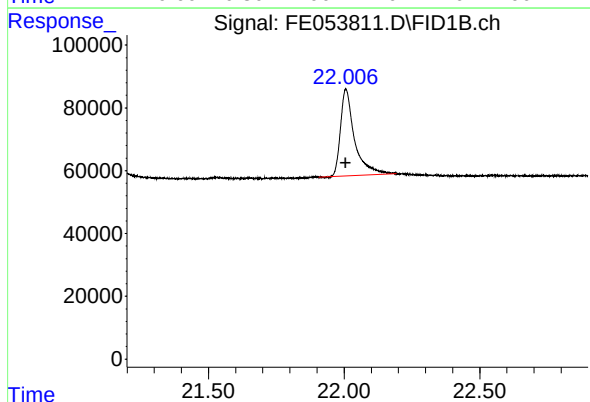
R.T.: 20.380 min
Delta R.T.: 0.000 min
Response: 1211680
Conc: 10.55 ug/ml



#21 n-Octatriacontane (C38)

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

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4



#22 n-Tetracontane (C40)

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

rteres

Area Percent Report

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.202	3.171	3.294	BB	134446	1431091	82.98%	4.808%
2	4.462	4.428	4.558	BB	132296	1429763	82.91%	4.804%
3	6.175	6.141	6.301	BB	120530	1487017	86.23%	4.996%
4	6.642	6.608	6.731	BB	133898	1441460	83.59%	4.843%
5	7.277	7.248	7.411	BB	105064	1432714	83.08%	4.813%
6	8.477	8.424	8.574	BB	119722	1421009	82.40%	4.774%
7	10.089	10.051	10.181	BB	120238	1426087	82.69%	4.791%
8	11.536	11.501	11.611	BB	116417	1425081	82.64%	4.788%
9	11.848	11.811	11.931	BB	149735	1724522	100.00%	5.794%
10	12.849	12.811	12.914	BB	114291	1392391	80.74%	4.678%
11	13.294	13.258	13.368	BB	100347	1252547	72.63%	4.208%
12	13.462	13.424	13.528	BB	111556	1374784	79.72%	4.619%
13	14.050	14.014	14.114	BB	106118	1350709	78.32%	4.538%
14	15.155	15.088	15.224	BB	101796	1328348	77.03%	4.463%
15	16.178	16.138	16.248	BB	95046	1299643	75.36%	4.366%
16	17.129	17.071	17.208	BB	96868	1292696	74.96%	4.343%
17	18.018	17.964	18.104	BB	92718	1326771	76.94%	4.458%
18	18.852	18.801	18.941	BB	85504	1329611	77.10%	4.467%
19	19.637	19.591	19.741	BB	76012	1261085	73.13%	4.237%
20	20.380	20.321	20.504	BB	62689	1211680	70.26%	4.071%
21	21.111	21.041	21.271	BB	43942	1130035	65.53%	3.797%
22	22.006	21.908	22.191	BB	27595	995600	57.73%	3.345%
Sum of corrected areas:							29764644	

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

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

Instrument :
 FID_E
 ClientSampleId :
 5 PPM ALIPHATIC HC STD5

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

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

Compound	R.T.	Response	Conc Units

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

(f)=RT Delta > 1/2 Window

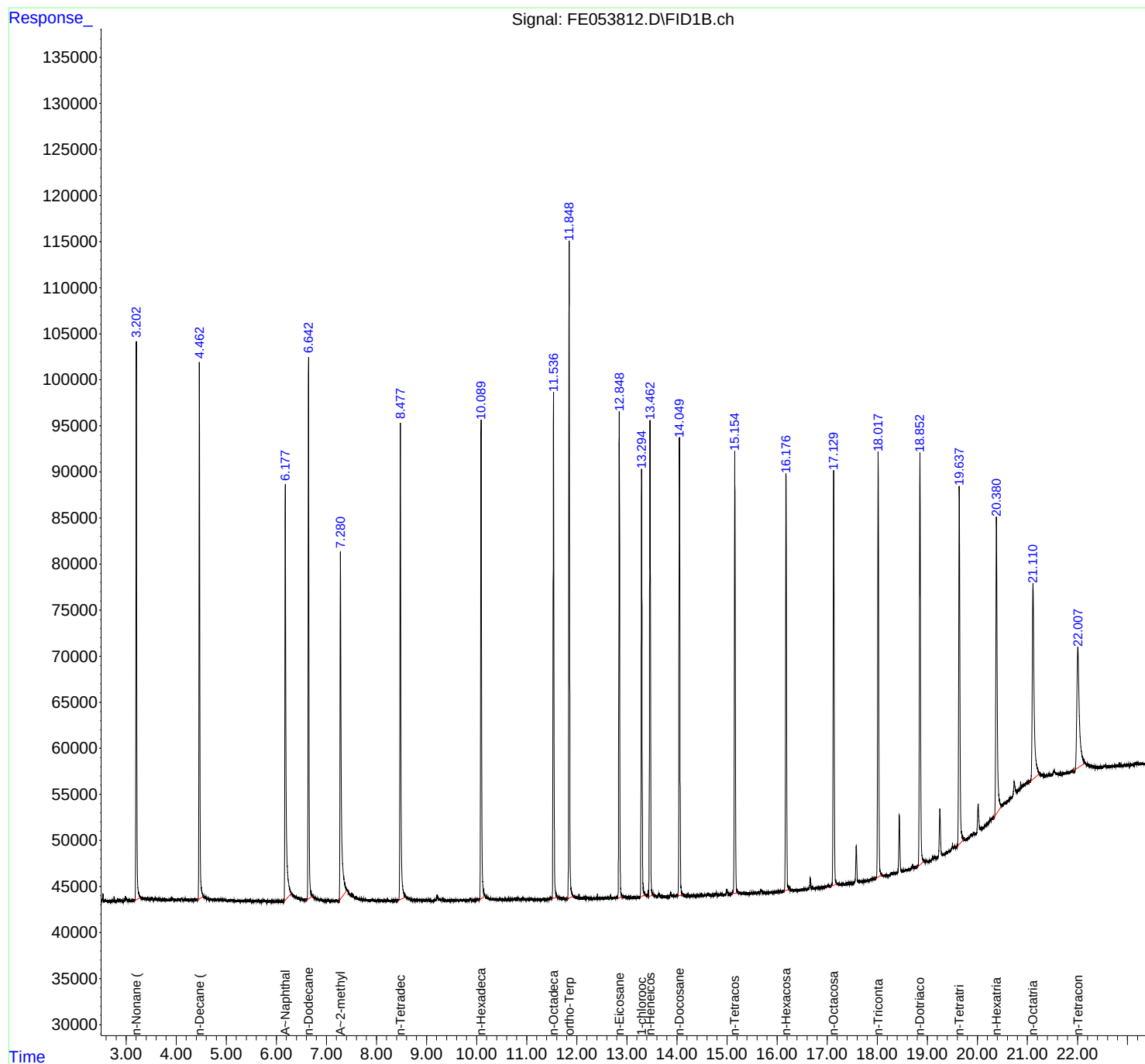
(m)=manual int.

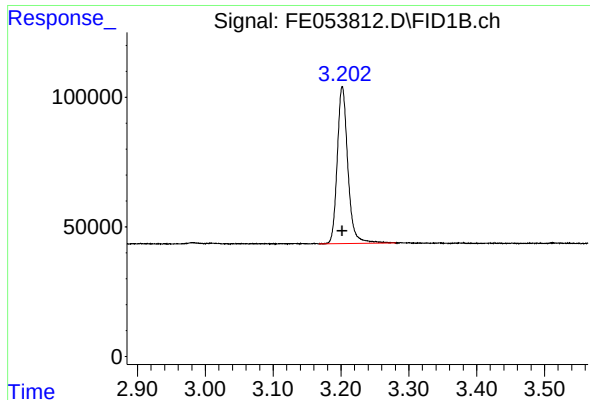
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053812.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 11:48
Operator : YP\AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5

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

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

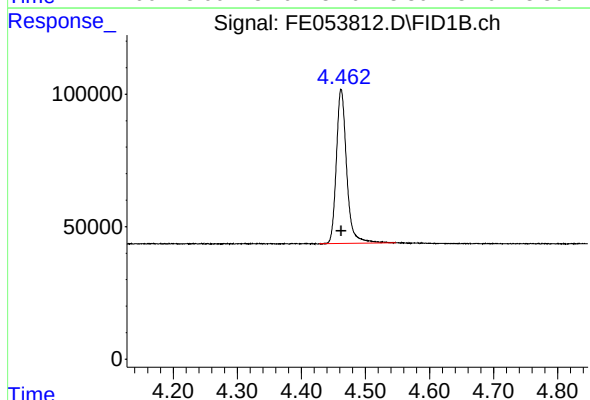




#1 n-Nonane (C9)

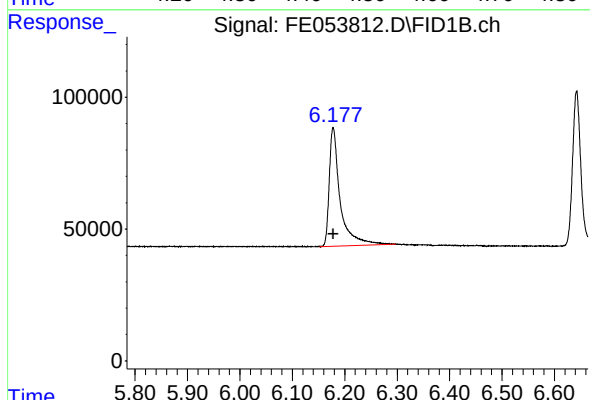
R.T.: 3.202 min
Delta R.T.: 0.000 min
Response: 656566
Conc: 4.86 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



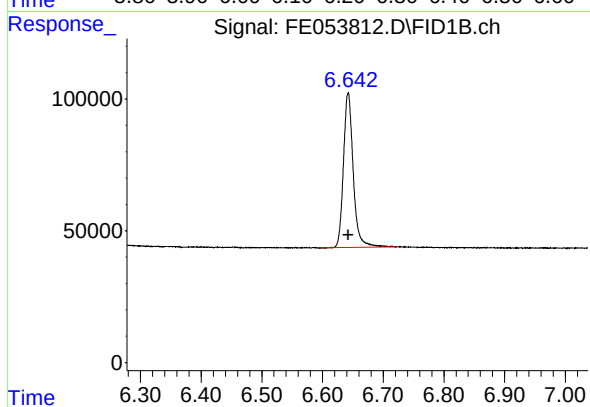
#2 n-Decane (C10)

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



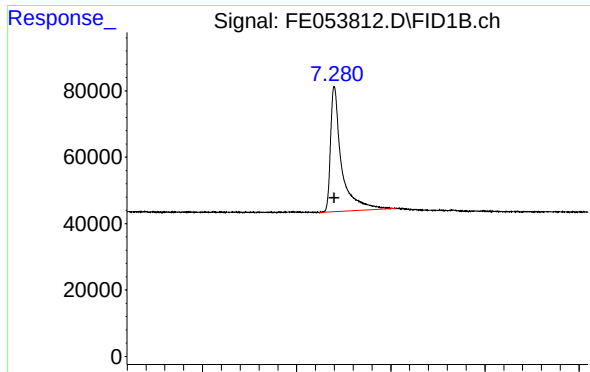
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

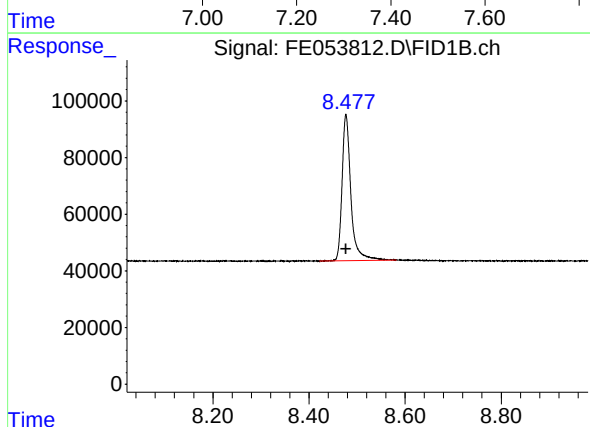
R.T.: 6.642 min
Delta R.T.: 0.000 min
Response: 655154
Conc: 4.80 ug/ml



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

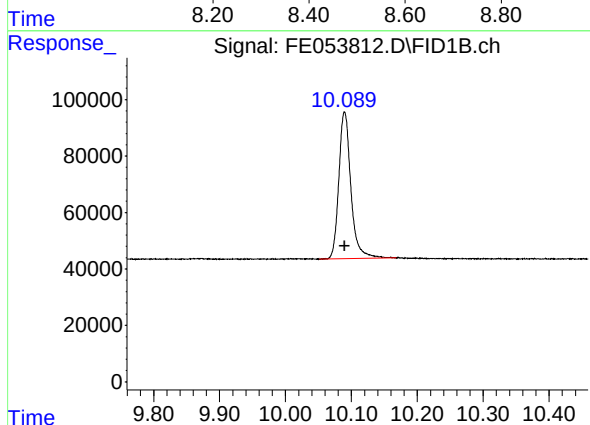
R.T.: 7.280 min
Delta R.T.: 0.000 min
Response: 614016
Conc: 4.43 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



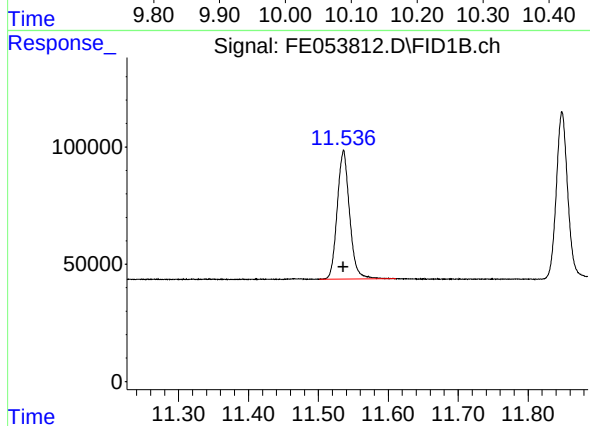
#6 n-Tetradecane (C14)

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



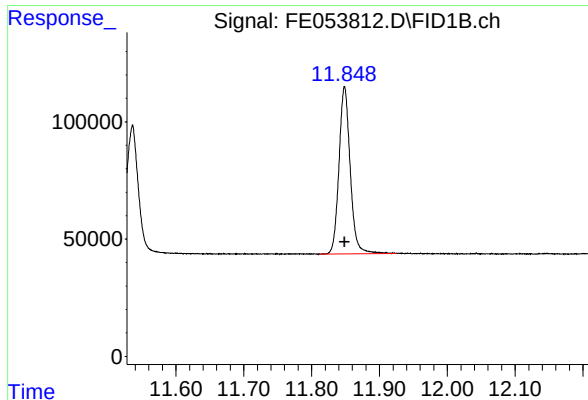
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

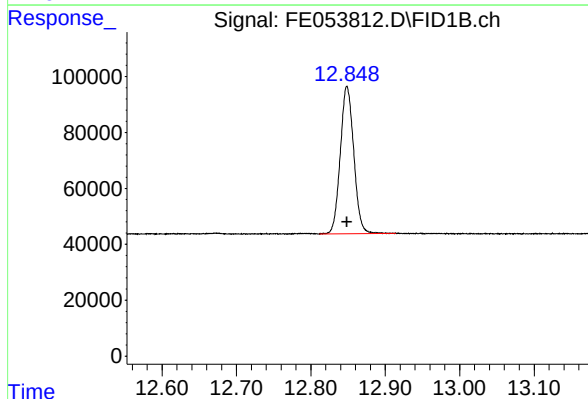
R.T.: 11.536 min
Delta R.T.: 0.000 min
Response: 672526
Conc: 4.99 ug/ml



#9 ortho-Terphenyl (SURR)

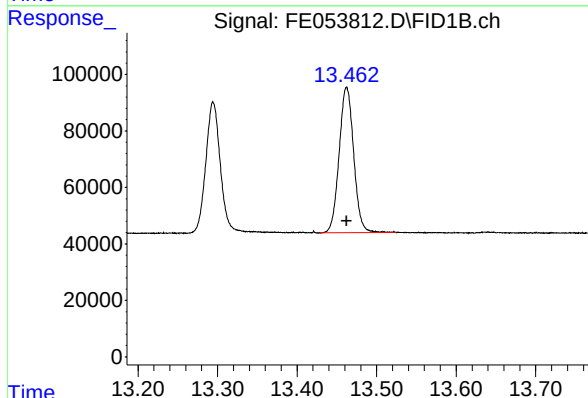
R.T.: 11.849 min
Delta R.T.: 0.000 min
Response: 817153
Conc: 5.03 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



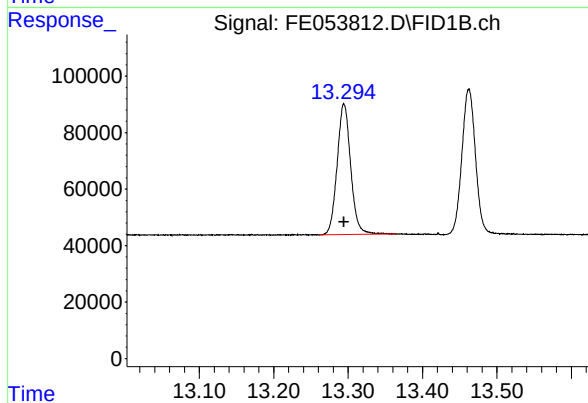
#10 n-Eicosane (C20)

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



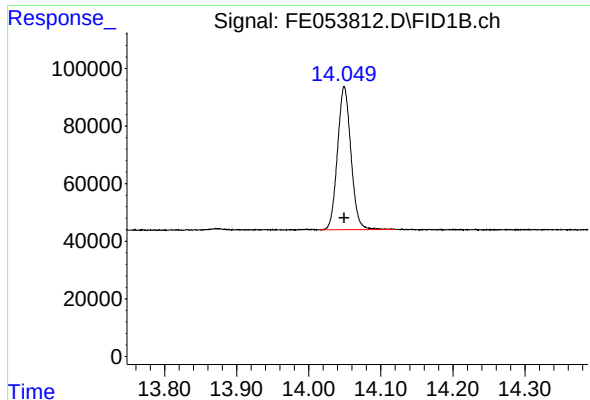
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

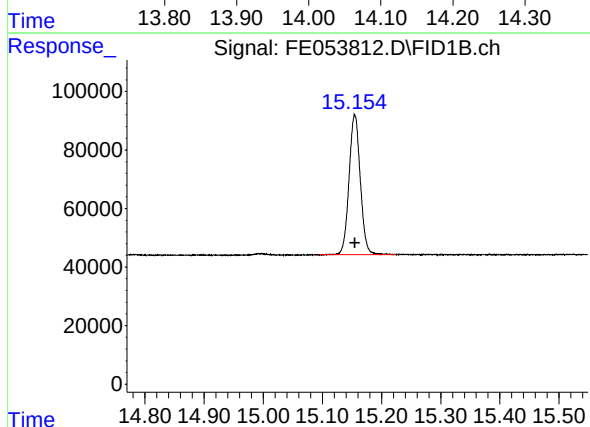
R.T.: 13.295 min
Delta R.T.: 0.000 min
Response: 587641
Conc: 4.96 ug/ml



#13 n-Docosane (C22)

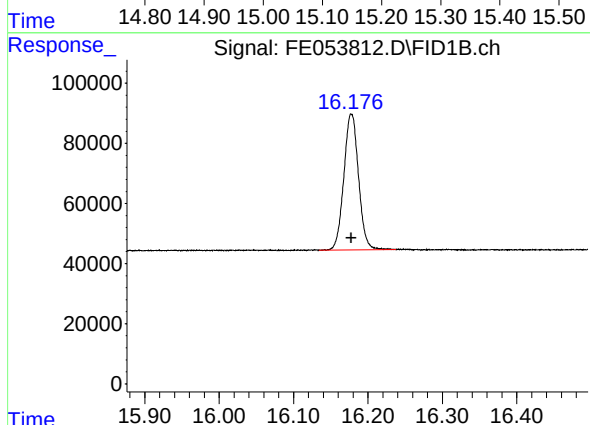
R.T.: 14.049 min
Delta R.T.: 0.000 min
Response: 643626
Conc: 5.05 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



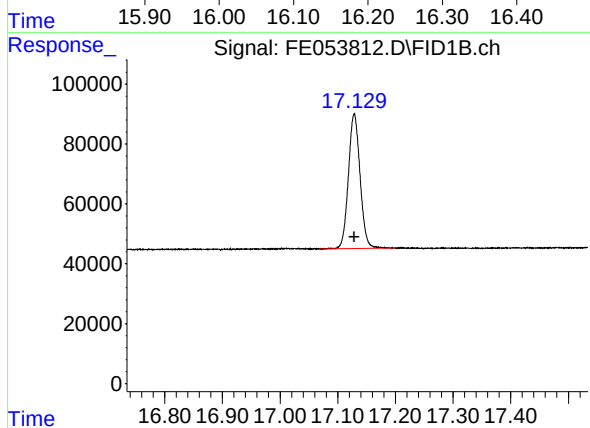
#14 n-Tetracosane (C24)

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



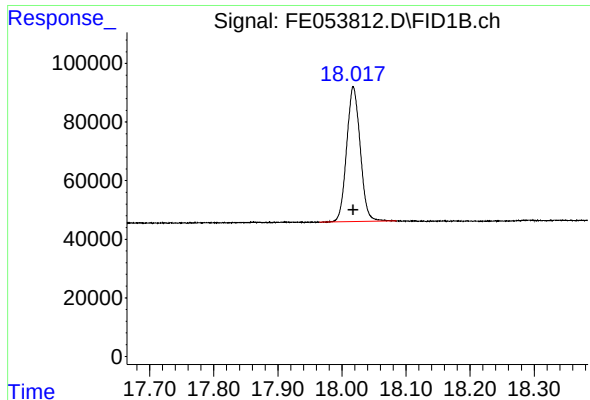
#15 n-Hexacosane (C26)

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



#16 n-Octacosane (C28)

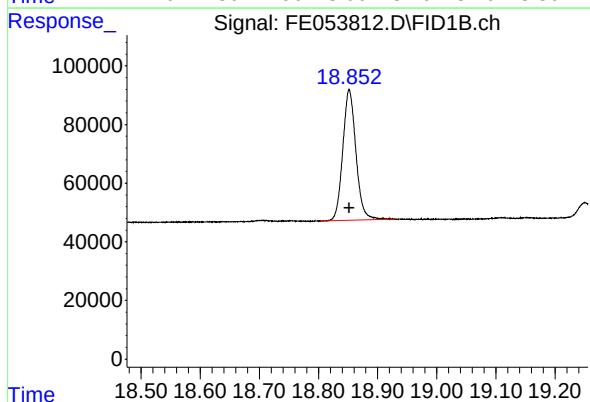
R.T.: 17.129 min
Delta R.T.: 0.000 min
Response: 632971
Conc: 5.21 ug/ml



#17 n-Tricontane (C30)

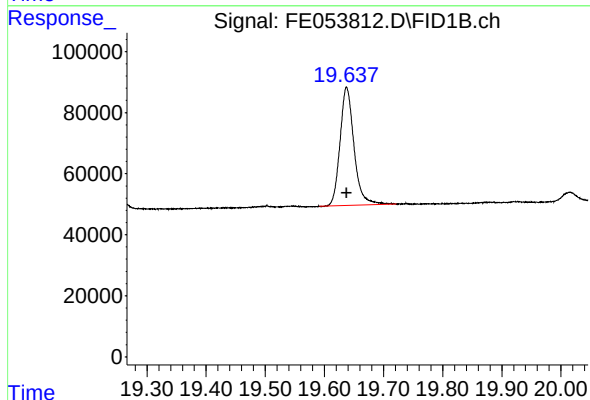
R.T.: 18.018 min
Delta R.T.: 0.000 min
Response: 674483
Conc: 5.41 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



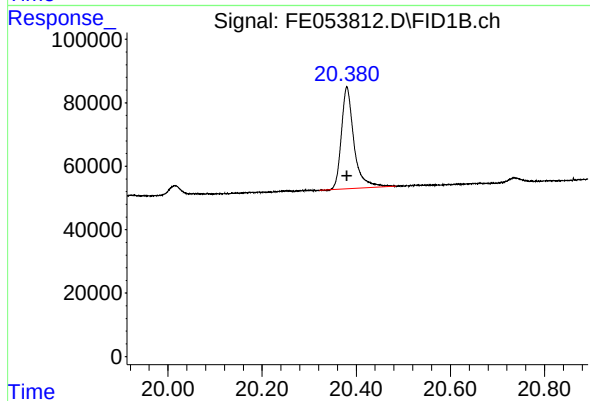
#18 n-Dotriacontane (C32)

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



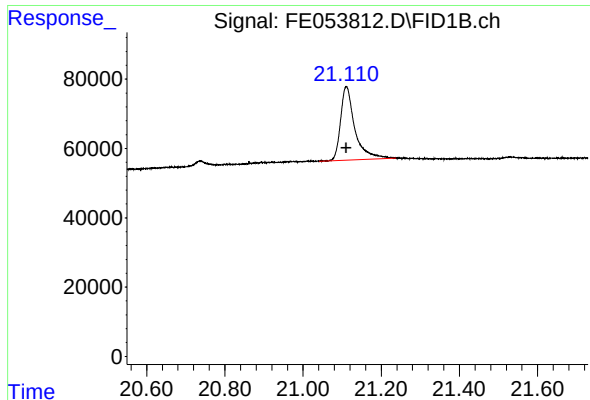
#19 n-Tetratriacontane (C34)

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



#20 n-Hexatriacontane (C36)

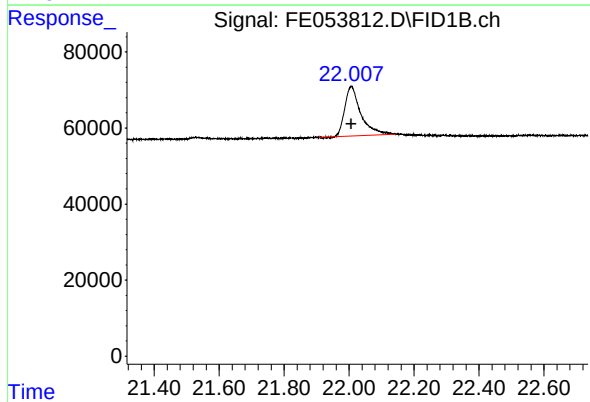
R.T.: 20.380 min
Delta R.T.: 0.000 min
Response: 597732
Conc: 5.16 ug/ml



#21 n-Octatriacontane (C38)

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

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5



#22 n-Tetracontane (C40)

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

rteres

Area Percent Report

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.202	3.168	3.281	BB	60519	656566	80.35%	4.672%
2	4.462	4.428	4.548	BB	58217	648937	79.41%	4.618%
3	6.178	6.151	6.298	BB	45028	655292	80.19%	4.663%
4	6.642	6.594	6.721	BB	58653	655154	80.18%	4.662%
5	7.280	7.248	7.411	BB	37424	614016	75.14%	4.369%
6	8.477	8.421	8.581	BB	51390	659483	80.70%	4.693%
7	10.090	10.051	10.168	BB	51984	660971	80.89%	4.704%
8	11.536	11.501	11.611	BB	53831	672526	82.30%	4.786%
9	11.849	11.811	11.924	BB	70934	817153	100.00%	5.815%
10	12.849	12.811	12.914	BB	52788	663340	81.18%	4.720%
11	13.295	13.261	13.364	BB	46345	587641	71.91%	4.182%
12	13.462	13.428	13.524	BB	51537	654852	80.14%	4.660%
13	14.049	14.014	14.121	BB	49489	643626	78.76%	4.580%
14	15.155	15.094	15.224	BB	47817	631655	77.30%	4.495%
15	16.178	16.134	16.238	BB	45304	619264	75.78%	4.407%
16	17.129	17.068	17.201	BB	44838	632971	77.46%	4.504%
17	18.018	17.964	18.084	BB	46030	674483	82.54%	4.800%
18	18.852	18.801	18.931	BB	44529	688933	84.31%	4.903%
19	19.638	19.591	19.721	BB	38732	636572	77.90%	4.530%
20	20.380	20.321	20.484	BB	32119	597732	73.15%	4.254%
21	21.111	21.041	21.238	BB	21187	534678	65.43%	3.805%
22	22.007	21.908	22.144	BB	13080	446823	54.68%	3.180%
Sum of corrected areas:						14052667		

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

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

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD ICV

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

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

Compound	R.T.	Response	Conc Units

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

(f)=RT Delta > 1/2 Window

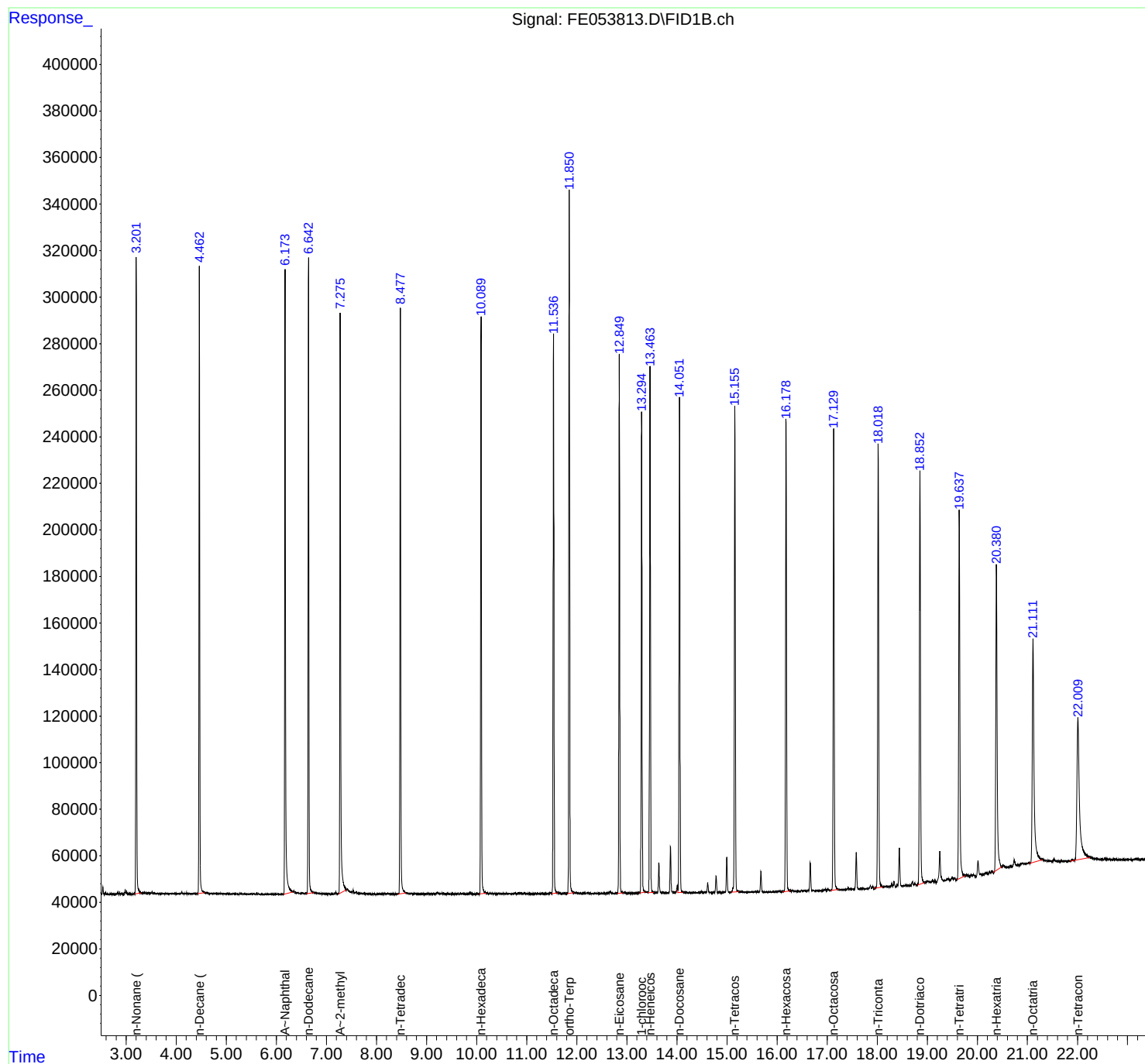
(m)=manual int.

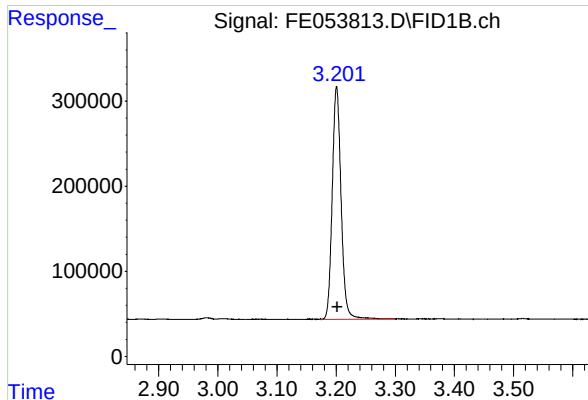
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE051425AL\
Data File : FE053813.D
Signal(s) : FID1B.ch
Acq On : 14 May 2025 12:18
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

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

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





#1 n-Nonane (C9)

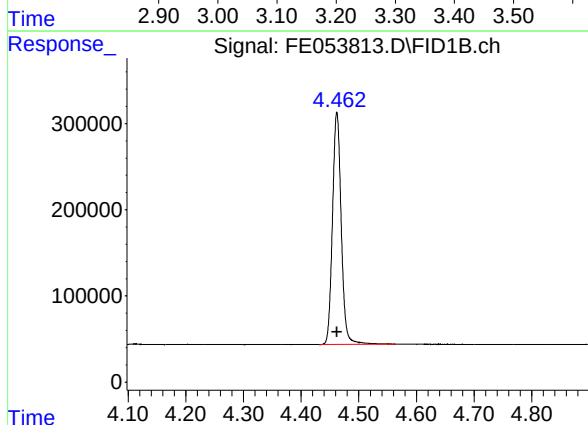
R.T.: 3.201 min
Delta R.T.: -0.001 min
Response: 2840477
Conc: 21.02 ug/ml

Instrument :

FID_E

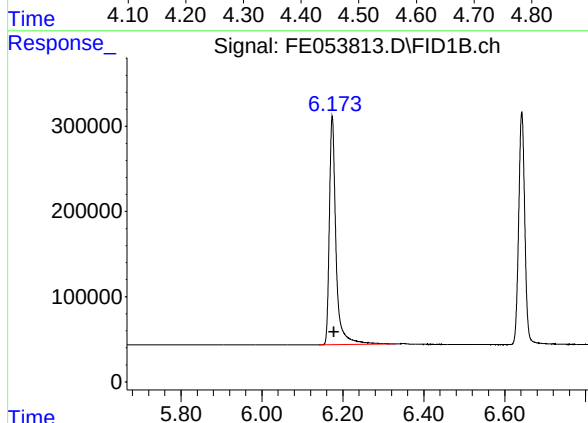
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



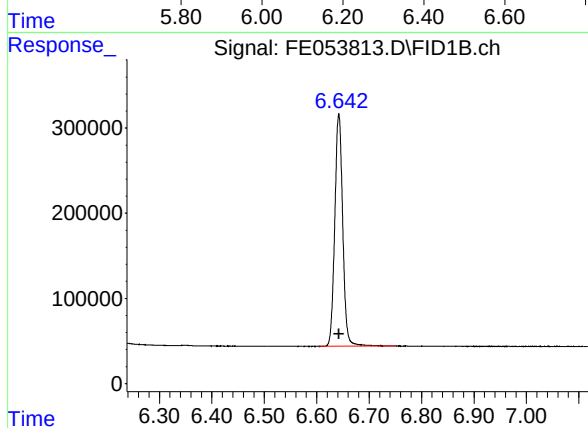
#2 n-Decane (C10)

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



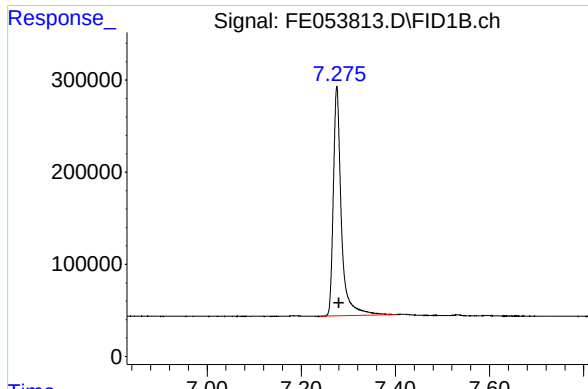
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

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



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

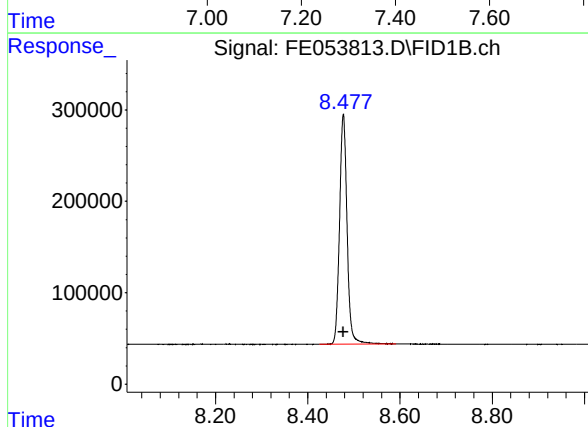
R.T.: 7.276 min
Delta R.T.: -0.005 min
Response: 2959846
Conc: 21.34 ug/ml

Instrument :

FID_E

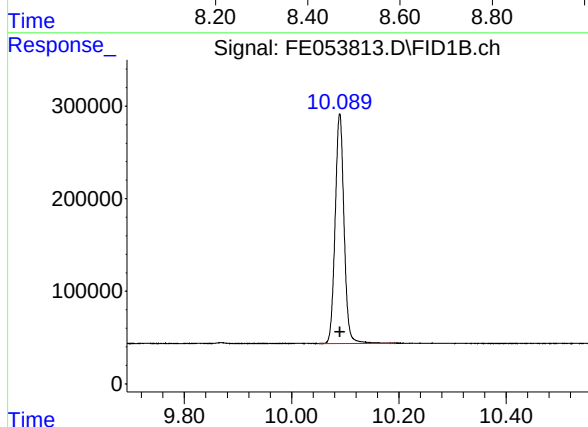
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



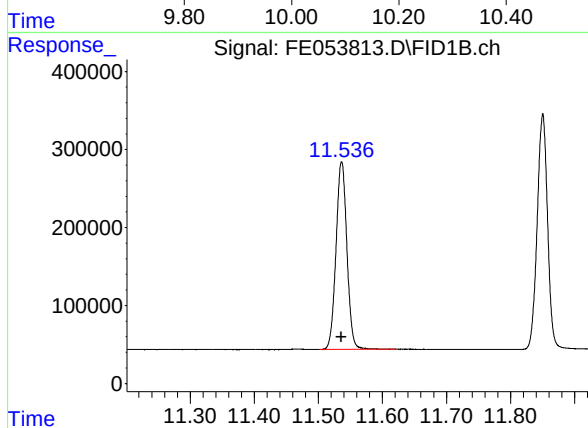
#6 n-Tetradecane (C14)

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



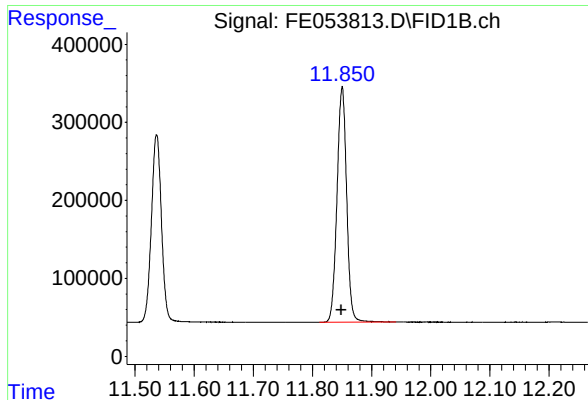
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

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



#9 ortho-Terphenyl (SURR)

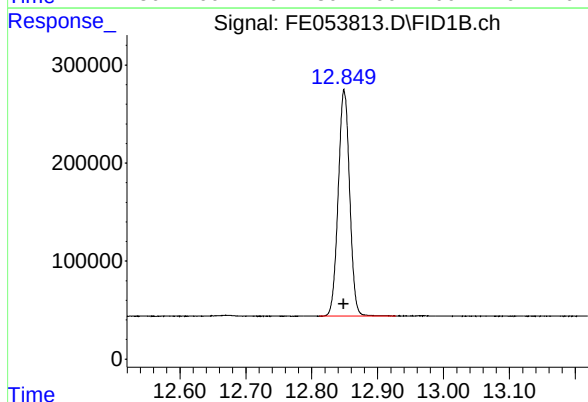
R.T.: 11.850 min
Delta R.T.: 0.002 min
Response: 3413619
Conc: 21.01 ug/ml

Instrument :

FID_E

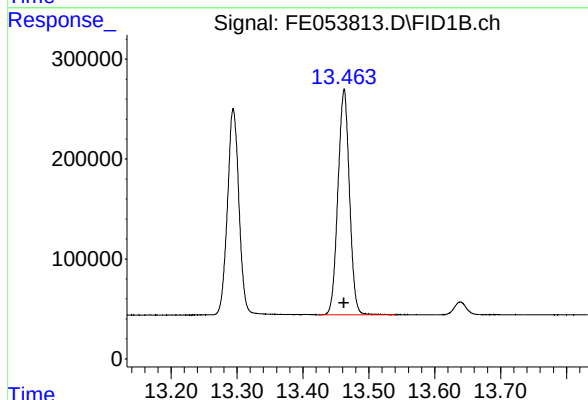
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



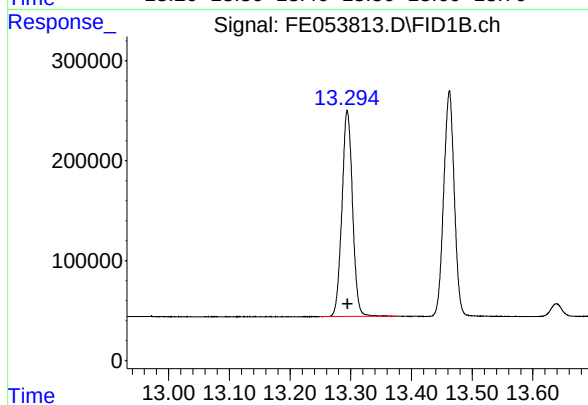
#10 n-Eicosane (C20)

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



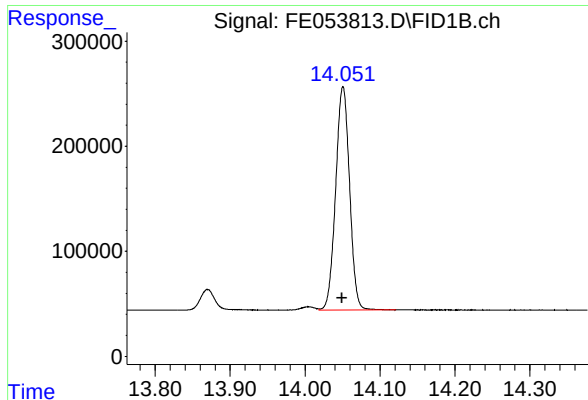
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

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



#13 n-Docosane (C22)

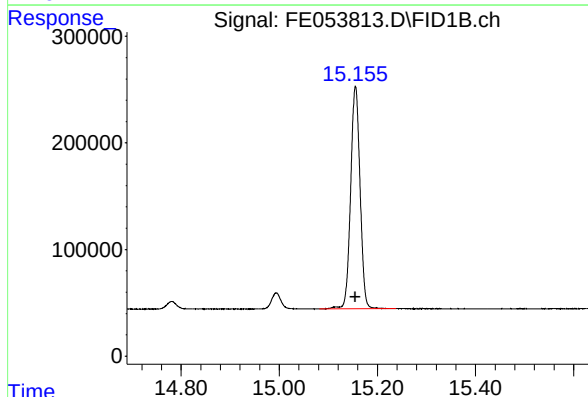
R.T.: 14.051 min
Delta R.T.: 0.001 min
Response: 2739221
Conc: 21.47 ug/ml

Instrument :

FID_E

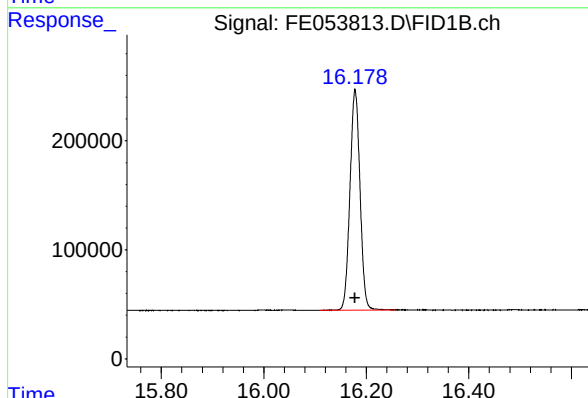
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



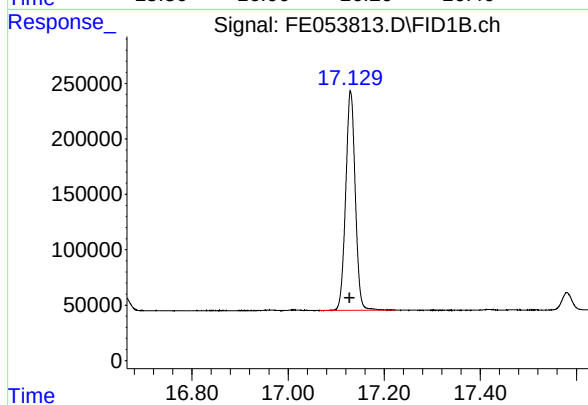
#14 n-Tetracosane (C24)

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



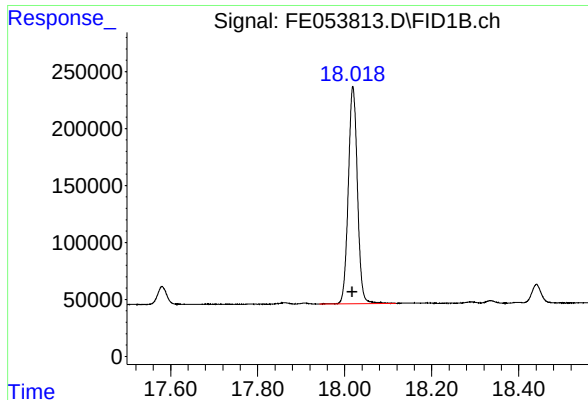
#15 n-Hexacosane (C26)

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



#16 n-Octacosane (C28)

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



#17 n-Tricontane (C30)

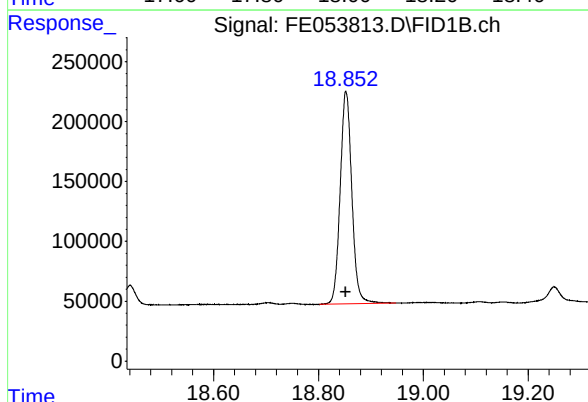
R.T.: 18.019 min
Delta R.T.: 0.001 min
Response: 2774148
Conc: 22.27 ug/ml

Instrument :

FID_E

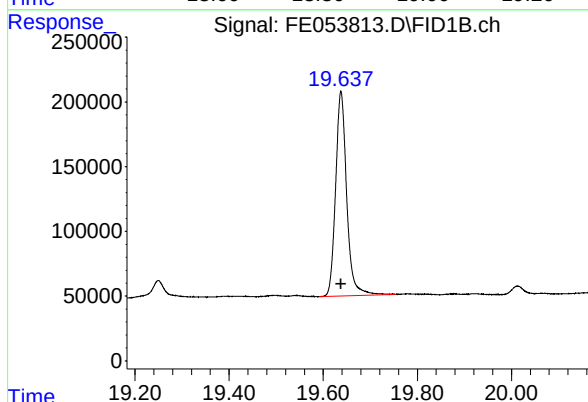
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



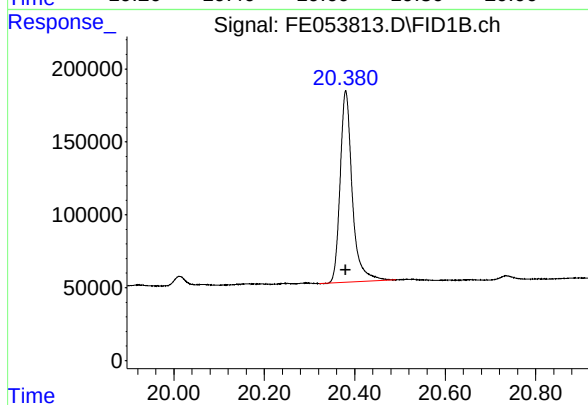
#18 n-Dotriacontane (C32)

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



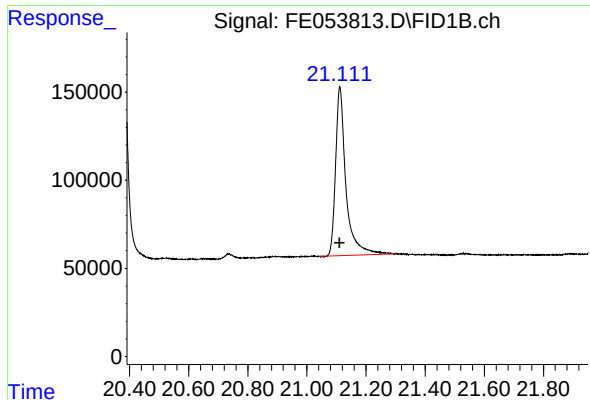
#19 n-Tetatriacontane (C34)

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



#20 n-Hexatriacontane (C36)

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



#21 n-Octatriacontane (C38)

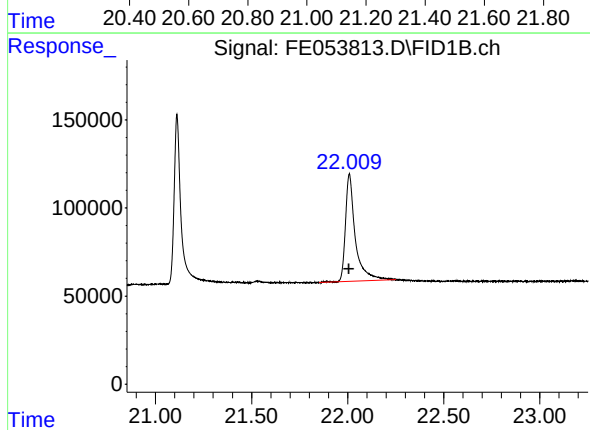
R.T.: 21.111 min
Delta R.T.: 0.000 min
Response: 2329830
Conc: 21.41 ug/ml

Instrument :

FID_E

ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



#22 n-Tetracontane (C40)

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

rteres

Area Percent Report

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.201	3.171	3.301	BB	272797	2840477	83.21%	4.684%
2	4.462	4.431	4.565	BB	269132	2845724	83.36%	4.693%
3	6.174	6.141	6.331	BV	267230	3077733	90.16%	5.075%
4	6.642	6.605	6.751	BB	272488	2883394	84.47%	4.755%
5	7.276	7.238	7.401	BV	248544	2959846	86.71%	4.881%
6	8.477	8.425	8.591	BB	251057	2848811	83.45%	4.698%
7	10.090	10.051	10.195	BB	248727	2849304	83.47%	4.699%
8	11.537	11.501	11.621	BB	241313	2838941	83.17%	4.682%
9	11.850	11.811	11.941	BB	302259	3413619	100.00%	5.629%
10	12.849	12.811	12.928	BB	230666	2781635	81.49%	4.587%
11	13.295	13.248	13.375	BB	205604	2500324	73.25%	4.123%
12	13.462	13.425	13.541	BB	223621	2735043	80.12%	4.510%
13	14.051	14.019	14.121	VB	212868	2739221	80.24%	4.517%
14	15.155	15.081	15.238	BB	208871	2780446	81.45%	4.585%
15	16.178	16.108	16.258	BB	202458	2752523	80.63%	4.539%
16	17.130	17.065	17.225	BB	197046	2740949	80.29%	4.520%
17	18.019	17.941	18.118	BB	190552	2774148	81.27%	4.575%
18	18.853	18.801	18.948	BB	178106	2741566	80.31%	4.521%
19	19.638	19.591	19.755	BB	158235	2579599	75.57%	4.254%
20	20.380	20.321	20.491	BV	131246	2437142	71.39%	4.019%
21	21.111	21.041	21.301	BB	96058	2329830	68.25%	3.842%
22	22.009	21.851	22.251	BB	61078	2189291	64.13%	3.610%
Sum of corrected areas:							60639566	

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

Continuing Calibration Report for SequenceID : FE060325AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FE054142.D

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

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	03 Jun 2025 07:43
Client Sample ID:		Operator:	YP\AJ
Data file:	FE054142.D	Misc:	
Instrument:	FID_E	ALS Vial:	2
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.085	6.730	7621538.000	60.000	ug/ml
Aliphatic C12-C16	6.731	10.178	5508764.000	40.000	ug/ml
Aliphatic C16-C21	10.179	13.552	8346475.000	60.000	ug/ml
Aliphatic C21-C28	13.553	17.220	11093653.000	80.000	ug/ml
Aliphatic C28-C40	17.221	22.091	14143478.000	120.000	ug/ml
Aliphatic EPH	3.085	22.091	46713908.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054142.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 07:43
 Operator : YP\AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
 Quant Time: Jun 03 10:53:14 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 12:15:41 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

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

(f)=RT Delta > 1/2 Window

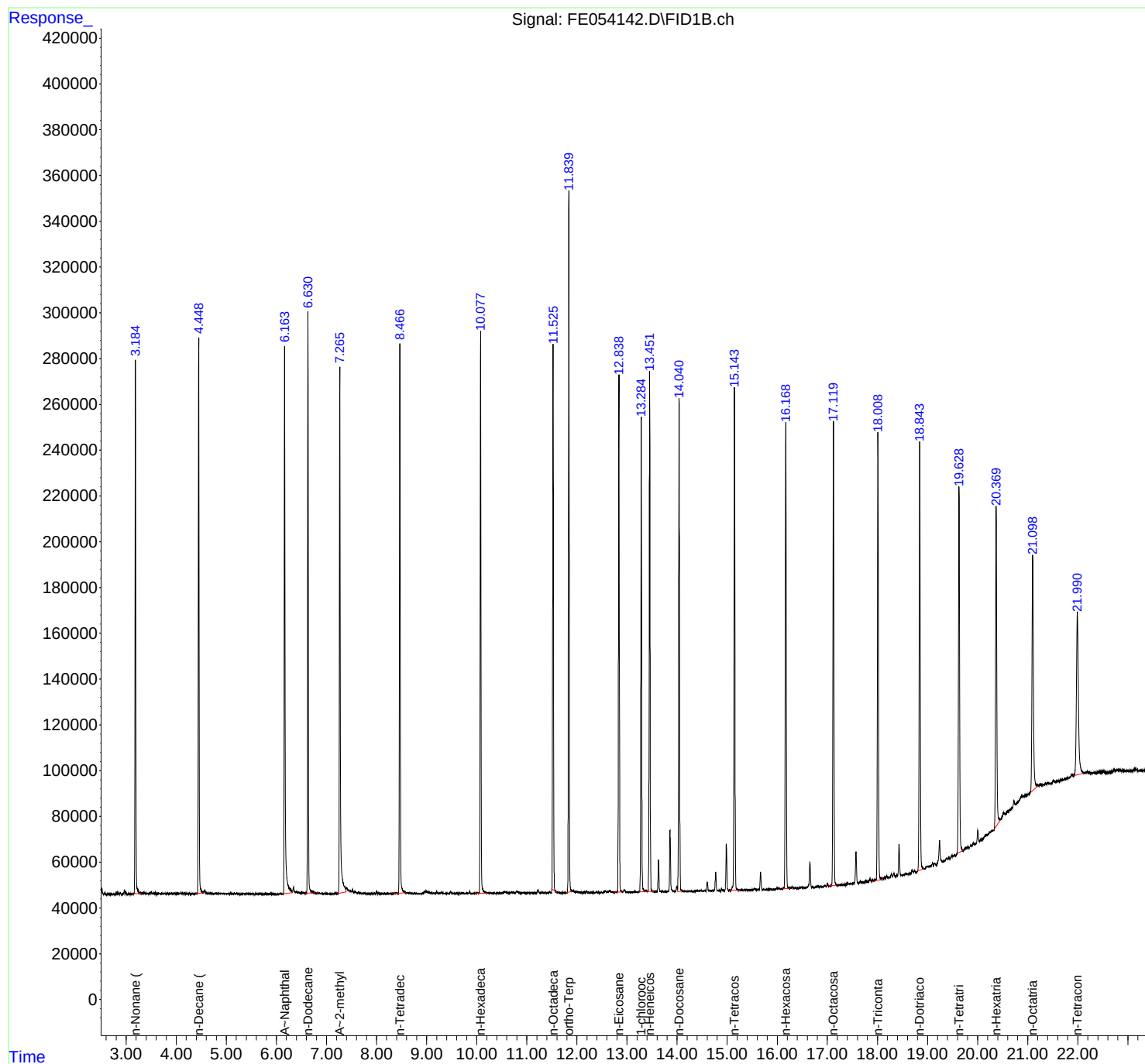
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
Data File : FE054142.D
Signal(s) : FID1B.ch
Acq On : 03 Jun 2025 07:43
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Jun 03 10:53:14 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE060325AL\
 Data File : FE054142.D
 Signal(s) : FID1B.ch
 Acq On : 03 Jun 2025 07:43
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.185	3.130	3.304	BB	232866	2432505	71.11%	4.169%
2	4.448	4.395	4.550	BV	242830	2525666	73.84%	4.329%
3	6.164	6.112	6.322	BV	238931	2842190	83.09%	4.872%
4	6.630	6.574	6.760	BB	253782	2663367	77.86%	4.565%
5	7.266	7.210	7.390	BV	229728	2819564	82.43%	4.833%
6	8.466	8.324	8.587	BB	240042	2704175	79.05%	4.635%
7	10.078	9.957	10.209	BB	245127	2804589	81.99%	4.807%
8	11.525	11.500	11.605	BB	238681	2771905	81.03%	4.751%
9	11.839	11.775	11.909	BV	304875	3420659	100.00%	5.863%
10	12.838	12.742	12.909	BB	226206	2801626	81.90%	4.802%
11	13.284	13.239	13.412	BB	207243	2545653	74.42%	4.363%
12	13.452	13.412	13.534	BB	226775	2772944	81.06%	4.753%
13	14.039	14.007	14.109	VB	215218	2775423	81.14%	4.757%
14	15.145	15.040	15.250	BB	218902	2818273	82.39%	4.831%
15	16.168	16.100	16.264	BB	203931	2771140	81.01%	4.750%
16	17.120	17.025	17.197	BB	202499	2728817	79.77%	4.677%
17	18.008	17.920	18.110	PB	195833	2760542	80.70%	4.732%
18	18.843	18.800	18.930	BB	187276	2698313	78.88%	4.625%
19	19.628	19.590	19.709	BV	159768	2469088	72.18%	4.232%
20	20.370	20.320	20.454	BV	139873	2254035	65.89%	3.863%
21	21.099	21.040	21.207	BB	102863	2024759	59.19%	3.471%
22	21.991	21.915	22.117	BV	71064	1936741	56.62%	3.320%
Sum of corrected areas:							58341972	

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

Continuing Calibration Report for SequenceID : FE060325AL

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

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

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

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

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

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
 Quant Time: Jun 03 12:21:23 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Quant Title : GC Extractables
 QLast Update : Wed May 14 12:15:41 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units

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

(f)=RT Delta > 1/2 Window

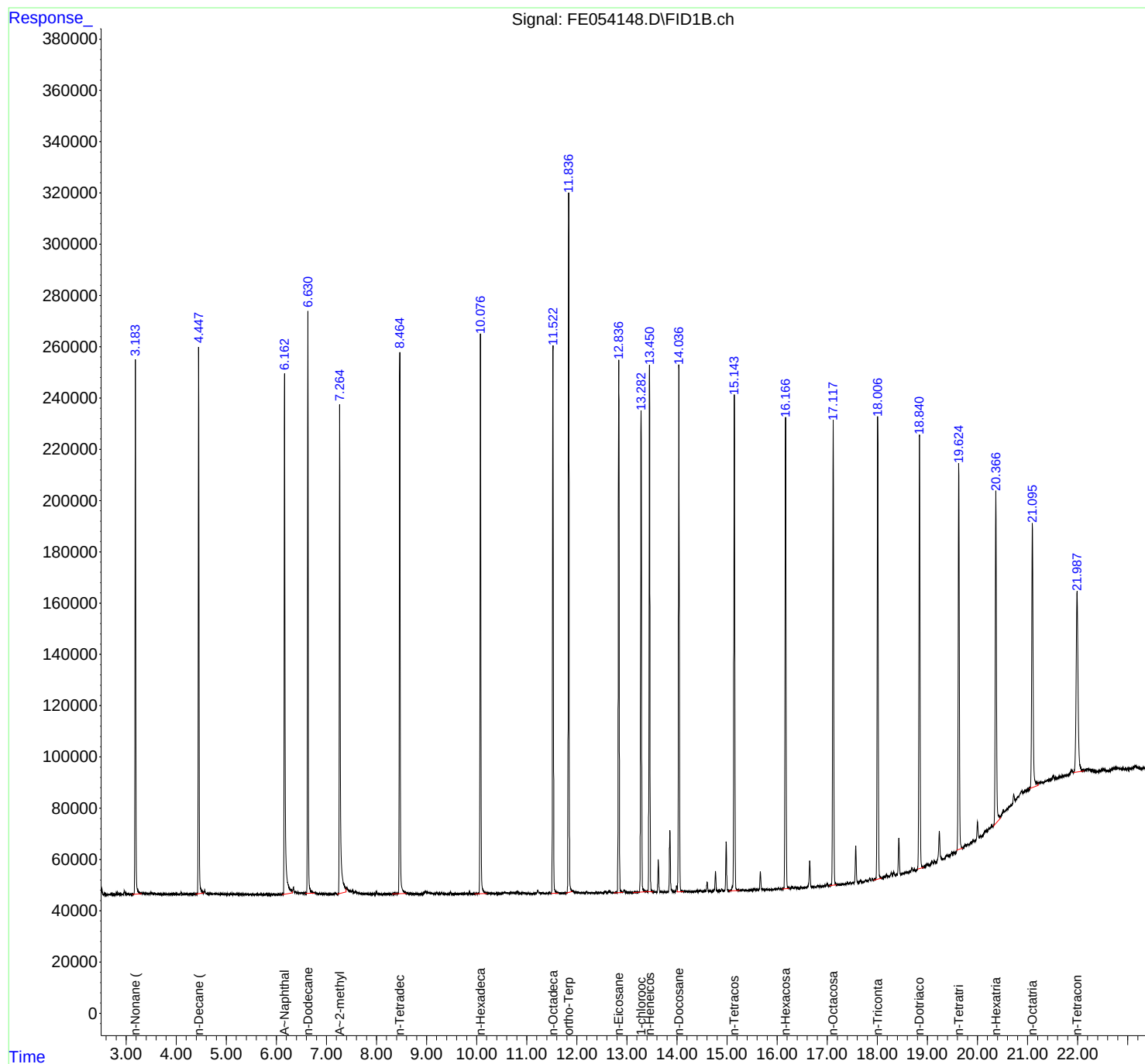
(m)=manual int.

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

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Jun 03 12:21:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Quant Title : GC Extractables
QLast Update : Wed May 14 12:15:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Area Percent Report

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.184	3.127	3.310	BB	208401	2180681	71.14%	4.120%
2	4.448	4.392	4.552	BV	213104	2256677	73.62%	4.264%
3	6.163	6.112	6.317	BV	202160	2524636	82.36%	4.770%
4	6.630	6.575	6.767	BB	227449	2379079	77.61%	4.495%
5	7.265	7.210	7.394	BV	190103	2496164	81.43%	4.716%
6	8.464	8.322	8.599	BB	211079	2423968	79.08%	4.580%
7	10.076	9.954	10.207	BB	217254	2502134	81.63%	4.728%
8	11.523	11.490	11.630	BB	212464	2538981	82.83%	4.797%
9	11.837	11.780	11.909	BV	273377	3065342	100.00%	5.792%
10	12.836	12.740	12.914	BV	207758	2516481	82.09%	4.755%
11	13.282	13.124	13.380	BB	187624	2292057	74.77%	4.331%
12	13.450	13.390	13.530	BB	205790	2487084	81.14%	4.699%
13	14.037	14.005	14.135	VB	204963	2500099	81.56%	4.724%
14	15.143	15.040	15.250	BB	192960	2546031	83.06%	4.811%
15	16.166	16.100	16.244	BB	183897	2506111	81.76%	4.735%
16	17.117	17.039	17.184	BB	181343	2484149	81.04%	4.694%
17	18.006	17.920	18.089	PB	180967	2524715	82.36%	4.770%
18	18.841	18.800	18.929	BB	169128	2495668	81.42%	4.715%
19	19.625	19.590	19.705	BV	150198	2289337	74.68%	4.326%
20	20.366	20.320	20.454	BV	129990	2142075	69.88%	4.047%
21	21.096	21.040	21.212	BV	103113	1952018	63.68%	3.688%
22	21.988	21.919	22.127	VV	70397	1822886	59.47%	3.444%
Sum of corrected areas:							52926375	

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

Continuing Calibration Report for SequenceID : FE060325AL

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

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

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

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

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

Instrument :
 FID_E
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

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

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.837	3069951	18.891 ug/ml
Spiked Amount 50.000		Recovery =	37.78%
12) S 1-chlorooctadecane (S...	13.281	2315546	19.532 ug/ml
Spiked Amount 50.000		Recovery =	39.06%
Target Compounds			
1) T n-Nonane (C9)	3.183	2171005	16.063 ug/ml
2) T n-Decane (C10)	4.447	2251031	16.658 ug/ml
3) T A~Naphthalene (C11.7)	6.162	2534339	17.634 ug/ml
4) T n-Dodecane (C12)	6.629	2376037	17.419 ug/ml
5) T A~2-methylnaphthalene...	7.264	2500227	18.025 ug/ml
6) T n-Tetradecane (C14)	8.463	2423030	17.955 ug/ml
7) T n-Hexadecane (C16)	10.076	2513012	18.624 ug/ml
8) T n-Octadecane (C18)	11.523	2549604	18.934 ug/ml
10) T n-Eicosane (C20)	12.835	2525176	19.213 ug/ml
11) T n-Heneicosane (C21)	13.449	2497500	19.264 ug/ml
13) T n-Docosane (C22)	14.037	2506328	19.646 ug/ml
14) T n-Tetracosane (C24)	15.142	2523628	20.170 ug/ml
15) T n-Hexacosane (C26)	16.165	2515878	20.546 ug/ml
16) T n-Octacosane (C28)	17.117	2489923	20.482 ug/ml
17) T n-Tricontane (C30)	18.007	2531642	20.324 ug/ml
18) T n-Dotriacontane (C32)	18.840	2510220	20.073 ug/ml
19) T n-Tetratriacontane (C34)	19.625	2319201	19.469 ug/ml
20) T n-Hexatriacontane (C36)	20.366	2135575	18.444 ug/ml
21) T n-Octatriacontane (C38)	21.095	1966169	18.067 ug/ml
22) T n-Tetracontane (C40)	21.987	1895864	19.106 ug/ml

(f)=RT Delta > 1/2 Window

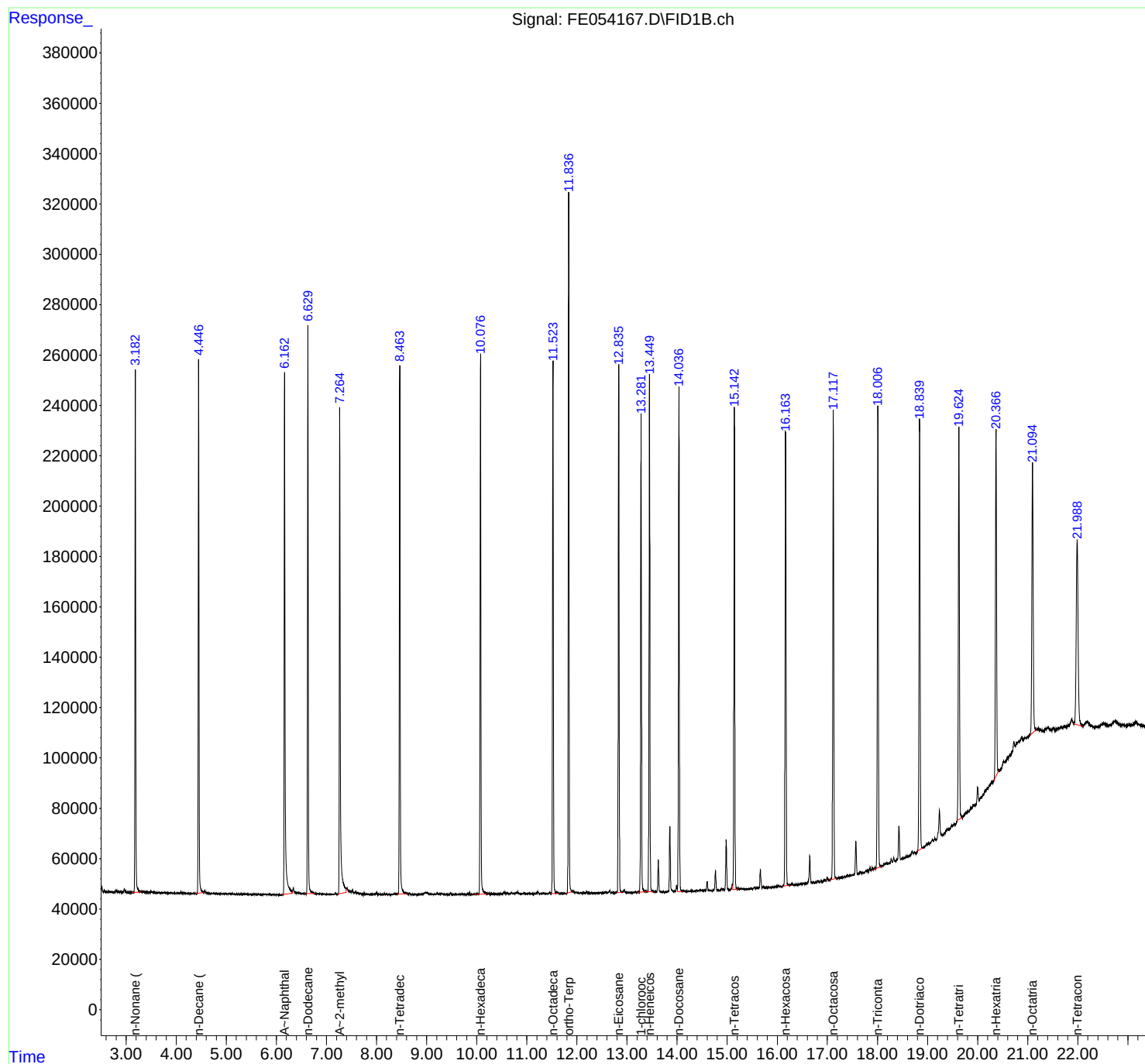
(m)=manual int.

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

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

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

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



rteres

Area Percent Report

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 051425.M
 Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.183	3.110	3.304	BB	207358	2171005	70.72%	4.085%
2	4.447	4.387	4.554	BV	211413	2251031	73.32%	4.236%
3	6.162	6.112	6.319	BV	206482	2534339	82.55%	4.769%
4	6.629	6.575	6.772	BB	225103	2376037	77.40%	4.471%
5	7.264	7.212	7.389	BV	192730	2500227	81.44%	4.704%
6	8.463	8.405	8.612	BB	209823	2423030	78.93%	4.559%
7	10.076	9.944	10.219	BB	213255	2513012	81.86%	4.729%
8	11.523	11.490	11.632	BB	211433	2549604	83.05%	4.797%
9	11.837	11.779	11.907	BV	277211	3069951	100.00%	5.776%
10	12.835	12.799	12.910	BV	210133	2525176	82.25%	4.751%
11	13.281	13.210	13.372	BB	189775	2315546	75.43%	4.357%
12	13.449	13.389	13.535	BB	205826	2497500	81.35%	4.699%
13	14.037	14.005	14.117	VB	199879	2506328	81.64%	4.716%
14	15.142	15.040	15.227	BB	191214	2548365	83.01%	4.795%
15	16.165	16.100	16.250	BB	180137	2515878	81.95%	4.734%
16	17.117	17.025	17.185	BB	186231	2489923	81.11%	4.685%
17	18.007	17.919	18.079	PB	183137	2531642	82.47%	4.764%
18	18.840	18.800	18.899	BB	170734	2510220	81.77%	4.723%
19	19.625	19.590	19.693	BV	156014	2319201	75.55%	4.364%
20	20.366	20.320	20.417	BB	137723	2135575	69.56%	4.018%
21	21.095	21.040	21.167	BV	106943	1966169	64.05%	3.700%
22	21.987	21.919	22.093	VV	73131	1895864	61.76%	3.567%
Sum of corrected areas:							53145622	

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



QC SAMPLE DATA

Manual Integration Report

Sequence:

FE051425AL

Instrument

FID_e

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

Manual Integration Report

Sequence:

FE060325AL

Instrument

FID_e

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

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE051425AL

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

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

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE051425AL

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

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

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE060325AL

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

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

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE060325AL

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

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

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE051425AL

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

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP24170,PP24175,PP24176,PP24177,PP24178
CCC Internal Standard/PEM 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	FE053806.D	14 May 2025 08:48		YP\AJ	Ok
2	I.BLK	I.BLK	FE053807.D	14 May 2025 09:18		YP\AJ	Ok
3	100 PPM ALIPHATIC H	100 PPM ALIPHATIC H	FE053808.D	14 May 2025 09:48		YP\AJ	Ok
4	50 PPM ALIPHATIC HC	50 PPM ALIPHATIC HC	FE053809.D	14 May 2025 10:18		YP\AJ	Ok
5	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE053810.D	14 May 2025 10:48		YP\AJ	Ok
6	10 PPM ALIPHATIC HC	10 PPM ALIPHATIC HC	FE053811.D	14 May 2025 11:18		YP\AJ	Ok
7	5 PPM ALIPHATIC HC	5 PPM ALIPHATIC HC	FE053812.D	14 May 2025 11:48		YP\AJ	Ok
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE053813.D	14 May 2025 12:18		YP\AJ	Ok
9	I.BLK	I.BLK	FE053814.D	14 May 2025 12:48		YP\AJ	Ok
10	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE053815.D	14 May 2025 13:18		YP\AJ	Ok
11	Q2019-01	MH-K	FE053816.D	14 May 2025 14:44		YP\AJ	Ok
12	Q2019-02	MH-K-EPH	FE053817.D	14 May 2025 15:13		YP\AJ	Ok
13	Q2020-01	TP-A	FE053818.D	14 May 2025 15:44		YP\AJ	Ok
14	Q2020-02	TP-A-EPH	FE053819.D	14 May 2025 16:14		YP\AJ	Ok
15	Q2022-02	COMP-1	FE053820.D	14 May 2025 16:44		YP\AJ	Ok
16	Q2022-03	COMP-1-EPH	FE053821.D	14 May 2025 17:14		YP\AJ	Ok
17	Q2022-04	COMP-2	FE053822.D	14 May 2025 18:04		YP\AJ	Ok
18	Q2022-05	COMP-2-EPH	FE053823.D	14 May 2025 18:34		YP\AJ	Ok

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE051425AL

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

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

M : Manual Integration

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE060325AL

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

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

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QC Batch ID # FE060325AL

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

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

M : Manual Integration



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 5/29/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 05/28/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:11
Out Date: 05/29/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135934

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
Q2135-01	1977	1	1.00	1.00	2.00	2.00	100.0	caluk
Q2136-01	OR-646-COMP-52	2	1.18	10.37	11.55	10.04	85.4	
Q2136-02	OR-646-VOC-52	3	1.15	10.30	11.45	9.45	80.6	
Q2136-03	OR-646-154	4	1.19	10.53	11.72	9.58	79.7	
Q2136-04	OR-646-155	5	1.19	10.00	11.19	8.97	77.8	
Q2137-01	MOO-25-0149	6	1.00	1.00	2.00	2.00	100.0	debris
Q2137-02	MOO-25-0149	7	1.00	1.00	2.00	2.00	100.0	debris
Q2138-01	SMALL-CONCRETE-PAD	8	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
Q2139-01	BELL-25-0010	9	1.00	1.00	2.00	2.00	100.0	debris
Q2139-02	BELL-25-0010	10	1.00	1.00	2.00	2.00	100.0	debris
Q2140-01	KMH5090-1-1	11	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2140-02	KMH5090-1-2	12	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2141-01	VNJ-215	13	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
Q2142-01	Y2309-0029-1-1	14	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2142-02	Y2309-0029-1-2	15	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2143-01	ELI-46-36-25-58-53	16	1.00	1.00	2.00	2.00	100.0	debris
Q2143-02	ELI-57-43-35-26	17	1.14	10.32	11.46	11.03	95.8	
Q2144-01	OILY-DEBRIS-COMP-A	18	1.00	1.00	2.00	2.00	100.0	debris
Q2144-02	OILY-DEBRIS-COMP-B	19	1.18	10.04	11.22	10.55	93.3	
Q2146-01	TP04-MHN-WC	20	1.15	9.93	11.08	9.08	79.9	
Q2146-02	TP04-MHN-VOC	21	1.19	10.53	11.72	10.27	86.2	
Q2146-03	TP04-MHN-EPH	22	1.12	10.87	11.99	8.21	65.2	
Q2147-01	WASTE	23	1.18	10.78	11.96	10.00	81.8	
Q2147-02	VOC	24	1.14	10.53	11.67	9.82	82.4	
Q2147-03	1	25	1.18	10.71	11.89	10.41	86.2	
Q2147-04	2	26	1.17	10.64	11.81	10.23	85.2	
Q2147-05	3	27	1.13	10.66	11.79	10.33	86.3	
Q2147-06	4	28	1.16	10.68	11.84	10.26	85.2	



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 5/29/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 05/28/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:11
Out Date: 05/29/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135934

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
Q2147-07	5	29	1.18	9.87	11.05	9.58	85.1	
Q2149-01	FILTER-CAKE	30	1.15	10.37	11.52	7.32	59.5	

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

WORKLIST(Hardcopy Internal Chain)

87133934

WorkList Name : %1-052825

WorkList ID : 199773

Department : Wet-Chemistry

Date : 05-28-2025 08:19:19

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2135-01	1977	Solid	Percent Solids	Cool 4 deg C	ATCE02	L31	05/28/2025	Chemtech -SO
Q2136-01	OR-646-COMP-52	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/27/2025	Chemtech -SO
Q2136-02	OR-646-VOC-52	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/27/2025	Chemtech -SO
Q2136-03	OR-646-154	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/27/2025	Chemtech -SO
Q2136-04	OR-646-155	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/27/2025	Chemtech -SO
Q2137-01	MOO-25-0149	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/27/2025	Chemtech -SO
Q2137-02	MOO-25-0149	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/28/2025	Chemtech -SO
Q2138-01	SMALL-CONCRETE-PAD	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/28/2025	Chemtech -SO
Q2139-01	BELL-25-0010	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/28/2025	Chemtech -SO
Q2139-02	BELL-25-0010	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/28/2025	Chemtech -SO
Q2140-01	KMH5090-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/28/2025	Chemtech -SO
Q2140-02	KMH5090-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/28/2025	Chemtech -SO
Q2141-01	VNJ-215	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/28/2025	Chemtech -SO
Q2142-01	Y2309-0029-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/28/2025	Chemtech -SO
Q2142-02	Y2309-0029-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/28/2025	Chemtech -SO
Q2143-01	ELI-46-36-25-58-53	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/28/2025	Chemtech -SO
Q2143-02	ELI-57-43-35-26	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/28/2025	Chemtech -SO
Q2144-01	OILY-DEBRIS-COMP-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/28/2025	Chemtech -SO
Q2144-02	OILY-DEBRIS-COMP-B	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/28/2025	Chemtech -SO
Q2146-01	TP04-MHN-WC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/28/2025	Chemtech -SO
Q2146-02	TP04-MHN-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/28/2025	Chemtech -SO

Date/Time 05/28/25 13:30

Raw Sample Received by: SQ WC

Raw Sample Relinquished by: WSM

Date/Time 05/28/25 17:15

Raw Sample Received by: JG Son

Raw Sample Relinquished by: JG Son

WORKLIST(Hardcopy Internal Chain)

17 135934

WorkList Name : %1-052825

WorkList ID : 189773

Department : Wet-Chemistry

Date : 05-28-2025 08:19:19

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2146-03	TP04-MHN-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/28/2025	Chemtech -SO
Q2147-01	WASTE	Solid	Percent Solids	Cool 4 deg C	SCIA01	L41	05/27/2025	Chemtech -SO
Q2147-02	VOC	Solid	Percent Solids	Cool 4 deg C	SCIA01	L41	05/27/2025	Chemtech -SO
Q2147-03	1	Solid	Percent Solids	Cool 4 deg C	SCIA01	L41	05/27/2025	Chemtech -SO
Q2147-04	2	Solid	Percent Solids	Cool 4 deg C	SCIA01	L41	05/27/2025	Chemtech -SO
Q2147-05	3	Solid	Percent Solids	Cool 4 deg C	SCIA01	L41	05/27/2025	Chemtech -SO
Q2147-06	4	Solid	Percent Solids	Cool 4 deg C	SCIA01	L41	05/27/2025	Chemtech -SO
Q2147-07	5	Solid	Percent Solids	Cool 4 deg C	SCIA01	L41	05/27/2025	Chemtech -SO
Q2149-01	FILTER-CAKE	Solid	Percent Solids	Cool 4 deg C	ARAM01	L31	05/28/2025	Chemtech -SO

Date/Time 05/28/25 13:30

Raw Sample Received by: SA 6001

Raw Sample Relinquished by: cfsa

Date/Time 05/28/25 17:15

Raw Sample Received by: cfsa

Raw Sample Relinquished by: cfsa

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

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	100 PPM	PP24573
Surrogate	1.0ML	100 PPM	PP24591
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
MeCl2/Acetone/1:1	N/A	EP2612
Baked Na2SO4	N/A	EP2620
Sand	N/A	E2865
Methylene Chloride	N/A	E3939
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

N/A

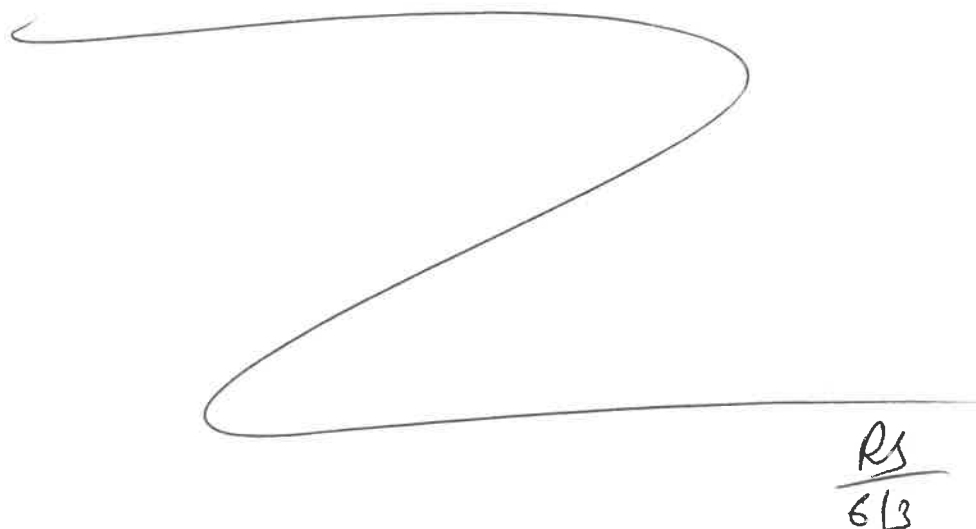
KD Bath ID:	N/A	Envap ID:	NEVAP-02
KD Bath Temperature:	N/A	Envap Temperature:	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
6/3/25	RS(Ext 66)	Y.P. PESTIPU
13:30	Preparation Group	Analysis Group

Analytical Method: MNJDEP-EPH-7

Concentration Date: 06/03/2025

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



WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q2147 WorkList ID : 189864 Department : Extraction Date : 06-03-2025 09:18:02

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

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

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

Prep Standard - Chemical Standard Summary

Order ID : Q2147

Test : EPH_F2

Prepbatch ID : PB168239,

Sequence ID/Qc Batch ID: FE060325AL,

Standard ID :

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

Chemical ID :

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

Extractions STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2017	1:1 ACETONE/METHYLENE CHLORIDE	EP2612	05/09/2025	11/05/2025	RUPESHKUMAR SHAH	None	None	Riteshkumar Patel
05/09/2025								

FROM 8000.00000ml of E3930 + 8000.00000ml of E3932 = Final Quantity: 16000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3923	Baked Sodium Sulfate	EP2620	05/30/2025	07/01/2025	RUPESHKUMAR SHAH	Extraction_SC ALE_2	None	Riteshkumar Patel
(EX-SC-2)								

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

Pest/Pcb STANDARD PREPARATION LOG

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

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

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

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

Pest/Pcb STANDARD PREPARATION LOG

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

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

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

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

Pest/Pcb STANDARD PREPARATION LOG

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

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

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

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

Pest/Pcb STANDARD PREPARATION LOG

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

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1330	100 PPM NJEPH Spike Solution	PP24573	05/14/2025	11/14/2025	Abdul Mirza	None	None	Yogesh Patel
								05/22/2025

FROM 5.00000ml of P13710 + 5.00000ml of P13711 + 5.00000ml of P13712 + 5.00000ml of P13713 + 5.00000ml of P13714 + 5.00000ml of P13716 + 5.00000ml of P13822 + 5.00000ml of P13825 + 5.00000ml of P13827 + 5.00000ml of P13902 + 5.00000ml of P13904 + 5.00000ml of P13914 + 5.00000ml of P13922 + 5.00000ml of P13924 + 5.00000ml of P13978 + 5.00000ml of P13979 + 5.00000ml of P13980 + 5.00000ml of P13981 + 5.00000ml of P13988 + 5.00000ml of P13989 = Final Quantity: 100.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1339	100 PPM NJEPH Surrogate Spike	PP24591	05/19/2025	11/05/2025	Abdul Mirza	None	None	Yogesh Patel 05/22/2025
<u>FROM</u>	1.00000ml of P13601 + 1.00000ml of P13603 + 1.00000ml of P13676 + 1.00000ml of P13677 + 196.00000ml of E3932 = Final Quantity: 200.000 ml							

CHEMICAL RECEIPT LOG BOOK

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

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

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A2862010	11/22/2025	05/22/2025 / RUPESH	02/28/2025 / RUPESH	E3939

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

CHEMICAL RECEIPT LOG BOOK

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

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

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

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

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

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

CHEMICAL RECEIPT LOG BOOK

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

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

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

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

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

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

CHEMICAL RECEIPT LOG BOOK

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

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

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

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

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	11/14/2025	05/14/2025 / Abdul	03/06/2025 / yogesh	P13902

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

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

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

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0220449	11/14/2025	05/14/2025 / Abdul	04/24/2025 / Rahul	P13979

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

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

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

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

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

Sand
Purified
Washed and Ignited



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

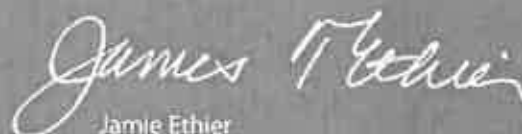
Certificate of Analysis

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

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

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

E 2865


Jamie Ethier
Vice President Global Quality

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

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



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

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

CERTIFICATE OF ANALYSIS

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

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

COMMENTS

QC: PhC Irma Belmares

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

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

RC-02-01, Ed. 3

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

avantor



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

Certificate of Analysis

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

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

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

E3930

J. Croak

Jamie Croak
Director Quality Operations, Bioscience Production

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

Avantor Performance Materials, LLC

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

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

Revision No.: 0

Certificate of Analysis

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

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

RS

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3932

Jamie Croak
Director Quality Operations, Bioscience Production

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

Avantor Performance Materials LLC

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



Material No.: 9266-A4
Batch No.: 25A2862010
Manufactured Date: 2024-12-18
Expiration Date: 2026-03-19
Revision No.: 0

Certificate of Analysis

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

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

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

E3939

Jamie Croak
Director Quality Operations, Bioscience Production

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

Avantor Performance Materials, LLC

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



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Calibration Standard

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

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

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

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

P12361
↓
P12370 } Y.P.
031/6/23

CERTIFIED VALUES

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

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

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

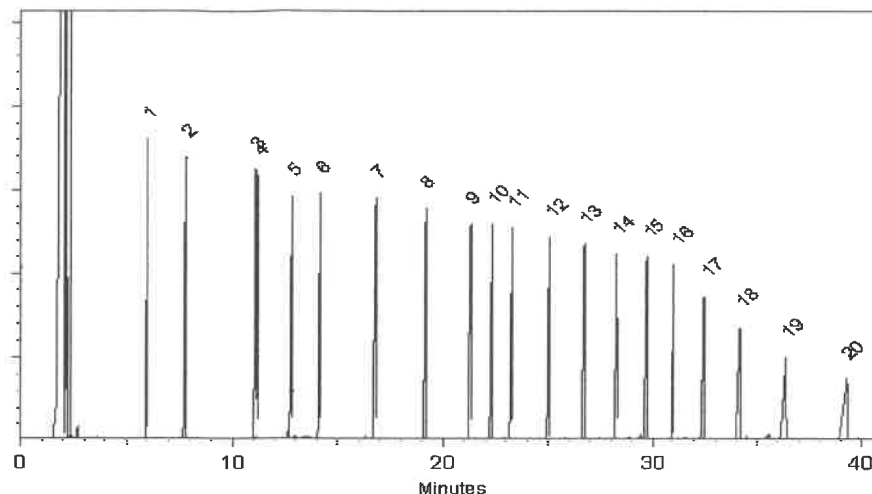
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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


Morgan Craighead - Mix Technician

Date Mixed: 10-Oct-2022 Balance: 1128360905


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 20-Oct-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

P12960
↓
P12991 } Y.P.
12/21/2023

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

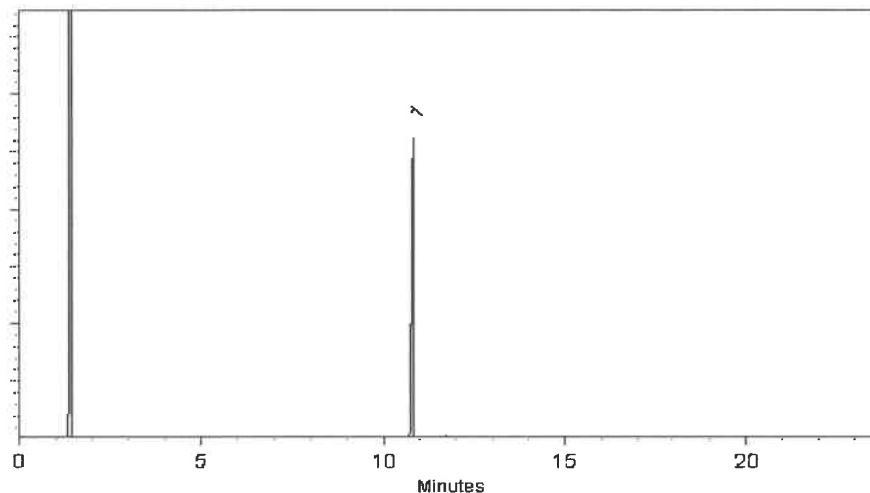
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Peter Robbins - Operations Technician I

Date Mixed: 02-Dec-2023

Balance Serial # B345965662

Christie Mills - Operations Lead Tech - ARM QC

Date Passed: 08-Dec-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

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

Manufacturing Notes:

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

Handling Notes:

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



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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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

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

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CAS # 75-09-2
Purity 99%

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Rtx-5 (cat.#10223)

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hydrogen-constant pressure 10 psi.

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

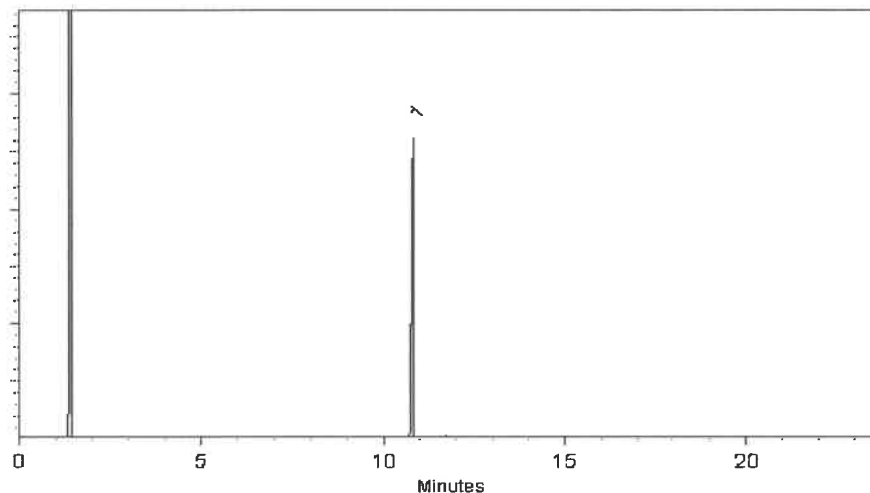
FID

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:

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- 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%.

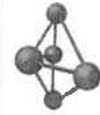
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

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.



CERTIFIED WEIGHT REPORT

Part Number: 95999

Lot Number: 040524

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

Expiration Date: 040534

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 1000

NIST Test ID#: 6UTB

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

CAUTION: Sonicate Before Use

Solvent(s):
Cyclohexane

Lot#
28930

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

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

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

Compound		Part Number	(RM#)	Lot Number	DIL Factor	Initial Vol. (mL)	Initial Conc (µg/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Pipette	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)		
																CAS#	OSHA PEL (TWA)	LD50
1.	2-Methylnaphthalene	(0214)	MKBF3783V	NA	NA	NA	NA	1000	97	0.2	NA	0.02579	0.02594	1005.7	5.7	91-57-6	N/A	or-rat 1630mg/kg
2.	Naphthalene	(0222)	MKB28680V	NA	NA	NA	NA	1000	100	0.2	NA	0.02502	0.02511	1003.7	5.7	91-20-3	10 ppm (50mg/m ³ /8H)	or-rat 490mg/kg
3.	n-Nonane	95708	120222	1.00	25.00	1000.7	1000	1000	NA	0.013	NA	NA	NA	1000.0	4.2	111-84-2	200 ppm (1050mg/m ³ /8H)	ivn-mus 218mg/kg
4.	n-Decane	95708	120222	1.00	25.00	1000.9	1000	1000	NA	0.013	NA	NA	NA	1000.2	4.2	124-18-5	N/A	N/A
5.	n-Dodecane	95708	120222	1.00	25.00	1000.7	1000	1000	NA	0.013	NA	NA	NA	1000.0	4.2	112-40-3	N/A	ivn-mus 3494mg/kg
6.	n-Tetradecane	95708	120222	1.00	25.00	1002.1	1000	1000	NA	0.013	NA	NA	NA	1001.3	4.2	629-59-4	N/A	N/A
7.	n-Hexadecane	95708	120222	1.00	25.00	1000.5	1000	1000	NA	0.013	NA	NA	NA	999.7	4.2	544-76-3	N/A	N/A
8.	n-Octadecane	95708	120222	1.00	25.00	1001.0	1000	1000	NA	0.013	NA	NA	NA	1000.3	4.1	583-45-3	N/A	N/A
9.	n-Eicosane	95708	120222	1.00	25.00	1001.0	1000	1000	NA	0.013	NA	NA	NA	1000.3	4.2	112-95-8	N/A	N/A
10.	n-Henicosane	95708	120222	1.00	25.00	1002.4	1000	1000	NA	0.013	NA	NA	NA	1001.6	4.2	629-94-7	N/A	N/A
11.	n-Docosane	95708	120222	1.00	25.00	1001.9	1000	1000	NA	0.013	NA	NA	NA	1001.2	4.2	629-97-0	N/A	N/A
12.	n-Tetracosane	95708	120222	1.00	25.00	1000.8	1000	1000	NA	0.013	NA	NA	NA	1000.1	4.2	646-31-1	N/A	N/A
13.	n-Hexacosane	95708	120222	1.00	25.00	1001.2	1000	1000	NA	0.013	NA	NA	NA	1000.4	4.2	630-01-3	N/A	N/A
14.	n-Octacosane	95708	120222	1.00	25.00	1000.5	1000	1000	NA	0.013	NA	NA	NA	999.8	4.2	630-02-4	N/A	N/A
15.	n-Triacontane	95708	120222	1.00	25.00	1000.5	1000	1000	NA	0.013	NA	NA	NA	999.8	4.2	638-68-6	N/A	N/A
16.	n-Dotriacontane	95708	120222	1.00	25.00	1000.5	1000	1000	NA	0.013	NA	NA	NA	999.8	4.3	544-85-4	N/A	ivn-mus 100mg/kg
17.	n-Tetracontane	95708	120222	1.00	25.00	1000.4	1000	1000	NA	0.013	NA	NA	NA	999.7	4.2	14167-59-0	N/A	N/A
18.	n-Hexatriacontane	95708	120222	1.00	25.00	1001.5	1000	1000	NA	0.013	NA	NA	NA	1000.8	4.2	630-06-8	N/A	N/A
19.	n-Octatriacontane	95708	120222	1.00	25.00	1000.3	1000	1000	NA	0.013	NA	NA	NA	999.6	4.3	7184-86-6	N/A	N/A
20.	n-Tetracontane	95708	120222	1.00	25.00	1000.6	1000	1000	NA	0.013	NA	NA	NA	999.9	4.3	4181-95-7	N/A	N/A

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



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 1-Chlorooctadecane Standard

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

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

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

Ship: Ambient

P13595
↓
P13624 } Y.P.
10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

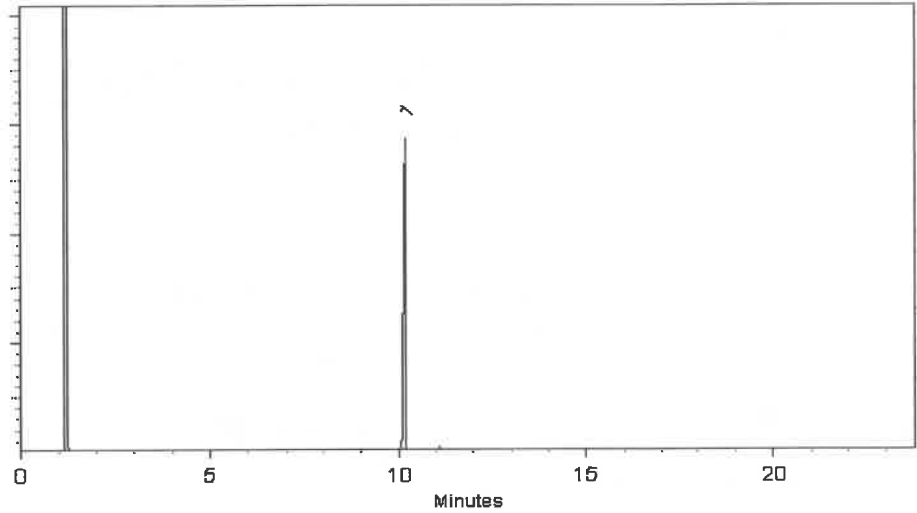
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Stacey Wanner - Operations Technician I

Date Mixed: 28-Jun-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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

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

Description : 1-Chlorooctadecane Standard

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

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

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

Ship: Ambient

P13595
↓
P13624 } Y.P.
10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

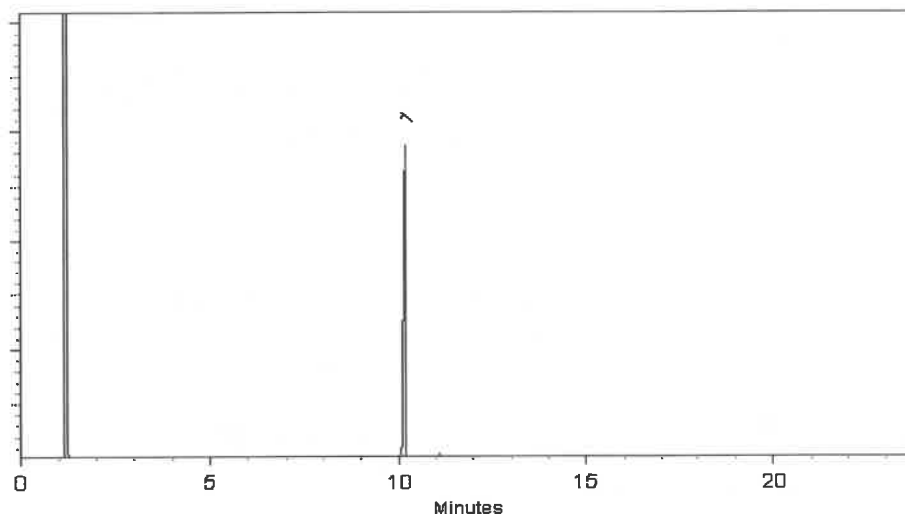
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Stacey Wanner - Operations Technician I

Date Mixed: 28-Jun-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

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

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

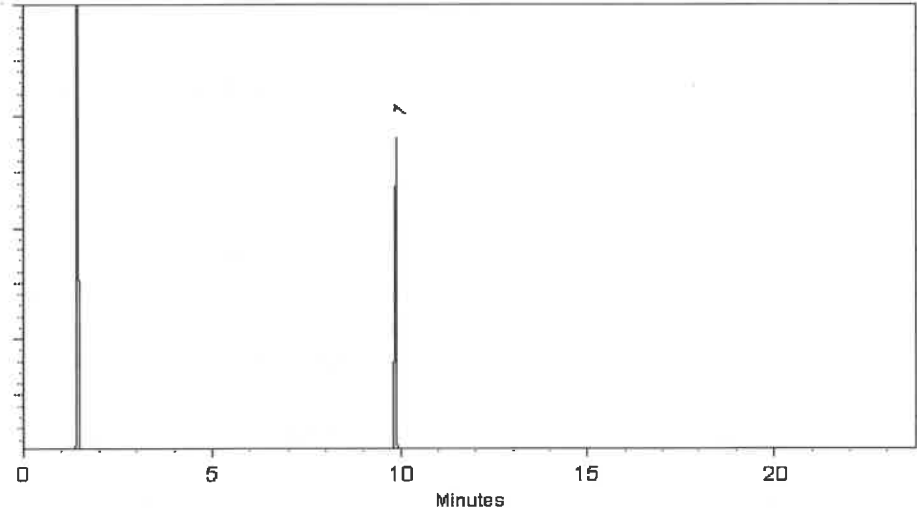
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

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

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

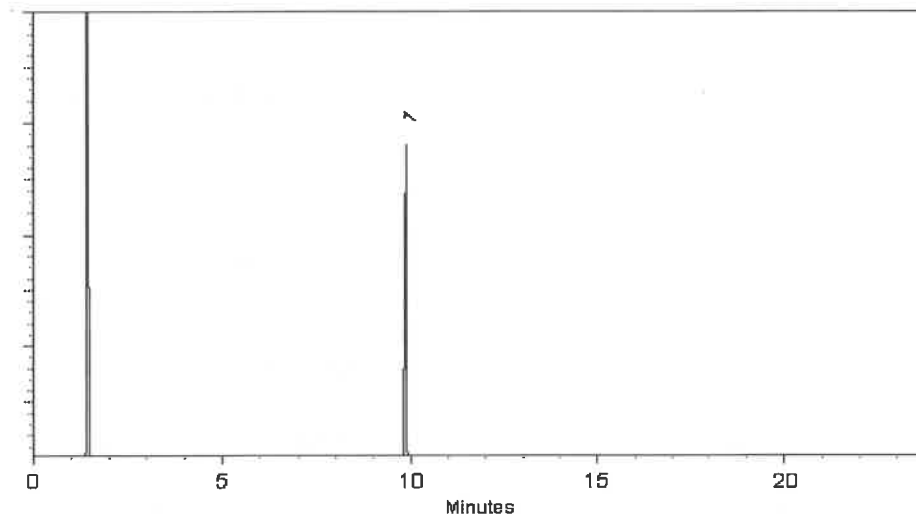
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

Manufacturing Notes:

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

Handling Notes:

- 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:

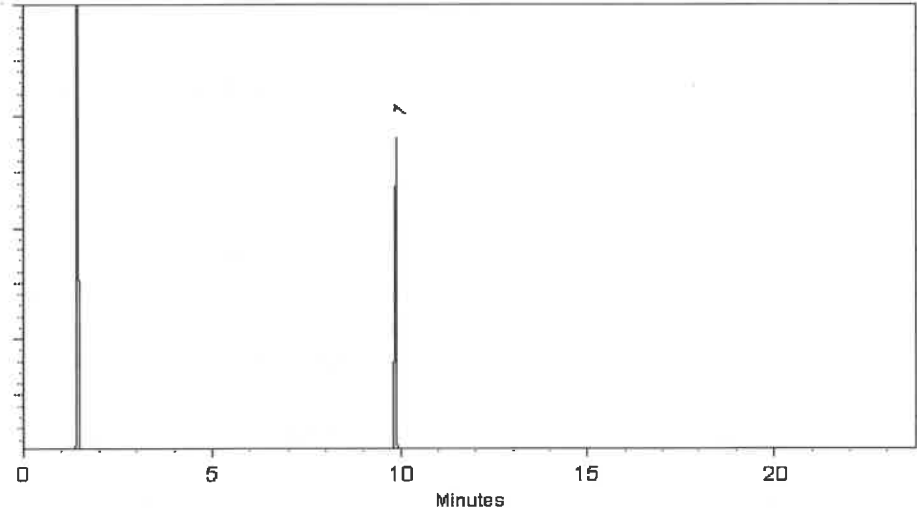
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

Manufacturing Notes:

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Handling Notes:

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

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

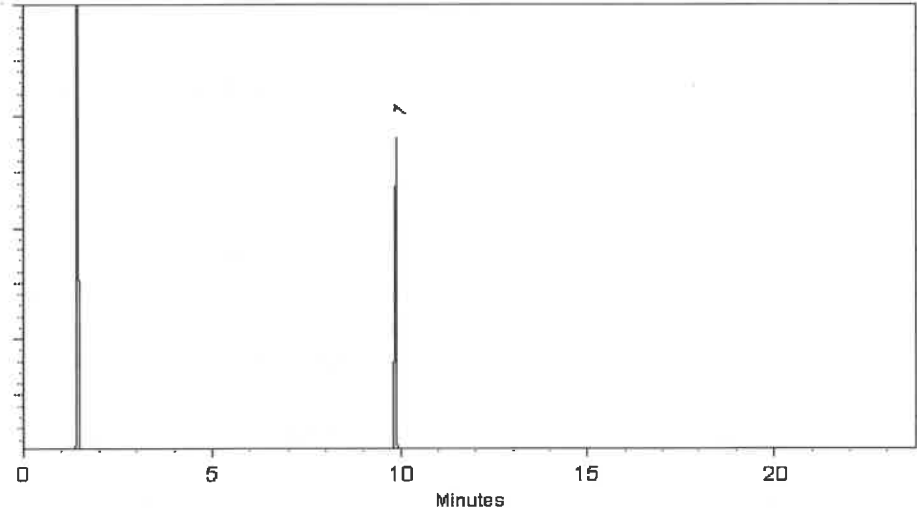
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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- Purity 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.
- 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.: A0211254

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : April 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13408
↓
P13716 } Y.P.
10/26/24

CERTIFIED VALUES

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



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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

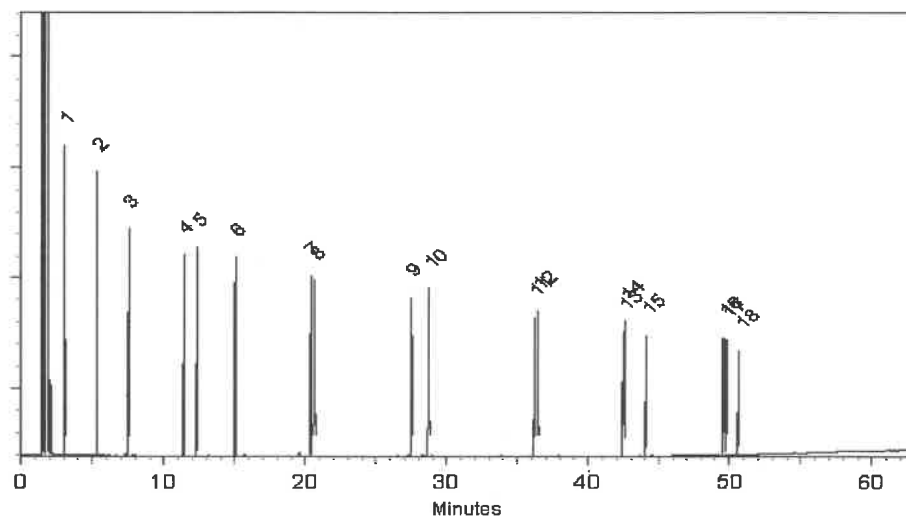
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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

Michael Maye
Michael Maye - Operations Tech I

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

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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Catalog No. : 30543

Lot No.: A0211254

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : April 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13408
↓
P13716 } Y.P.
10/26/24

CERTIFIED VALUES

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

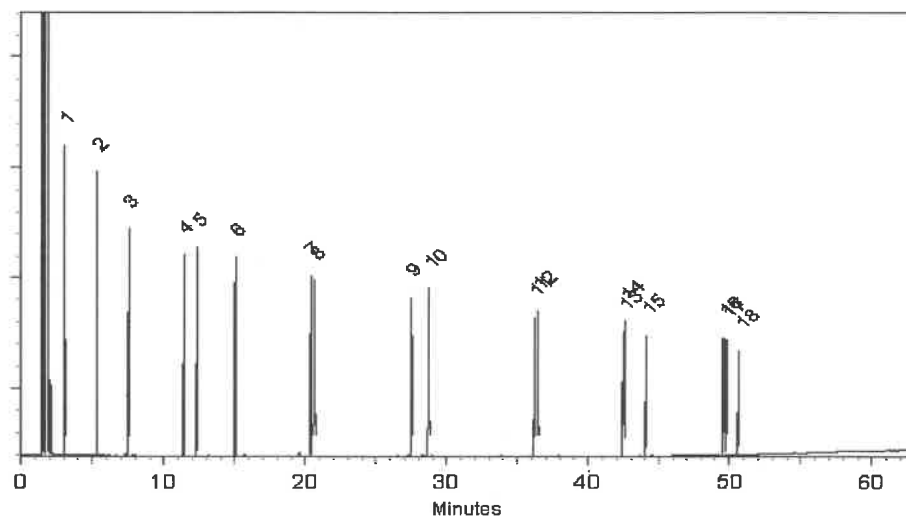
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240105ECS	99%	200.8	µg/mL	+/- 9.0474

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

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

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rbx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.
Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)
Inj. Temp:
250°C
Det. Temp:
330°C
Det. Type:
FID
Split Vent:
20 ml/min.
Inj. Vol
1µl



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Michael Maye
Michael Maye - Operations Tech I

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

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-May-2024

Manufactured under Restek's ISO 9001:2015
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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Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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Handling Notes:

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chromatographic plus



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Catalog No. : 30543

Lot No.: A0211254

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : April 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13408
↓
P13716 } Y.P.
10/26/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	200.0 µg/mL	+/- 9.0114
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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.)

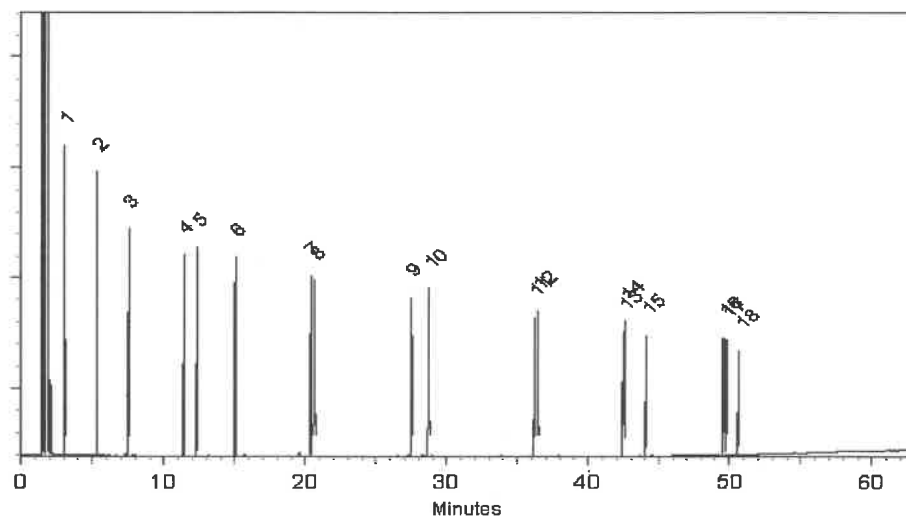
Inj. Temp:
250°C

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.
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- Purity of isomeric compounds is reported as the sum of the isomers.
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Certified Uncertainty Value Notes:

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

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Manufacturing Notes:

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Handling Notes:

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

Description : NJEPH Aromatics Matrix Spike Mix

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

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

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

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

P13408
↓
P13716 } Y.P.
10/26/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	200.0 µg/mL	+/- 9.0114
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7	Phenanthrene	85-01-8	MKCS5188	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCR0570	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCK2592	99%	201.2 µg/mL	+/- 9.0655
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18	Benzo(g,h,i)perylene	191-24-2	RP240105ECS	99%	200.8	µg/mL	+/- 9.0474

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

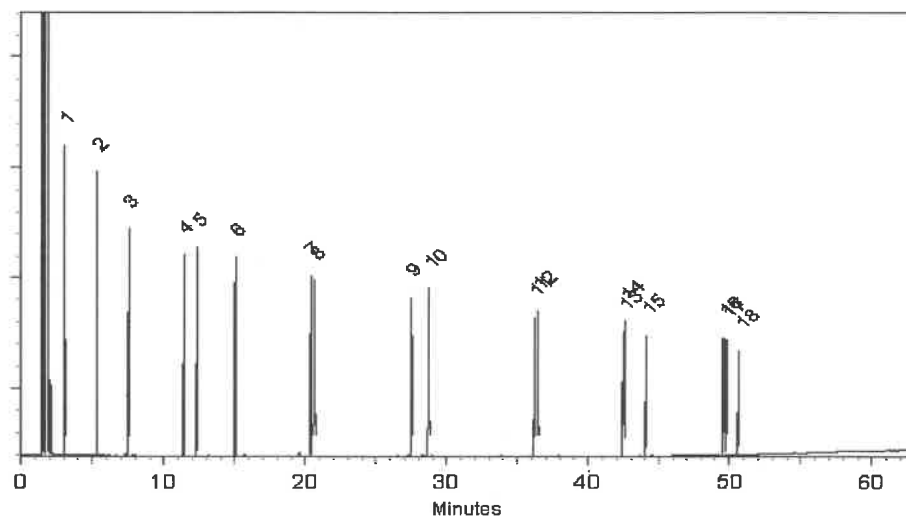
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Michael Maye
Michael Maye - Operations Tech I

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

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Certified Uncertainty Value Notes:

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

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

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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.



110 Benner Circle
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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543

Lot No.: A0211254

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : April 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13408
↓
P13716 } Y.P.
10/26/24

CERTIFIED VALUES

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

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

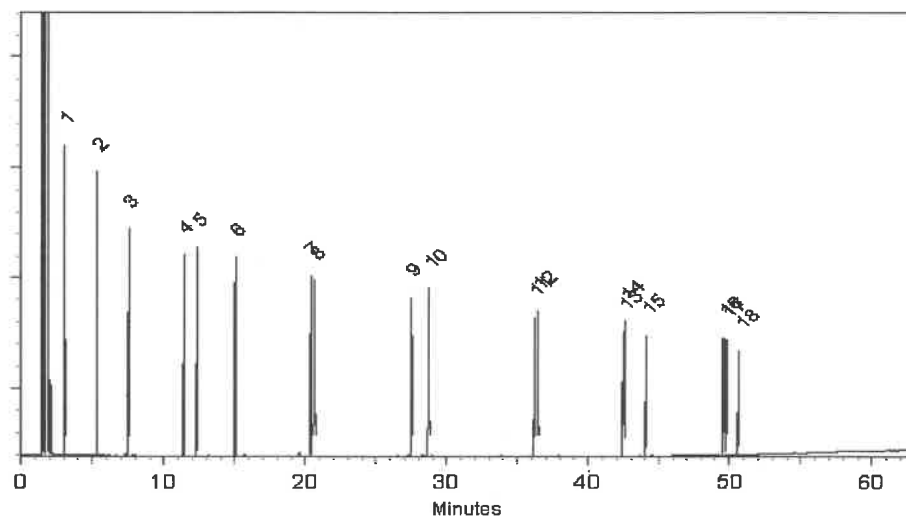
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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

Michael Maye
Michael Maye - Operations Tech I

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

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Catalog No. : 30543

Lot No.: A0211254

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : April 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13408
↓
P13716 } Y.P.
10/26/24

CERTIFIED VALUES

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

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

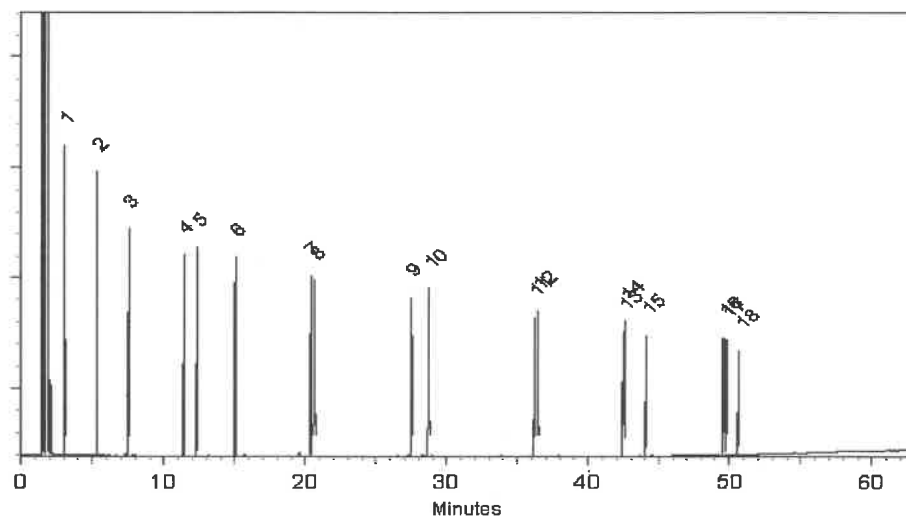
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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

Michael Maye
Michael Maye - Operations Tech I

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

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

P13800
↓
P13829 } YIP
12/09/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

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

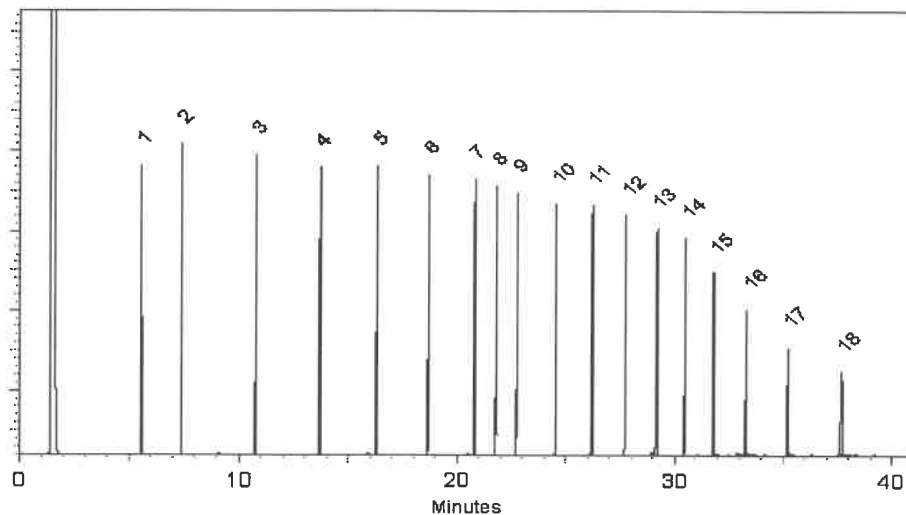
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Penelope S. Riglin
Penelope Riglin - Operations Tech I

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

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

P13800
↓
P13829 } YIP
12/09/24

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

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

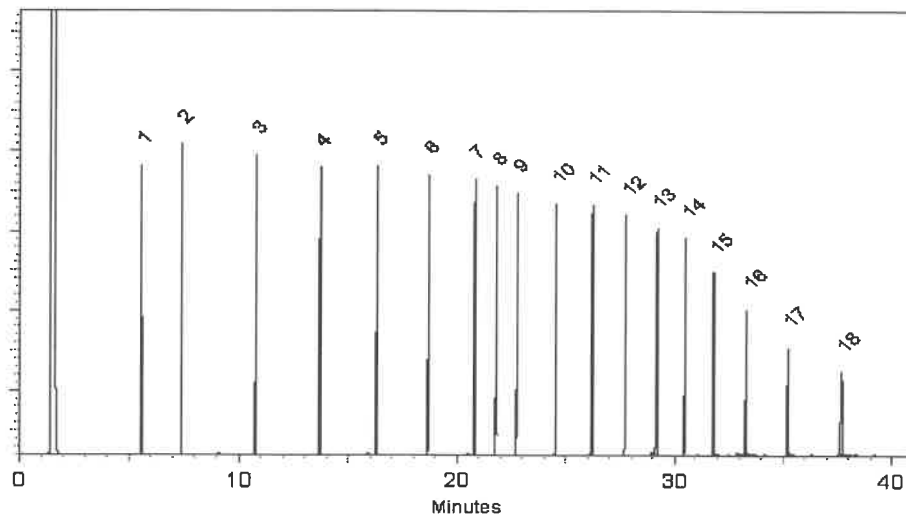
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Penelope S. Riglin
Penelope Riglin - Operations Tech I

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

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

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.)

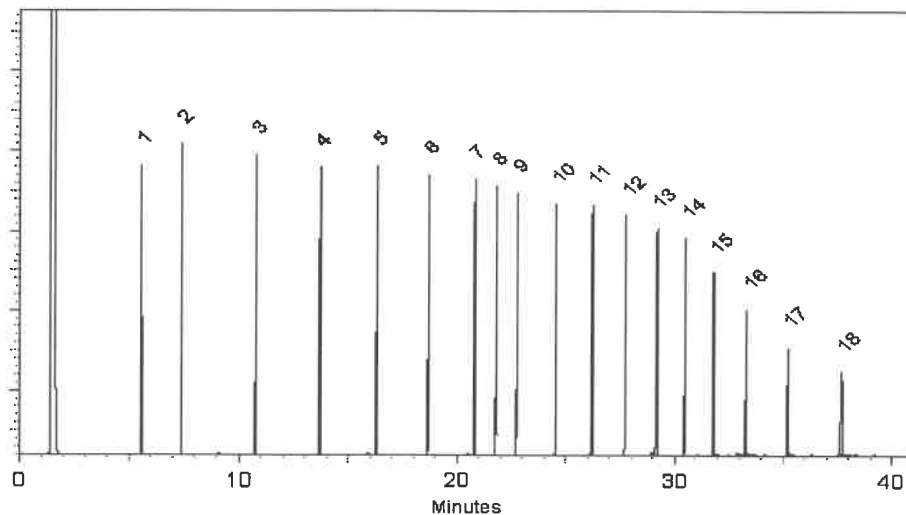
Inj. Temp:
250°C

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

P13896
↓
P13906 } Y.P.
03/06/25

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

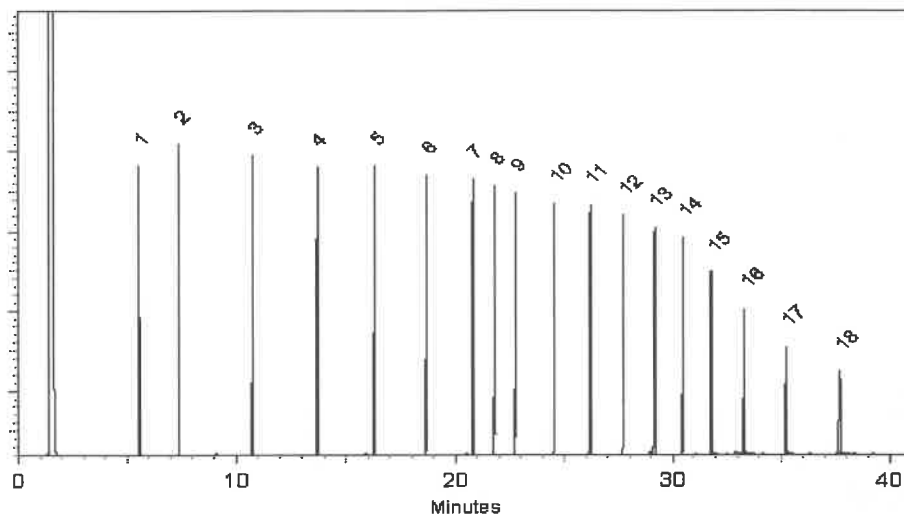
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Penelope B. Riglin
Penelope Riglin - Operations Tech I

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

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : NJEPH Aliphatics Matrix Spike Mix

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

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

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

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

P13896
↓
P13906 } Y.P.
03/06/25

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

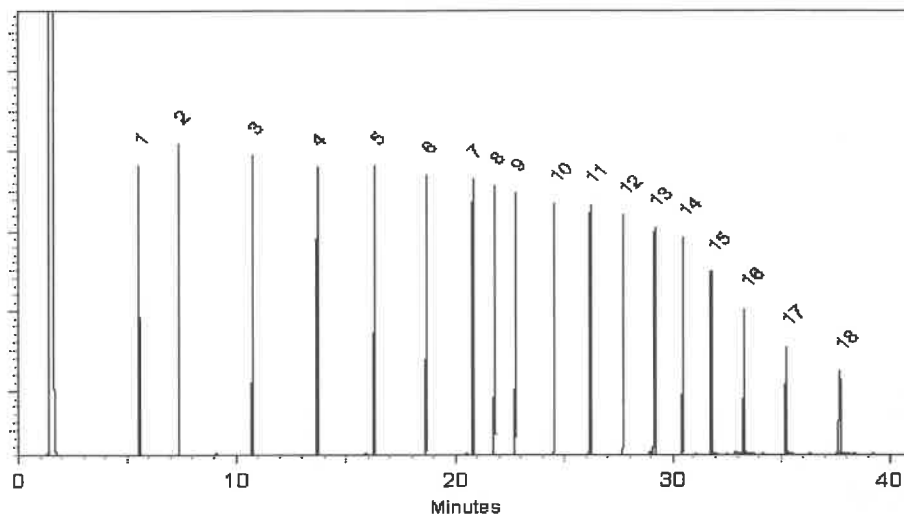
Inj. Temp:
250°C

Det. Temp:
330°C

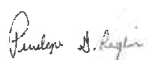
Det. Type:
FID

Split Vent:
2 ml/min.

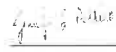
Inj. Vol
1µl



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


Penelope Riglin - Operations Tech I

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


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0220449

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

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

Expiration Date : January 31, 2032 **Storage:** 10°C or colder

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

P13909
↓
P1395 } Y.P.
03106/25

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	201.3 µg/mL	+/- 5.2012
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.7 µg/mL	+/- 5.2098
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	201.3 µg/mL	+/- 5.2012
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.3 µg/mL	+/- 5.1753
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1839
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.1 µg/mL	+/- 5.1704
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.7 µg/mL	+/- 5.1839
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.3 µg/mL	+/- 5.1753
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	201.3 µg/mL	+/- 5.2012
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	201.0 µg/mL	+/- 5.1926
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.3 µg/mL	+/- 5.1753
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.2 µg/mL	+/- 5.1984
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	201.7 µg/mL	+/- 5.2098
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	201.3 µg/mL	+/- 5.2012
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	201.7 µg/mL	+/- 5.2098
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	201.6 µg/mL	+/- 5.2081

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

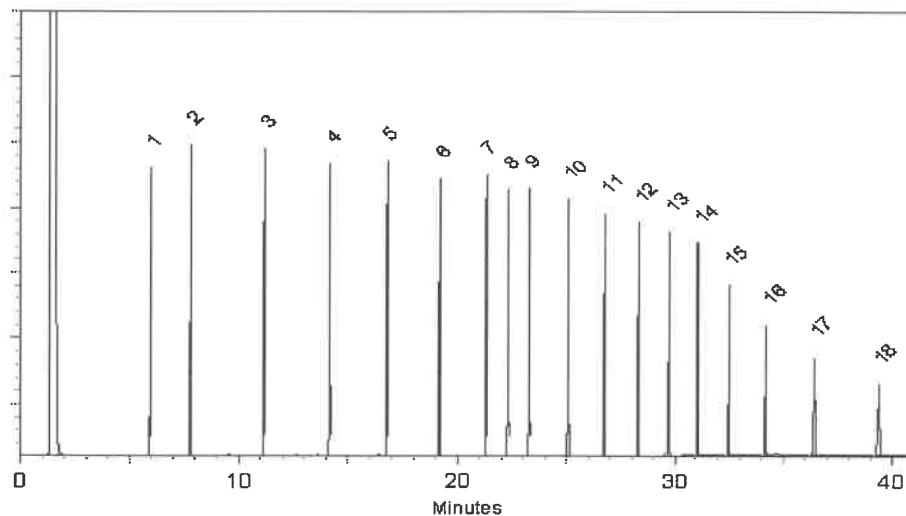
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Brandon Reish
Brandon Reish - Operations Technician III

Date Mixed: 23-Dec-2024 **Balance Serial #** C322230531

Dillan Murphy
Dillan Murphy - Operations Technician I

Date Passed: 27-Dec-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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Fax: 1-814-353-1309

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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.: A0220580

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : November 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13916 } Y.P.
↓
P13935 } 08/06/25

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-39	98%	201.9 µg/mL	+/- 9.0961
2	Naphthalene	91-20-3	STBL1057	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	RP241029RSR	98%	201.9 µg/mL	+/- 9.0961
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.9 µg/mL	+/- 9.0961
7	Phenanthrene	85-01-8	MKCT3391	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	MKCW9141	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCL8032	99%	201.6 µg/mL	+/- 9.0835
11	Benz(a)anthracene	56-55-3	I220012022BAA	99%	202.0 µg/mL	+/- 9.1015
12	Chrysene	218-01-9	RP240719RSR	99%	202.0 µg/mL	+/- 9.1015
13	Benzo(b)fluoranthene	205-99-2	SBS-BBF-FINAL-2	99%	202.0 µg/mL	+/- 9.1015
14	Benzo(k)fluoranthene	207-08-9	012022K	98%	201.5 µg/mL	+/- 9.0784
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

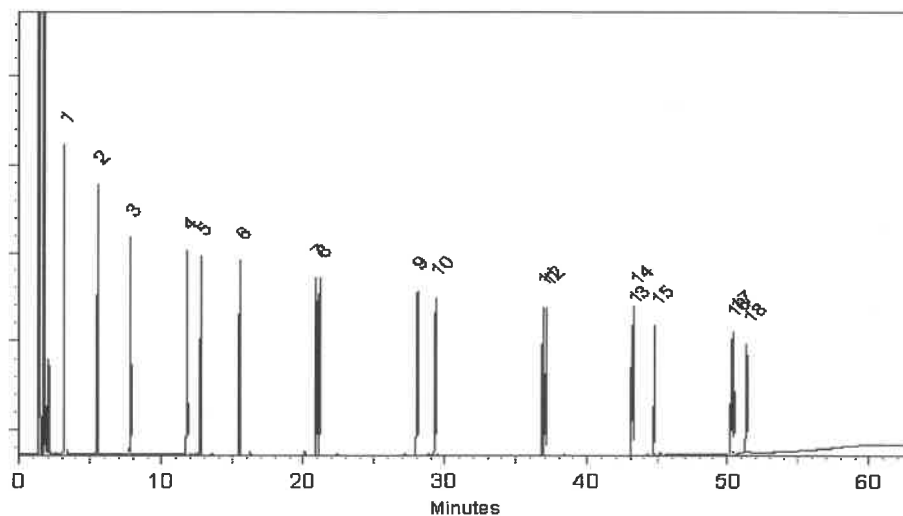
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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

VenKelley
Ven Kelley - Operations Tech I

Date Mixed: 30-Dec-2024 **Balance Serial #** 1128360905

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 03-Jan-2025

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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

Catalog No. : 30543

Lot No.: A0220580

Description : NJEPH Aromatics Matrix Spike Mix

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

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : November 30, 2030

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Ship: Ambient

P13916 } Y.P.
↓
P13935 } 08/06/25

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-39	98%	201.9 µg/mL	+/- 9.0961
2	Naphthalene	91-20-3	STBL1057	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	RP241029RSR	98%	201.9 µg/mL	+/- 9.0961
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.9 µg/mL	+/- 9.0961
7	Phenanthrene	85-01-8	MKCT3391	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	MKCW9141	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCL8032	99%	201.6 µg/mL	+/- 9.0835
11	Benz(a)anthracene	56-55-3	I220012022BAA	99%	202.0 µg/mL	+/- 9.1015
12	Chrysene	218-01-9	RP240719RSR	99%	202.0 µg/mL	+/- 9.1015
13	Benzo(b)fluoranthene	205-99-2	SBS-BBF-FINAL-2	99%	202.0 µg/mL	+/- 9.1015
14	Benzo(k)fluoranthene	207-08-9	012022K	98%	201.5 µg/mL	+/- 9.0784
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

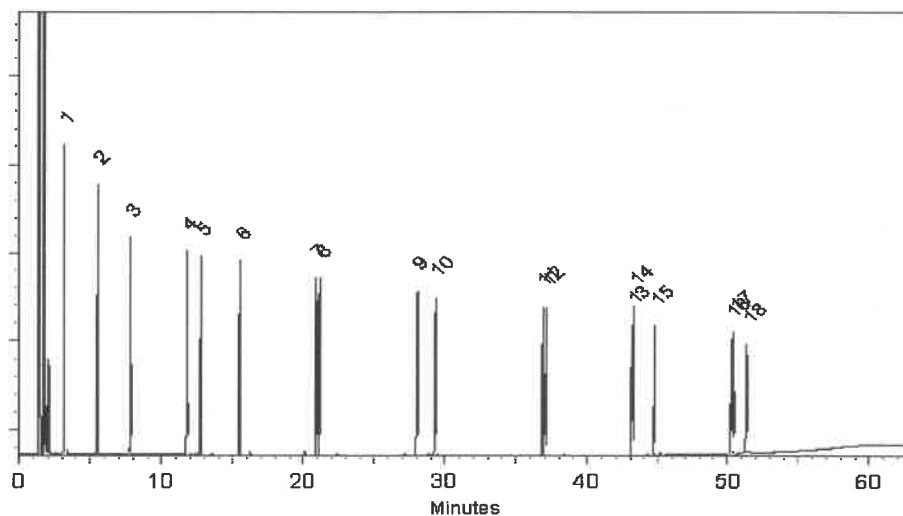
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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

VenKelley
Ven Kelley - Operations Tech I

Date Mixed: 30-Dec-2024 **Balance Serial #** 1128360905

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 03-Jan-2025

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

Catalog No. : 30542 **Lot No.:** A0220449

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

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

Expiration Date : January 31, 2032 **Storage:** 10°C or colder

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

P13978 } RC/
↓
P13987 } 04/24/25

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	201.3 µg/mL	+/- 5.2012
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.7 µg/mL	+/- 5.2098
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	201.3 µg/mL	+/- 5.2012
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.3 µg/mL	+/- 5.1753
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1839
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.1 µg/mL	+/- 5.1704
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.7 µg/mL	+/- 5.1839
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.3 µg/mL	+/- 5.1753
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	201.3 µg/mL	+/- 5.2012
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	201.0 µg/mL	+/- 5.1926
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.3 µg/mL	+/- 5.1753
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.2 µg/mL	+/- 5.1984
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	201.7 µg/mL	+/- 5.2098
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	201.3 µg/mL	+/- 5.2012
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	201.7 µg/mL	+/- 5.2098
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	201.6 µg/mL	+/- 5.2081

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

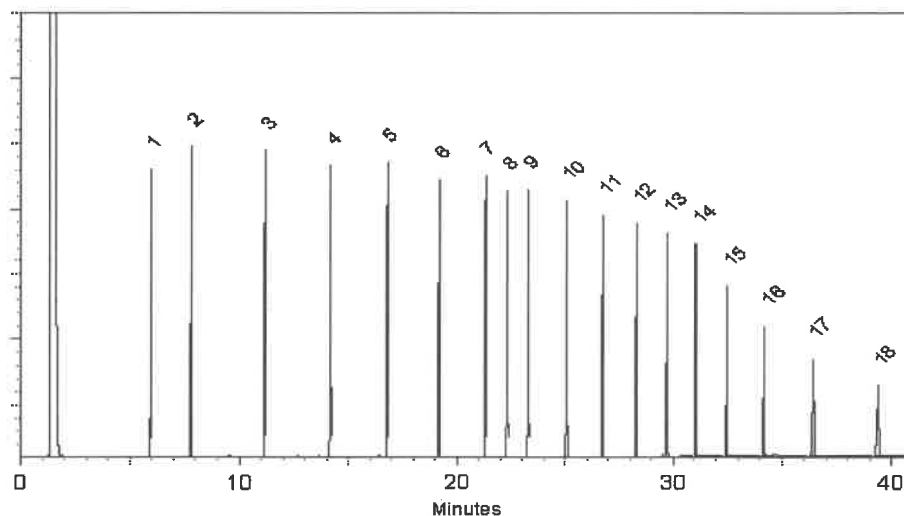
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

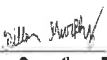
Inj. Vol
1µl



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


Brandon Reish - Operations Technician III

Date Mixed: 23-Dec-2024 **Balance Serial #** C322230531


Dillan Murphy - Operations Technician I

Date Passed: 27-Dec-2024

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



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

Catalog No. : 30542 **Lot No.:** A0220449

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

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

Expiration Date : January 31, 2032 **Storage:** 10°C or colder

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

P13978 } RC/
↓
P13987 } 04/24/25

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	201.3 µg/mL	+/- 5.2012
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.7 µg/mL	+/- 5.2098
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	201.3 µg/mL	+/- 5.2012
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.3 µg/mL	+/- 5.1753
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1839
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.1 µg/mL	+/- 5.1704
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.7 µg/mL	+/- 5.1839
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.3 µg/mL	+/- 5.1753
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	201.3 µg/mL	+/- 5.2012
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	201.0 µg/mL	+/- 5.1926
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.3 µg/mL	+/- 5.1753
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.2 µg/mL	+/- 5.1984
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	201.7 µg/mL	+/- 5.2098
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	201.3 µg/mL	+/- 5.2012
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	201.7 µg/mL	+/- 5.2098
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	201.6 µg/mL	+/- 5.2081

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

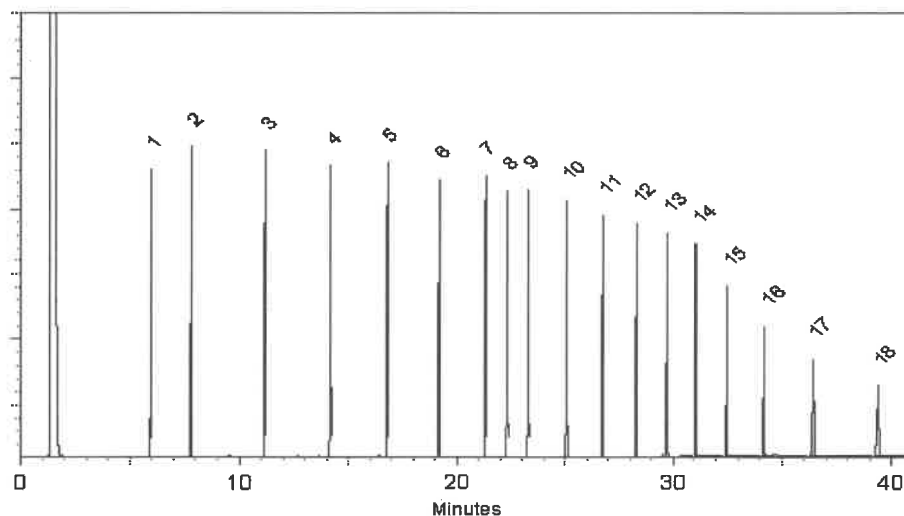
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

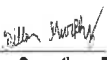
Inj. Vol
1µl



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


Brandon Reish - Operations Technician III

Date Mixed: 23-Dec-2024 **Balance Serial #** C322230531


Dillan Murphy - Operations Technician I

Date Passed: 27-Dec-2024

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



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Catalog No. : 30542 **Lot No.:** A0220449

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

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

Expiration Date : January 31, 2032 **Storage:** 10°C or colder

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

P13978 } RC/
↓
P13987 } 04/24/25

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	201.3 µg/mL	+/- 5.2012
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.7 µg/mL	+/- 5.2098
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	201.3 µg/mL	+/- 5.2012
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.3 µg/mL	+/- 5.1753
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1839
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.1 µg/mL	+/- 5.1704
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.7 µg/mL	+/- 5.1839
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.3 µg/mL	+/- 5.1753
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	201.3 µg/mL	+/- 5.2012
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	201.0 µg/mL	+/- 5.1926
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.3 µg/mL	+/- 5.1753
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.2 µg/mL	+/- 5.1984
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	201.7 µg/mL	+/- 5.2098
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	201.3 µg/mL	+/- 5.2012
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	201.7 µg/mL	+/- 5.2098
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	201.6 µg/mL	+/- 5.2081

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

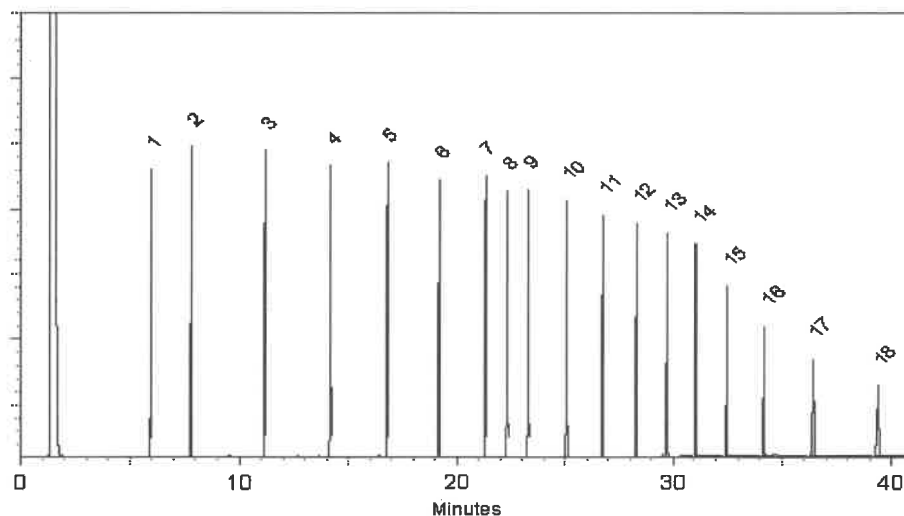
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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


Brandon Reish - Operations Technician III

Date Mixed: 23-Dec-2024 **Balance Serial #** C322230531


Dillan Murphy - Operations Technician I

Date Passed: 27-Dec-2024

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



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0220449

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

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

Expiration Date : January 31, 2032 **Storage:** 10°C or colder

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

P13978 } RC/
↓
P13987 } 04/24/25

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	201.3 µg/mL	+/- 5.2012
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.7 µg/mL	+/- 5.2098
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	201.3 µg/mL	+/- 5.2012
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.3 µg/mL	+/- 5.1753
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1839
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.1 µg/mL	+/- 5.1704
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.7 µg/mL	+/- 5.1839
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.3 µg/mL	+/- 5.1753
10	n-Tetracosane (C24)	646-31-1	UH5GN	99%	201.3 µg/mL	+/- 5.2012
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	201.0 µg/mL	+/- 5.1926
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.3 µg/mL	+/- 5.1753
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.2 µg/mL	+/- 5.1984
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	201.7 µg/mL	+/- 5.2098
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	201.3 µg/mL	+/- 5.2012
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	201.7 µg/mL	+/- 5.2098
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	201.6 µg/mL	+/- 5.2081

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

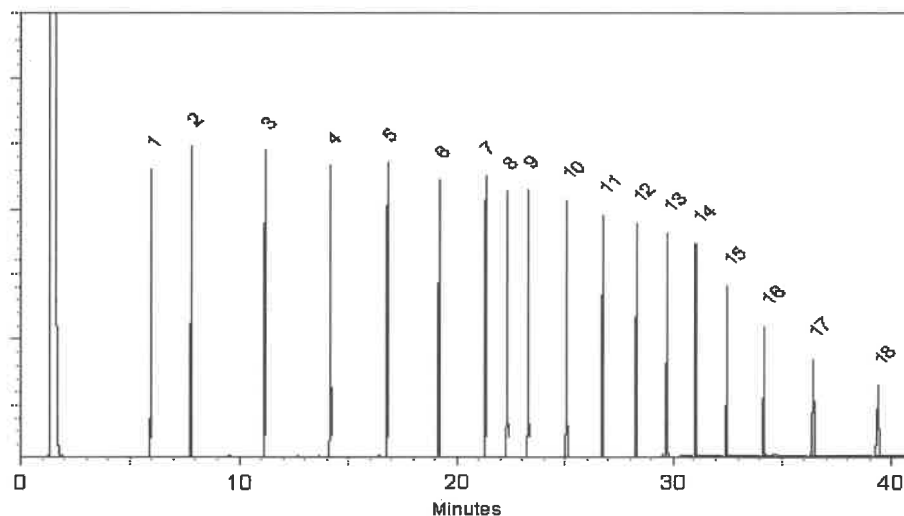
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

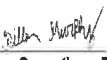
Inj. Vol
1µl



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


Brandon Reish - Operations Technician III

Date Mixed: 23-Dec-2024 **Balance Serial #** C322230531


Dillan Murphy - Operations Technician I

Date Passed: 27-Dec-2024

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



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Bellefonte, PA 16823-8812
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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.

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Catalog No. : 30543 **Lot No.:** A0220580

Description : NJEPH Aromatics Matrix Spike Mix

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

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

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

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

P13988 } RC/
↓
P13993 } 4/25/25

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-39	98%	201.9 µg/mL	+/- 9.0961
2	Naphthalene	91-20-3	STBL1057	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	RP241029RSR	98%	201.9 µg/mL	+/- 9.0961
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.9 µg/mL	+/- 9.0961
7	Phenanthrene	85-01-8	MKCT3391	99%	200.8 µg/mL	+/- 9.0474
8	Anthracene	120-12-7	MKCW9141	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCL8032	99%	201.6 µg/mL	+/- 9.0835
11	Benz(a)anthracene	56-55-3	I220012022BAA	99%	202.0 µg/mL	+/- 9.1015
12	Chrysene	218-01-9	RP240719RSR	99%	202.0 µg/mL	+/- 9.1015
13	Benzo(b)fluoranthene	205-99-2	SBS-BBF-FINAL-2	99%	202.0 µg/mL	+/- 9.1015
14	Benzo(k)fluoranthene	207-08-9	012022K	98%	201.5 µg/mL	+/- 9.0784
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0383

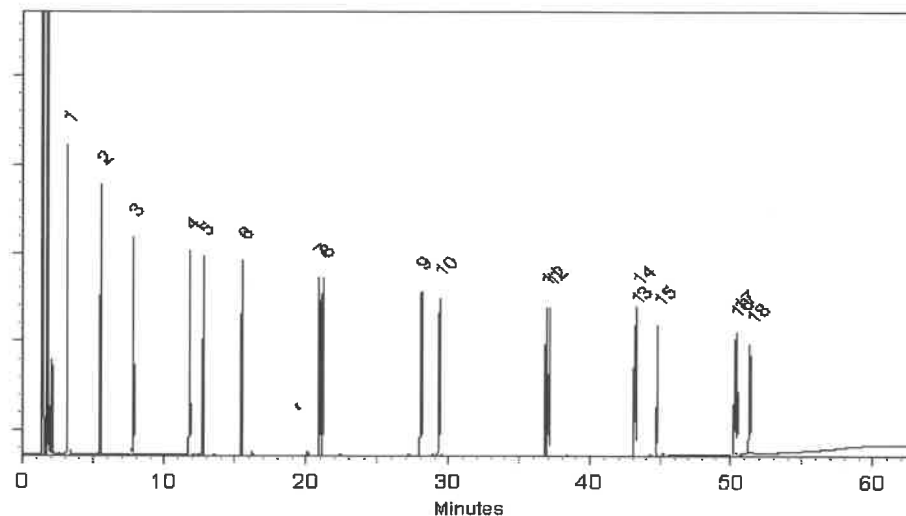
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	201.2 µg/mL	+/- 9.0655
18	Benzo(g,h,i)perylene	191-24-2	RP241014RSR	98%	200.3 µg/mL	+/- 9.0255

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

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

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.
Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)
Inj. Temp:
250°C
Det. Temp:
330°C
Det. Type:
FID
Split Vent:
20 ml/min.
Inj. Vol
1µl



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VenKelley
Ven Kelley - Operations Tech I

Date Mixed: 30-Dec-2024 **Balance Serial #** 1128360905

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 03-Jan-2025

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



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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Catalog No. : 30543 **Lot No.:** A0220580

Description : NJEPH Aromatics Matrix Spike Mix

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

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

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

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

P13988 } RC/
↓
P13993 } 4/25/25

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-39	98%	201.9 µg/mL	+/- 9.0961
2	Naphthalene	91-20-3	STBL1057	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	RP241029RSR	98%	201.9 µg/mL	+/- 9.0961
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
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9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCL8032	99%	201.6 µg/mL	+/- 9.0835
11	Benz(a)anthracene	56-55-3	I220012022BAA	99%	202.0 µg/mL	+/- 9.1015
12	Chrysene	218-01-9	RP240719RSR	99%	202.0 µg/mL	+/- 9.1015
13	Benzo(b)fluoranthene	205-99-2	SBS-BBF-FINAL-2	99%	202.0 µg/mL	+/- 9.1015
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15	Benzo(a)pyrene	50-32-8	NQLXA	98%	200.7 µg/mL	+/- 9.0431
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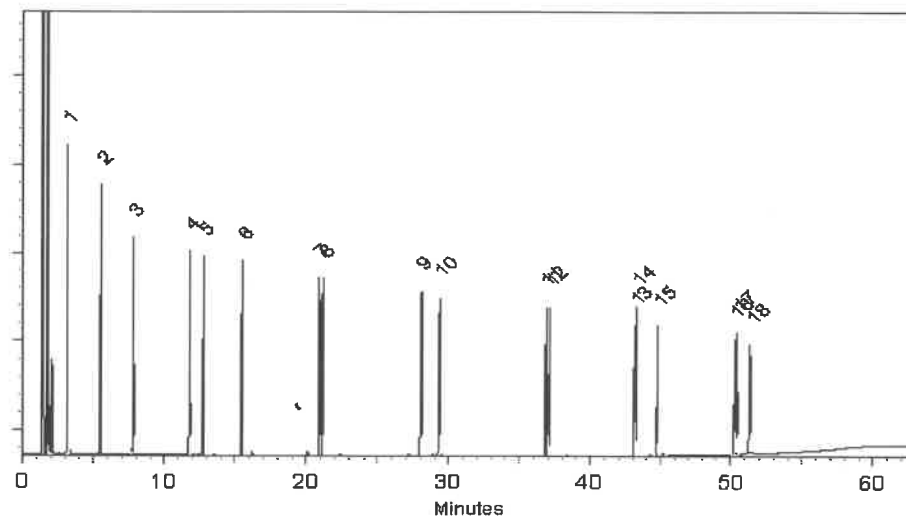
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18	Benzo(g,h,i)perylene	191-24-2	RP241014RSR	98%	200.3 µg/mL	+/- 9.0255

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

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

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.
Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)
Inj. Temp:
250°C
Det. Temp:
330°C
Det. Type:
FID
Split Vent:
20 ml/min.
Inj. Vol
1µl



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VenKelley
Ven Kelley - Operations Tech I

Date Mixed: 30-Dec-2024 **Balance Serial #** 1128360905

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 03-Jan-2025

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

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

Q2147

98 Morse Ave

CHEMTECH

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

Chemtech Project Number Noted
COC Number

CLIENT INFORMATION		PROJECT INFORMATION		BILLING INFORMATION	
Report to be sent to:		PROJECT NAME:	LOCATION:	BILL TO:	PO#
COMPANY:		PROJECT #:	PROJECT MANAGER:	ADDRESS:	
ADDRESS:		E-MAIL:		CITY:	STATE: ZIP:
CITY: STATE: ZIP:		PHONE:		ATTENTION:	
ATTENTION:		FAX:		PHONE:	
PHONE: FAX:					

DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION		ANALYSIS	
FAX (RUSH):	DAYS*	☐ Level 1 (Results Only)	☐ Level 4 (QC + Full Raw Data)		
HARDCOPY (DATA PACKAGE):	DAYS*	☐ Level 2 (Results + QC)	☐ NJ Reduced ☐ US EPA CLP		
EDD:	DAYS*	☐ Level 3 (Results + QC + Raw Data)	☐ NYS ASP A ☐ NYS ASP B		
*TO BE APPROVED BY CHEMTECH		☐ Other			
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS		☐ EDD FORMAT			

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# of Bottles	PRESERVATIVES									COMMENTS ← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER
			CONP	GRAS	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	WASTE				5/27	12:45	1	X									
2.	VOC				5/27	12:45	1		X								
3.	1				5/27	12:45	1			X							
4.	2				5/27	12:45	1			X							
5.	3				5/27	12:45	1			X							
6.	4				5/27	12:45	1			X							
7.	5				5/27	12:45	1			X							
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY	Conditions of bottles or collars at receipt:		
1.		1. <u>[Signature]</u> 5-28-27	☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP	4-5-6	
RELINQUISHED BY	DATE/TIME	RECEIVED BY	Comments:		
2.		2. <u>[Signature]</u>			
RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY	Page _____ of _____	CLIENT: ☐ Hand Delivered ☐ Other: _____	Shipment Complete
3. <u>[Signature]</u>	5-28-27	3.		CHEMTECH: ☐ Picked Up	☐ YES ☐ NO

10/2018

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT

YELLOW - CHEMTECH COPY

PINK - SAMPLER COPY

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

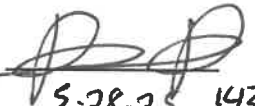


284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2147	SCIA01	Order Date : 5/28/2025 1:30:00 PM	Project Mgr :
Client Name : Sciacca General Contractor		Project Name : 98 Morse Ave Nutley	Report Type : Results Only
Client Contact : Rosanne Scirica		Receive DateTime : 5/28/2025 1:37:00 PM	EDD Type : EXCEL NJCLEANUP
Invoice Name : Sciacca General Contractor		Purchase Order :	Hard Copy Date :
Invoice Contact : Rosanne Scirica			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2147-02	VOC	Solid	05/27/2025	08:00	VOC-TCLVOA-10		8260D		10 Bus. Days

Relinquished By : 

Date / Time :

5-28-25 1435

Received By : 

Date / Time :

5/28/25 1435

Storage Area : VOA Refridgerator Room