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

Cover Page

Order ID : Q1872

Project ID : NJ Soil PT

Client : Alliance Technical Group, LLC - Newark

Lab Sample Number	Client Sample Number
Q1872-01	HW0425-PT-AN-SOIL
Q1872-02	HW0425-PT-CORR-SOIL
Q1872-03	HW0425-PT-CN-SOIL
Q1872-04	HW0425-PT-CN-SOIL
Q1872-05	HW0425-PT-FP-SOIL
Q1872-06	HW0425-PT-CR6-SOIL
Q1872-07	HW0425-PT-NUT-SOIL
Q1872-08	HW0425-PT-NUT-SOIL
Q1872-09	HW0425-PT-OGR-SOIL
Q1872-10	HW0425-PT-MET-SOIL
Q1872-11	HW0425-PT-BNA-SOIL
Q1872-12	HW0425-PT-TRIAZINE-SOIL
Q1872-13	HW0425-PT-PAH-SOIL
Q1872-14	HW0425-PT-DIES-SOIL
Q1872-15	HW0425-PT-GAS-SOIL
Q1872-16	HW0425-PT-NJEPH-SOIL
Q1872-17	HW0425-PT-HERB-SOIL
Q1872-18	HW0425-PT-PCB-SOIL
Q1872-19	HW0425-PT-PCBO-SOIL
Q1872-20	HW0425-PT-PEST-SOIL
Q1872-21	HW0425-PT-CHLR-SOIL
Q1872-22	HW0425-PT-TXP-SOIL
Q1872-23	HW0425-PT-VOA-SOIL
Q1872-24	HW0425-PT-SOL-SOIL
Q1872-25	HW0425-PT-NO2-SOIL

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

Signature : _____

Date: 5/27/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Alliance Technical Group, LLC - Newark
Project Name: NJ Soil PT
Project # N/A
Order ID # Q1872
Test Name: Diesel Range Organics

A. Number of Samples and Date of Receipt:
24 Solid samples were received on 04/24/2025.
1 Solid sample was received on 04/28/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Ammonia, Anions Group1, Anions Group2, Corrosivity, Cyanide, Diesel Range Organics, EPH, Flash Point, Gasoline Range Organics, Herbicide Group1, Hexavalent Chromium, Mercury, Metals Group3, Metals ICP-Group1, Oil and Grease, PCB, PESTICIDE Group1, PESTICIDE Group2, PESTICIDE Group3, Phosphorus, Total, SVOCMS Group1, SVOCMS Group2, SVOCMS Group3, SVOCMS Group4, SVOCMS Group5, TKN, TOC, TS and VOCMS Group1. This data package contains results for Diesel Range Organics.

C. Analytical Techniques:
The analysis were performed on instrument FID_G. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 13302.The analysis of Diesel Range Organics was based on method 8015D and extraction was done based on method 3541.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Retention Times were acceptable for all samples.
The MS recoveries met the requirements for all compounds .
The MSD recoveries met the acceptable requirements .
The RPD met criteria .
The Blank Spike met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .
The Continuous Calibration met the requirements .

Samples HW0425-PT-DIES-SOIL was diluted due to bad matrix, The above sample original run is reported as screening data in miscellaneous data.

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E. Additional Comments:
The soil samples results are based on a dry weight basis.

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

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. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____

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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 is 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

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GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDER ID: Q1872 MATRIX: Solid

METHOD: 8015D/3541

		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified.			✓
2.	Standard Summary Submitted.			✓
3.	Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis, 12 HOURS IF 8000 SERIES METHOD. The Initial Calibration met the requirements . The Continuous Calibration met the requirements .			✓
4.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
5.	Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			✓
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range. The MS recoveries met the requirements for all compounds . The MSD recoveries met the acceptable requirements . The Blank Spike met requirements for all samples . The RPD met criteria .			✓
7.	Retention Time Shift Meet Criteria (if applicable) Comments:			✓
8.	Extraction Holding Time Met If not met, list number of days exceeded for each sample:		✓	

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GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

		NA	NO	YES
9.	Analysis Holding Time Met		✓	

If not met, list those compounds and their recoveries which fall outside the acceptable range.

The Holding Times were met for all analysis.

ADDITIONAL COMMENTS:

Samples HW0425-PT-DIES-SOIL was diluted due to bad matrix, The above sample original run is reported as screening data in miscellaneous data.

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

_____ _____

QA REVIEW Date

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1872

	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: SOHIL JODHANI **Date:** 05/27/2025

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LAB CHRONICLE

OrderID:	Q1872	**OrderDate:**	4/24/2025 1:26:50 PM
Client:	Alliance Technical Group, LLC - Newark	**Project:**	NJ Soil PT
Contact:	Mohammad Ahmed	**Location:**	QA Office,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1872-14	**HW0425-PT-DIES-SOIL**	**SOIL**			**04/25/25**			**04/28/25**
			Diesel Range Organics	8015D		05/13/25	05/13/25	
Q1872-15	**HW0425-PT-GAS-SOIL**	**SOIL**			**04/21/25**			**04/24/25**
			Gasoline Range Organics	8015D			04/29/25	

QC
SUMMARY

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SOIL DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Chemtech Client: Alliance Technical Group, LLC - Newark

Lab Code: CHEM Case No.: Q1872 SAS No.: Q1872 SDG No.: Q1872

EPA SAMPLE NO.	S1 TETRACOSANE-d50	S2	S3	S4	TOT OUT
PIBLK-FG015817.D	96				0
PIBLK-FG015824.D	85				0
PIBLK-FG015834.D	96				0
PB167975BL	87				0
PB167975BS	93				0
HW0425-PT-DIES-SOIL	42				0
SB2-4-5MS	58				0
SB2-4-5MSD	60				0

	QC LIMITS
TETRACOSANE-d50	For Water : 29-130 For Soil : 37-130

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate Diluted Out

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SOIL DIESEL RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Alliance Technical Group, LLC - Newark

Lab Code: CHEM **Cas No:** Q1872 **SAS No :** Q1872 **SDG No:** Q1872

Client SampleID : SB2-4-5MS **Datafile:** FG015828.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
DRO	7123	0	7673	108%		68-131

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SOIL DIESEL RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Alliance Technical Group, LLC - Newark

Lab Code: CHEM **Cas No:** Q1872 **SAS No :** Q1872 **SDG No:** Q1872

Client SampleID : SB2-4-5MSD **Datafile:** FG015829.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
DRO	7121	0	7822	110%		68-131

MS/MSD % Recovery RPD : 1.9

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SOIL DIESEL RANGE ORGANICS LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RI

Lab Name: Chemtech **Client:** Alliance Technical Group, LLC - Newark

Lab Code: CHEM **Cas No:** Q1872 **SAS No :** Q1872 **SDG No:** Q1872

Matrix Spike - EPA Sample No : PB167975BS **Datafile:** FG015821.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS
DRO	6662	0	6321	95	68-131

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4B

METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167975BL

Lab Name: CHEMTECH Contract: ALLI03

Lab Code: CHEM Case No.: Q1872 SAS No.: Q1872 SDG NO.: Q1872

Lab File ID: FG015820.D Lab Sample ID: PB167975BL

Instrument ID: FG Date Extracted: 05/13/2025

Matrix: (soil/water) Soil Date Analyzed: 05/13/25

Level: (low/med) low Time Analyzed: 13:22

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB167975BS	PB167975BS	FG015821.D	05/13/25
HW0425-PT-DIES-SOIL	Q1872-14	FG015823.D	05/13/25
SB2-4-5MS	Q1956-03MS	FG015828.D	05/13/25
SB2-4-5MSD	Q1956-04MSD	FG015829.D	05/13/25

COMMENTS:

Alliance
TECHNICAL GROUP

SAMPLE DATA

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Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	04/25/25
Project:	NJ Soil PT	Date Received:	04/28/25
Client Sample ID:	HW0425-PT-DIES-SOIL	SDG No.:	Q1872
Lab Sample ID:	Q1872-14	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	100 Decanted:
Sample Wt/Vol:	20.24 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015823.D	5	05/13/25 10:05	05/13/25 15:25	PB167975

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	120000		1250	12400	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	1.68		37 - 130	42%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance 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
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015823.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 15:25
Operator : YP\AJ
Sample : Q1872-14 5X
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 14 03:55:16 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_G
ClientSampleId :
HW0425-PT-DIES-SOIL

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 05/14/2025
Supervised By :mohammad ahmed 05/15/2025

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.994	198280	1.684 ug/mlm
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015823.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 15:25
Operator : YP\AJ
Sample : Q1872-14 5X
Misc :
ALS Vial : 24 Sample Multiplier: 1

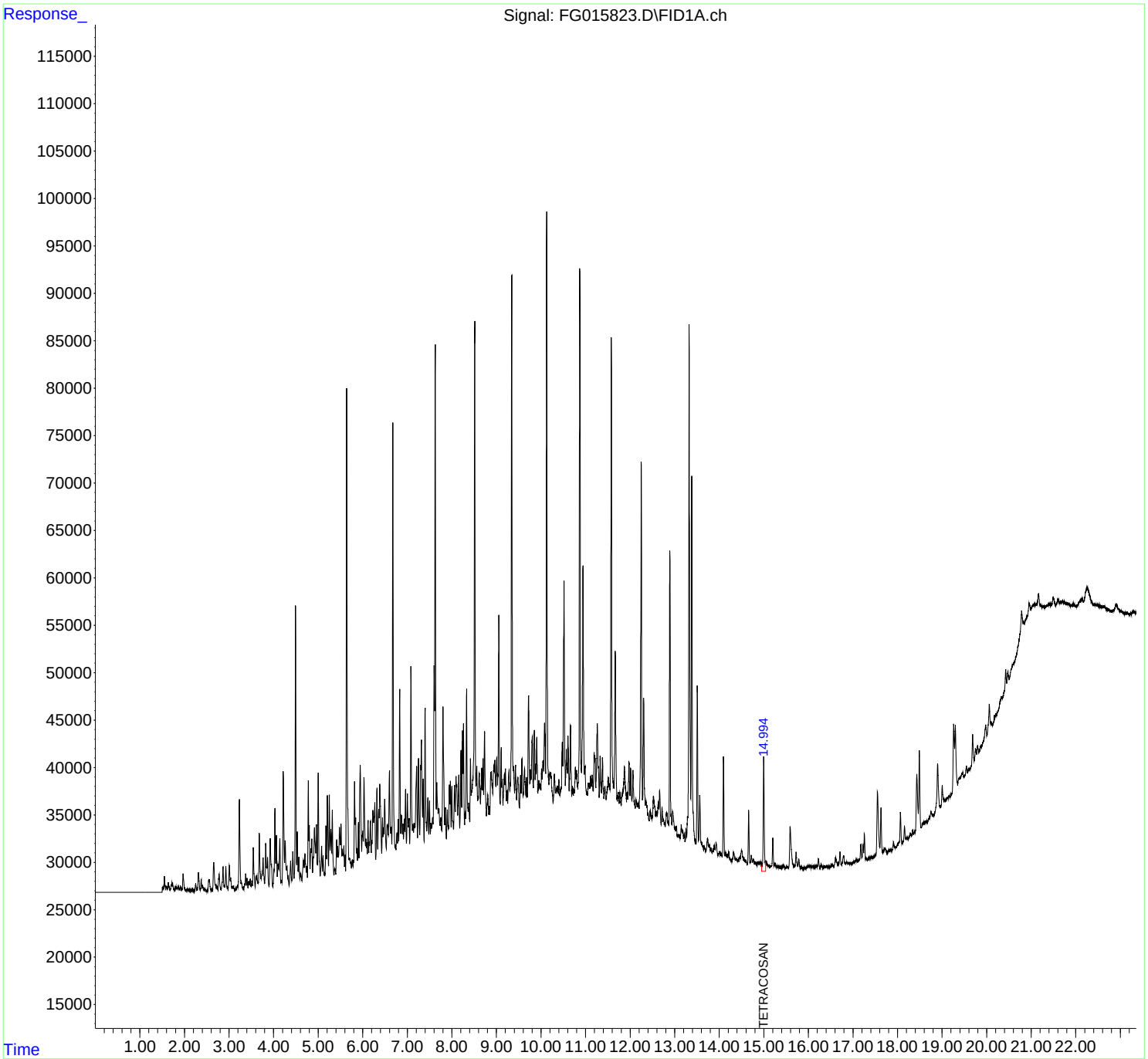
Integration File: autoint1.e
Quant Time: May 14 03:55:16 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

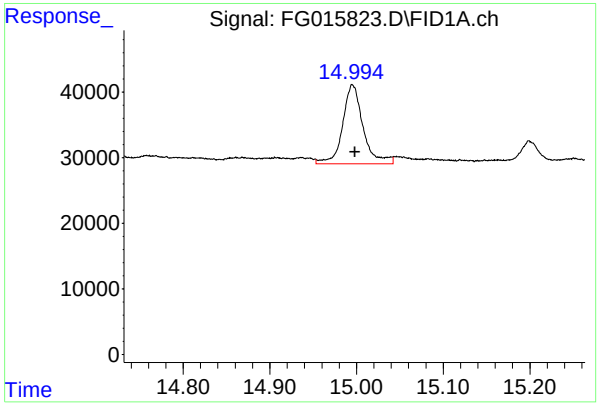
Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_G
ClientSampleId :
HW0425-PT-DIES-SOIL

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 05/14/2025
Supervised By :mohammad ahmed 05/15/2025





#9 TETRACOSANE-d50 (SURROGATE)

R.T.:	14.994 min
Delta R.T.:	-0.004 min
Response:	198280
Conc:	1.68 ug/ml

Instrument :
FID_G
ClientSampleId :
HW0425-PT-DIES-SOIL

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 05/14/2025
Supervised By :mohammad ahmed 05/15/2025

Instrument :
FID_G
ClientSampleId :
HW0425-PT-DIES-SOIL

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 05/14/2025
Supervised By :mohammad ahmed 05/15/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG05132
Data File : FG015823.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 15:25
Sample : Q1872-14 5X
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.823	3.800	3.841	BV	4192	53225	4.40%	0.086%
2	3.848	3.841	3.853	VV	1736	11813	0.98%	0.019%
3	3.866	3.853	3.897	VV	2720	30570	2.52%	0.049%
4	3.925	3.897	3.945	PH	4732	67177	5.55%	0.108%
5	3.952	3.945	3.979	HH	2069	20776	1.72%	0.034%
6	4.030	3.979	4.048	PH	7921	101917	8.42%	0.164%
7	4.063	4.048	4.084	HH	5061	64124	5.30%	0.103%
8	4.100	4.084	4.120	HH	2020	34192	2.82%	0.055%
9	4.140	4.120	4.162	HH	4728	62718	5.18%	0.101%
10	4.174	4.162	4.189	HH	278	3021	0.25%	0.005%
11	4.218	4.189	4.246	HH	11764	184450	15.23%	0.298%
12	4.261	4.246	4.290	HH	4467	71926	5.94%	0.116%
13	4.300	4.290	4.318	HH	1754	22396	1.85%	0.036%
14	4.328	4.318	4.349	HH	787	6306	0.52%	0.010%
15	4.382	4.349	4.410	PH	2337	33233	2.74%	0.054%
16	4.432	4.410	4.458	HH	3366	47563	3.93%	0.077%
17	4.494	4.458	4.517	HH	29282	342843	28.31%	0.553%
18	4.532	4.517	4.550	HH	5373	65772	5.43%	0.106%
19	4.568	4.550	4.590	HH	2781	40158	3.32%	0.065%
20	4.606	4.590	4.634	HH	1041	19747	1.63%	0.032%
21	4.670	4.634	4.688	HH	2436	51357	4.24%	0.083%
22	4.704	4.688	4.735	HH	3087	60165	4.97%	0.097%
23	4.746	4.735	4.759	HH	1822	20880	1.72%	0.034%
24	4.780	4.759	4.793	HH	10847	116772	9.64%	0.188%
25	4.801	4.793	4.819	HH	6103	64544	5.33%	0.104%
26	4.837	4.819	4.848	HH	3669	51092	4.22%	0.082%
27	4.858	4.848	4.875	HH	4698	53291	4.40%	0.086%
28	4.916	4.875	4.945	HH	5898	146964	12.14%	0.237%
29	4.960	4.945	4.982	HH	6186	91960	7.59%	0.148%
30	5.001	4.982	5.046	HH	11618	183668	15.17%	0.296%
31	5.078	5.046	5.095	HH	3937	64136	5.30%	0.103%
32	5.111	5.095	5.140	HH	2910	47519	3.92%	0.077%
33	5.175	5.140	5.189	HH	6066	82016	6.77%	0.132%
34	5.207	5.189	5.234	HH	9136	144934	11.97%	0.234%
35	5.251	5.234	5.267	HH	9252	114232	9.43%	0.184%
36	5.286	5.267	5.304	HH	5667	98169	8.11%	0.158%

Instrument :
FID_G
ClientSampleId :
HW0425-PT-DIES-SOIL

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 05/14/2025
Supervised By :mohammad ahmed 05/15/2025

rteres

37	5.318	5.304	5.353	HH	7748	114466	9.45%	0.185%
38	5.369	5.353	5.394	HH	1532	31623	2	
39	5.415	5.394	5.430	HH	4575	63844	5	
40	5.440	5.430	5.455	HH	3910	49072	4	
41	5.479	5.455	5.501	HH	5908	122422	10	
42	5.514	5.501	5.530	HH	6230	81196	6	
43	5.538	5.530	5.562	HH	3607	62232	5.14%	0.100%
44	5.577	5.562	5.592	HH	3961	55275	4.56%	0.089%
45	5.604	5.592	5.617	HH	3010	34022	2.81%	0.055%
46	5.640	5.617	5.691	HH	52188	738642	61.00%	1.191%
47	5.699	5.691	5.743	HH	2668	72684	6.00%	0.117%
48	5.766	5.743	5.780	HH	2493	46773	3.86%	0.075%
49	5.791	5.780	5.799	HH	2420	24524	2.03%	0.040%
50	5.817	5.799	5.833	HH	10743	141874	11.72%	0.229%
51	5.841	5.833	5.859	HH	6896	85077	7.03%	0.137%
52	5.866	5.859	5.885	HH	3671	48477	4.00%	0.078%
53	5.903	5.885	5.917	HH	6455	83200	6.87%	0.134%
54	5.945	5.917	5.978	HH	12456	287879	23.77%	0.464%
55	5.990	5.978	5.995	HH	5097	46422	3.83%	0.075%
56	6.004	5.995	6.013	HH	5564	54976	4.54%	0.089%
57	6.030	6.013	6.062	HH	11062	207346	17.12%	0.334%
58	6.072	6.062	6.084	HH	4671	57848	4.78%	0.093%
59	6.093	6.084	6.106	HH	4312	49899	4.12%	0.080%
60	6.120	6.106	6.136	HH	6636	87062	7.19%	0.140%
61	6.148	6.136	6.154	HH	4364	42772	3.53%	0.069%
62	6.173	6.154	6.191	HH	6477	112777	9.31%	0.182%
63	6.204	6.191	6.210	HH	4516	46300	3.82%	0.075%
64	6.227	6.210	6.244	HH	7714	134559	11.11%	0.217%
65	6.272	6.244	6.292	HH	8399	180435	14.90%	0.291%
66	6.319	6.292	6.338	HH	10050	157532	13.01%	0.254%
67	6.359	6.338	6.369	HH	7775	117785	9.73%	0.190%
68	6.383	6.369	6.428	HH	10488	258190	21.32%	0.416%
69	6.444	6.428	6.456	HH	6900	91621	7.57%	0.148%
70	6.467	6.456	6.477	HH	5894	68845	5.69%	0.111%
71	6.493	6.477	6.529	HH	8867	193506	15.98%	0.312%
72	6.548	6.529	6.574	HH	6245	145446	12.01%	0.235%
73	6.600	6.574	6.625	HH	11726	242519	20.03%	0.391%
74	6.640	6.625	6.654	HH	5907	94070	7.77%	0.152%
75	6.677	6.654	6.724	HH	48523	677395	55.94%	1.093%
76	6.731	6.724	6.747	HH	4029	53205	4.39%	0.086%
77	6.768	6.747	6.781	HH	5343	94519	7.81%	0.152%
78	6.797	6.781	6.811	HH	6771	99730	8.24%	0.161%
79	6.831	6.811	6.854	HH	20483	294848	24.35%	0.476%
80	6.868	6.854	6.892	HH	7074	146508	12.10%	0.236%
81	6.902	6.892	6.917	HH	6273	82787	6.84%	0.134%
82	6.935	6.917	6.947	HH	6788	106428	8.79%	0.172%
83	6.961	6.947	6.982	HH	9920	147755	12.20%	0.238%
84	7.003	6.982	7.028	HH	9197	188606	15.58%	0.304%
85	7.039	7.028	7.055	HH	6810	94166	7.78%	0.152%
86	7.083	7.055	7.116	HH	22830	390252	32.23%	0.629%
87	7.128	7.116	7.142	HH	6205	91826	7.58%	0.148%
88	7.159	7.142	7.174	HH	6343	115184	9.51%	0.186%
89	7.209	7.174	7.230	HH	12291	292333	24.14%	0.472%

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90	7.252	7.230	7.281	HH	13158	254072	20.98%	0.410%
91	7.301	7.281	7.306	HH	12321	137199	11	
92	7.318	7.306	7.344	HH	15079	259660	21	
93	7.358	7.344	7.378	HH	10975	161383	13	
94	7.400	7.378	7.437	HH	18434	351983	29	
95	7.463	7.437	7.484	HH	9064	195187	16	
96	7.499	7.484	7.517	HH	8685	136115	11.24%	0.220%
97	7.529	7.517	7.541	HH	6285	87612	7.24%	0.141%
98	7.568	7.541	7.579	HH	6923	145084	11.98%	0.234%
99	7.604	7.579	7.612	HH	22881	287001	23.70%	0.463%
100	7.628	7.612	7.651	HH	56375	708684	58.53%	1.143%
101	7.664	7.651	7.691	HH	10596	216238	17.86%	0.349%
102	7.701	7.691	7.708	HH	7847	76449	6.31%	0.123%
103	7.713	7.708	7.734	HH	7832	109830	9.07%	0.177%
104	7.750	7.734	7.776	HH	6914	157331	12.99%	0.254%
105	7.802	7.776	7.838	HH	18627	416252	34.38%	0.671%
106	7.854	7.838	7.879	HH	7993	161020	13.30%	0.260%
107	7.896	7.879	7.924	HH	7735	170648	14.09%	0.275%
108	7.944	7.924	7.956	HH	10371	155940	12.88%	0.252%
109	7.968	7.956	7.986	HH	10805	155345	12.83%	0.251%
110	8.000	7.986	8.037	HH	10172	226903	18.74%	0.366%
111	8.060	8.037	8.076	HH	10292	191782	15.84%	0.309%
112	8.094	8.076	8.129	HH	11185	302087	24.95%	0.487%
113	8.157	8.129	8.178	HH	11425	256699	21.20%	0.414%
114	8.205	8.178	8.222	HH	13892	256655	21.20%	0.414%
115	8.239	8.222	8.250	HH	15942	214921	17.75%	0.347%
116	8.262	8.250	8.287	HH	16862	254449	21.01%	0.410%
117	8.299	8.287	8.311	HH	7410	101232	8.36%	0.163%
118	8.332	8.311	8.364	HH	20462	381714	31.52%	0.616%
119	8.380	8.364	8.402	HH	8408	172257	14.23%	0.278%
120	8.419	8.402	8.435	HH	13026	202542	16.73%	0.327%
121	8.514	8.435	8.543	HH	59154	1210855	100.00%	1.953%
122	8.561	8.543	8.578	HH	12319	232174	19.17%	0.375%
123	8.616	8.578	8.643	HH	11625	378284	31.24%	0.610%
124	8.673	8.643	8.687	HH	12074	277980	22.96%	0.448%
125	8.699	8.687	8.714	HH	13166	184783	15.26%	0.298%
126	8.735	8.714	8.774	HH	15932	402451	33.24%	0.649%
127	8.806	8.774	8.829	HH	9241	269059	22.22%	0.434%
128	8.843	8.829	8.855	HH	8117	120061	9.92%	0.194%
129	8.873	8.855	8.880	HH	11673	151421	12.51%	0.244%
130	8.889	8.880	8.901	HH	11695	140950	11.64%	0.227%
131	8.908	8.901	8.919	HH	10622	105835	8.74%	0.171%
132	8.942	8.919	8.951	HH	12410	222809	18.40%	0.359%
133	8.964	8.951	8.987	HH	12970	255338	21.09%	0.412%
134	9.007	8.987	9.023	HH	13240	252482	20.85%	0.407%
135	9.056	9.023	9.085	HH	28207	564644	46.63%	0.911%
136	9.109	9.085	9.123	HH	14331	254583	21.03%	0.411%
137	9.132	9.123	9.149	HH	10843	158494	13.09%	0.256%
138	9.179	9.149	9.191	HH	11531	256812	21.21%	0.414%
139	9.204	9.191	9.226	HH	11999	221403	18.28%	0.357%
140	9.240	9.226	9.255	HH	9795	159683	13.19%	0.258%
141	9.285	9.255	9.300	HH	11923	287417	23.74%	0.464%

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142	9.344	9.300	9.375	HH	64079	1070272	88.39%	1.726%
143	9.381	9.375	9.409	HH	12310	226122	18	
144	9.430	9.409	9.454	HH	12400	293230	24	
145	9.485	9.454	9.516	HH	11048	362602	29	
146	9.543	9.516	9.558	HH	11368	249434	20	
147	9.574	9.558	9.596	HH	13084	255041	21	
148	9.604	9.596	9.609	HH	9573	70955	5.86%	0.114%
149	9.630	9.609	9.663	HH	12122	343894	28.40%	0.555%
150	9.678	9.663	9.691	HH	11124	175089	14.46%	0.282%
151	9.722	9.691	9.754	HH	19745	507687	41.93%	0.819%
152	9.765	9.754	9.778	HH	12007	163855	13.53%	0.264%
153	9.805	9.778	9.830	HH	15490	403037	33.29%	0.650%
154	9.853	9.830	9.871	HH	16129	319158	26.36%	0.515%
155	9.884	9.871	9.892	HH	12523	149391	12.34%	0.241%
156	9.907	9.892	9.930	HH	15394	285767	23.60%	0.461%
157	9.954	9.930	9.971	HH	10872	250299	20.67%	0.404%
158	9.981	9.971	9.995	HH	10504	150641	12.44%	0.243%
159	10.014	9.995	10.024	HH	11993	194053	16.03%	0.313%
160	10.046	10.024	10.062	HH	12921	274025	22.63%	0.442%
161	10.081	10.062	10.106	HH	16831	377515	31.18%	0.609%
162	10.128	10.106	10.177	HH	70353	1136507	93.86%	1.833%
163	10.206	10.177	10.218	HH	11726	275440	22.75%	0.444%
164	10.222	10.218	10.273	HH	11662	332240	27.44%	0.536%
165	10.300	10.273	10.338	HH	11521	392579	32.42%	0.633%
166	10.341	10.338	10.349	HH	9814	63534	5.25%	0.102%
167	10.361	10.349	10.387	HH	10291	227360	18.78%	0.367%
168	10.403	10.387	10.422	HH	10947	212296	17.53%	0.342%
169	10.476	10.422	10.491	HH	14884	473269	39.09%	0.763%
170	10.518	10.491	10.546	HH	31930	662908	54.75%	1.069%
171	10.570	10.546	10.592	HH	14067	340164	28.09%	0.549%
172	10.608	10.592	10.632	HH	15533	303752	25.09%	0.490%
173	10.664	10.632	10.689	HH	16652	431458	35.63%	0.696%
174	10.706	10.689	10.726	HH	10228	214797	17.74%	0.346%
175	10.735	10.726	10.740	HH	9694	81690	6.75%	0.132%
176	10.770	10.740	10.791	HH	12276	328832	27.16%	0.530%
177	10.798	10.791	10.824	HH	11931	220090	18.18%	0.355%
178	10.870	10.824	10.909	HH	63990	1197136	98.87%	1.931%
179	10.942	10.909	10.971	HH	33356	730942	60.37%	1.179%
180	10.988	10.971	11.044	HH	12317	462930	38.23%	0.747%
181	11.067	11.044	11.094	HH	10579	309494	25.56%	0.499%
182	11.113	11.094	11.128	HH	11331	212892	17.58%	0.343%
183	11.151	11.128	11.169	HH	11073	259772	21.45%	0.419%
184	11.194	11.169	11.231	HH	13816	453948	37.49%	0.732%
185	11.263	11.231	11.305	HH	16821	571115	47.17%	0.921%
186	11.325	11.305	11.361	HH	13369	365194	30.16%	0.589%
187	11.379	11.361	11.417	HH	13217	357577	29.53%	0.577%
188	11.432	11.417	11.457	HH	10131	230643	19.05%	0.372%
189	11.462	11.457	11.466	HH	9004	49305	4.07%	0.080%
190	11.510	11.466	11.547	HH	11054	491224	40.57%	0.792%
191	11.576	11.547	11.635	HH	57169	1094422	90.38%	1.765%
192	11.666	11.635	11.714	HH	24431	659036	54.43%	1.063%
193	11.732	11.714	11.749	HH	9565	187367	15.47%	0.302%
194	11.753	11.749	11.759	HH	8699	51220	4.23%	0.083%

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195	11.770	11.759	11.797	HH	9580	208133	17.19%	0.336%
196	11.872	11.797	11.919	HH	12213	732802	60	
197	11.930	11.919	11.948	HH	9628	157417	13	
198	11.971	11.948	11.994	HH	12825	302542	24	
199	12.012	11.994	12.039	HH	12064	275996	22	
200	12.063	12.039	12.115	HH	11762	424762	35	
201	12.132	12.115	12.158	HH	8890	220401	18.20%	0.356%
202	12.164	12.158	12.170	HH	8263	57886	4.78%	0.093%
203	12.184	12.170	12.202	HH	8444	154411	12.75%	0.249%
204	12.249	12.202	12.277	HH	44412	857588	70.83%	1.383%
205	12.302	12.277	12.341	HH	19522	468560	38.70%	0.756%
206	12.350	12.341	12.427	HH	8660	397294	32.81%	0.641%
207	12.450	12.427	12.474	HH	7649	208446	17.21%	0.336%
208	12.477	12.474	12.493	HH	7159	76286	6.30%	0.123%
209	12.524	12.493	12.577	HH	9230	404121	33.37%	0.652%
210	12.590	12.577	12.599	HH	7536	95917	7.92%	0.155%
211	12.631	12.599	12.646	HH	8543	222821	18.40%	0.359%
212	12.661	12.646	12.695	HH	9731	233517	19.29%	0.377%
213	12.716	12.695	12.731	HH	7944	155524	12.84%	0.251%
214	12.742	12.731	12.749	HH	6784	73165	6.04%	0.118%
215	12.752	12.749	12.776	HH	6663	102345	8.45%	0.165%
216	12.778	12.776	12.787	HH	6432	40338	3.33%	0.065%
217	12.816	12.787	12.852	HH	7490	265895	21.96%	0.429%
218	12.855	12.852	12.860	HH	6413	30475	2.52%	0.049%
219	12.892	12.860	12.934	HH	35082	627969	51.86%	1.013%
220	12.951	12.934	13.004	HH	7439	274834	22.70%	0.443%
221	13.011	13.004	13.023	HH	5932	65724	5.43%	0.106%
222	13.035	13.023	13.056	HH	5976	113039	9.34%	0.182%
223	13.060	13.056	13.069	HH	5039	39554	3.27%	0.064%
224	13.075	13.069	13.081	HH	5021	34478	2.85%	0.056%
225	13.085	13.081	13.094	HH	5185	40419	3.34%	0.065%
226	13.100	13.094	13.104	HH	5019	27421	2.26%	0.044%
227	13.107	13.104	13.125	HH	5174	62794	5.19%	0.101%
228	13.145	13.125	13.167	HH	5999	141238	11.66%	0.228%
229	13.171	13.167	13.174	HH	5540	25019	2.07%	0.040%
230	13.183	13.174	13.200	HH	5598	78185	6.46%	0.126%
231	13.218	13.200	13.234	HH	5199	100378	8.29%	0.162%
232	13.254	13.234	13.269	HH	5699	107290	8.86%	0.173%
233	13.323	13.269	13.359	HH	58714	1075860	88.85%	1.735%
234	13.380	13.359	13.473	HH	42865	852818	70.43%	1.376%
235	13.505	13.473	13.533	HH	20817	356748	29.46%	0.575%
236	13.561	13.533	13.603	HH	9276	249859	20.63%	0.403%
237	13.606	13.603	13.636	HH	4284	79339	6.55%	0.128%
238	13.640	13.636	13.649	HH	3843	29726	2.45%	0.048%
239	13.651	13.649	13.704	HH	3932	117328	9.69%	0.189%
240	13.737	13.704	13.765	HH	4800	153218	12.65%	0.247%
241	13.771	13.765	13.776	HH	3984	24884	2.06%	0.040%
242	13.782	13.776	13.803	HH	4004	61560	5.08%	0.099%
243	13.815	13.803	13.839	HH	3723	75211	6.21%	0.121%
244	13.857	13.839	13.869	HH	3645	62302	5.15%	0.100%
245	13.886	13.869	13.910	HH	4061	92963	7.68%	0.150%
246	13.928	13.910	13.971	HH	4252	132931	10.98%	0.214%

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247	13.980	13.971	13.989	HH	3173	32462	2.68%	0.052%
248	14.008	13.989	14.028	HH	3367	75288	6	
249	14.045	14.028	14.065	HH	3205	67943	5	
250	14.093	14.065	14.127	HH	13361	235116	19	
251	14.149	14.127	14.167	HH	3225	72356	5	
252	14.177	14.167	14.192	HH	3104	43785	3	
253	14.212	14.192	14.233	HH	3313	72205	5.96%	0.116%
254	14.238	14.233	14.271	HH	2677	57461	4.75%	0.093%
255	14.277	14.271	14.286	HH	2437	20504	1.69%	0.033%
256	14.322	14.286	14.377	HH	3239	151215	12.49%	0.244%
257	14.387	14.377	14.406	HH	2590	43640	3.60%	0.070%
258	14.418	14.406	14.439	HH	2502	48337	3.99%	0.078%
259	14.459	14.439	14.473	HH	2786	52270	4.32%	0.084%
260	14.495	14.473	14.501	HH	3481	53986	4.46%	0.087%
261	14.507	14.501	14.536	HH	3428	63013	5.20%	0.102%
262	14.554	14.536	14.578	HH	2672	62561	5.17%	0.101%
263	14.601	14.578	14.629	HH	2438	70003	5.78%	0.113%
264	14.658	14.629	14.689	HH	7727	143500	11.85%	0.231%
265	14.718	14.689	14.742	HH	2927	78704	6.50%	0.127%
266	14.758	14.742	14.786	HH	2547	61924	5.11%	0.100%
267	14.792	14.786	14.807	HH	2261	27471	2.27%	0.044%
268	14.811	14.807	14.846	HH	2221	48290	3.99%	0.078%
269	14.869	14.846	14.885	HH	2243	49982	4.13%	0.081%
270	14.888	14.885	14.901	HH	2114	20006	1.65%	0.032%
271	14.907	14.901	14.927	HH	2170	32964	2.72%	0.053%
272	14.936	14.927	14.957	HH	2218	37428	3.09%	0.060%
273	14.995	14.957	15.033	HH	13294	249079	20.57%	0.402%
274	15.045	15.033	15.079	HH	2337	59641	4.93%	0.096%
275	15.082	15.079	15.115	HH	2045	41379	3.42%	0.067%
276	15.120	15.115	15.136	HH	1921	22325	1.84%	0.036%
277	15.164	15.136	15.172	HH	1879	38308	3.16%	0.062%
278	15.199	15.172	15.235	HH	4777	105828	8.74%	0.171%
279	15.251	15.235	15.303	HH	2111	76257	6.30%	0.123%
280	15.310	15.303	15.315	HH	1761	12863	1.06%	0.021%
281	15.320	15.315	15.326	HH	1747	11098	0.92%	0.018%
282	15.331	15.326	15.350	HH	1839	25370	2.10%	0.041%
283	15.354	15.350	15.368	HH	1759	17129	1.41%	0.028%
284	15.376	15.368	15.387	HH	1764	19033	1.57%	0.031%
285	15.399	15.387	15.408	HH	1885	22509	1.86%	0.036%
286	15.447	15.408	15.468	HH	1937	62881	5.19%	0.101%
287	15.473	15.468	15.489	HH	1684	21292	1.76%	0.034%
288	15.513	15.489	15.524	HH	1789	35440	2.93%	0.057%
289	15.538	15.524	15.554	HH	1793	29909	2.47%	0.048%
290	15.588	15.554	15.693	HH	5876	246490	20.36%	0.398%
291	15.724	15.693	15.764	HH	3305	99085	8.18%	0.160%
292	15.784	15.764	15.818	HH	2574	66480	5.49%	0.107%
293	15.820	15.818	15.833	HH	1772	15408	1.27%	0.025%
294	15.838	15.833	15.845	HH	1704	11295	0.93%	0.018%
295	15.851	15.845	15.865	HH	1723	20166	1.67%	0.033%
296	15.909	15.865	15.919	HH	1707	51470	4.25%	0.083%
297	15.933	15.919	15.953	HH	1710	34219	2.83%	0.055%
298	15.960	15.953	15.969	HH	1701	14996	1.24%	0.024%
299	15.989	15.969	16.000	HH	1758	31931	2.64%	0.052%

Instrument :
FID_G
ClientSampleId :
HW0425-PT-DIES-SOIL

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 05/14/2025
Supervised By :mohammad ahmed 05/15/2025

rteres

300	16.033	16.000	16.059	HH	1863	63355	5.23%	0.102%
301	16.062	16.059	16.067	HH	1760	8375		
302	16.103	16.067	16.109	HH	1889	44436		
303	16.112	16.109	16.144	HH	1874	36415		
304	16.176	16.144	16.201	HH	1855	59696		
305	16.224	16.201	16.262	HH	2572	75491		
306	16.289	16.262	16.337	HH	1984	79688	6.58%	0.129%
307	16.365	16.337	16.381	HH	1839	45363	3.75%	0.073%
308	16.413	16.381	16.432	HH	1908	54996	4.54%	0.089%
309	16.447	16.432	16.467	HH	1772	36932	3.05%	0.060%
310	16.540	16.467	16.562	HH	1887	102167	8.44%	0.165%
311	16.608	16.562	16.659	HH	2696	128387	10.60%	0.207%
312	16.676	16.659	16.683	HH	2098	29037	2.40%	0.047%
313	16.708	16.683	16.742	HH	3320	89624	7.40%	0.145%
314	16.788	16.742	16.834	HH	2854	130233	10.76%	0.210%
315	16.861	16.834	16.897	HH	2198	81403	6.72%	0.131%
316	16.911	16.897	16.932	HH	2172	43357	3.58%	0.070%
317	16.942	16.932	16.970	HH	2147	48606	4.01%	0.078%
318	17.016	16.970	17.034	HH	2244	83382	6.89%	0.134%
319	17.090	17.034	17.108	HH	2454	104355	8.62%	0.168%
320	17.176	17.108	17.202	HH	4077	162904	13.45%	0.263%
321	17.224	17.202	17.237	HH	4085	73068	6.03%	0.118%
322	17.256	17.237	17.328	HH	5176	175550	14.50%	0.283%
323	17.408	17.328	17.435	HH	2771	169858	14.03%	0.274%
324	17.464	17.435	17.484	HH	2875	82391	6.80%	0.133%
325	17.550	17.484	17.602	HH	9548	365700	30.20%	0.590%
326	17.628	17.602	17.676	HH	7853	211297	17.45%	0.341%
327	17.719	17.676	17.771	HH	3732	197711	16.33%	0.319%
328	17.800	17.771	17.810	HH	3477	79136	6.54%	0.128%
329	17.835	17.810	17.866	HH	3522	116847	9.65%	0.188%
330	17.909	17.866	17.946	HH	4379	185023	15.28%	0.298%
331	17.954	17.946	17.971	HH	3824	56803	4.69%	0.092%
332	18.066	17.971	18.099	HH	7376	364248	30.08%	0.588%
333	18.157	18.099	18.194	HH	6029	275437	22.75%	0.444%
334	18.203	18.194	18.242	HH	4801	137712	11.37%	0.222%
335	18.289	18.242	18.312	HH	5158	209756	17.32%	0.338%
336	18.341	18.312	18.363	HH	5633	161590	13.35%	0.261%
337	18.385	18.363	18.394	HH	5455	99898	8.25%	0.161%
338	18.432	18.394	18.464	HH	11480	355572	29.37%	0.574%
339	18.489	18.464	18.501	HBA	7308	134924	11.14%	0.218%
			Sum of corrected areas:			61994094		

FG042425.M Wed May 14 05:33:33 2025

CALIBRATION SUMMARY

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

DIESEL RANGE ORGANICS INITIAL CALIBRATION SUMMARY

Lab Name: Chemtech Contract: ALLI03

ProjectID: NJ Soil PT

Lab Code: CHEM Case No.: Q1872 SAS No.: Q1872 SDG No.: Q1872

Calibration Sequence : FG042425		Test : Diesel Range Organics	
Concentration (PPM)	**Area Count**	**Reference Factor**	**File ID**
1000	122641169	122641	FG015756.D
500	64139521	128279	FG015757.D
200	25210755	126054	FG015758.D
100	13317775	133178	FG015759.D
50	6223650	124473	FG015760.D

AVG RF : 126925 **% RSD : 3.202** **AVG RT : 15.0012**

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015756.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 10:48
Operator : YP\AJ
Sample : 100 TRPH STD
Misc :
ALS Vial : 71 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
100 TRPH STD

Integration File: autoint1.e
Quant Time: Apr 24 11:27:45 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 11:24:48 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	15.007	11104419	97.461 ug/ml
	Target Compounds			
1)	N-OCTANE	1.974	10996290	98.710 ug/ml
2)	N-DECANE	4.505	11243230	98.740 ug/ml
3)	N-DODECANE	6.689	11662485	98.467 ug/ml
4)	N-TETRADECANE	8.526	11973700	97.938 ug/ml
5)	N-HEXADECANE	10.140	12216508	97.599 ug/ml
6)	N-OCTADECANE	11.589	12572177	97.463 ug/ml
7)	N-EICOSANE	12.904	12823427	97.384 ug/ml
8)	N-DOCOSANE	14.106	12541120	97.443 ug/ml
10)	N-TETRACOSANE	15.213	12584383	97.592 ug/ml
11)	N-HEXACOSANE	16.237	12562391	97.503 ug/ml
12)	N-OCTACOSANE	17.189	12461748	97.586 ug/ml
13)	N-TRIACONTANE	18.079	12549024	97.656 ug/ml
14)	N-DOTRIACONTANE	18.913	12168396	97.077 ug/ml
15)	N-TETRATRIACONTANE	19.697	10948623	96.599 ug/ml
16)	N-HEXATRIACONTANE	20.437	9283927	95.058 ug/ml
17)	N-OCTATRIACONTANE	21.177	7985569	93.305 ug/ml
18)	N-TETRACONTANE	22.097	7362877	94.497 ug/ml

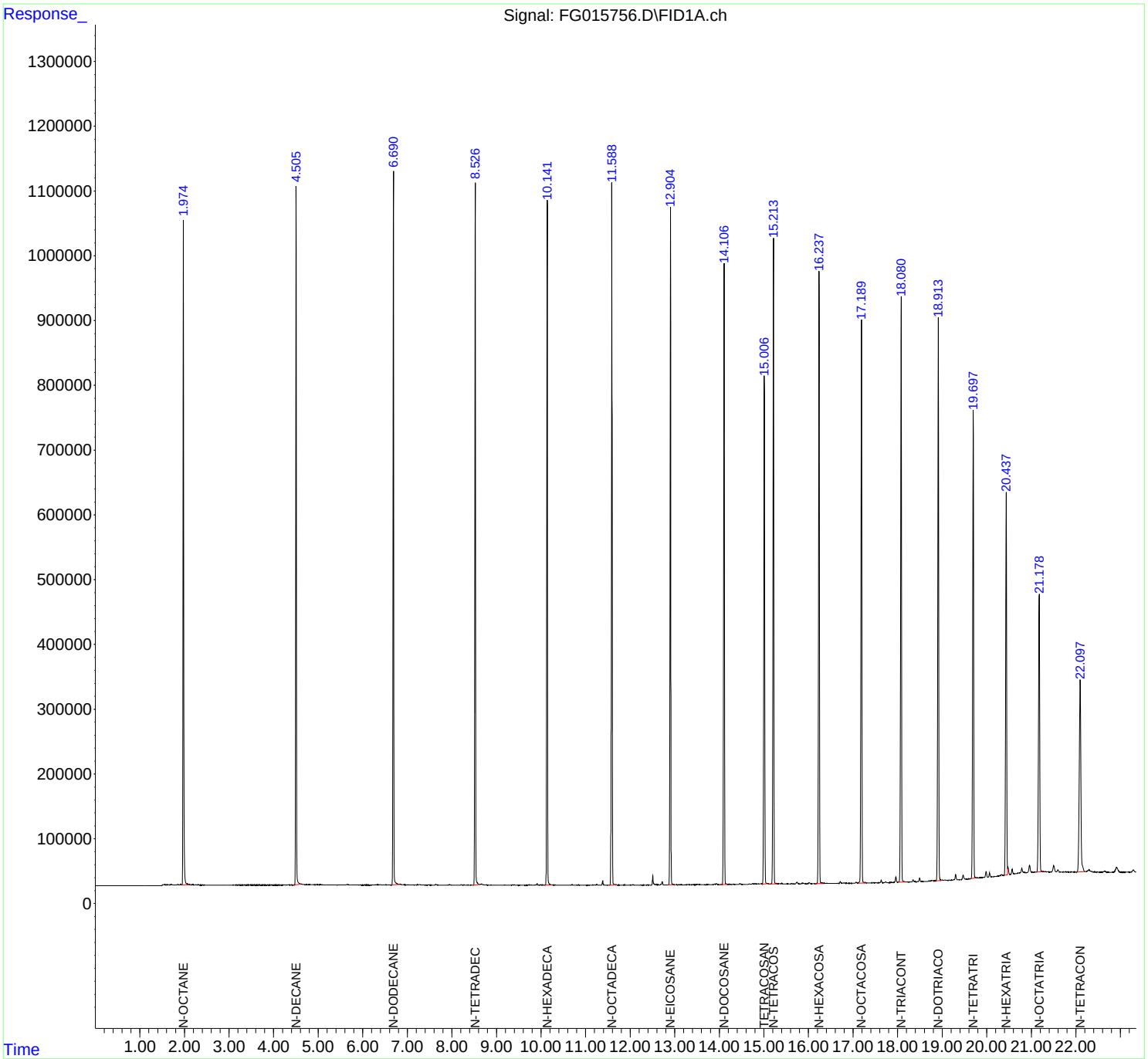
(f)=RT Delta > 1/2 Window (m)=manual int.

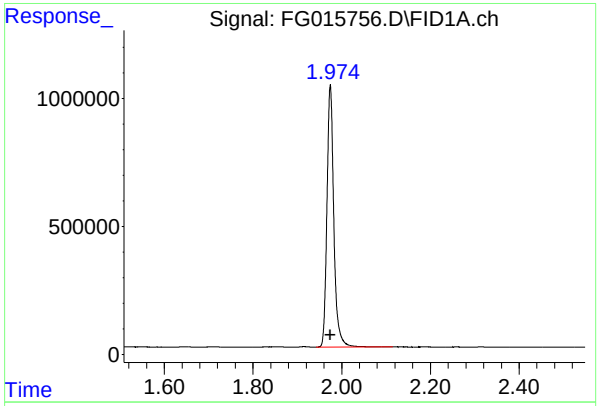
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015756.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 10:48
Operator : YP\AJ
Sample : 100 TRPH STD
Misc :
ALS Vial : 71 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
100 TRPH STD

Integration File: autoint1.e
Quant Time: Apr 24 11:27:45 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 11:24:48 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

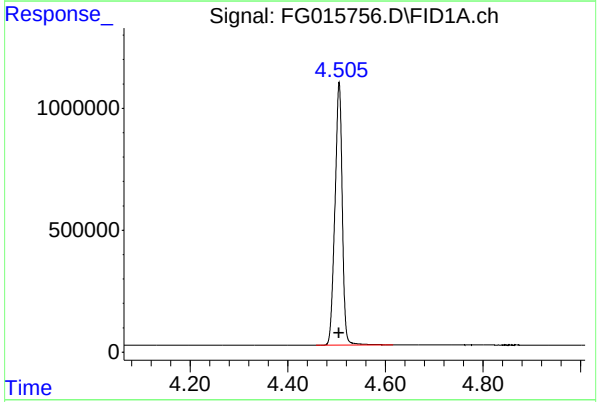




#1 N-OCTANE

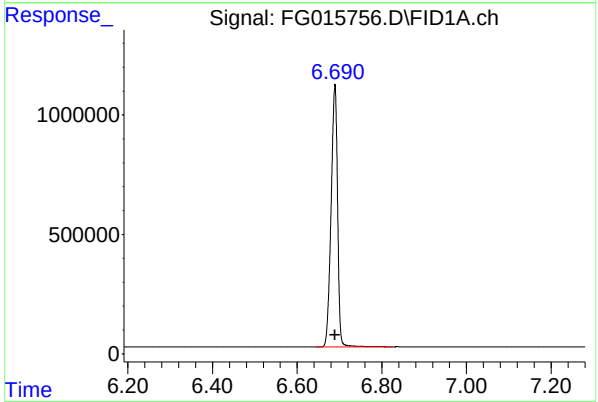
R.T.: 1.974 min
Delta R.T.: 0.000 min
Response: 10996290
Conc: 98.71 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



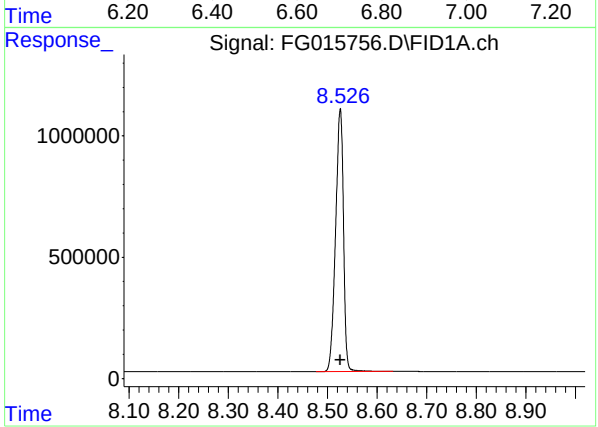
#2 N-DECANE

R.T.: 4.505 min
Delta R.T.: 0.000 min
Response: 11243230
Conc: 98.74 ug/ml



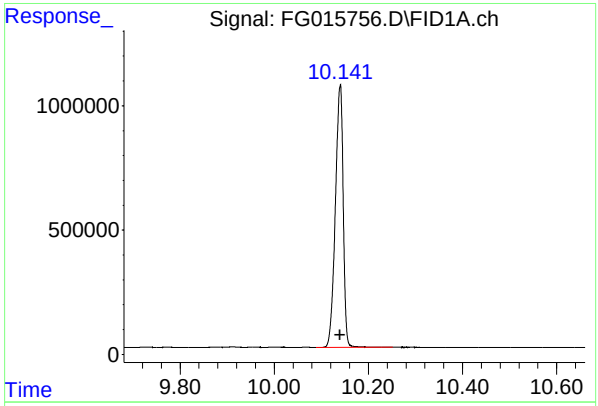
#3 N-DODECANE

R.T.: 6.689 min
Delta R.T.: 0.000 min
Response: 11662485
Conc: 98.47 ug/ml



#4 N-TETRADECANE

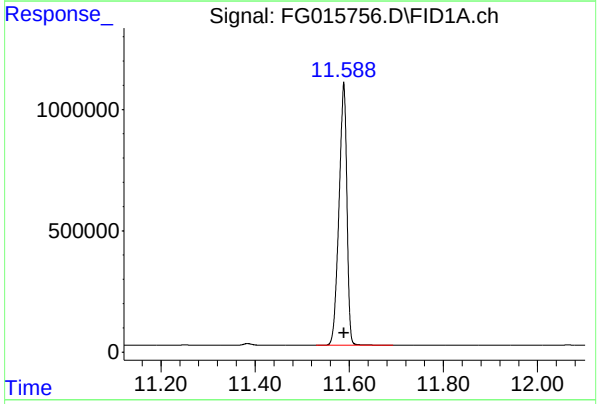
R.T.: 8.526 min
Delta R.T.: 0.000 min
Response: 11973700
Conc: 97.94 ug/ml



#5 N-HEXADECANE

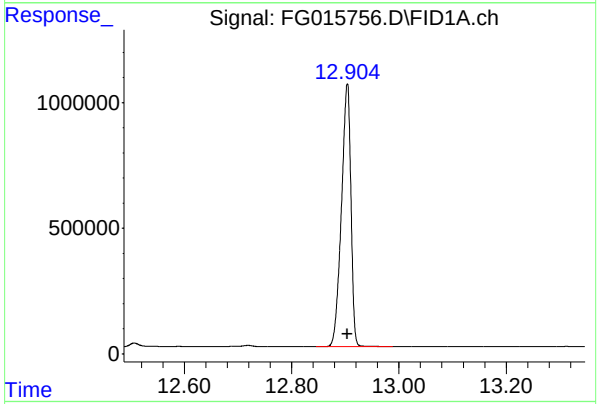
R.T.: 10.140 min
Delta R.T.: 0.000 min
Response: 12216508
Conc: 97.60 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



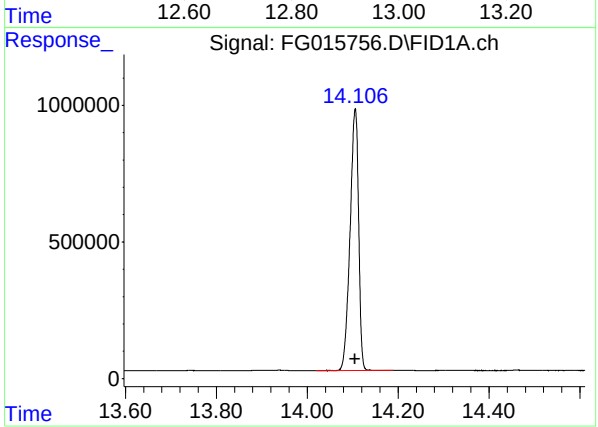
#6 N-OCTADECANE

R.T.: 11.589 min
Delta R.T.: 0.000 min
Response: 12572177
Conc: 97.46 ug/ml



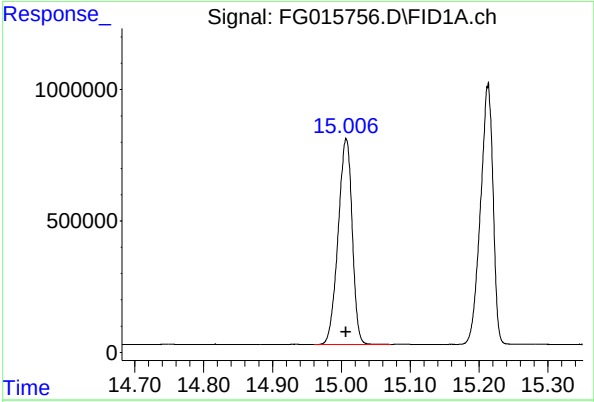
#7 N-EICOSANE

R.T.: 12.904 min
Delta R.T.: 0.000 min
Response: 12823427
Conc: 97.38 ug/ml



#8 N-DOCOSANE

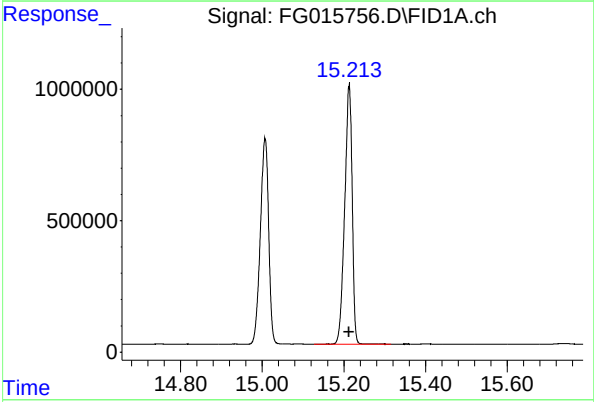
R.T.: 14.106 min
Delta R.T.: 0.000 min
Response: 12541120
Conc: 97.44 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

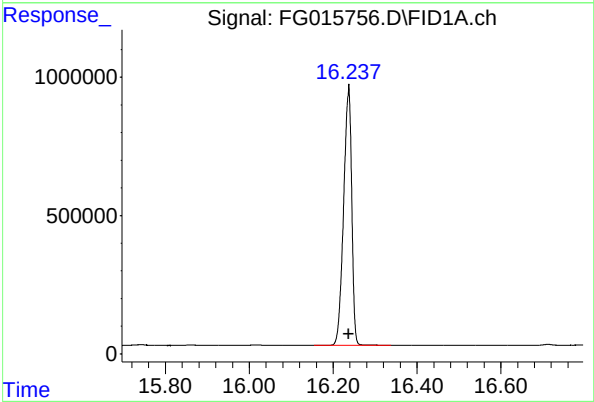
R.T.: 15.007 min
Delta R.T.: 0.000 min
Response: 11104419
Conc: 97.46 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



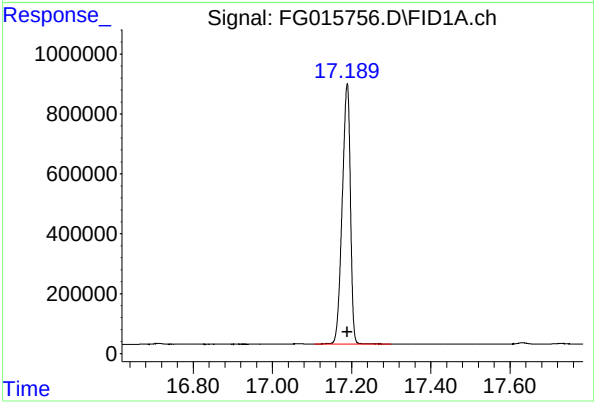
#10 N-TETRACOSANE

R.T.: 15.213 min
Delta R.T.: 0.000 min
Response: 12584383
Conc: 97.59 ug/ml



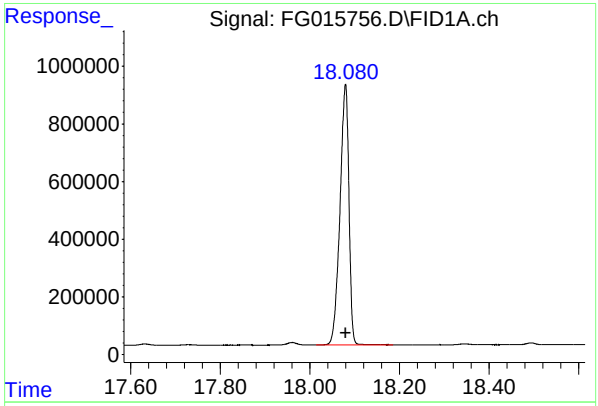
#11 N-HEXACOSANE

R.T.: 16.237 min
Delta R.T.: 0.000 min
Response: 12562391
Conc: 97.50 ug/ml



#12 N-OCTACOSANE

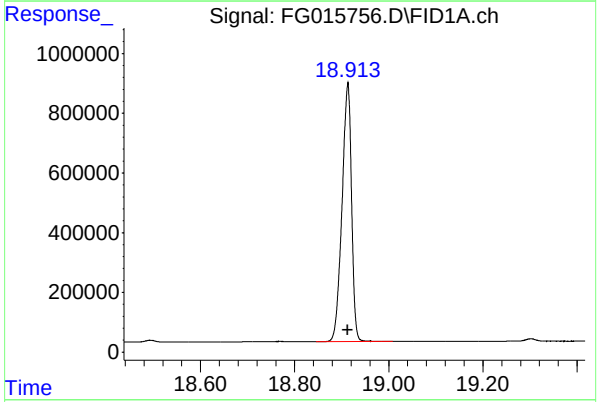
R.T.: 17.189 min
Delta R.T.: 0.000 min
Response: 12461748
Conc: 97.59 ug/ml



#13 N-TRIACONTANE

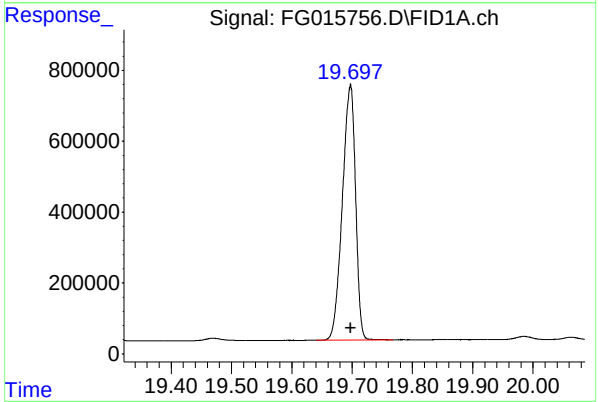
R.T.: 18.079 min
Delta R.T.: 0.000 min
Response: 12549024
Conc: 97.66 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



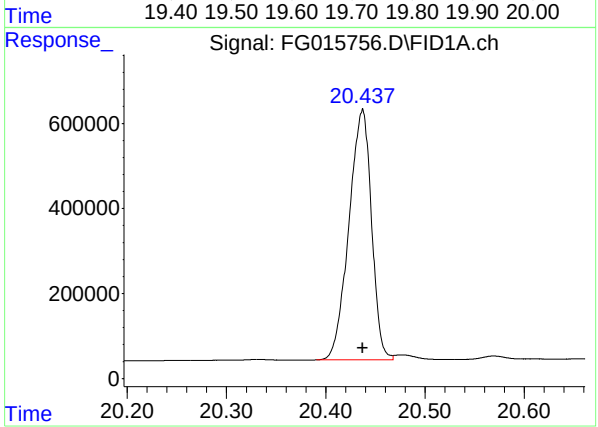
#14 N-DOTRIACONTANE

R.T.: 18.913 min
Delta R.T.: 0.000 min
Response: 12168396
Conc: 97.08 ug/ml



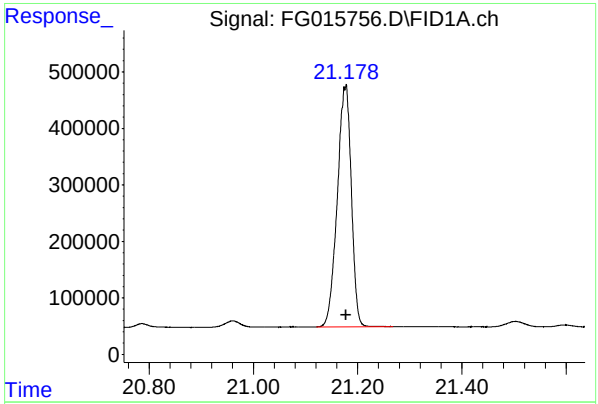
#15 N-TETRATRIACONTANE

R.T.: 19.697 min
Delta R.T.: 0.000 min
Response: 10948623
Conc: 96.60 ug/ml



#16 N-HEXATRIACONTANE

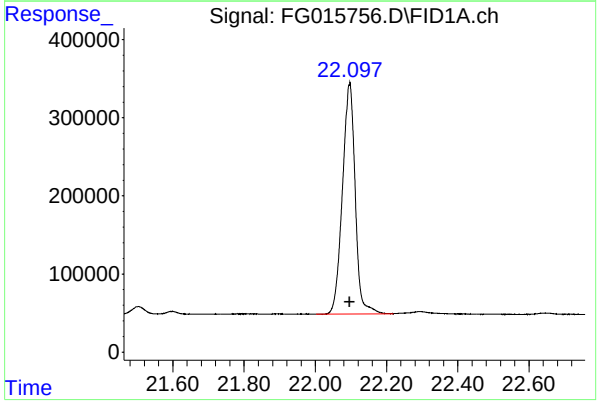
R.T.: 20.437 min
Delta R.T.: 0.000 min
Response: 9283927
Conc: 95.06 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.177 min
Delta R.T.: 0.000 min
Response: 7985569
Conc: 93.30 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.097 min
Delta R.T.: 0.000 min
Response: 7362877
Conc: 94.50 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015756.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 10:48
Sample : 100 TRPH STD
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.974	1.942	2.115	PB	1024920	10996290	85.75%	5.363%
2	4.505	4.458	4.615	BV	1077976	11243230	87.68%	5.483%
3	6.689	6.645	6.826	BV	1098911	11662485	90.95%	5.688%
4	8.526	8.477	8.632	BV	1084475	11973700	93.37%	5.840%
5	10.140	10.089	10.252	BB	1053512	12216508	95.27%	5.958%
6	11.589	11.530	11.693	BB	1084929	12572177	98.04%	6.132%
7	12.904	12.845	12.989	BB	1045141	12823427	100.00%	6.254%
8	14.106	14.020	14.189	BB	958194	12541120	97.80%	6.116%
9	15.007	14.960	15.072	BV	782960	11104419	86.59%	5.416%
10	15.213	15.127	15.315	BB	983900	12584383	98.14%	6.138%
11	16.237	16.155	16.338	BB	936784	12562391	97.96%	6.127%
12	17.189	17.105	17.300	BB	869173	12461748	97.18%	6.078%
13	18.079	18.014	18.185	BB	903788	12549024	97.86%	6.120%
14	18.913	18.845	19.009	BB	864772	12168396	94.89%	5.935%
15	19.697	19.640	19.768	BV	722721	10948623	85.38%	5.340%
16	20.437	20.390	20.468	BV	587955	9283927	72.40%	4.528%
17	21.177	21.120	21.268	BB	425010	7985569	62.27%	3.895%
18	22.097	22.002	22.218	BV	294785	7362877	57.42%	3.591%

Sum of corrected areas: 205040295

FG042425.M Thu Apr 24 13:16:57 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015757.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 11:17
Operator : YP\AJ
Sample : 50 TRPH STD
Misc :
ALS Vial : 72 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 TRPH STD

Integration File: autoint1.e
Quant Time: Apr 24 11:25:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 11:24:48 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	15.002	5841495	50.000 ug/ml
	Target Compounds			
1)	N-OCTANE	1.975	5641868	50.000 ug/ml
2)	N-DECANE	4.503	5765123	50.000 ug/ml
3)	N-DODECANE	6.686	6012868	50.000 ug/ml
4)	N-TETRADECANE	8.522	6238947	50.000 ug/ml
5)	N-HEXADECANE	10.136	6408748	50.000 ug/ml
6)	N-OCTADECANE	11.584	6613302	50.000 ug/ml
7)	N-EICOSANE	12.898	6756237	50.000 ug/ml
8)	N-DOCOSANE	14.100	6599646	50.000 ug/ml
10)	N-TETRACOSANE	15.207	6602706	50.000 ug/ml
11)	N-HEXACOSANE	16.231	6602864	50.000 ug/ml
12)	N-OCTACOSANE	17.184	6539080	50.000 ug/ml
13)	N-TRIACONTANE	18.074	6575660	50.000 ug/ml
14)	N-DOTRIACONTANE	18.908	6450543	50.000 ug/ml
15)	N-TETRATRIACONTANE	19.692	5859842	50.000 ug/ml
16)	N-HEXATRIACONTANE	20.433	5124615	50.000 ug/ml
17)	N-OCTATRIACONTANE	21.173	4565784	50.000 ug/ml
18)	N-TETRACONTANE	22.092	4110184	50.000 ug/ml

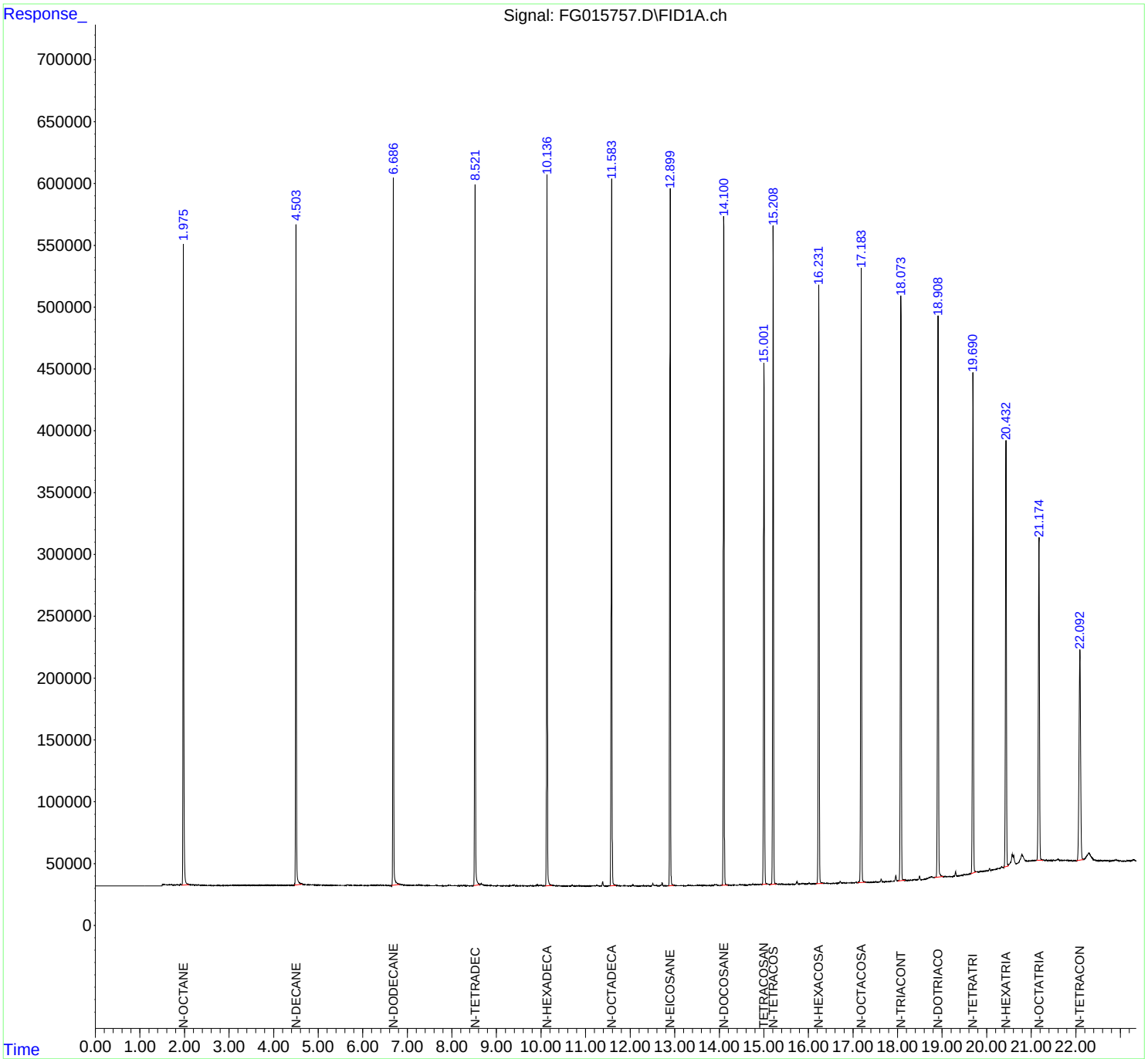
(f)=RT Delta > 1/2 Window (m)=manual int.

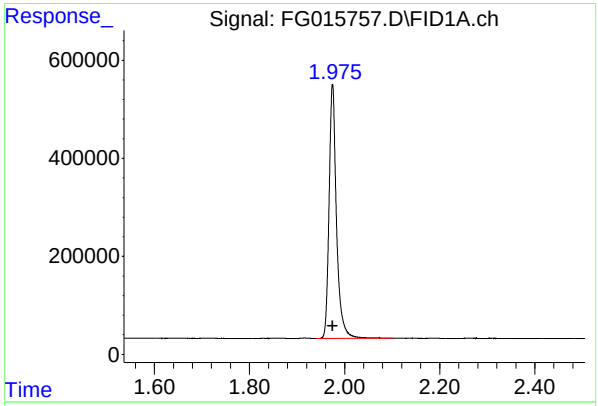
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015757.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 11:17
Operator : YP\AJ
Sample : 50 TRPH STD
Misc :
ALS Vial : 72 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 TRPH STD

Integration File: autoint1.e
Quant Time: Apr 24 11:25:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 11:24:48 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

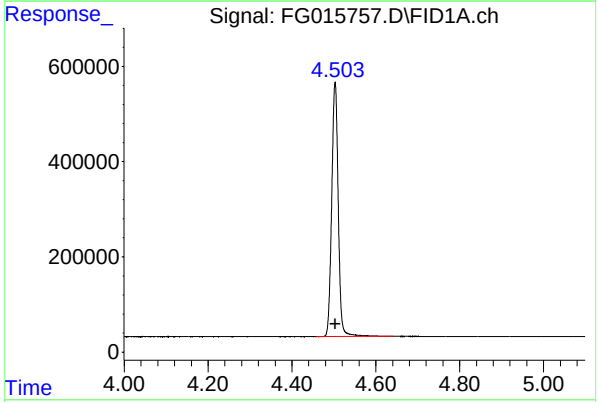




#1 N-OCTANE

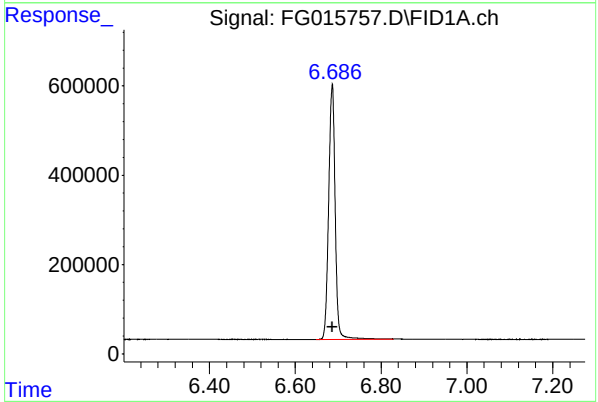
R.T.: 1.975 min
Delta R.T.: 0.000 min
Response: 5641868
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



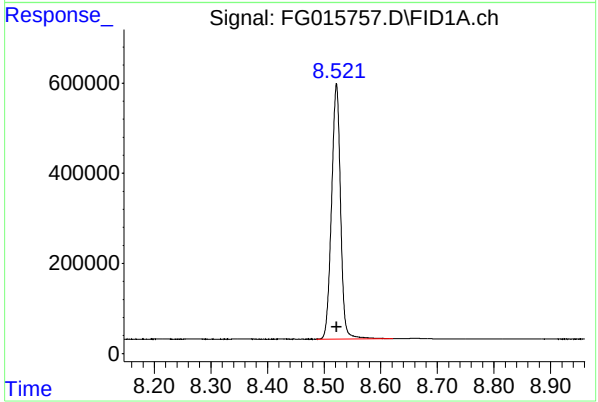
#2 N-DECANE

R.T.: 4.503 min
Delta R.T.: 0.000 min
Response: 5765123
Conc: 50.00 ug/ml



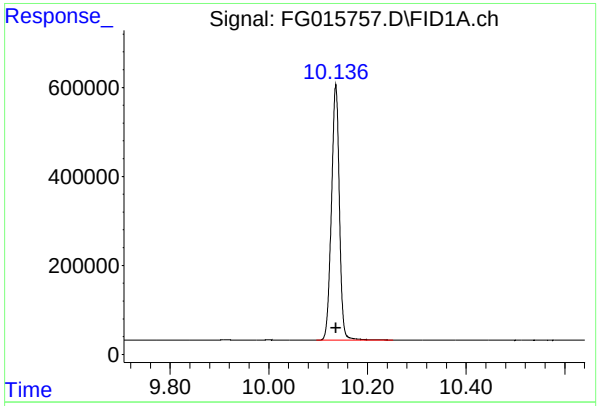
#3 N-DODECANE

R.T.: 6.686 min
Delta R.T.: 0.000 min
Response: 6012868
Conc: 50.00 ug/ml



#4 N-TETRADECANE

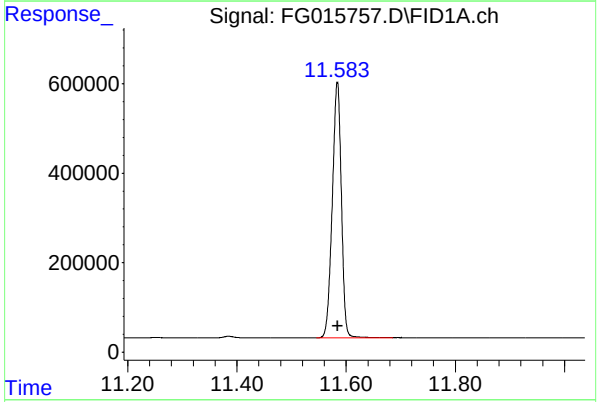
R.T.: 8.522 min
Delta R.T.: 0.000 min
Response: 6238947
Conc: 50.00 ug/ml



#5 N-HEXADECANE

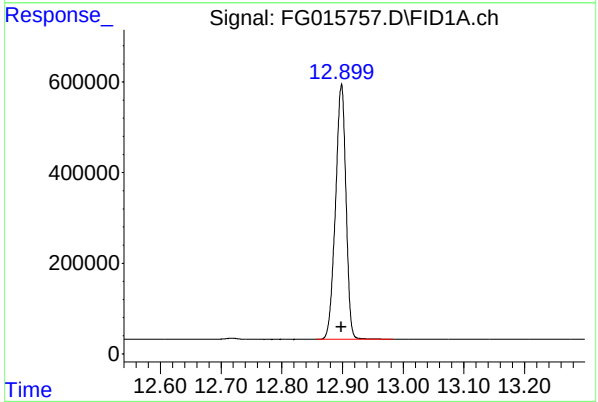
R.T.: 10.136 min
Delta R.T.: 0.000 min
Response: 6408748
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



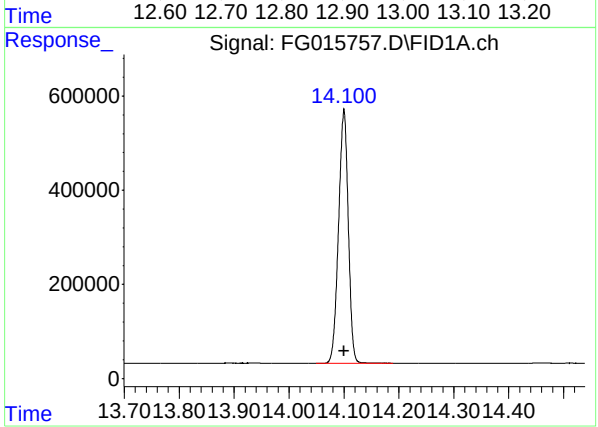
#6 N-OCTADECANE

R.T.: 11.584 min
Delta R.T.: 0.000 min
Response: 6613302
Conc: 50.00 ug/ml



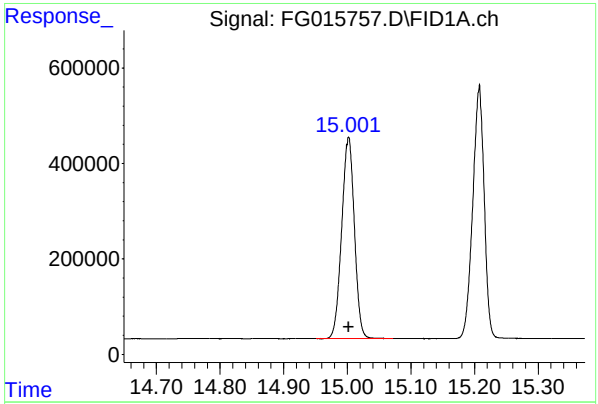
#7 N-EICOSANE

R.T.: 12.898 min
Delta R.T.: 0.000 min
Response: 6756237
Conc: 50.00 ug/ml



#8 N-DOCOSANE

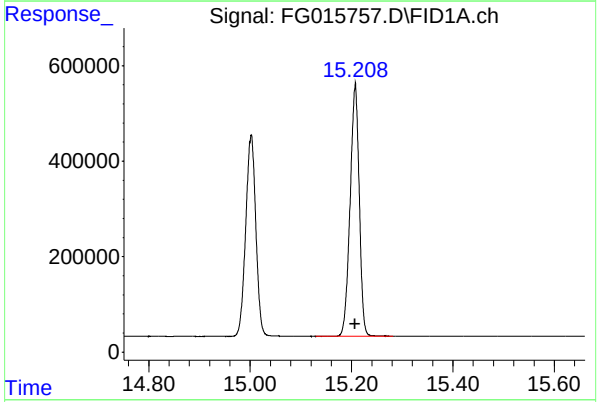
R.T.: 14.100 min
Delta R.T.: 0.000 min
Response: 6599646
Conc: 50.00 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

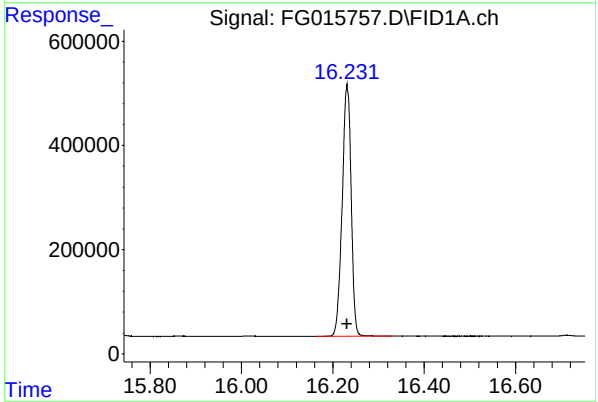
R.T.: 15.002 min
Delta R.T.: 0.000 min
Response: 5841495
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



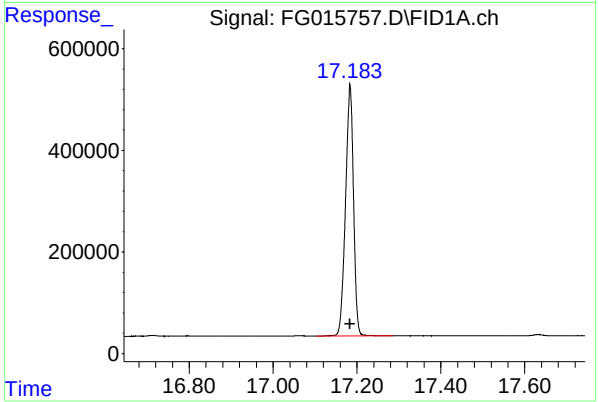
#10 N-TETRACOSANE

R.T.: 15.207 min
Delta R.T.: 0.000 min
Response: 6602706
Conc: 50.00 ug/ml



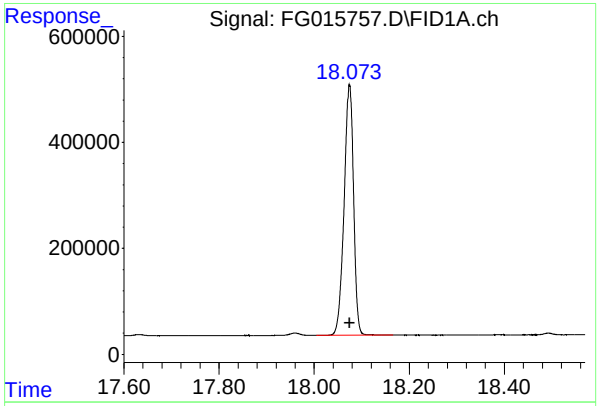
#11 N-HEXACOSANE

R.T.: 16.231 min
Delta R.T.: 0.000 min
Response: 6602864
Conc: 50.00 ug/ml



#12 N-OCTACOSANE

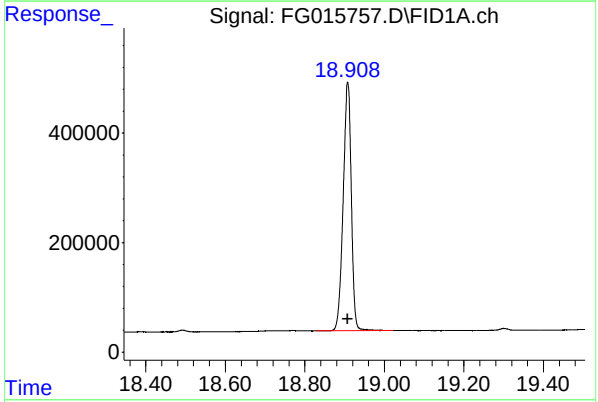
R.T.: 17.184 min
Delta R.T.: 0.000 min
Response: 6539080
Conc: 50.00 ug/ml



#13 N-TRIACONTANE

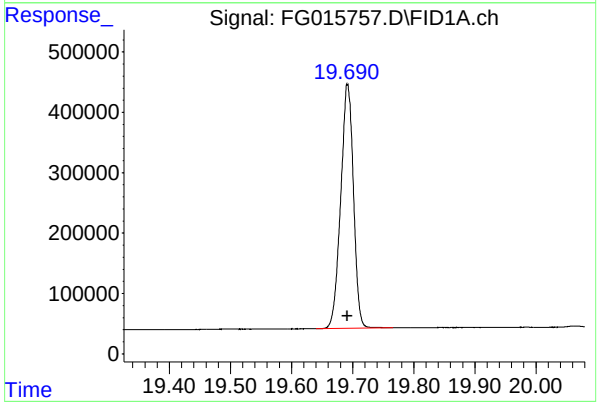
R.T.: 18.074 min
Delta R.T.: 0.000 min
Response: 6575660
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



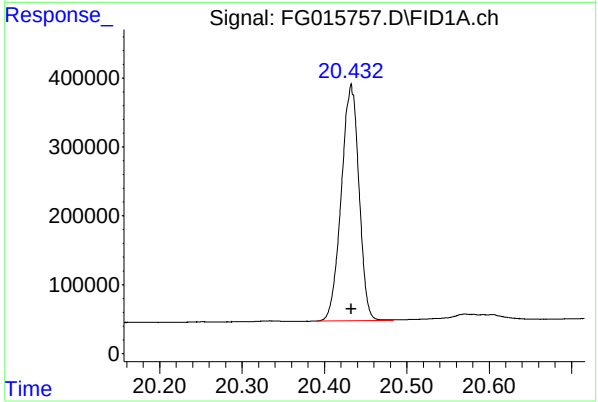
#14 N-DOTRIACONTANE

R.T.: 18.908 min
Delta R.T.: 0.000 min
Response: 6450543
Conc: 50.00 ug/ml



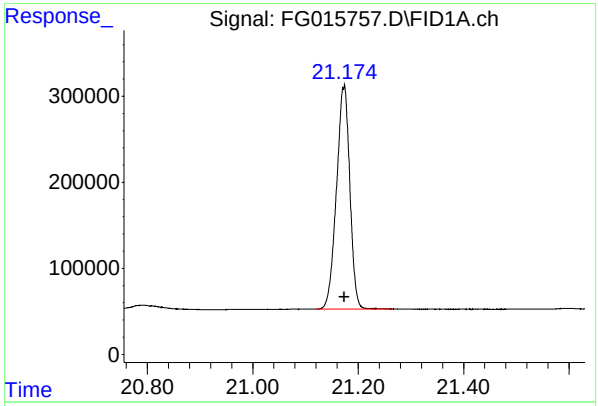
#15 N-TETRATRIACONTANE

R.T.: 19.692 min
Delta R.T.: 0.000 min
Response: 5859842
Conc: 50.00 ug/ml



#16 N-HEXATRIACONTANE

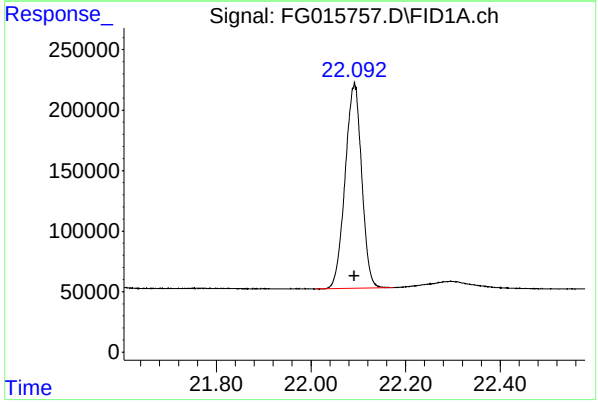
R.T.: 20.433 min
Delta R.T.: 0.000 min
Response: 5124615
Conc: 50.00 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.173 min
Delta R.T.: 0.000 min
Response: 4565784
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.092 min
Delta R.T.: 0.000 min
Response: 4110184
Conc: 50.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015757.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 11:17
Sample : 50 TRPH STD
Misc :
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.975	1.940	2.102	PB	518391	5641868	83.51%	5.209%
2	4.503	4.458	4.641	BB	534310	5765123	85.33%	5.323%
3	6.686	6.648	6.828	BV	569163	6012868	89.00%	5.552%
4	8.522	8.486	8.622	BV	566758	6238947	92.34%	5.760%
5	10.136	10.096	10.252	BB	572817	6408748	94.86%	5.917%
6	11.584	11.545	11.686	BB	570837	6613302	97.88%	6.106%
7	12.898	12.857	12.983	BB	561391	6756237	100.00%	6.238%
8	14.100	14.049	14.189	BB	540265	6599646	97.68%	6.093%
9	15.002	14.951	15.072	BV	421352	5841495	86.46%	5.393%
10	15.207	15.130	15.282	BB	528649	6602706	97.73%	6.096%
11	16.231	16.163	16.332	BB	484089	6602864	97.73%	6.096%
12	17.184	17.102	17.286	BB	494986	6539080	96.79%	6.037%
13	18.074	18.004	18.166	BB	471435	6575660	97.33%	6.071%
14	18.908	18.828	19.022	BB	453993	6450543	95.48%	5.956%
15	19.692	19.640	19.766	BB	402842	5859842	86.73%	5.410%
16	20.433	20.390	20.483	BV	343234	5124615	75.85%	4.731%
17	21.173	21.120	21.266	BB	258145	4565784	67.58%	4.215%
18	22.092	22.011	22.173	BV	170162	4110184	60.84%	3.795%

Sum of corrected areas: 108309511

FG042425.M Thu Apr 24 13:17:40 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015758.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 11:46
Operator : YP\AJ
Sample : 20 TRPH STD
Misc :
ALS Vial : 73 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
20 TRPH STD

Integration File: autoint1.e
Quant Time: Apr 24 11:54:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 11:54:05 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	15.000	2321990	20.251 ug/ml
	Target Compounds			
1)	N-OCTANE	1.974	2237524	20.057 ug/ml
2)	N-DECANE	4.502	2238396	19.771 ug/ml
3)	N-DODECANE	6.684	2319481	19.720 ug/ml
4)	N-TETRADECANE	8.520	2417851	19.851 ug/ml
5)	N-HEXADECANE	10.134	2497764	19.970 ug/ml
6)	N-OCTADECANE	11.582	2589337	20.049 ug/ml
7)	N-EICOSANE	12.895	2668069	20.174 ug/ml
8)	N-DOCOSANE	14.098	2616865	20.221 ug/ml
10)	N-TETRACOSANE	15.204	2622580	20.224 ug/ml
11)	N-HEXACOSANE	16.229	2625744	20.252 ug/ml
12)	N-OCTACOSANE	17.181	2614668	20.314 ug/ml
13)	N-TRIACONTANE	18.070	2657089	20.447 ug/ml
14)	N-DOTRIACONTANE	18.904	2600271	20.490 ug/ml
15)	N-TETRATRIACONTANE	19.689	2454733	21.076 ug/ml
16)	N-HEXATRIACONTANE	20.430	2212619	21.695 ug/ml
17)	N-OCTATRIACONTANE	21.168	2053554	22.497 ug/ml
18)	N-TETRACONTANE	22.089	1847089	22.327 ug/ml

(f)=RT Delta > 1/2 Window (m)=manual int.

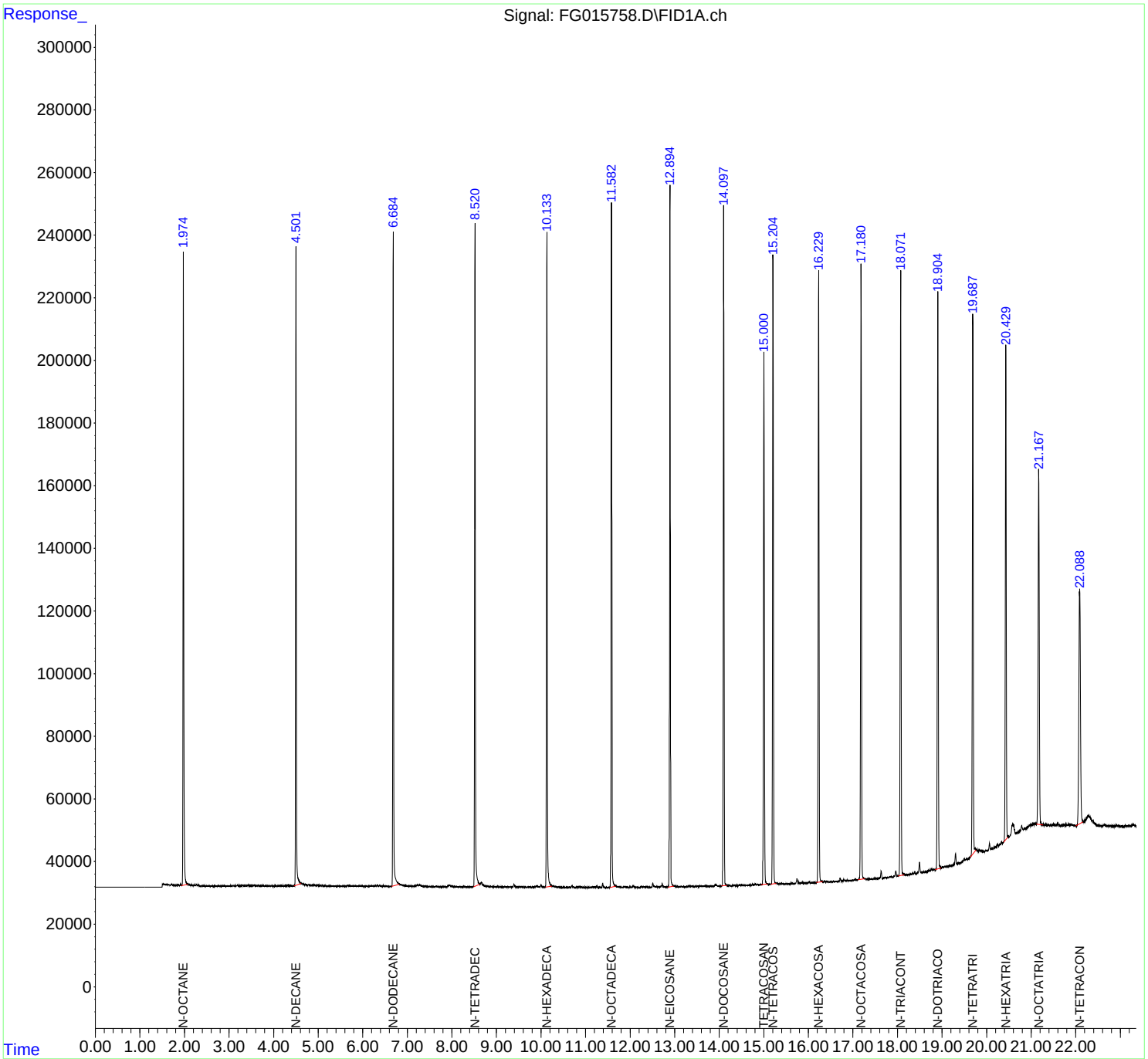
Quantitation Report (QT Reviewed)

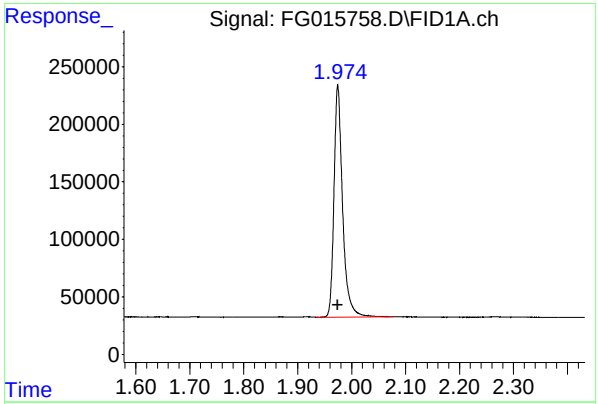
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015758.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 11:46
Operator : YP\AJ
Sample : 20 TRPH STD
Misc :
ALS Vial : 73 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
20 TRPH STD

Integration File: autoint1.e
Quant Time: Apr 24 11:54:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 11:54:05 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

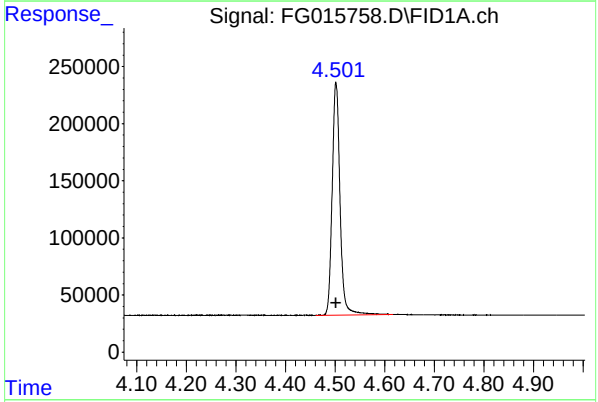




#1 N-OCTANE

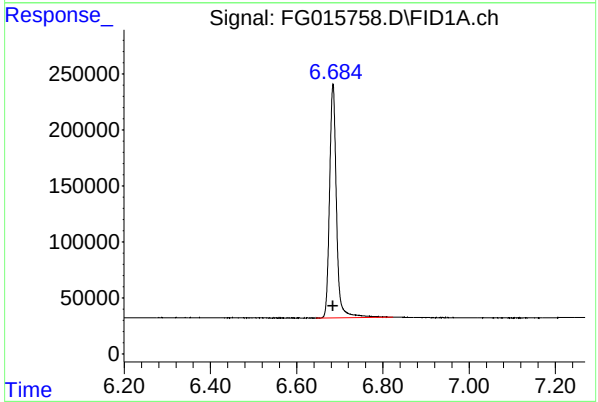
R.T.: 1.974 min
Delta R.T.: 0.000 min
Response: 2237524
Conc: 20.06 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



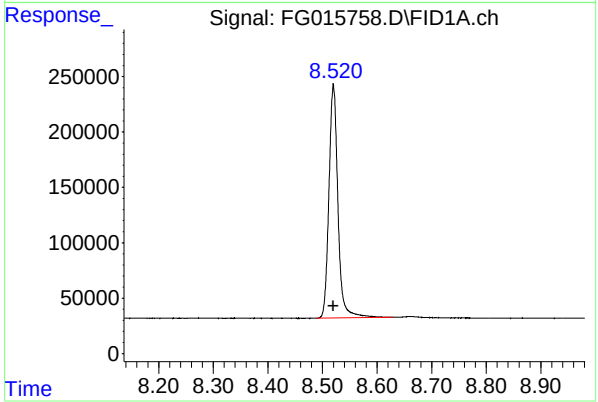
#2 N-DECANE

R.T.: 4.502 min
Delta R.T.: 0.000 min
Response: 2238396
Conc: 19.77 ug/ml



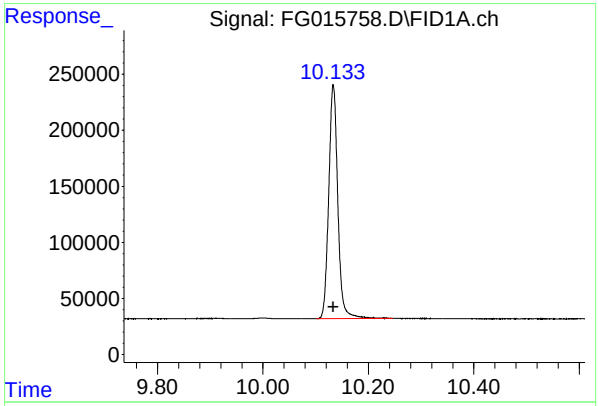
#3 N-DODECANE

R.T.: 6.684 min
Delta R.T.: 0.000 min
Response: 2319481
Conc: 19.72 ug/ml



#4 N-TETRADECANE

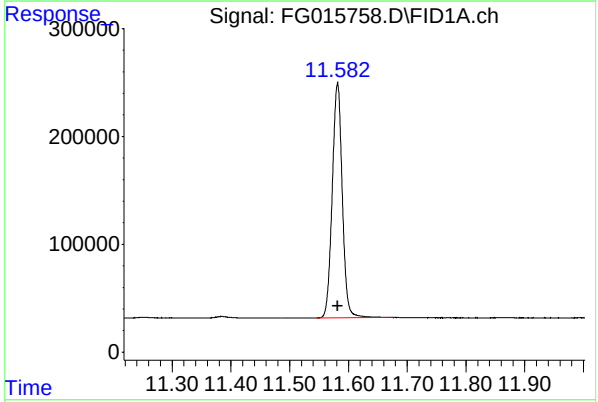
R.T.: 8.520 min
Delta R.T.: 0.000 min
Response: 2417851
Conc: 19.85 ug/ml



#5 N-HEXADECANE

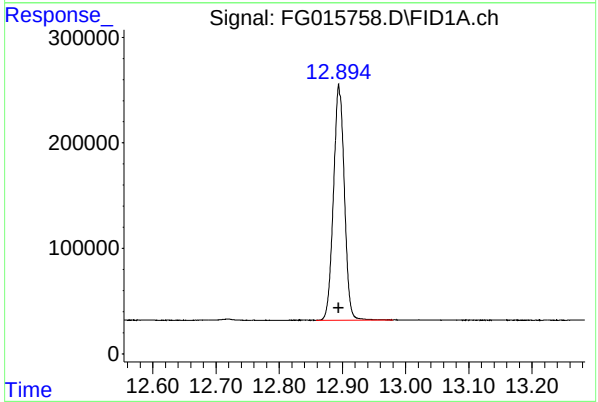
R.T.: 10.134 min
Delta R.T.: 0.000 min
Response: 2497764
Conc: 19.97 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



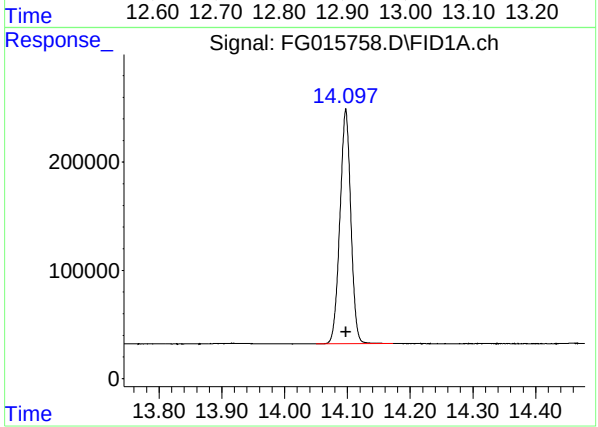
#6 N-OCTADECANE

R.T.: 11.582 min
Delta R.T.: 0.000 min
Response: 2589337
Conc: 20.05 ug/ml



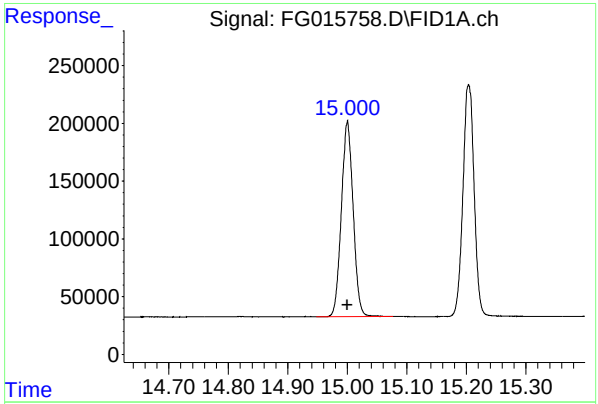
#7 N-EICOSANE

R.T.: 12.895 min
Delta R.T.: 0.000 min
Response: 2668069
Conc: 20.17 ug/ml



#8 N-DOCOSANE

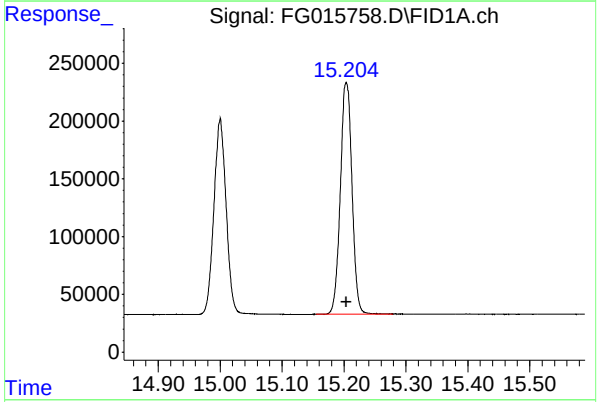
R.T.: 14.098 min
Delta R.T.: 0.000 min
Response: 2616865
Conc: 20.22 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

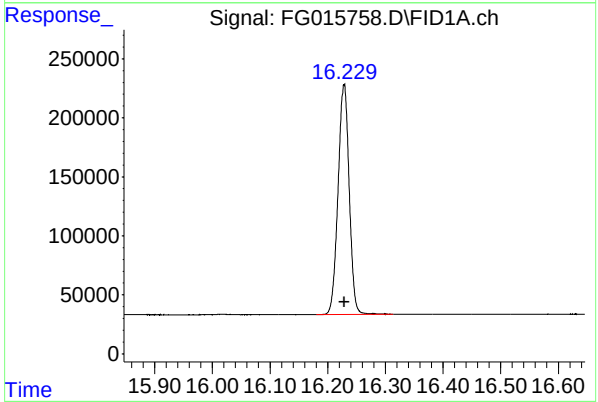
R.T.: 15.000 min
Delta R.T.: 0.000 min
Response: 2321990
Conc: 20.25 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



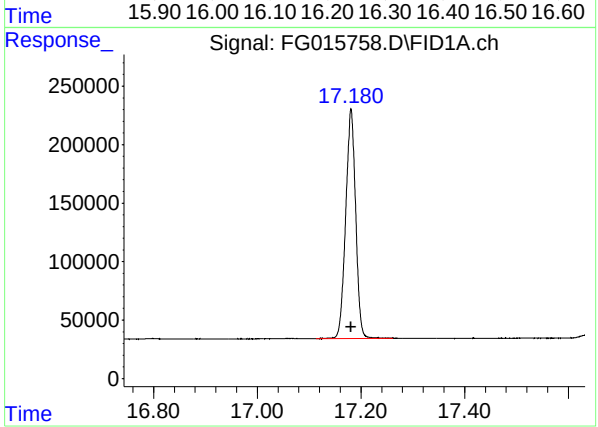
#10 N-TETRACOSANE

R.T.: 15.204 min
Delta R.T.: 0.000 min
Response: 2622580
Conc: 20.22 ug/ml



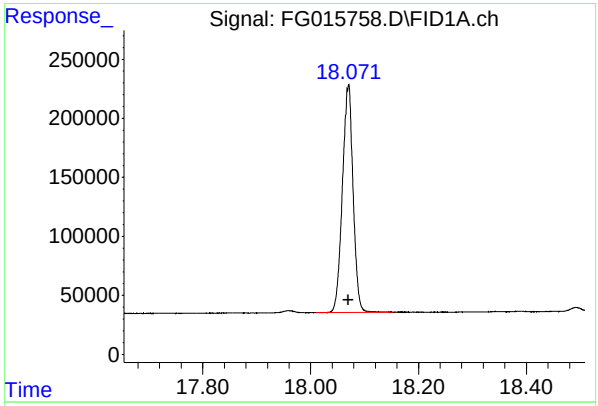
#11 N-HEXACOSANE

R.T.: 16.229 min
Delta R.T.: 0.000 min
Response: 2625744
Conc: 20.25 ug/ml



#12 N-OCTACOSANE

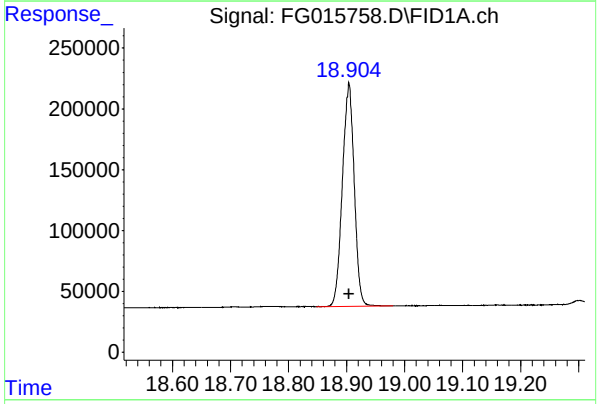
R.T.: 17.181 min
Delta R.T.: 0.000 min
Response: 2614668
Conc: 20.31 ug/ml



#13 N-TRIACONTANE

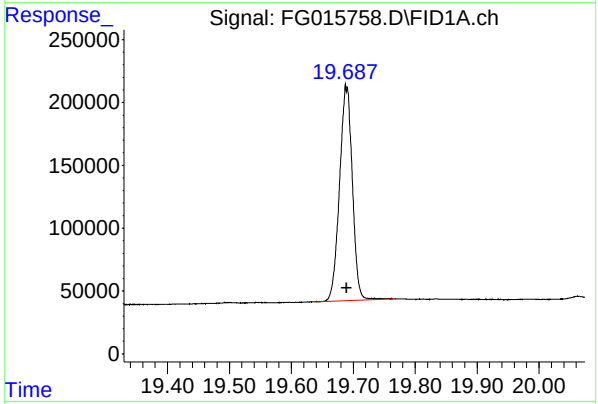
R.T.: 18.070 min
Delta R.T.: 0.000 min
Response: 2657089
Conc: 20.45 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



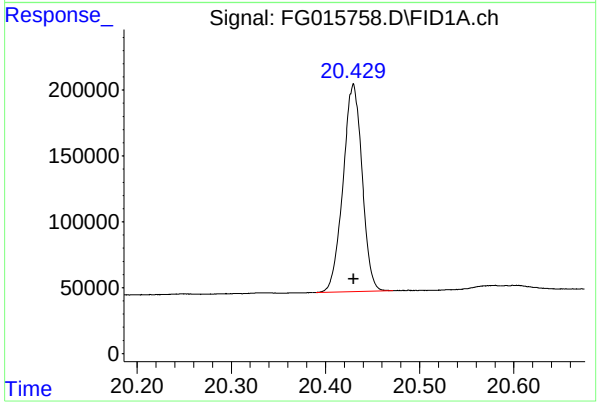
#14 N-DOTRIACONTANE

R.T.: 18.904 min
Delta R.T.: 0.000 min
Response: 2600271
Conc: 20.49 ug/ml



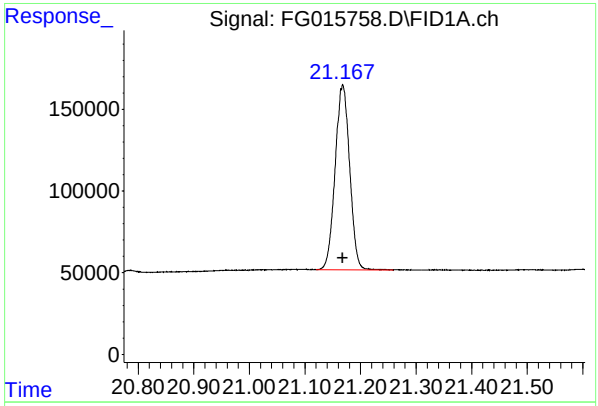
#15 N-TETRATRIACONTANE

R.T.: 19.689 min
Delta R.T.: 0.000 min
Response: 2454733
Conc: 21.08 ug/ml



#16 N-HEXATRIACONTANE

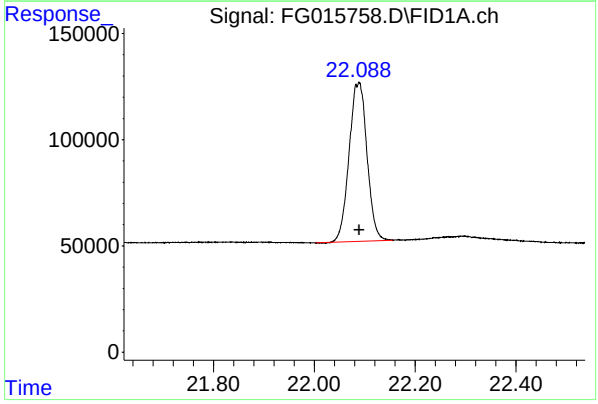
R.T.: 20.430 min
Delta R.T.: 0.000 min
Response: 2212619
Conc: 21.69 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.168 min
Delta R.T.: 0.000 min
Response: 2053554
Conc: 22.50 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.089 min
Delta R.T.: 0.000 min
Response: 1847089
Conc: 22.33 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015758.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 11:46
Sample : 20 TRPH STD
Misc :
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.975	1.934	2.077	BB	201920	2237524	83.86%	5.132%
2	4.502	4.462	4.617	BB	203820	2238396	83.90%	5.134%
3	6.684	6.645	6.823	BB	208563	2319481	86.93%	5.320%
4	8.520	8.488	8.629	BB	211119	2417851	90.62%	5.546%
5	10.134	10.101	10.247	BB	208652	2497764	93.62%	5.729%
6	11.582	11.545	11.676	BB	218192	2589337	97.05%	5.939%
7	12.895	12.858	12.980	BB	223239	2668069	100.00%	6.120%
8	14.098	14.050	14.173	BB	216965	2616865	98.08%	6.003%
9	15.000	14.948	15.077	BB	168988	2321990	87.03%	5.326%
10	15.204	15.155	15.279	BB	200433	2622580	98.30%	6.016%
11	16.229	16.180	16.313	BB	194531	2625744	98.41%	6.023%
12	17.181	17.113	17.262	BB	196368	2614668	98.00%	5.998%
13	18.070	18.010	18.153	BB	192263	2657089	99.59%	6.095%
14	18.904	18.848	18.980	BB	183783	2600271	97.46%	5.965%
15	19.689	19.640	19.764	BB	166134	2454733	92.00%	5.631%
16	20.430	20.390	20.472	BB	158134	2212619	82.93%	5.075%
17	21.168	21.120	21.258	BB	113394	2053554	76.97%	4.710%
18	22.089	22.003	22.156	BB	74811	1847089	69.23%	4.237%

Sum of corrected areas: 43595624

FG042425.M Thu Apr 24 13:18:10 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015759.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 12:16
Operator : YP\AJ
Sample : 10 TRPH STD
Misc :
ALS Vial : 74 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
10 TRPH STD

Integration File: autoint1.e
Quant Time: Apr 24 12:30:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:30:48 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	14.999	1251163	10.669 ug/ml
	Target Compounds			
1)	N-OCTANE	1.975	1185572	10.463 ug/ml
2)	N-DECANE	4.502	1151939	10.130 ug/ml
3)	N-DODECANE	6.684	1187117	10.070 ug/ml
4)	N-TETRADECANE	8.520	1261201	10.264 ug/ml
5)	N-HEXADECANE	10.134	1314900	10.380 ug/ml
6)	N-OCTADECANE	11.581	1372556	10.463 ug/ml
7)	N-EICOSANE	12.894	1428003	10.586 ug/ml
8)	N-DOCOSANE	14.097	1398103	10.591 ug/ml
10)	N-TETRACOSANE	15.204	1402010	10.597 ug/ml
11)	N-HEXACOSANE	16.227	1402199	10.599 ug/ml
12)	N-OCTACOSANE	17.179	1399747	10.642 ug/ml
13)	N-TRIACONTANE	18.068	1412539	10.638 ug/ml
14)	N-DOTRIACONTANE	18.903	1413302	10.829 ug/ml
15)	N-TETRATRIACONTANE	19.688	1328246	11.017 ug/ml
16)	N-HEXATRIACONTANE	20.429	1238523	11.526 ug/ml
17)	N-OCTATRIACONTANE	21.168	1158527	11.891 ug/ml
18)	N-TETRACONTANE	22.088	1119497	12.434 ug/ml

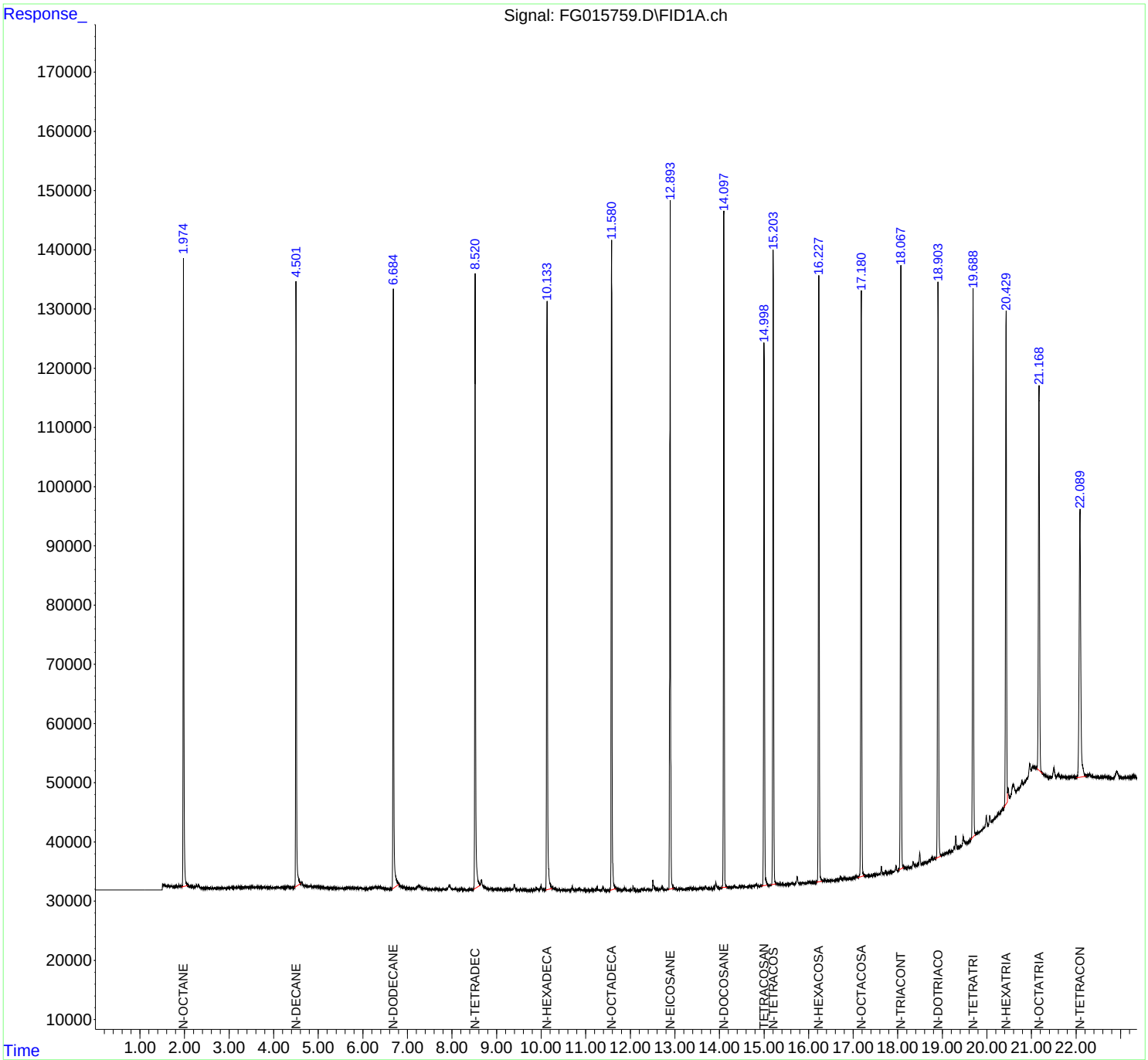
(f)=RT Delta > 1/2 Window (m)=manual int.

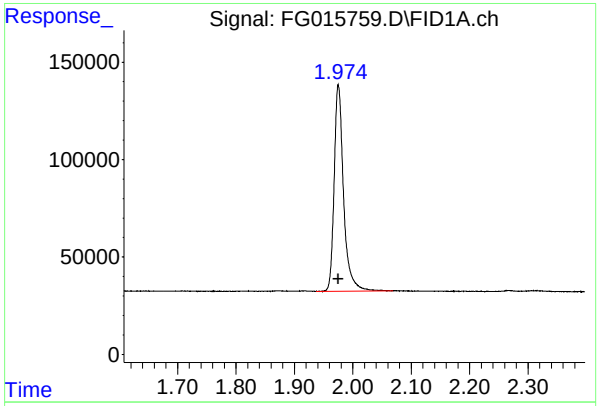
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015759.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 12:16
Operator : YP\AJ
Sample : 10 TRPH STD
Misc :
ALS Vial : 74 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
10 TRPH STD

Integration File: autoint1.e
Quant Time: Apr 24 12:30:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:30:48 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

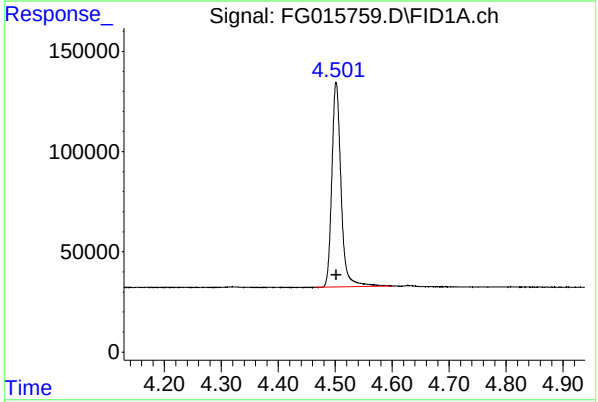




#1 N-OCTANE

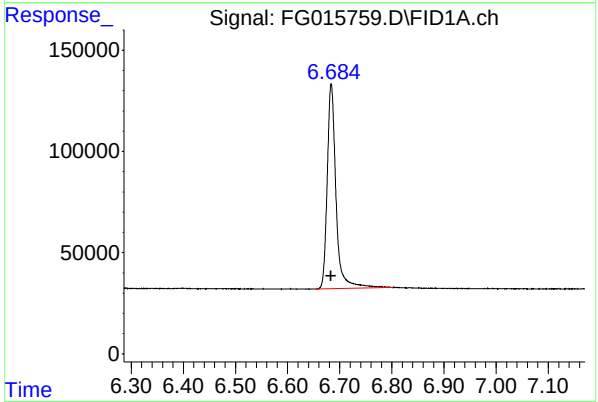
R.T.: 1.975 min
Delta R.T.: 0.000 min
Response: 1185572
Conc: 10.46 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



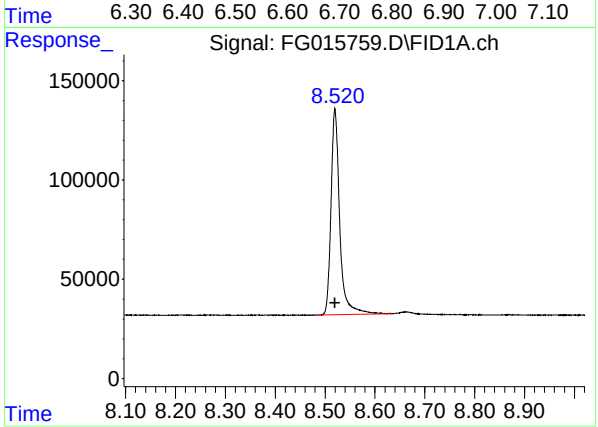
#2 N-DECANE

R.T.: 4.502 min
Delta R.T.: 0.000 min
Response: 1151939
Conc: 10.13 ug/ml



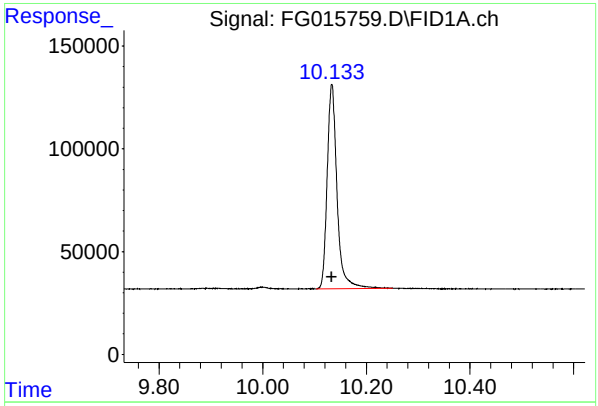
#3 N-DODECANE

R.T.: 6.684 min
Delta R.T.: 0.000 min
Response: 1187117
Conc: 10.07 ug/ml



#4 N-TETRADECANE

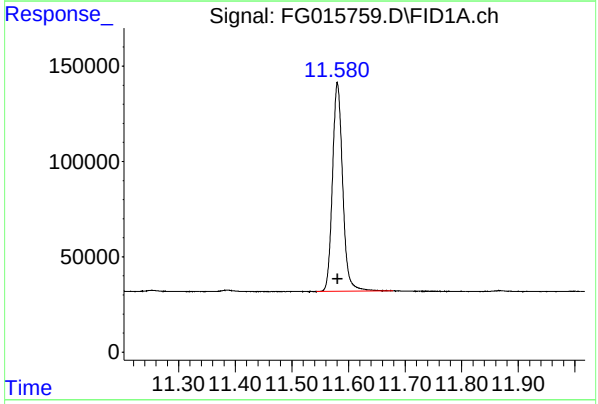
R.T.: 8.520 min
Delta R.T.: 0.000 min
Response: 1261201
Conc: 10.26 ug/ml



#5 N-HEXADECANE

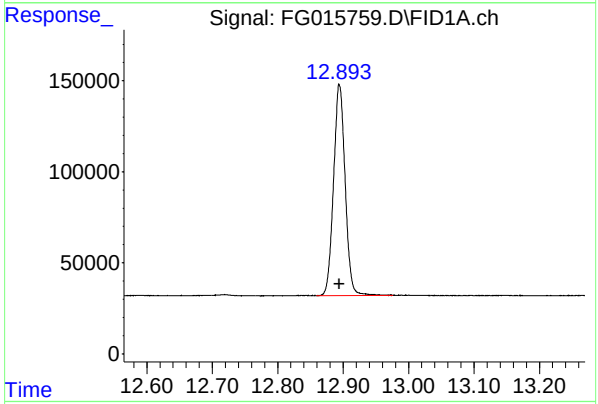
R.T.: 10.134 min
Delta R.T.: 0.000 min
Response: 1314900
Conc: 10.38 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



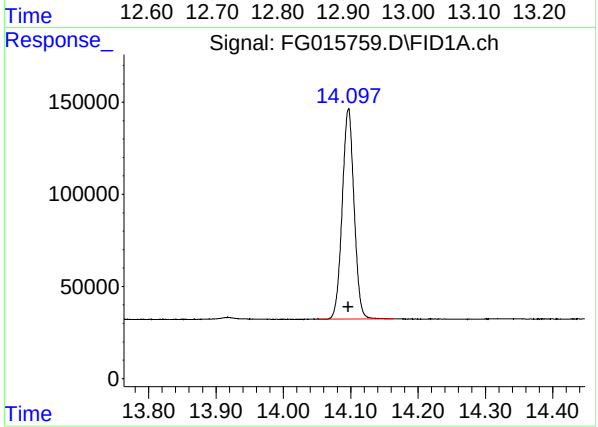
#6 N-OCTADECANE

R.T.: 11.581 min
Delta R.T.: 0.000 min
Response: 1372556
Conc: 10.46 ug/ml



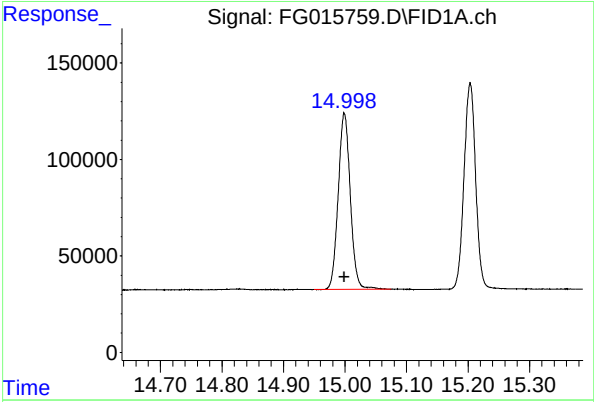
#7 N-EICOSANE

R.T.: 12.894 min
Delta R.T.: 0.000 min
Response: 1428003
Conc: 10.59 ug/ml



#8 N-DOCOSANE

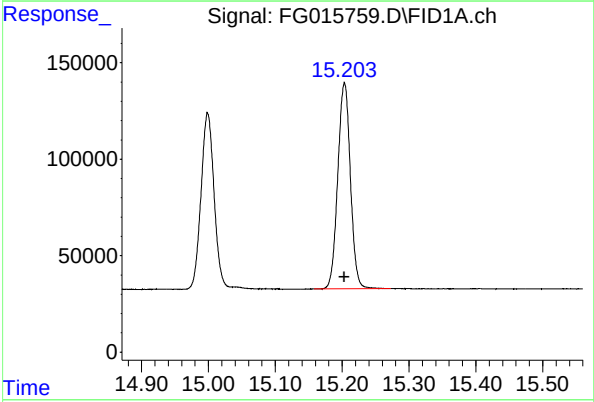
R.T.: 14.097 min
Delta R.T.: 0.000 min
Response: 1398103
Conc: 10.59 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

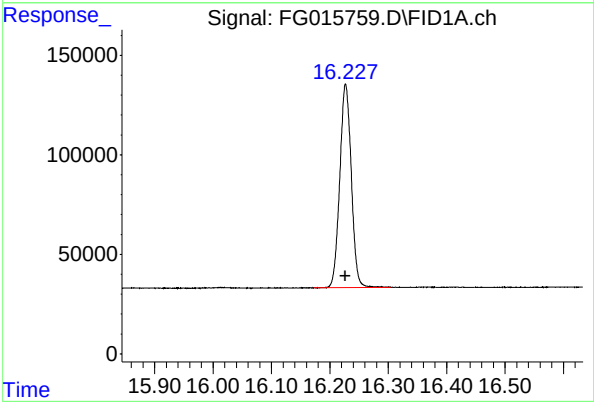
R.T.: 14.999 min
Delta R.T.: 0.000 min
Response: 1251163
Conc: 10.67 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



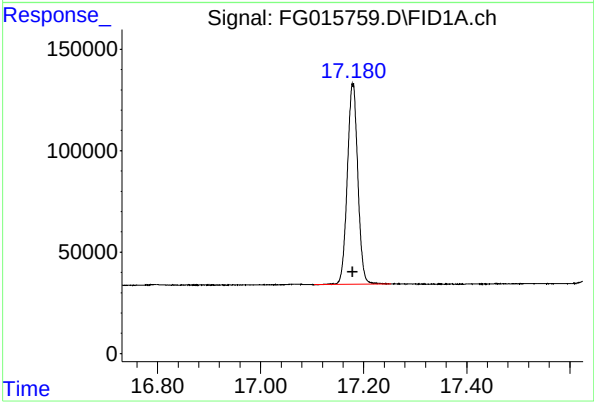
#10 N-TETRACOSANE

R.T.: 15.204 min
Delta R.T.: 0.000 min
Response: 1402010
Conc: 10.60 ug/ml



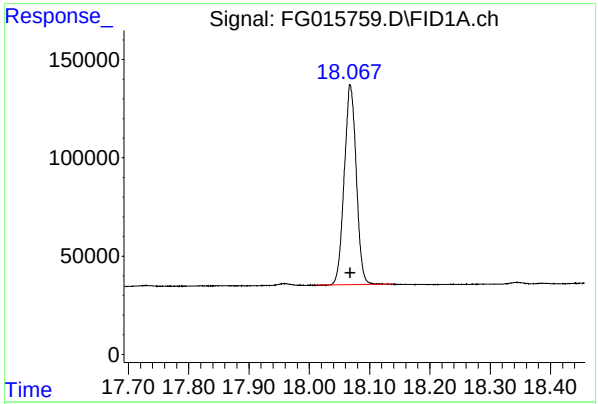
#11 N-HEXACOSANE

R.T.: 16.227 min
Delta R.T.: 0.000 min
Response: 1402199
Conc: 10.60 ug/ml



#12 N-OCTACOSANE

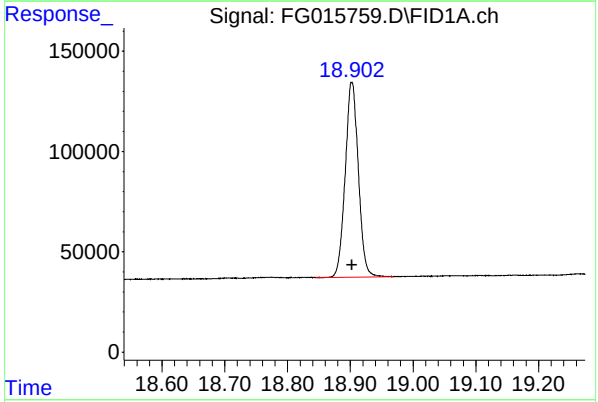
R.T.: 17.179 min
Delta R.T.: 0.000 min
Response: 1399747
Conc: 10.64 ug/ml



#13 N-TRIACONTANE

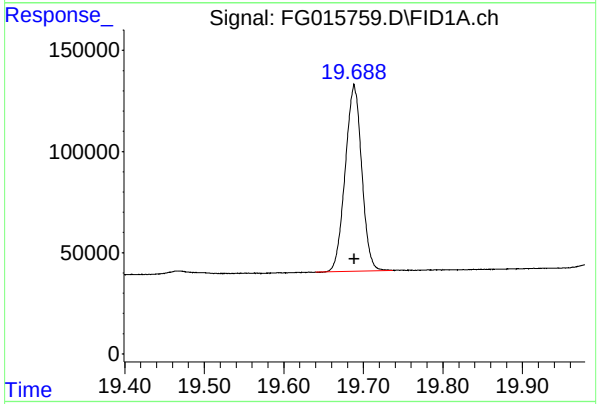
R.T.: 18.068 min
Delta R.T.: 0.000 min
Response: 1412539
Conc: 10.64 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



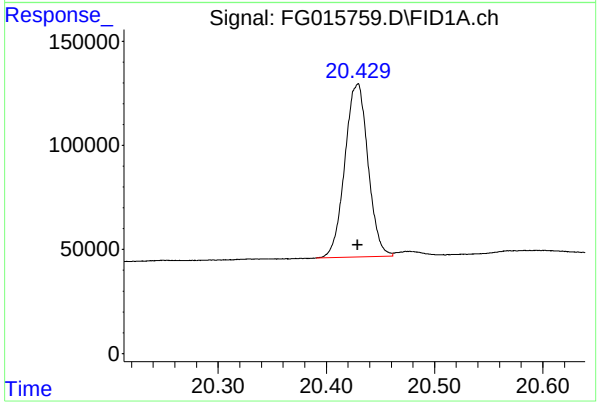
#14 N-DOTRIACONTANE

R.T.: 18.903 min
Delta R.T.: 0.000 min
Response: 1413302
Conc: 10.83 ug/ml



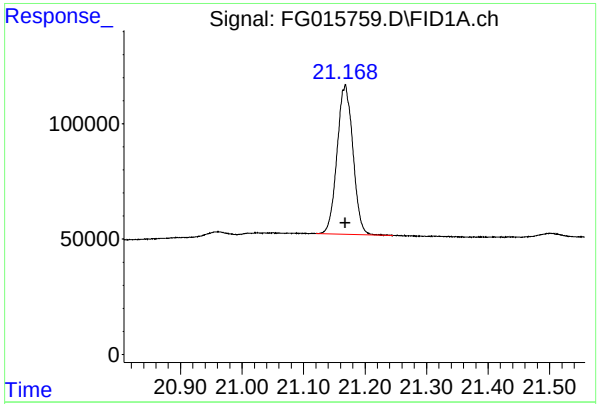
#15 N-TETRATRIACONTANE

R.T.: 19.688 min
Delta R.T.: 0.000 min
Response: 1328246
Conc: 11.02 ug/ml



#16 N-HEXATRIACONTANE

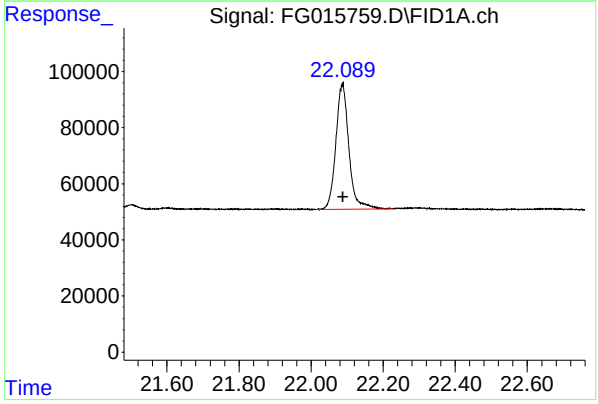
R.T.: 20.429 min
Delta R.T.: 0.000 min
Response: 1238523
Conc: 11.53 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.168 min
Delta R.T.: 0.000 min
Response: 1158527
Conc: 11.89 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.088 min
Delta R.T.: 0.000 min
Response: 1119497
Conc: 12.43 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015759.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 12:16
Sample : 10 TRPH STD
Misc :
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.975	1.937	2.069	BB	105583	1185572	83.02%	5.061%
2	4.502	4.466	4.601	BB	102001	1151939	80.67%	4.918%
3	6.684	6.655	6.802	BB	101210	1187117	83.13%	5.068%
4	8.520	8.482	8.636	BB	103482	1261201	88.32%	5.384%
5	10.134	10.103	10.251	BB	99417	1314900	92.08%	5.613%
6	11.581	11.543	11.679	BB	109455	1372556	96.12%	5.859%
7	12.894	12.859	12.976	BB	115658	1428003	100.00%	6.096%
8	14.097	14.049	14.163	BB	114084	1398103	97.91%	5.968%
9	14.999	14.950	15.075	BB	91364	1251163	87.62%	5.341%
10	15.204	15.158	15.273	BB	106974	1402010	98.18%	5.985%
11	16.227	16.173	16.305	BB	102334	1402199	98.19%	5.986%
12	17.179	17.104	17.253	BB	97529	1399747	98.02%	5.975%
13	18.068	18.011	18.139	BB	101750	1412539	98.92%	6.030%
14	18.903	18.845	18.968	BB	97211	1413302	98.97%	6.033%
15	19.688	19.640	19.737	BB	92505	1328246	93.01%	5.670%
16	20.429	20.390	20.461	BV	83009	1238523	86.73%	5.287%
17	21.168	21.120	21.245	BB	64968	1158527	81.13%	4.946%
18	22.088	22.014	22.227	BB	45168	1119497	78.40%	4.779%
			Sum of corrected areas:			23425144		

FG042425.M Thu Apr 24 13:18:46 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015760.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 12:45
Operator : YP\AJ
Sample : 5 TRPH STD
Misc :
ALS Vial : 75 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
5 TRPH STD

Integration File: autoint1.e
Quant Time: Apr 24 12:53:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:53:03 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
9) S	TETRACOSANE-d50 (SURR...	14.998	597973	5.079 ug/ml
Target Compounds				
1)	N-OCTANE	1.977	551237	4.891 ug/ml
2)	N-DECANE	4.503	509093	4.573 ug/ml
3)	N-DODECANE	6.684	507207	4.426 ug/ml
4)	N-TETRADECANE	8.520	571671	4.718 ug/ml
5)	N-HEXADECANE	10.135	604971	4.819 ug/ml
6)	N-OCTADECANE	11.581	652759	4.981 ug/ml
7)	N-EICOSANE	12.895	691598	5.101 ug/ml
8)	N-DOCOSANE	14.096	675439	5.093 ug/ml
10)	N-TETRACOSANE	15.202	676031	5.087 ug/ml
11)	N-HEXACOSANE	16.227	669566	5.049 ug/ml
12)	N-OCTACOSANE	17.179	665315	5.047 ug/ml
13)	N-TRIACONTANE	18.069	677422	5.081 ug/ml
14)	N-DOTRIACONTANE	18.902	685497	5.200 ug/ml
15)	N-TETRATRIACONTANE	19.688	612187	5.062 ug/ml
16)	N-HEXATRIACONTANE	20.429	531350	4.956 ug/ml
17)	N-OCTATRIACONTANE	21.169	459713	4.772 ug/ml
18)	N-TETRACONTANE	22.088	425456	4.778 ug/ml

(f)=RT Delta > 1/2 Window (m)=manual int.

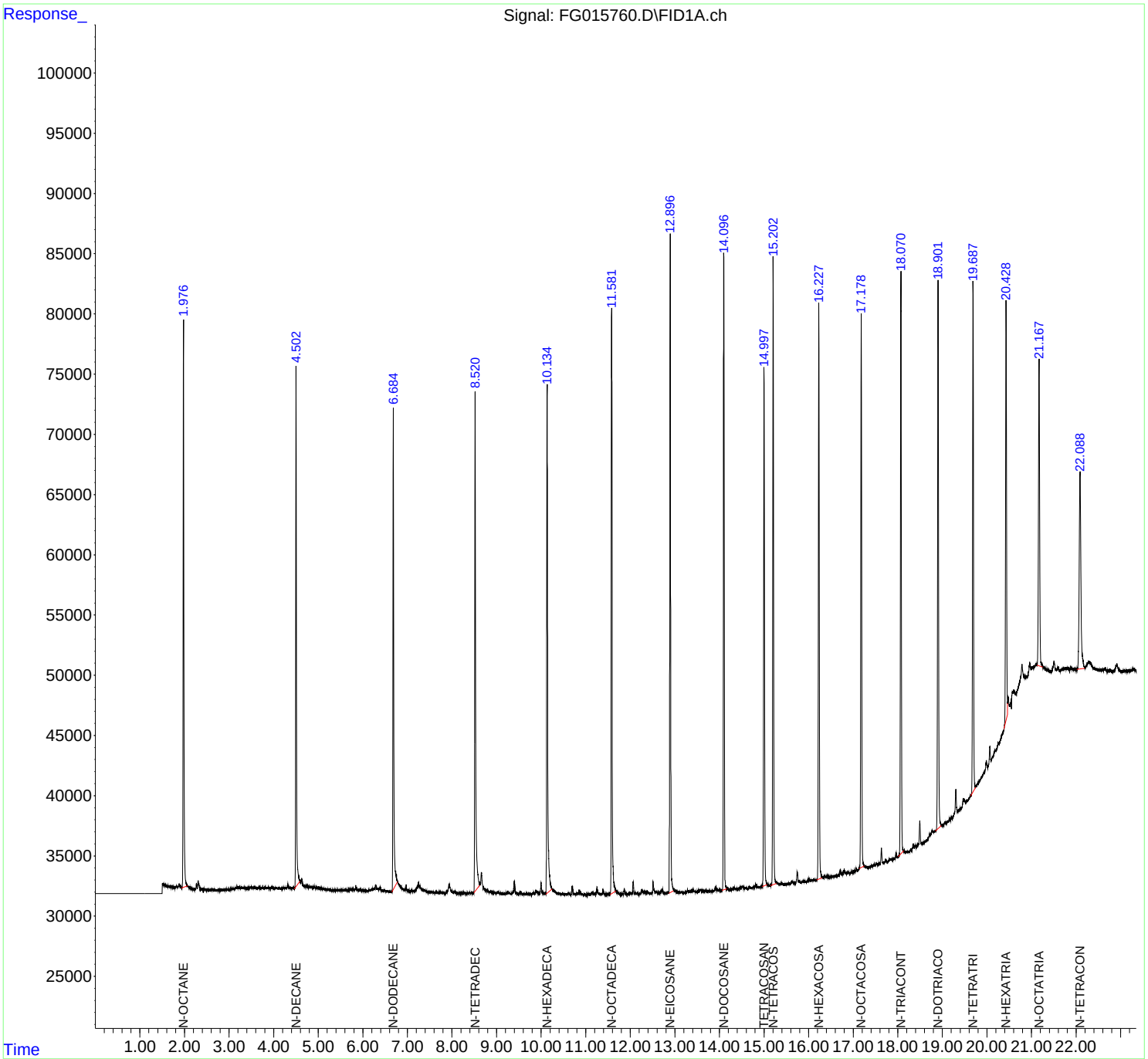
Quantitation Report (QT Reviewed)

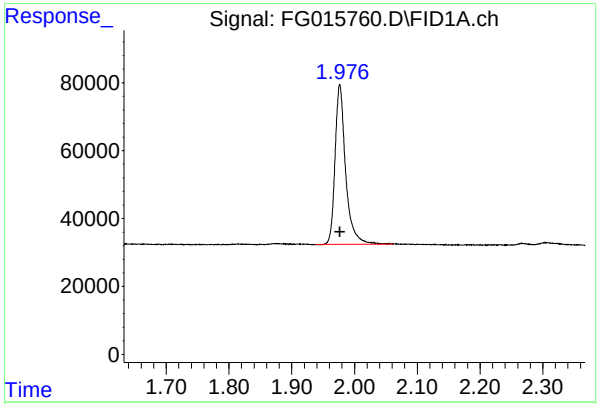
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015760.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 12:45
Operator : YP\AJ
Sample : 5 TRPH STD
Misc :
ALS Vial : 75 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
5 TRPH STD

Integration File: autoint1.e
Quant Time: Apr 24 12:53:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:53:03 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

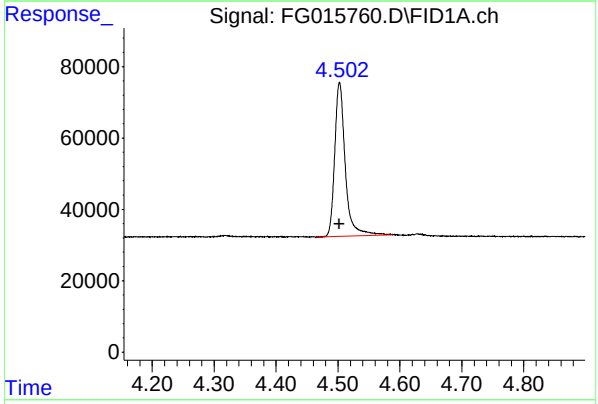




#1 N-OCTANE

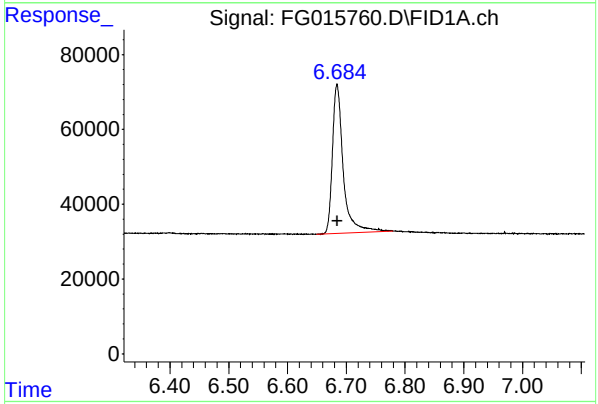
R.T.: 1.977 min
Delta R.T.: 0.000 min
Response: 551237
Conc: 4.89 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



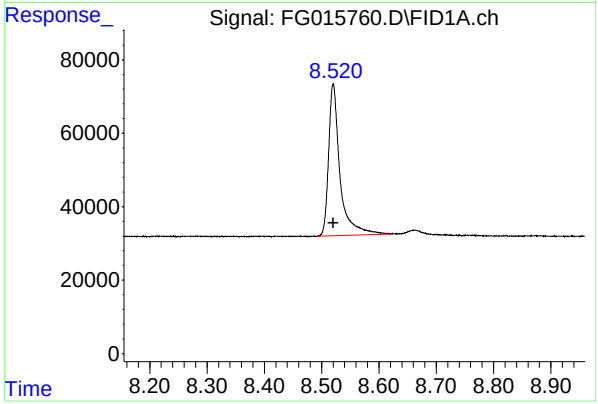
#2 N-DECANE

R.T.: 4.503 min
Delta R.T.: 0.000 min
Response: 509093
Conc: 4.57 ug/ml



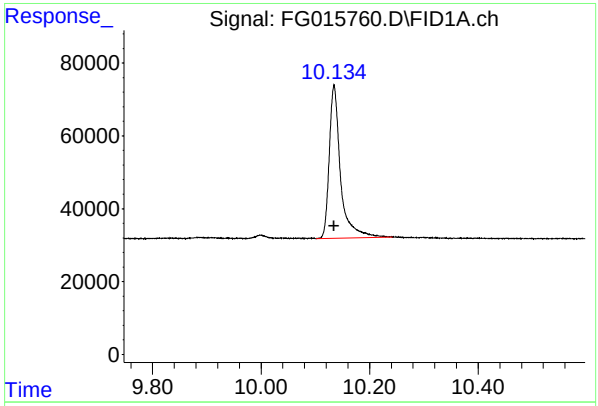
#3 N-DODECANE

R.T.: 6.684 min
Delta R.T.: 0.000 min
Response: 507207
Conc: 4.43 ug/ml



#4 N-TETRADECANE

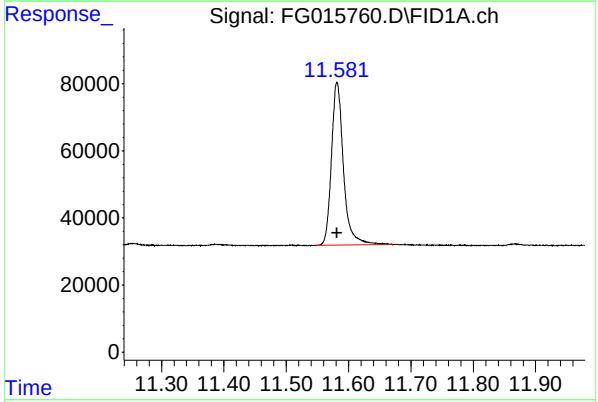
R.T.: 8.520 min
Delta R.T.: 0.000 min
Response: 571671
Conc: 4.72 ug/ml



#5 N-HEXADECANE

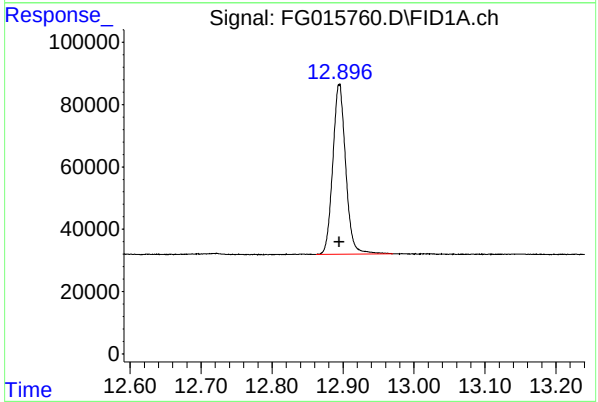
R.T.: 10.135 min
Delta R.T.: 0.000 min
Response: 604971
Conc: 4.82 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



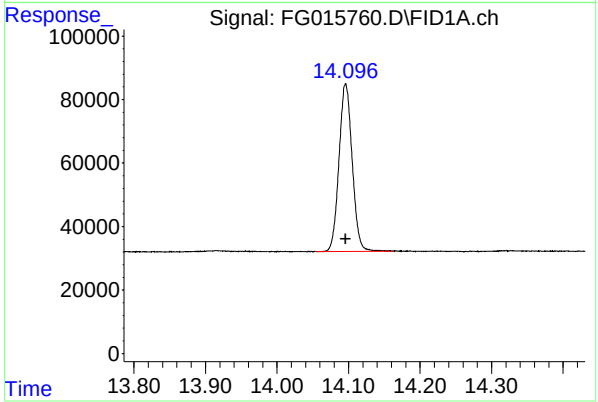
#6 N-OCTADECANE

R.T.: 11.581 min
Delta R.T.: 0.000 min
Response: 652759
Conc: 4.98 ug/ml



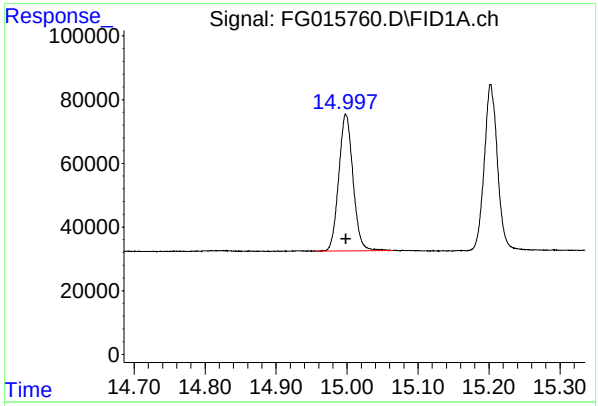
#7 N-EICOSANE

R.T.: 12.895 min
Delta R.T.: 0.000 min
Response: 691598
Conc: 5.10 ug/ml



#8 N-DOCOSANE

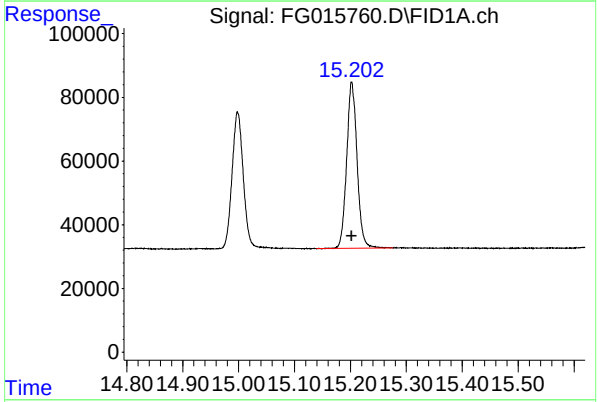
R.T.: 14.096 min
Delta R.T.: 0.000 min
Response: 675439
Conc: 5.09 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

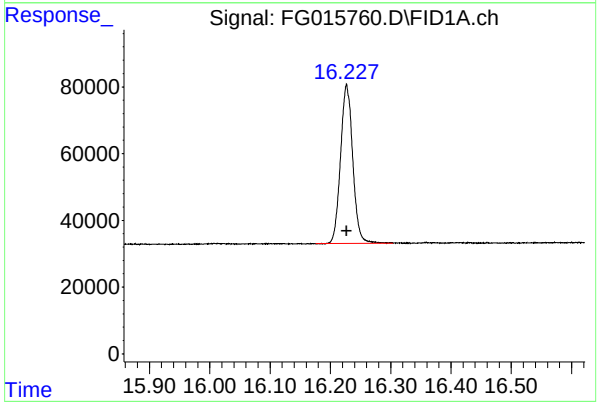
R.T.: 14.998 min
Delta R.T.: 0.000 min
Response: 597973
Conc: 5.08 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



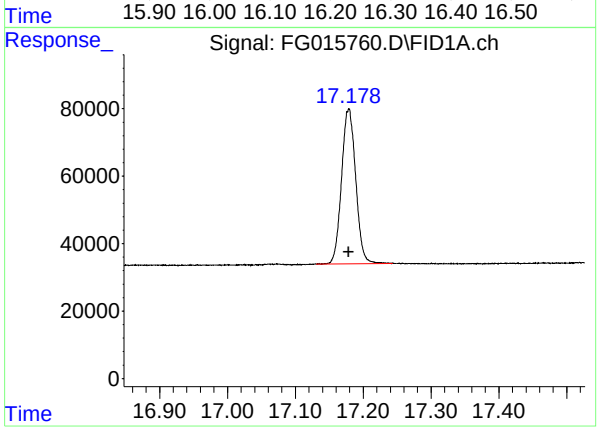
#10 N-TETRACOSANE

R.T.: 15.202 min
Delta R.T.: 0.000 min
Response: 676031
Conc: 5.09 ug/ml



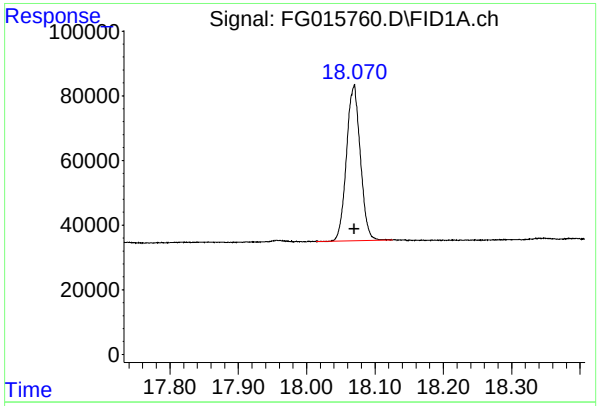
#11 N-HEXACOSANE

R.T.: 16.227 min
Delta R.T.: 0.000 min
Response: 669566
Conc: 5.05 ug/ml



#12 N-OCTACOSANE

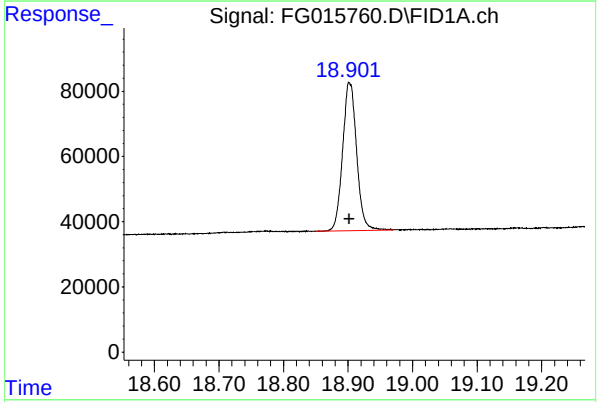
R.T.: 17.179 min
Delta R.T.: 0.000 min
Response: 665315
Conc: 5.05 ug/ml



#13 N-TRIACONTANE

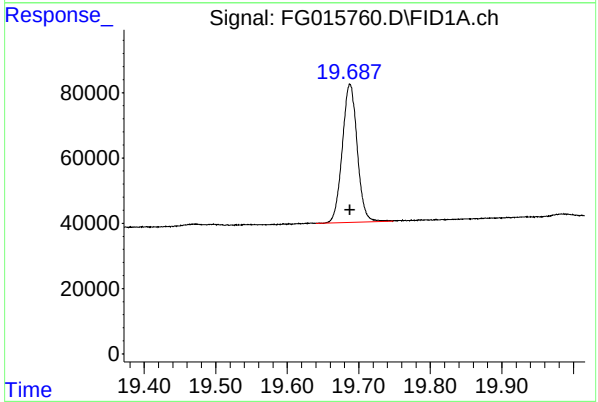
R.T.: 18.069 min
Delta R.T.: 0.000 min
Response: 677422
Conc: 5.08 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



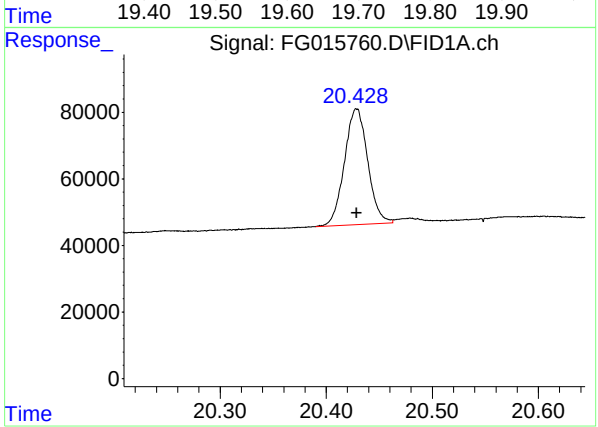
#14 N-DOTRIACONTANE

R.T.: 18.902 min
Delta R.T.: 0.000 min
Response: 685497
Conc: 5.20 ug/ml



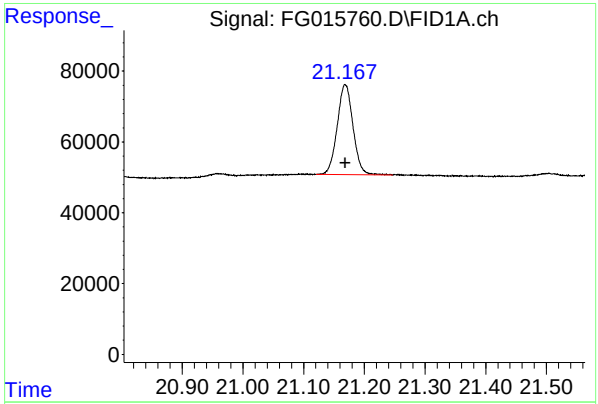
#15 N-TETRATRIACONTANE

R.T.: 19.688 min
Delta R.T.: 0.000 min
Response: 612187
Conc: 5.06 ug/ml



#16 N-HEXATRIACONTANE

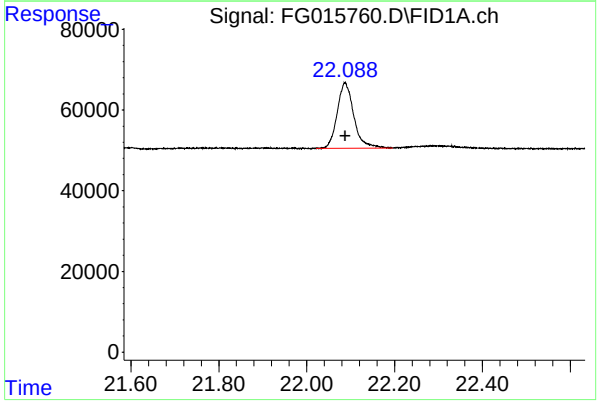
R.T.: 20.429 min
Delta R.T.: 0.000 min
Response: 531350
Conc: 4.96 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.169 min
Delta R.T.: 0.000 mi
Response: 459713
Conc: 4.77 ug/m

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.088 min
Delta R.T.: 0.000 min
Response: 425456
Conc: 4.78 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015760.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 12:45
Sample : 5 TRPH STD
Misc :
ALS Vial : 75 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.977	1.939	2.061	BB	47137	551237	79.70%	5.121%
2	4.503	4.465	4.589	BB	43181	509093	73.61%	4.729%
3	6.684	6.649	6.780	BB	39956	507207	73.34%	4.712%
4	8.520	8.490	8.624	BB	41407	571671	82.66%	5.311%
5	10.135	10.101	10.243	BB	42133	604971	87.47%	5.620%
6	11.581	11.548	11.671	BB	48580	652759	94.38%	6.064%
7	12.895	12.862	12.970	BB	54237	691598	100.00%	6.425%
8	14.096	14.055	14.162	BB	52891	675439	97.66%	6.275%
9	14.998	14.956	15.065	BB	42665	597973	86.46%	5.555%
10	15.202	15.139	15.276	BB	52148	676031	97.75%	6.280%
11	16.227	16.176	16.304	BB	47808	669566	96.81%	6.220%
12	17.179	17.130	17.244	BB	45997	665315	96.20%	6.181%
13	18.069	18.014	18.126	BB	47882	677422	97.95%	6.293%
14	18.902	18.850	18.970	BB	45364	685497	99.12%	6.368%
15	19.688	19.640	19.748	BB	42275	612187	88.52%	5.687%
16	20.429	20.390	20.463	BV	34740	531350	76.83%	4.936%
17	21.169	21.120	21.247	BB	25451	459713	66.47%	4.271%
18	22.088	22.021	22.196	BB	16340	425456	61.52%	3.952%
			Sum of corrected areas:			10764484		

FG042425.M Thu Apr 24 13:19:16 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015761.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 13:14
Operator : YP\AJ
Sample : FG042225ICV
Misc :
ALS Vial : 76 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
FG042225ICV

Integration File: autoint1.e
Quant Time: Apr 24 13:22:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	15.002	5703592	48.444 ug/ml
	Target Compounds			
1)	N-OCTANE	1.974	5510430	48.896 ug/ml
2)	N-DECANE	4.503	5641970	50.676 ug/ml
3)	N-DODECANE	6.686	5866110	51.187 ug/ml
4)	N-TETRADECANE	8.522	6094657	50.297 ug/ml
5)	N-HEXADECANE	10.136	6265761	49.909 ug/ml
6)	N-OCTADECANE	11.584	6463057	49.317 ug/ml
7)	N-EICOSANE	12.898	6595058	48.645 ug/ml
8)	N-DOCOSANE	14.101	6445107	48.595 ug/ml
10)	N-TETRACOSANE	15.207	6455131	48.576 ug/ml
11)	N-HEXACOSANE	16.231	6437369	48.540 ug/ml
12)	N-OCTACOSANE	17.184	6356430	48.215 ug/ml
13)	N-TRIACONTANE	18.074	6379777	47.853 ug/ml
14)	N-DOTRIACONTANE	18.907	6133852	46.529 ug/ml
15)	N-TETRATRIACONTANE	19.693	5542426	45.829 ug/ml
16)	N-HEXATRIACONTANE	20.432	4717169	43.996 ug/ml
17)	N-OCTATRIACONTANE	21.170	4060290	42.150 ug/ml
18)	N-TETRACONTANE	22.087	3600811	40.438 ug/ml

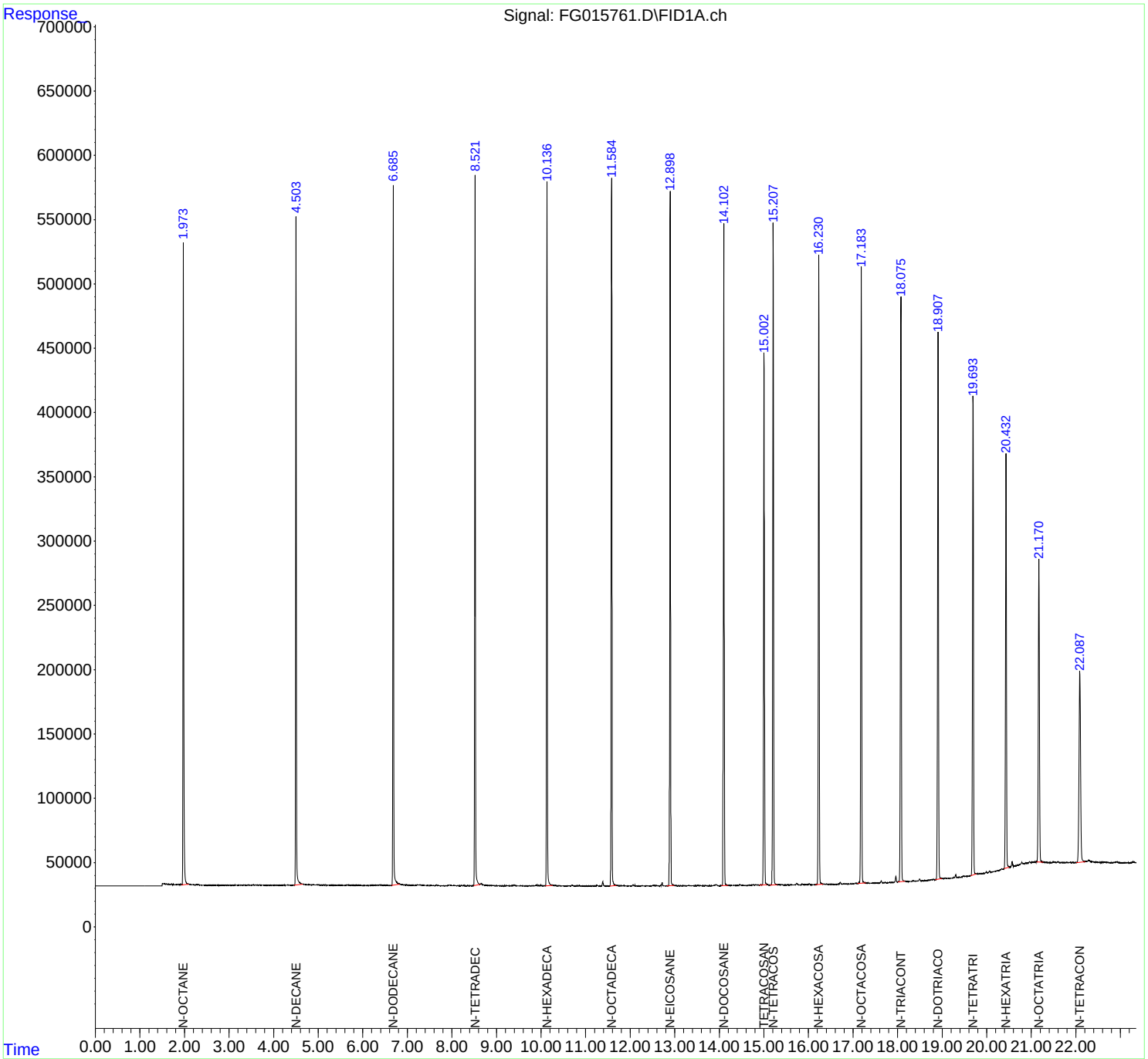
(f)=RT Delta > 1/2 Window (m)=manual int.

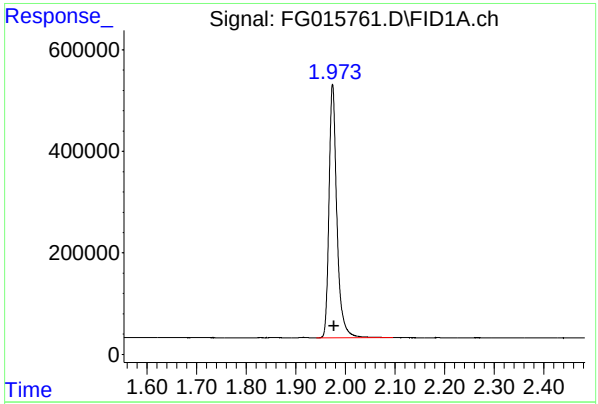
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015761.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 13:14
Operator : YP\AJ
Sample : FG042225ICV
Misc :
ALS Vial : 76 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
FG042225ICV

Integration File: autoint1.e
Quant Time: Apr 24 13:22:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

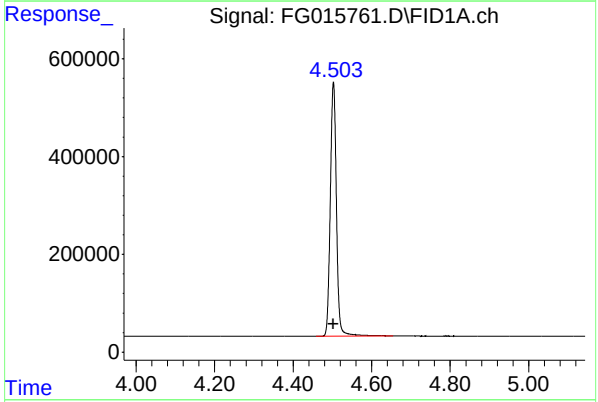




#1 N-OCTANE

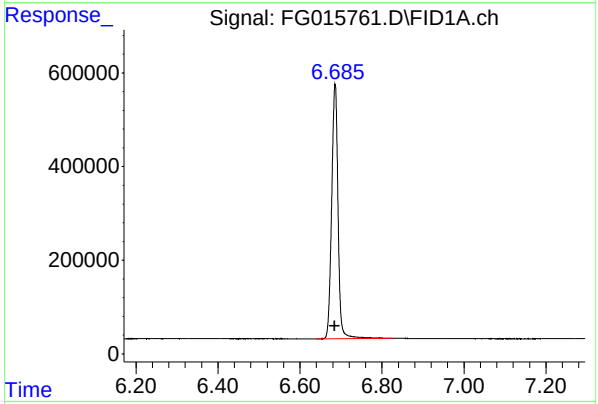
R.T.: 1.974 min
Delta R.T.: -0.003 min
Response: 5510430
Conc: 48.90 ug/ml

Instrument :
FID_G
ClientSampleId :
FG042225ICV



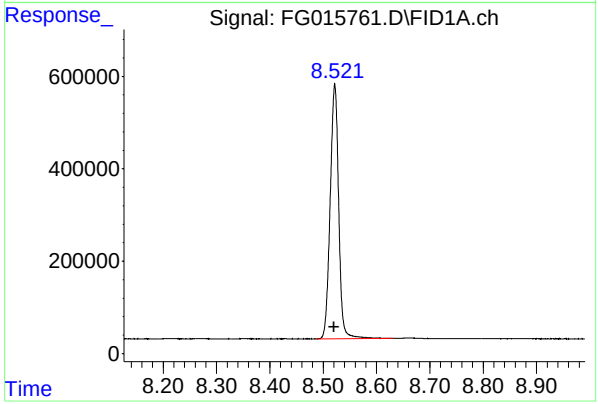
#2 N-DECANE

R.T.: 4.503 min
Delta R.T.: 0.000 min
Response: 5641970
Conc: 50.68 ug/ml



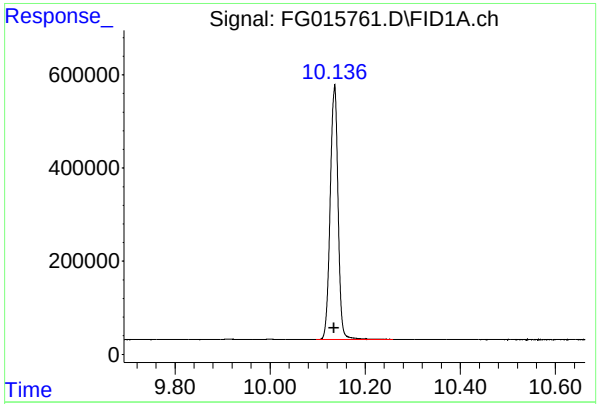
#3 N-DODECANE

R.T.: 6.686 min
Delta R.T.: 0.001 min
Response: 5866110
Conc: 51.19 ug/ml



#4 N-TETRADECANE

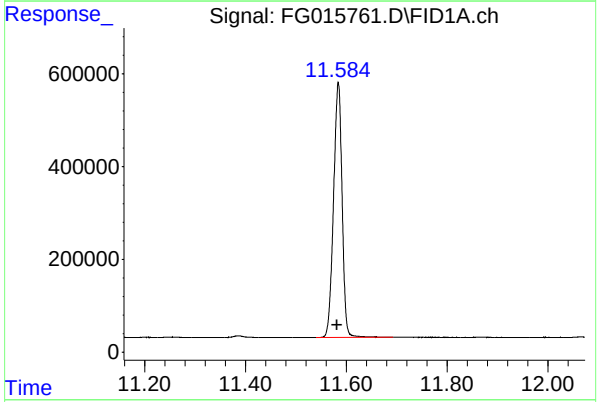
R.T.: 8.522 min
Delta R.T.: 0.001 min
Response: 6094657
Conc: 50.30 ug/ml



#5 N-HEXADECANE

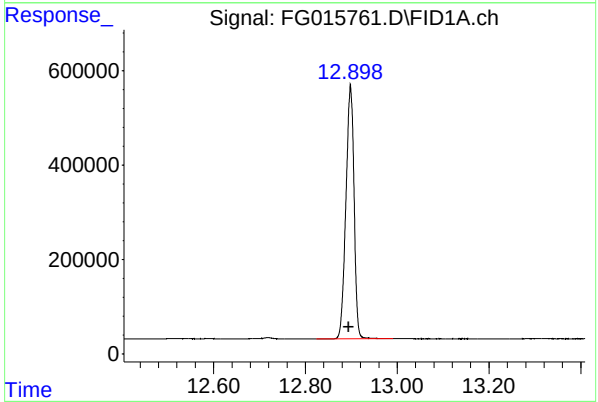
R.T.: 10.136 min
Delta R.T.: 0.001 min
Response: 6265761
Conc: 49.91 ug/ml

Instrument :
FID_G
ClientSampleId :
FG042225ICV



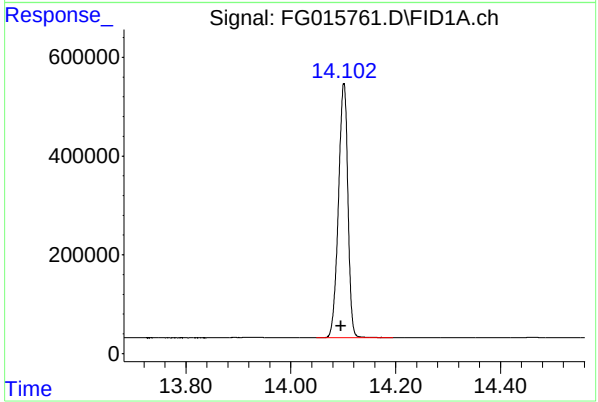
#6 N-OCTADECANE

R.T.: 11.584 min
Delta R.T.: 0.003 min
Response: 6463057
Conc: 49.32 ug/ml



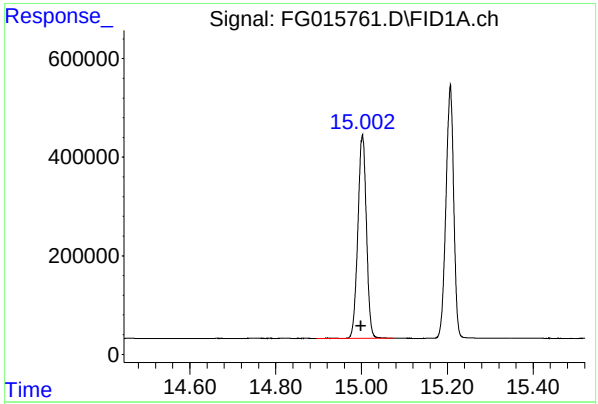
#7 N-EICOSANE

R.T.: 12.898 min
Delta R.T.: 0.004 min
Response: 6595058
Conc: 48.64 ug/ml



#8 N-DOCOSANE

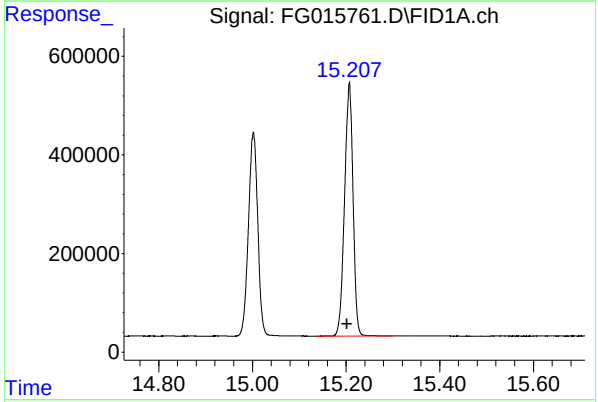
R.T.: 14.101 min
Delta R.T.: 0.005 min
Response: 6445107
Conc: 48.59 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

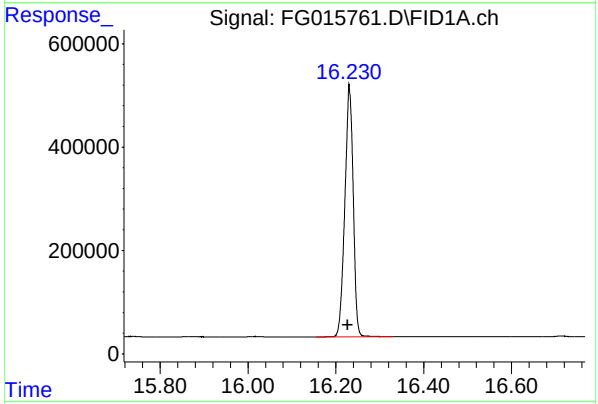
R.T.: 15.002 min
Delta R.T.: 0.004 min
Response: 5703592
Conc: 48.44 ug/ml

Instrument :
FID_G
ClientSampleId :
FG042225ICV



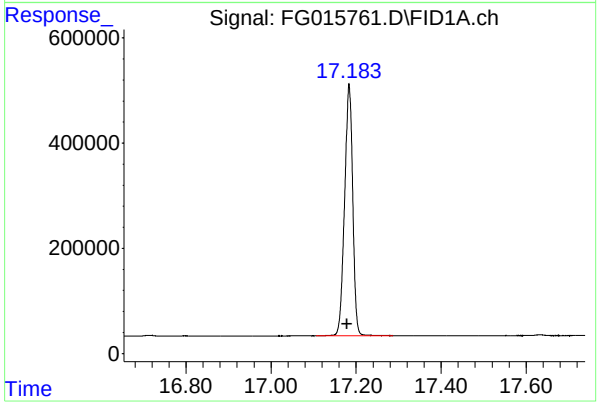
#10 N-TETRACOSANE

R.T.: 15.207 min
Delta R.T.: 0.005 min
Response: 6455131
Conc: 48.58 ug/ml



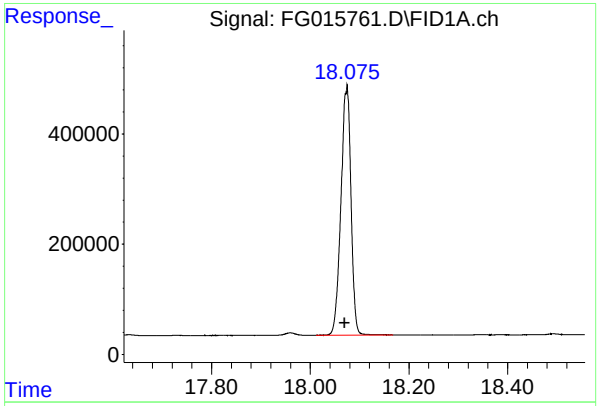
#11 N-HEXACOSANE

R.T.: 16.231 min
Delta R.T.: 0.004 min
Response: 6437369
Conc: 48.54 ug/ml



#12 N-OCTACOSANE

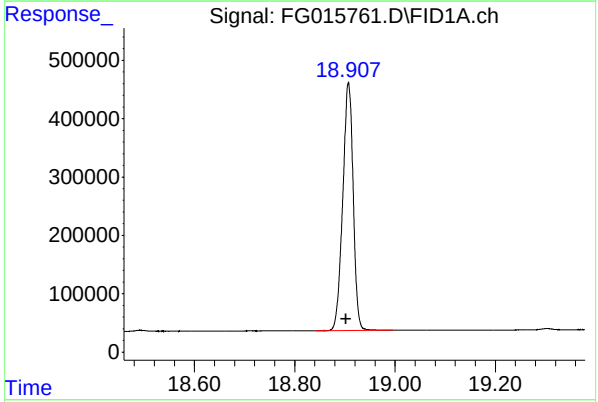
R.T.: 17.184 min
Delta R.T.: 0.005 min
Response: 6356430
Conc: 48.22 ug/ml



#13 N-TRIACONTANE

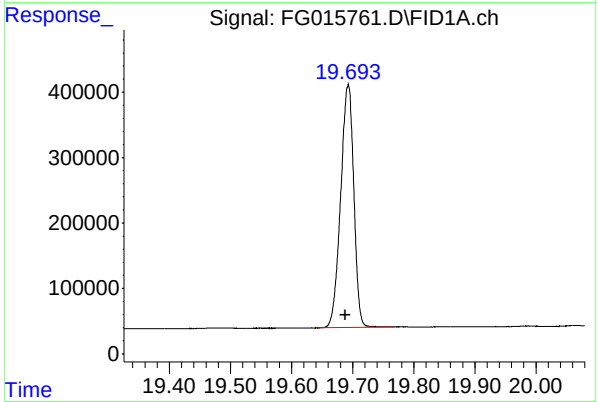
R.T.: 18.074 min
Delta R.T.: 0.005 min
Response: 6379777
Conc: 47.85 ug/ml

Instrument :
FID_G
ClientSampleId :
FG042225ICV



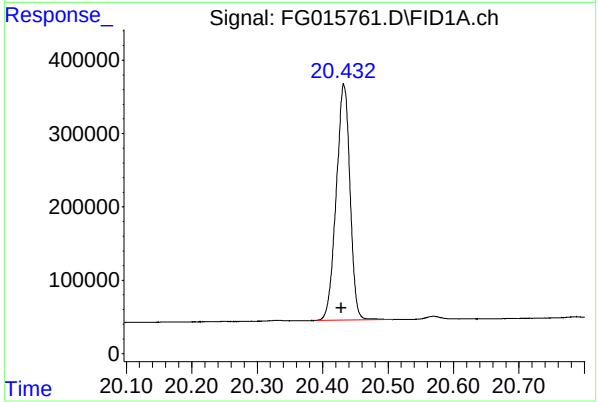
#14 N-DOTRIACONTANE

R.T.: 18.907 min
Delta R.T.: 0.005 min
Response: 6133852
Conc: 46.53 ug/ml



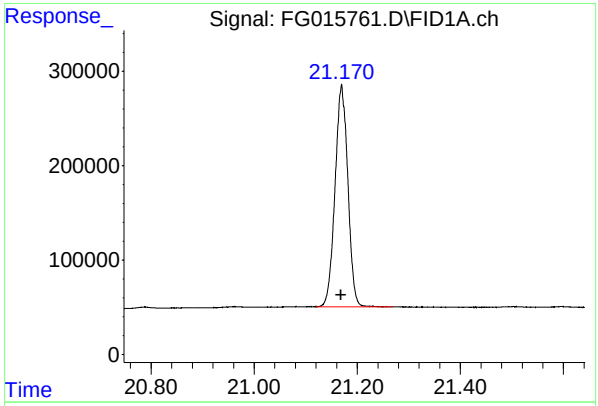
#15 N-TETRATRIACONTANE

R.T.: 19.693 min
Delta R.T.: 0.005 min
Response: 5542426
Conc: 45.83 ug/ml



#16 N-HEXATRIACONTANE

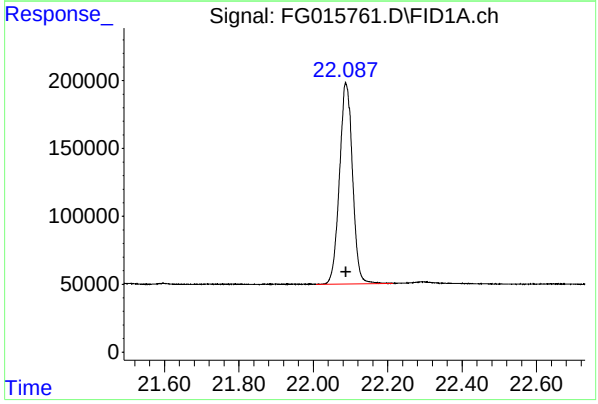
R.T.: 20.432 min
Delta R.T.: 0.004 min
Response: 4717169
Conc: 44.00 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.170 min
Delta R.T.: 0.001 min
Response: 4060290
Conc: 42.15 ug/ml

Instrument :
FID_G
ClientSampleId :
FG042225ICV



#18 N-TETRACONTANE

R.T.: 22.087 min
Delta R.T.: 0.000 min
Response: 3600811
Conc: 40.44 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG042425\
Data File : FG015761.D
Signal(s) : FID1A.ch
Acq On : 24 Apr 2025 13:14
Sample : FG042225ICV
Misc :
ALS Vial : 76 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.974	1.941	2.096	BB	498673	5510430	83.55%	5.285%
2	4.503	4.458	4.654	BB	519614	5641970	85.55%	5.411%
3	6.686	6.639	6.827	BB	542865	5866110	88.95%	5.626%
4	8.522	8.487	8.631	BV	551733	6094657	92.41%	5.845%
5	10.136	10.097	10.258	BB	545251	6265761	95.01%	6.009%
6	11.584	11.540	11.693	BB	548843	6463057	98.00%	6.198%
7	12.898	12.823	12.991	BB	538074	6595058	100.00%	6.325%
8	14.101	14.048	14.195	BB	513981	6445107	97.73%	6.181%
9	15.002	14.894	15.073	BV	414129	5703592	86.48%	5.470%
10	15.207	15.136	15.300	BB	515504	6455131	97.88%	6.191%
11	16.231	16.155	16.330	BB	485122	6437369	97.61%	6.174%
12	17.184	17.106	17.287	BB	479206	6356430	96.38%	6.096%
13	18.074	18.012	18.168	BB	447217	6379777	96.74%	6.119%
14	18.907	18.843	18.996	BB	423311	6133852	93.01%	5.883%
15	19.693	19.640	19.766	BB	371183	5542426	84.04%	5.316%
16	20.432	20.390	20.508	BB	321020	4717169	71.53%	4.524%
17	21.170	21.120	21.269	BB	234910	4060290	61.57%	3.894%
18	22.087	22.008	22.214	BB	148215	3600811	54.60%	3.453%

Sum of corrected areas: 104268994

FG042425.M Thu Apr 24 14:33:53 2025

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Fax : 908 789 8922

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: ALLI03

ProjectID: NJ Soil PT

Lab Code: CHEM Case No.: Q1872 SAS No.: Q1872 SDG No.: Q1872

DataFile: FG015818.D Analyst Name: YP\AJ Analyst Date: 05-13-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	60476877	120954	126925	4.704

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015818.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 11:40
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: May 14 03:54:24 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	14.998	5482459	46.565 ug/ml
	Target Compounds			
2)	N-DECANE	4.499	5351365	48.066 ug/ml
3)	N-DODECANE	6.681	5643937	49.248 ug/ml
4)	N-TETRADECANE	8.517	5889484	48.604 ug/ml
5)	N-HEXADECANE	10.131	6050592	48.196 ug/ml
6)	N-OCTADECANE	11.579	6240717	47.620 ug/ml
7)	N-EICOSANE	12.895	6359506	46.907 ug/ml
8)	N-DOCOSANE	14.097	6209146	46.816 ug/ml
10)	N-TETRACOSANE	15.204	6232751	46.903 ug/ml
11)	N-HEXACOSANE	16.228	6221359	46.911 ug/ml
12)	N-OCTACOSANE	17.181	6278020	47.621 ug/ml

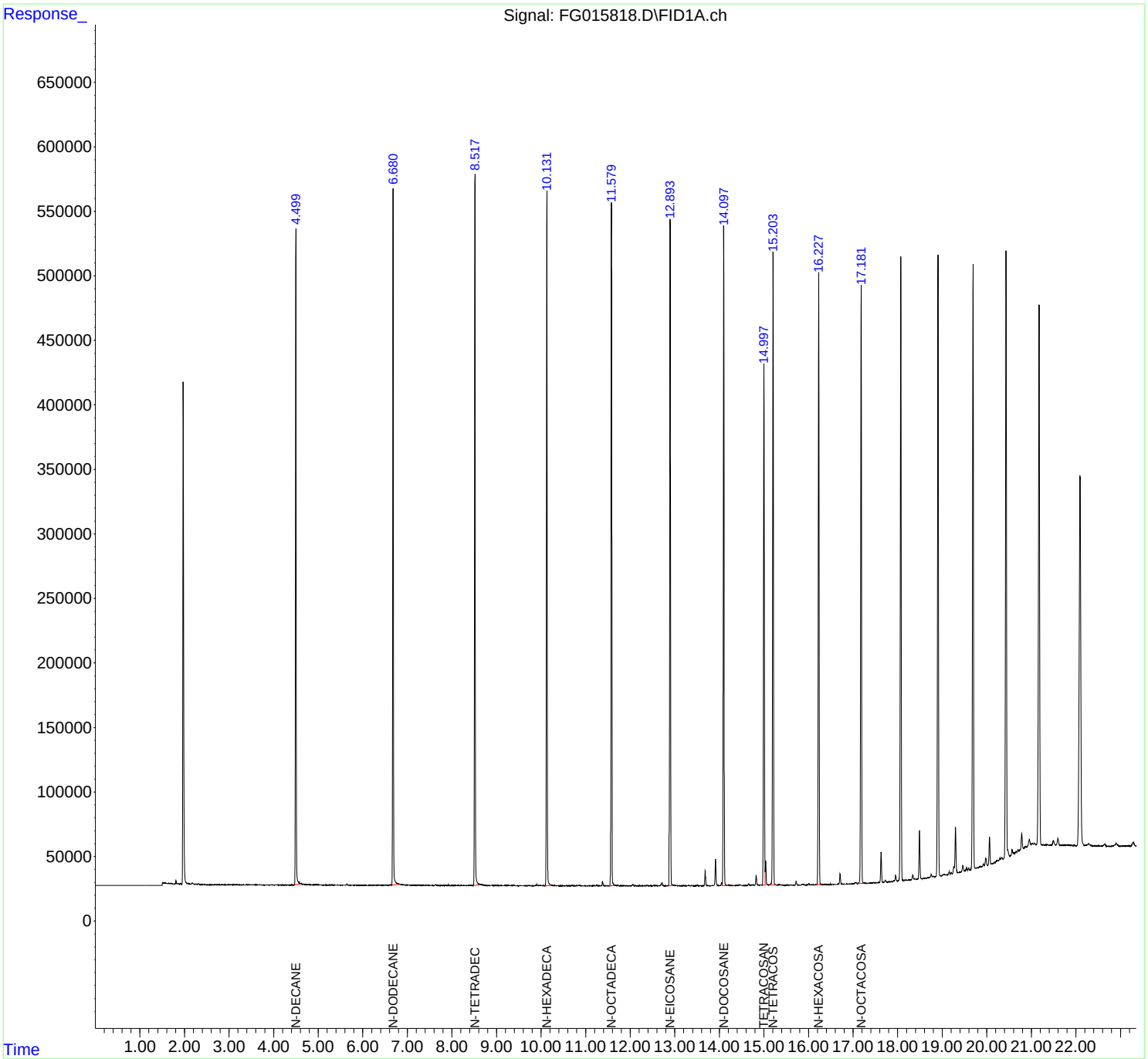
(f)=RT Delta > 1/2 Window (m)=manual int.

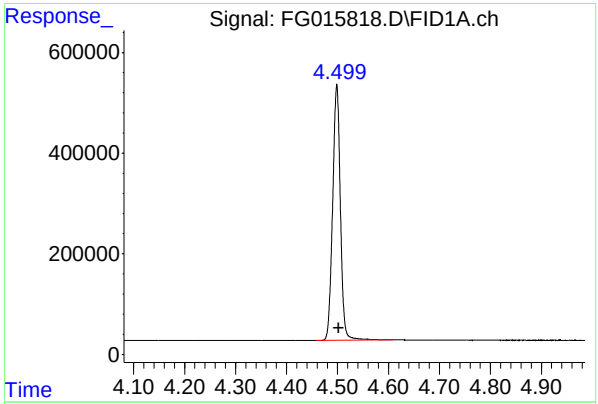
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015818.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 11:40
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: May 14 03:54:24 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

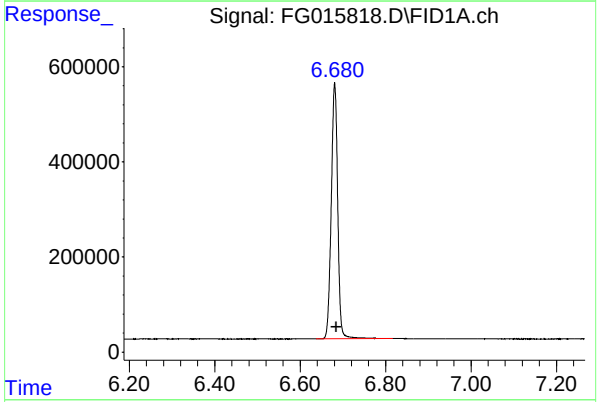




#2 N-DECANE

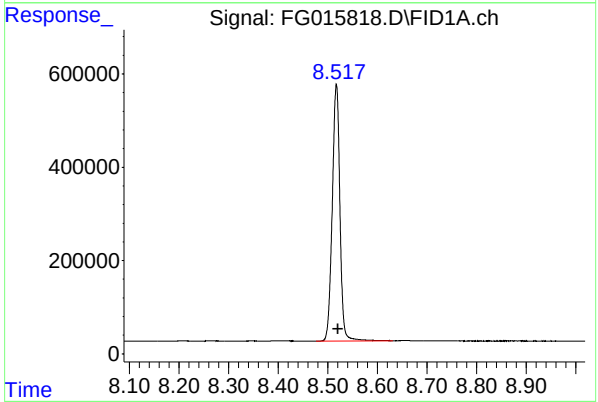
R.T.: 4.499 min
Delta R.T.: -0.004 min
Response: 5351365
Conc: 48.07 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



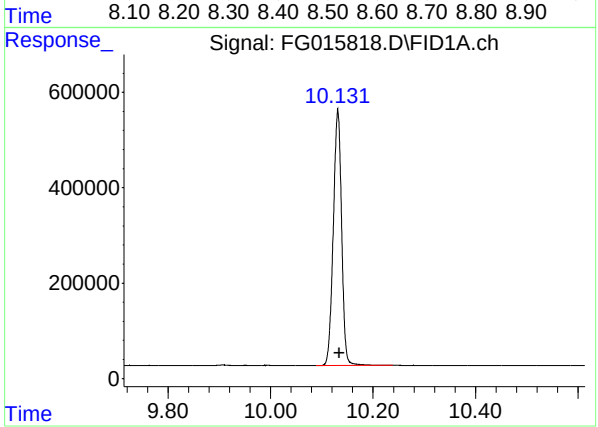
#3 N-DODECANE

R.T.: 6.681 min
Delta R.T.: -0.003 min
Response: 5643937
Conc: 49.25 ug/ml



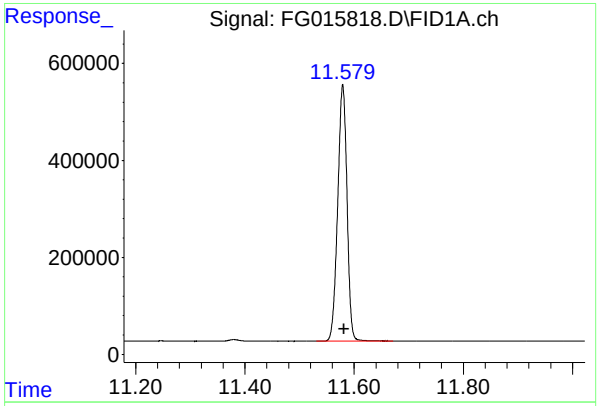
#4 N-TETRADECANE

R.T.: 8.517 min
Delta R.T.: -0.003 min
Response: 5889484
Conc: 48.60 ug/ml



#5 N-HEXADECANE

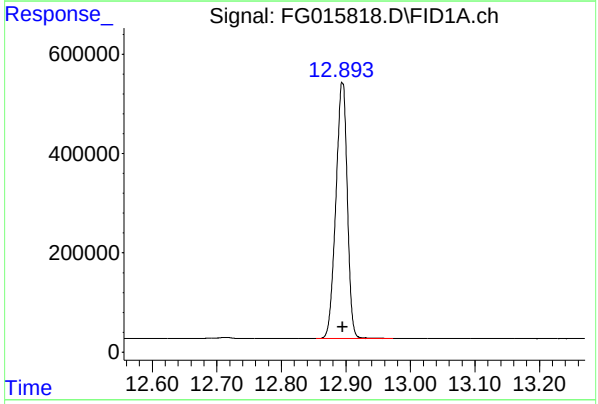
R.T.: 10.131 min
Delta R.T.: -0.003 min
Response: 6050592
Conc: 48.20 ug/ml



#6 N-OCTADECANE

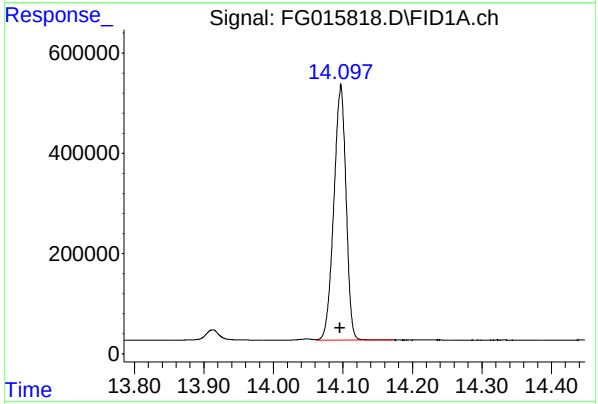
R.T.: 11.579 min
Delta R.T.: -0.002 min
Response: 6240717
Conc: 47.62 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



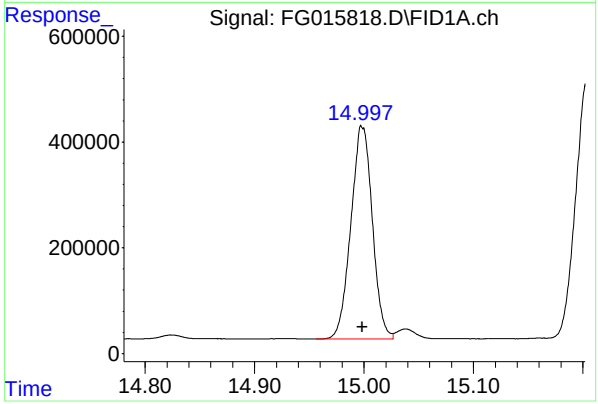
#7 N-EICOSANE

R.T.: 12.895 min
Delta R.T.: 0.000 min
Response: 6359506
Conc: 46.91 ug/ml



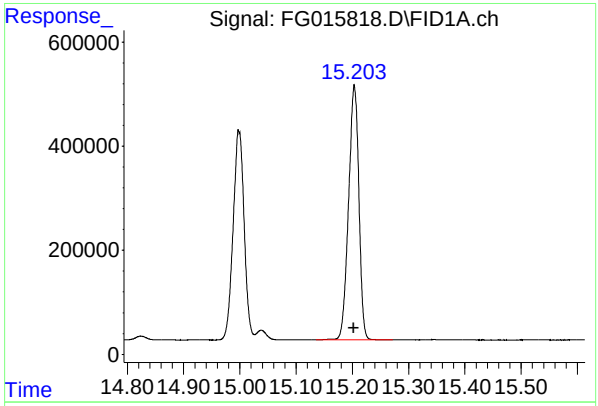
#8 N-DOCOSANE

R.T.: 14.097 min
Delta R.T.: 0.001 min
Response: 6209146
Conc: 46.82 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

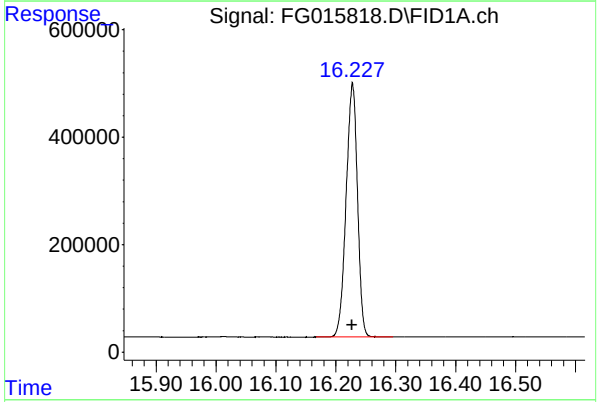
R.T.: 14.998 min
Delta R.T.: 0.000 min
Response: 5482459
Conc: 46.57 ug/ml



#10 N-TETRACOSANE

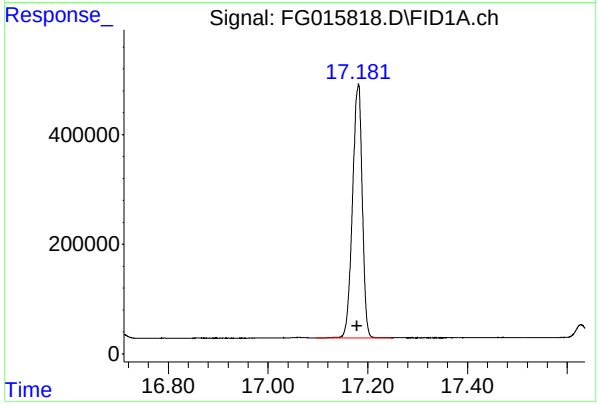
R.T.: 15.204 min
Delta R.T.: 0.001 min
Response: 6232751
Conc: 46.90 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



#11 N-HEXACOSANE

R.T.: 16.228 min
Delta R.T.: 0.001 min
Response: 6221359
Conc: 46.91 ug/ml



#12 N-OCTACOSANE

R.T.: 17.181 min
Delta R.T.: 0.002 min
Response: 6278020
Conc: 47.62 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015818.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 11:40
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.499	4.458	4.609	BB	508368	5351365	84.15%	8.113%
2	6.681	6.637	6.817	BB	538048	5643937	88.75%	8.557%
3	8.517	8.476	8.631	BV	550429	5889484	92.61%	8.929%
4	10.131	10.089	10.239	BB	536692	6050592	95.14%	9.173%
5	11.579	11.530	11.671	BB	529210	6240717	98.13%	9.461%
6	12.895	12.854	12.973	BB	514140	6359506	100.00%	9.642%
7	14.097	14.061	14.172	VB	510628	6209146	97.64%	9.414%
8	14.998	14.956	15.026	BV	398999	5482459	86.21%	8.312%
9	15.204	15.135	15.272	BB	489489	6232751	98.01%	9.449%
10	16.228	16.167	16.295	BB	472998	6221359	97.83%	9.432%
11	17.181	17.096	17.250	BB	462352	6278020	98.72%	9.518%

Sum of corrected areas: 65959334

FG042425.M Wed May 14 05:05:25 2025

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Fax : 908 789 8922

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: ALLI03

ProjectID: NJ Soil PT

Lab Code: CHEM Case No.: Q1872 SAS No.: Q1872 SDG No.: Q1872

DataFile: FG015825.D Analyst Name: YP\AJ Analyst Date: 05-13-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	62796625	125593	126925	1.049

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015825.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 16:53
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: May 14 03:55:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	14.998	5659391	48.068 ug/ml
	Target Compounds			
2)	N-DECANE	4.497	5569282	50.023 ug/ml
3)	N-DODECANE	6.680	5878120	51.292 ug/ml
4)	N-TETRADECANE	8.517	6151100	50.763 ug/ml
5)	N-HEXADECANE	10.131	6321600	50.354 ug/ml
6)	N-OCTADECANE	11.579	6510234	49.677 ug/ml
7)	N-EICOSANE	12.893	6615705	48.797 ug/ml
8)	N-DOCOSANE	14.095	6437736	48.539 ug/ml
10)	N-TETRACOSANE	15.202	6444515	48.496 ug/ml
11)	N-HEXACOSANE	16.226	6411471	48.345 ug/ml
12)	N-OCTACOSANE	17.178	6456862	48.977 ug/ml

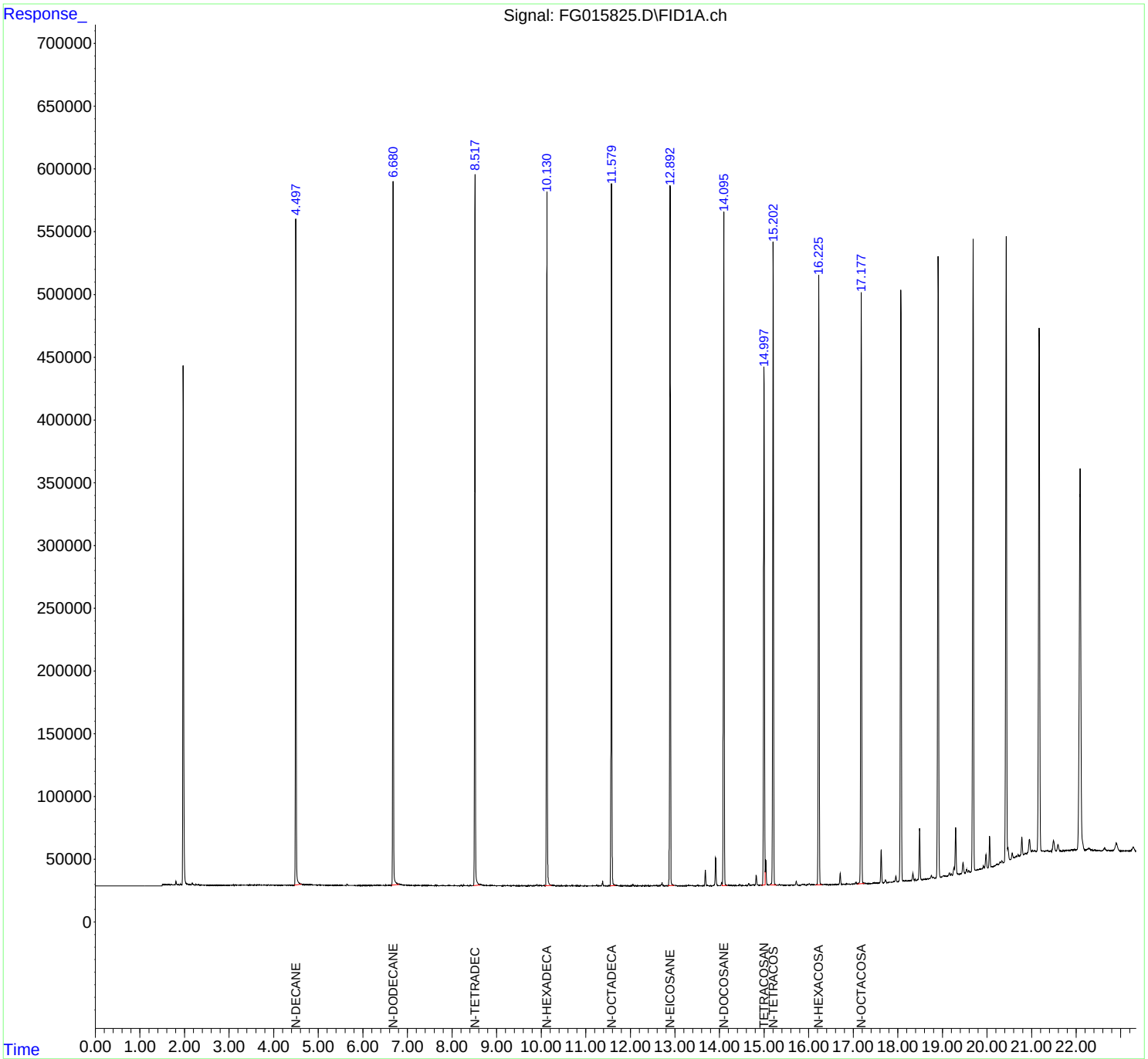
(f)=RT Delta > 1/2 Window (m)=manual int.

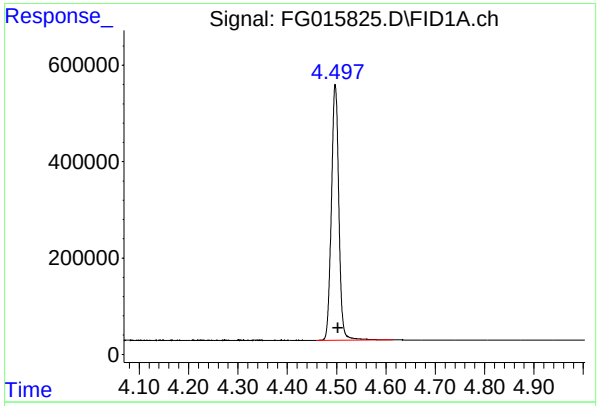
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015825.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 16:53
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: May 14 03:55:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

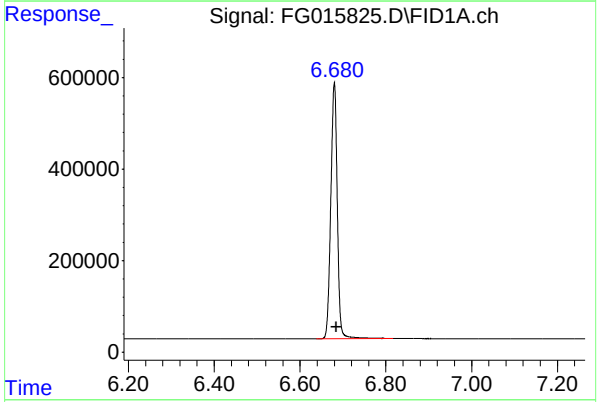




#2 N-DECANE

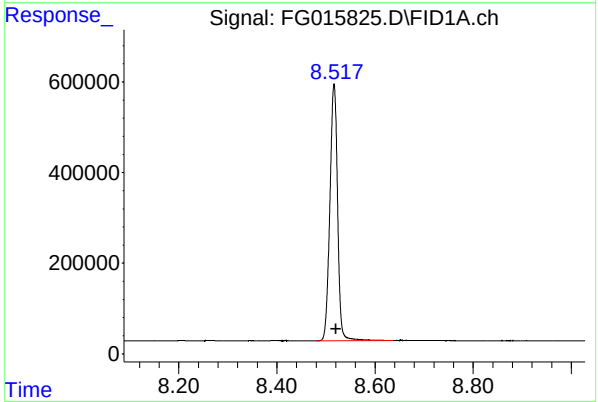
R.T.: 4.497 min
Delta R.T.: -0.005 min
Response: 5569282
Conc: 50.02 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



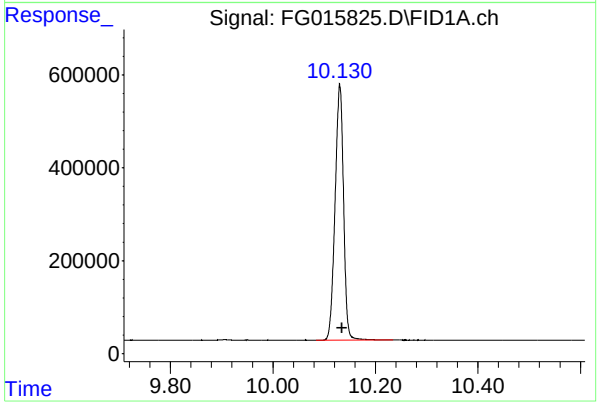
#3 N-DODECANE

R.T.: 6.680 min
Delta R.T.: -0.004 min
Response: 5878120
Conc: 51.29 ug/ml



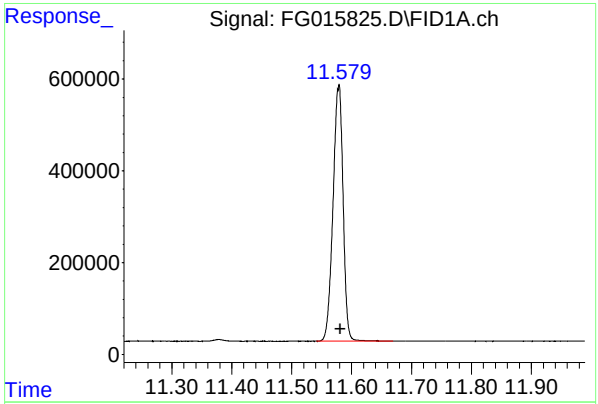
#4 N-TETRADECANE

R.T.: 8.517 min
Delta R.T.: -0.004 min
Response: 6151100
Conc: 50.76 ug/ml



#5 N-HEXADECANE

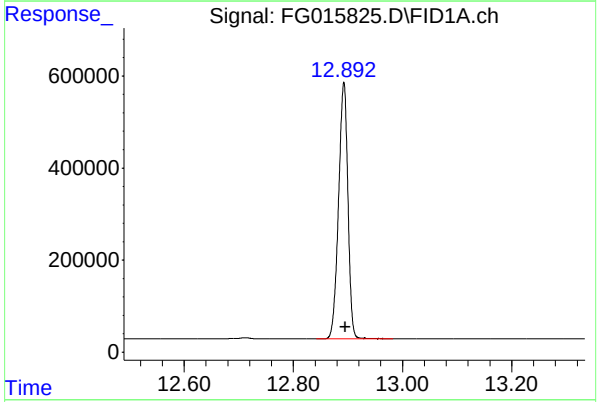
R.T.: 10.131 min
Delta R.T.: -0.004 min
Response: 6321600
Conc: 50.35 ug/ml



#6 N-OCTADECANE

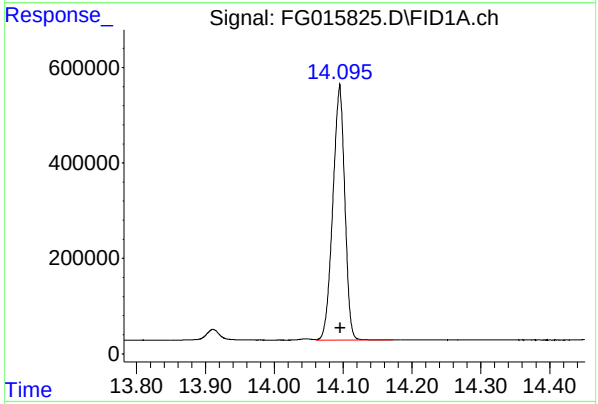
R.T.: 11.579 min
Delta R.T.: -0.003 min
Response: 6510234
Conc: 49.68 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



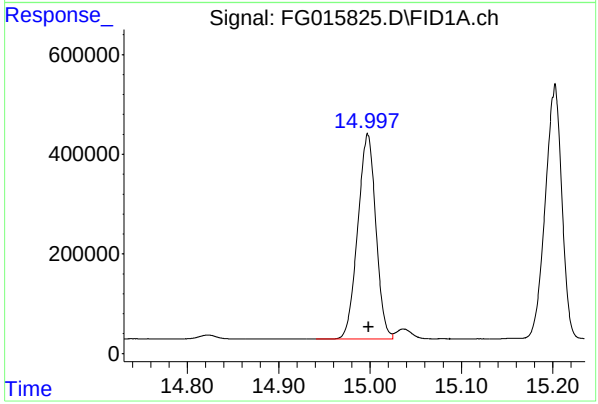
#7 N-EICOSANE

R.T.: 12.893 min
Delta R.T.: -0.002 min
Response: 6615705
Conc: 48.80 ug/ml



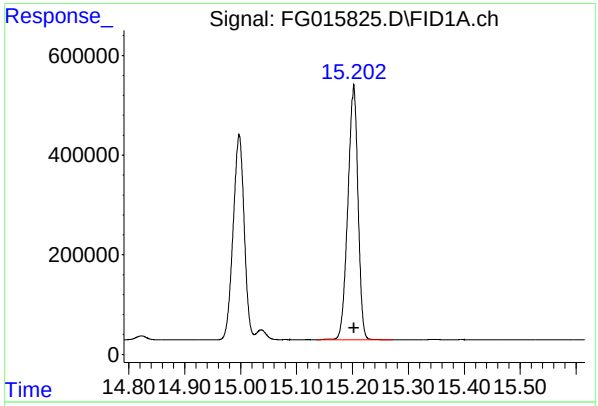
#8 N-DOCOSANE

R.T.: 14.095 min
Delta R.T.: 0.000 min
Response: 6437736
Conc: 48.54 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

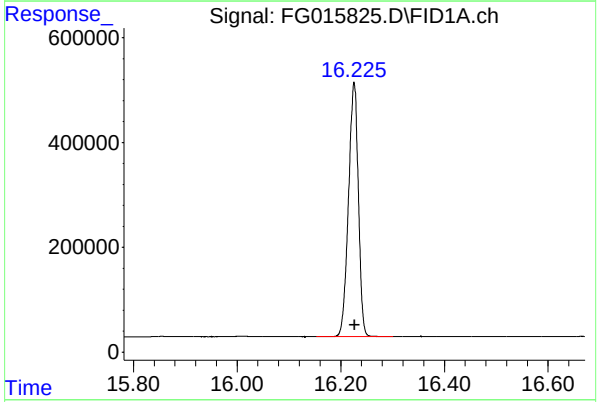
R.T.: 14.998 min
Delta R.T.: 0.000 min
Response: 5659391
Conc: 48.07 ug/ml



#10 N-TETRACOSANE

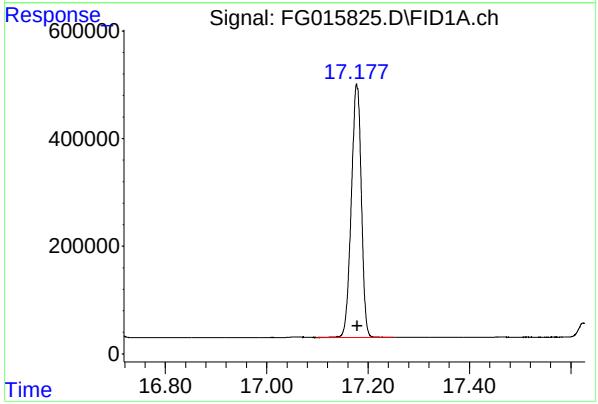
R.T.: 15.202 min
Delta R.T.: 0.000 min
Response: 6444515
Conc: 48.50 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



#11 N-HEXACOSANE

R.T.: 16.226 min
Delta R.T.: 0.000 min
Response: 6411471
Conc: 48.34 ug/ml



#12 N-OCTACOSANE

R.T.: 17.178 min
Delta R.T.: 0.000 min
Response: 6456862
Conc: 48.98 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015825.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 16:53
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.497	4.458	4.614	BB	530200	5569282	84.18%	8.136%
2	6.680	6.638	6.817	BB	559379	5878120	88.85%	8.587%
3	8.517	8.480	8.637	BV	566587	6151100	92.98%	8.985%
4	10.131	10.084	10.234	BB	547795	6321600	95.55%	9.235%
5	11.579	11.541	11.669	BB	555154	6510234	98.41%	9.510%
6	12.893	12.842	12.983	BB	557804	6615705	100.00%	9.664%
7	14.095	14.061	14.173	VB	534342	6437736	97.31%	9.404%
8	14.998	14.941	15.025	BV	411404	5659391	85.54%	8.267%
9	15.202	15.135	15.273	BB	512339	6444515	97.41%	9.414%
10	16.226	16.153	16.301	BB	484679	6411471	96.91%	9.366%
11	17.178	17.098	17.249	BB	469809	6456862	97.60%	9.432%

Sum of corrected areas: 68456017

FG042425.M Wed May 14 05:09:13 2025

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

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: ALLI03

ProjectID: NJ Soil PT

Lab Code: CHEM Case No.: Q1872 SAS No.: Q1872 SDG No.: Q1872

DataFile: FG015835.D Analyst Name: YP\AJ Analyst Date: 05-13-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	63457844	126916	126925	0.007

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015835.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 21:46
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: May 14 03:57:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	14.996	5710489	48.502 ug/ml
	Target Compounds			
2)	N-DECANE	4.497	5691010	51.117 ug/ml
3)	N-DODECANE	6.679	5974108	52.129 ug/ml
4)	N-TETRADECANE	8.516	6207700	51.230 ug/ml
5)	N-HEXADECANE	10.129	6361678	50.674 ug/ml
6)	N-OCTADECANE	11.578	6549621	49.977 ug/ml
7)	N-EICOSANE	12.892	6656888	49.101 ug/ml
8)	N-DOCOSANE	14.094	6494017	48.964 ug/ml
10)	N-TETRACOSANE	15.201	6515965	49.034 ug/ml
11)	N-HEXACOSANE	16.225	6479146	48.855 ug/ml
12)	N-OCTACOSANE	17.177	6527711	49.515 ug/ml

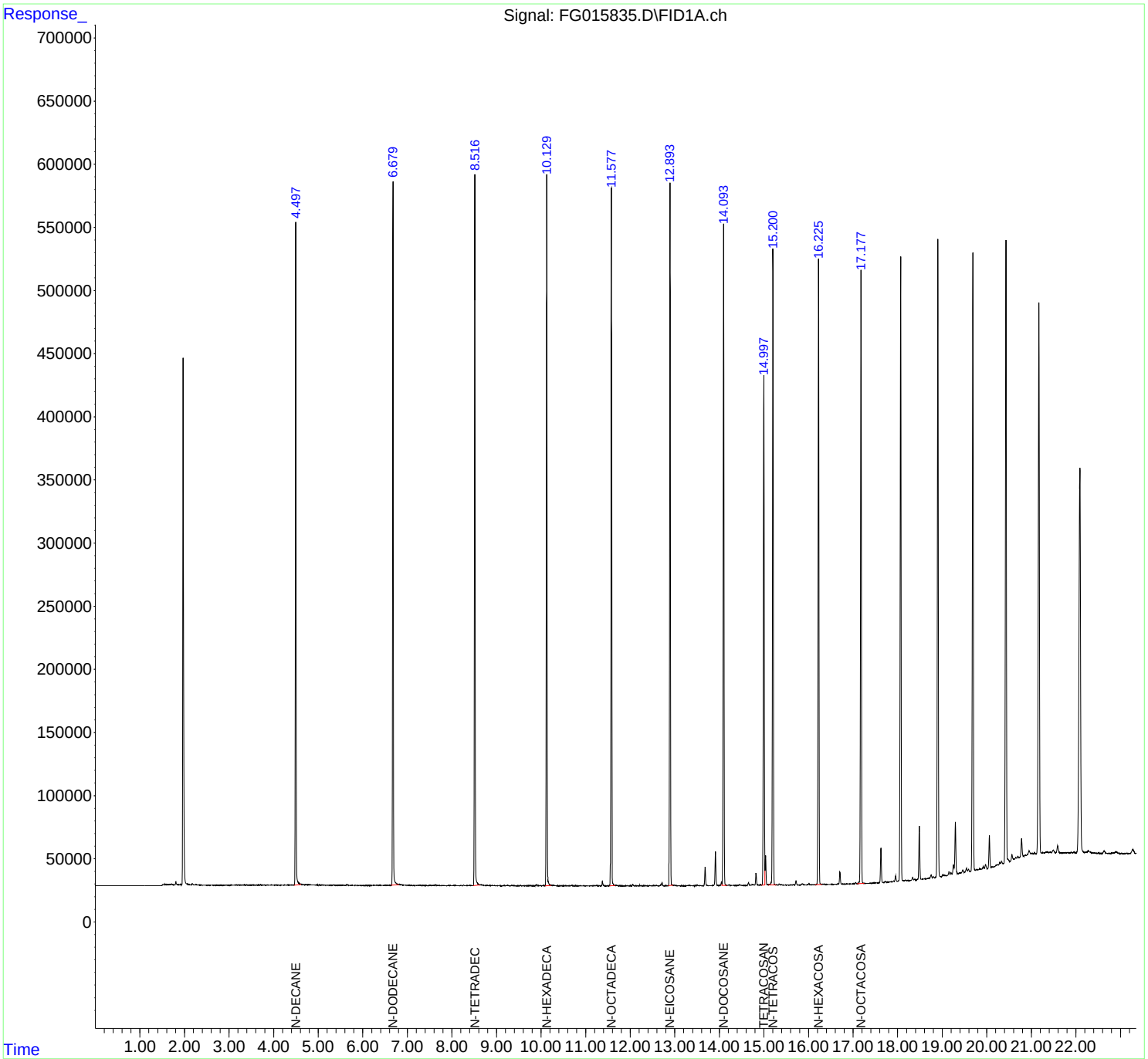
(f)=RT Delta > 1/2 Window (m)=manual int.

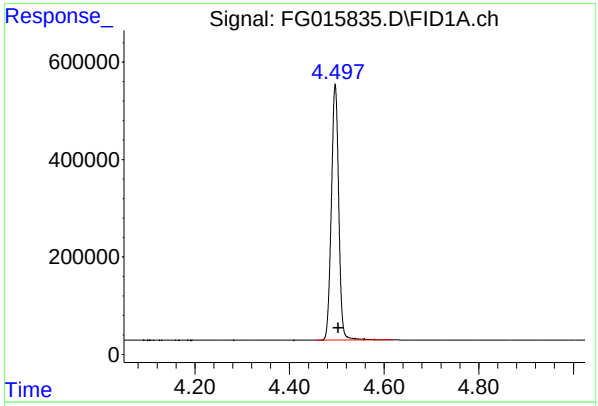
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015835.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 21:46
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: May 14 03:57:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

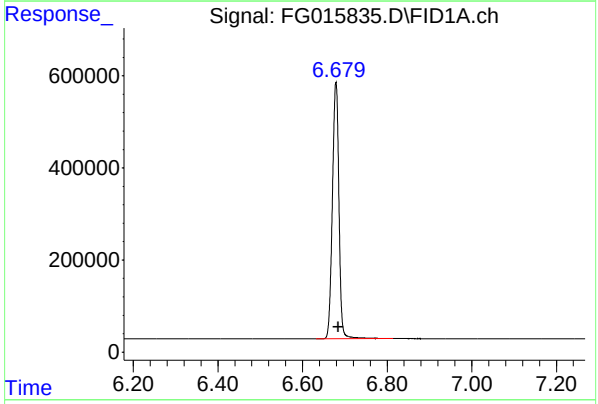




#2 N-DECANE

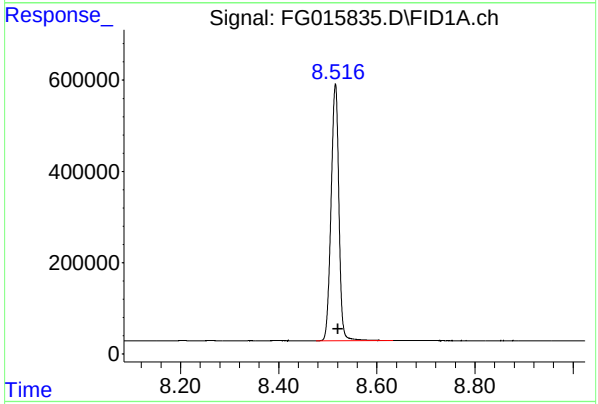
R.T.: 4.497 min
Delta R.T.: -0.006 min
Response: 5691010
Conc: 51.12 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



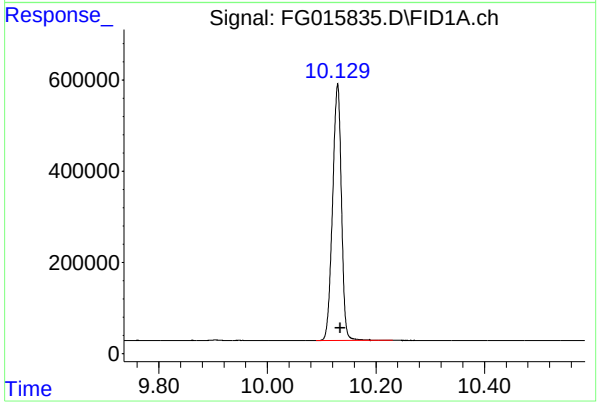
#3 N-DODECANE

R.T.: 6.679 min
Delta R.T.: -0.005 min
Response: 5974108
Conc: 52.13 ug/ml



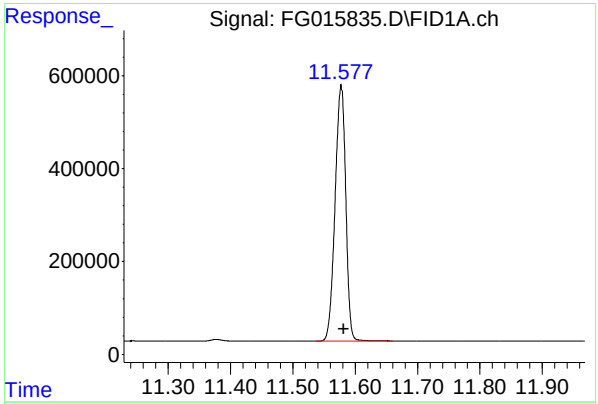
#4 N-TETRADECANE

R.T.: 8.516 min
Delta R.T.: -0.005 min
Response: 6207700
Conc: 51.23 ug/ml



#5 N-HEXADECANE

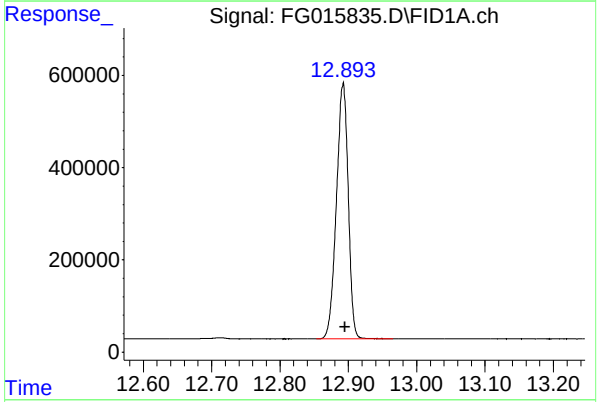
R.T.: 10.129 min
Delta R.T.: -0.005 min
Response: 6361678
Conc: 50.67 ug/ml



#6 N-OCTADECANE

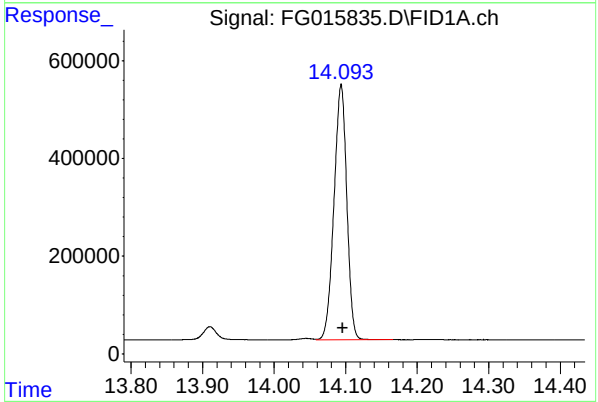
R.T.: 11.578 min
Delta R.T.: -0.004 min
Response: 6549621
Conc: 49.98 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



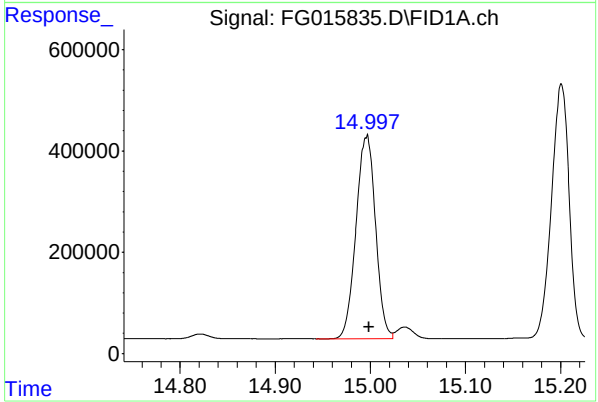
#7 N-EICOSANE

R.T.: 12.892 min
Delta R.T.: -0.002 min
Response: 6656888
Conc: 49.10 ug/ml



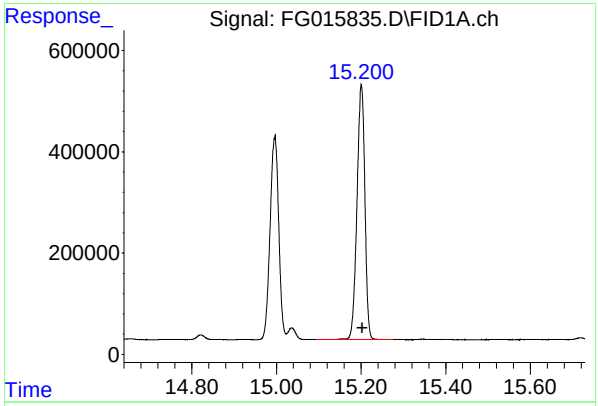
#8 N-DOCOSANE

R.T.: 14.094 min
Delta R.T.: -0.002 min
Response: 6494017
Conc: 48.96 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

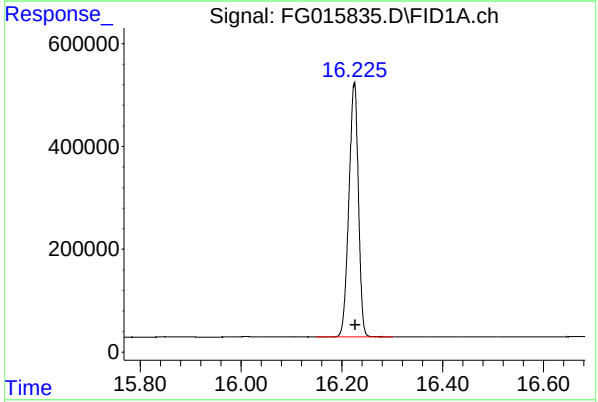
R.T.: 14.996 min
Delta R.T.: -0.002 min
Response: 5710489
Conc: 48.50 ug/ml



#10 N-TETRACOSANE

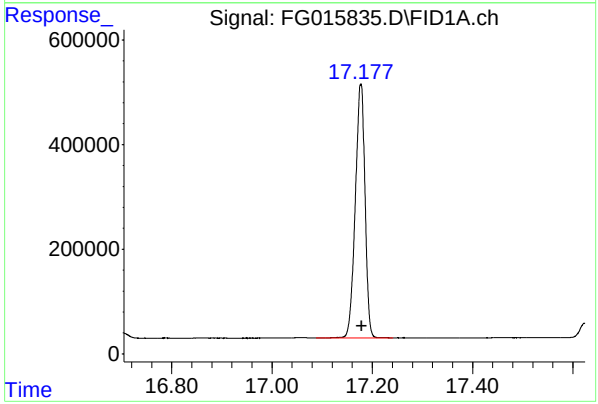
R.T.: 15.201 min
Delta R.T.: -0.002 min
Response: 6515965
Conc: 49.03 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



#11 N-HEXACOSANE

R.T.: 16.225 min
Delta R.T.: -0.002 min
Response: 6479146
Conc: 48.85 ug/ml



#12 N-OCTACOSANE

R.T.: 17.177 min
Delta R.T.: -0.001 min
Response: 6527711
Conc: 49.51 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015835.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 21:46
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.497	4.456	4.619	BB	525383	5691010	85.49%	8.228%
2	6.679	6.632	6.814	BB	557151	5974108	89.74%	8.637%
3	8.516	8.476	8.633	BB	562392	6207700	93.25%	8.975%
4	10.129	10.090	10.231	BB	563052	6361678	95.57%	9.197%
5	11.578	11.537	11.660	BB	547511	6549621	98.39%	9.469%
6	12.892	12.853	12.965	BB	551855	6656888	100.00%	9.624%
7	14.094	14.059	14.166	VB	523556	6494017	97.55%	9.389%
8	14.996	14.943	15.024	BV	398233	5710489	85.78%	8.256%
9	15.201	15.094	15.275	BB	502844	6515965	97.88%	9.420%
10	16.225	16.149	16.301	BB	491501	6479146	97.33%	9.367%
11	17.177	17.088	17.241	BB	484690	6527711	98.06%	9.437%

Sum of corrected areas: 69168334

FG042425.M Wed May 14 05:11:03 2025

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

Analytical Sequence

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1872

Project: NJ Soil PT **Instrument ID:** FID_G

GC Column: RXI-1MS **ID:** 0.18 **(mm)**

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SUROGATE RT FROM INITIAL CALIBRATION **15.0012**

EPA SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
PIBLK01	I.BLK01	13 May 2025 11:11	FG015817.D	14.996	
50 PPM TRPH STD	50 PPM TRPH STD	13 May 2025 11:40	FG015818.D	14.998	
PB167975BL	PB167975BL	13 May 2025 13:22	FG015820.D	14.998	
PB167975BS	PB167975BS	13 May 2025 13:51	FG015821.D	14.995	
HW0425-PT-DIES-SOIL	Q1872-14	13 May 2025 15:25	FG015823.D	14.994	
PIBLK02	I.BLK02	13 May 2025 15:54	FG015824.D	14.995	
50 PPM TRPH STD	50 PPM TRPH STD	13 May 2025 16:53	FG015825.D	14.998	
SB2-4-5MS	Q1956-03MS	13 May 2025 18:21	FG015828.D	14.994	
SB2-4-5MSD	Q1956-04MSD	13 May 2025 18:50	FG015829.D	14.993	
PIBLK03	I.BLK03	13 May 2025 21:16	FG015834.D	14.993	
50 PPM TRPH STD	50 PPM TRPH STD	13 May 2025 21:46	FG015835.D	14.996	

 # Column used to flag RT values with an * values outside of QC limits

QC Limits	Lower Limit	Upper Limits
(± 0.10 minutes)	14.9012	15.1012

QC SAMPLE DATA

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

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	
Project:	NJ Soil PT	Date Received:	
Client Sample ID:	PB167975BL	SDG No.:	Q1872
Lab Sample ID:	PB167975BL	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	100 Decanted:
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015820.D	1	05/13/25 10:05	05/13/25 13:22	PB167975

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	169	U	169	1670	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	17.4		37 - 130	87%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance 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
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015820.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 13:22
Operator : YP\AJ
Sample : PB167975BL
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB167975BL

Integration File: autoint1.e
Quant Time: May 14 03:54:45 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.998	2046304	17.380 ug/ml
Target Compounds			

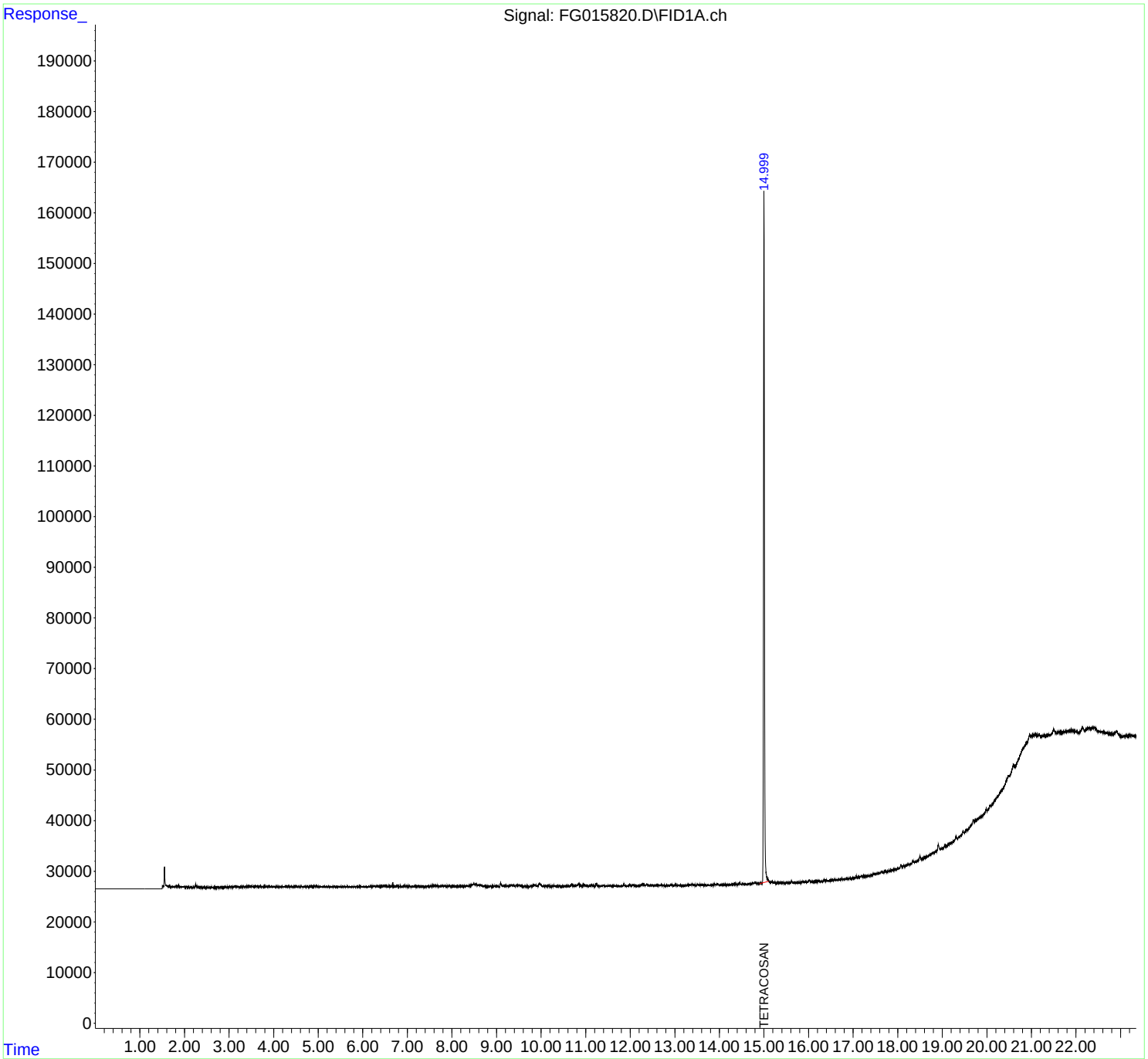
(f)=RT Delta > 1/2 Window (m)=manual int.

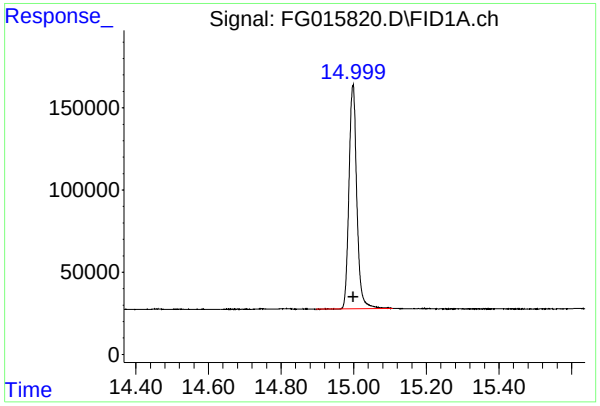
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015820.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 13:22
Operator : YP\AJ
Sample : PB167975BL
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB167975BL

Integration File: autoint1.e
Quant Time: May 14 03:54:45 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.998 min
Delta R.T.: 0.000 mi
Response: 2046304
Conc: 17.38 ug/m

Instrument :
FID_G
ClientSampleId :
PB167975BL

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015820.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 13:22
Sample : PB167975BL
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	14.998	14.896	15.108	BB	135194	2046304	100.00%	100.000%
			Sum of corrected areas:			2046304		

FG042425.M Wed May 14 05:06:17 2025

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

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	05/13/25
Project:	NJ Soil PT	Date Received:	05/13/25
Client Sample ID:	PIBLK-FG015817.D	SDG No.:	Q1872
Lab Sample ID:	I.BLK-FG015817.D	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015817.D	1		05/13/25	FG051325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	19.2		29 - 130	96%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance 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
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015817.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 11:11
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 14 03:54:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
9) S	TETRACOSANE-d50 (SURR...	14.996	2260251	19.197 ug/ml
Target Compounds				

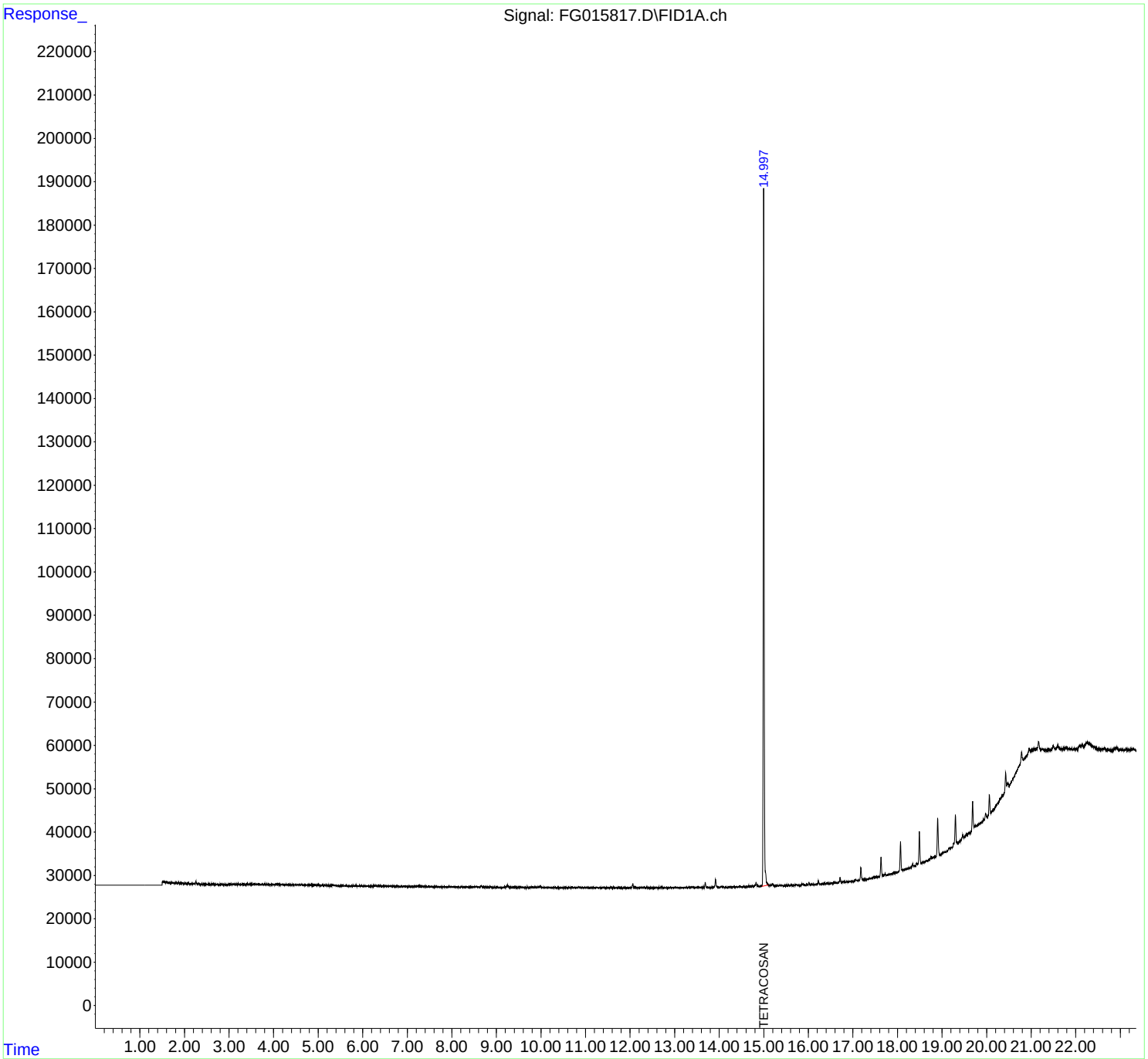
(f)=RT Delta > 1/2 Window (m)=manual int.

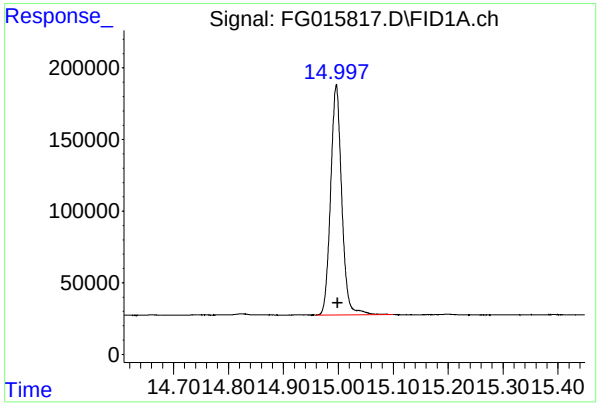
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015817.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 11:11
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 14 03:54:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.996 min
Delta R.T.: -0.002 mi
Response: 2260251
Conc: 19.20 ug/m

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015817.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 11:11
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	14.996	14.960	15.100	BB	160540	2260251	100.00%	100.000%

Sum of corrected areas: 2260251

FG042425.M Wed May 14 05:03:26 2025

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

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	05/13/25
Project:	NJ Soil PT	Date Received:	05/13/25
Client Sample ID:	PIBLK-FG015824.D	SDG No.:	Q1872
Lab Sample ID:	I.BLK-FG015824.D	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015824.D	1		05/13/25	FG051325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	16.9		29 - 130	85%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance 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
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015824.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 15:54
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 14 03:55:26 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.995	1994752	16.942 ug/ml
Target Compounds			

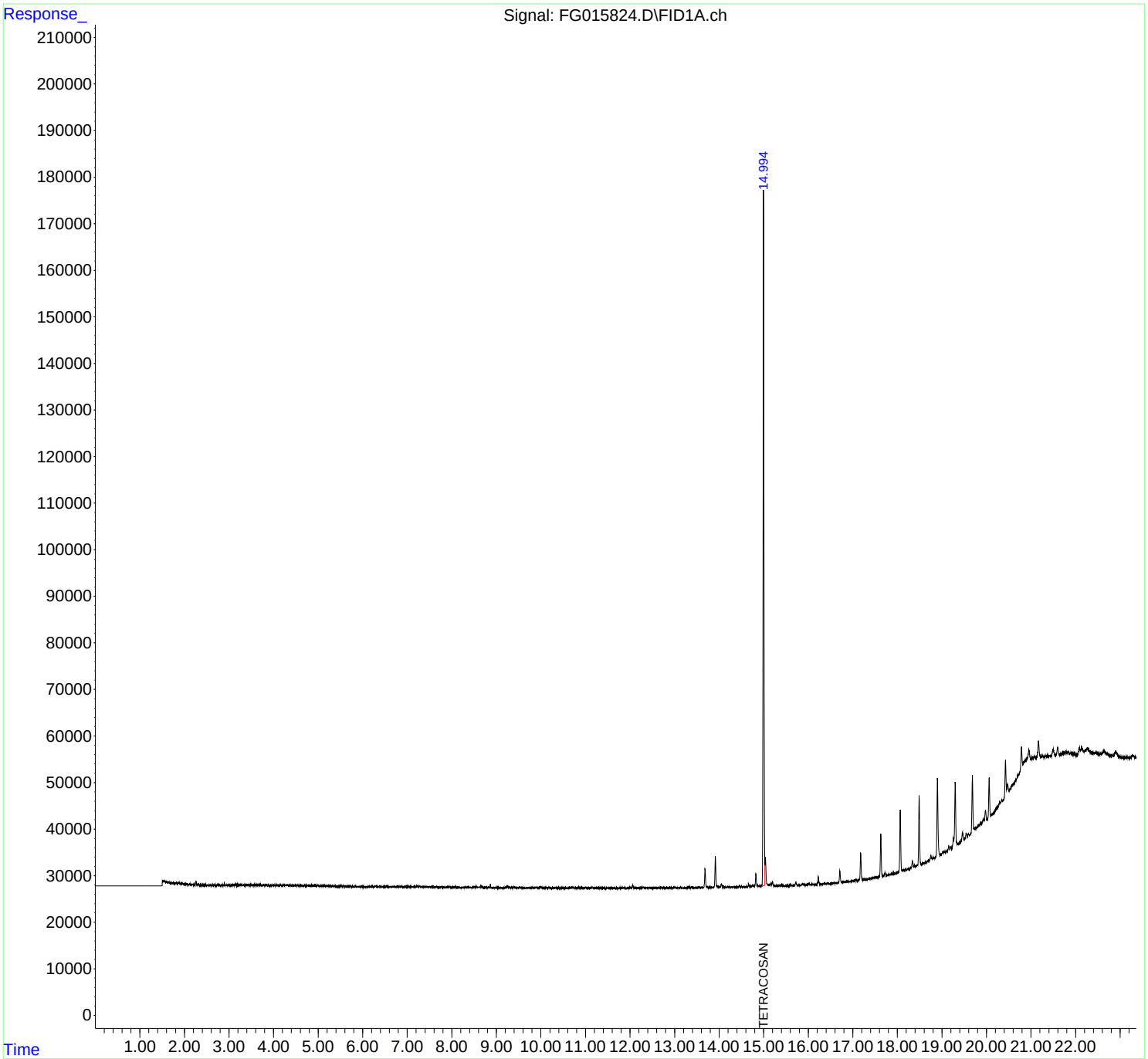
(f)=RT Delta > 1/2 Window (m)=manual int.

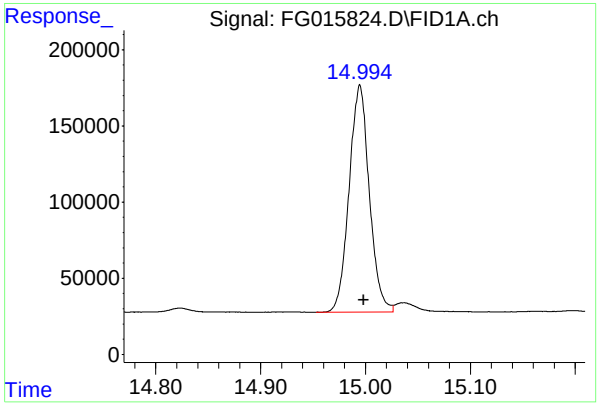
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015824.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 15:54
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 14 03:55:26 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.995 min
Delta R.T.: -0.004 mi
Response: 1994752
Conc: 16.94 ug/m

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015824.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 15:54
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	14.995	14.953	15.026	BV	149231	1994752	100.00%	100.000%
			Sum of corrected areas:			1994752		

FG042425.M Wed May 14 05:08:10 2025

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

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	05/13/25
Project:	NJ Soil PT	Date Received:	05/13/25
Client Sample ID:	PIBLK-FG015834.D	SDG No.:	Q1872
Lab Sample ID:	I.BLK-FG015834.D	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015834.D	1		05/13/25	FG051325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	19.2		29 - 130	96%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance 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
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015834.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 21:16
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 14 03:57:07 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.993	2264007	19.229 ug/ml
Target Compounds			

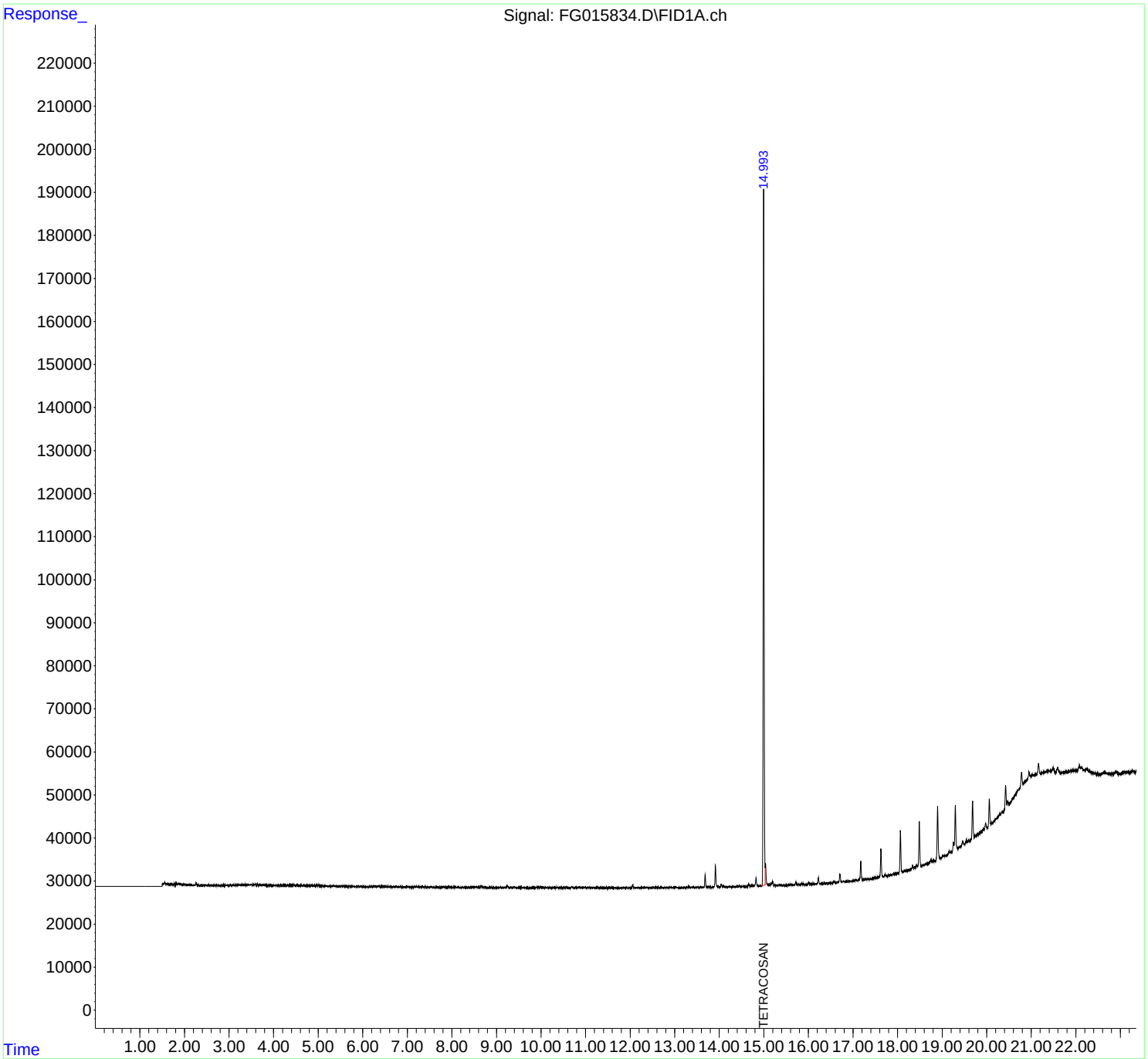
(f)=RT Delta > 1/2 Window (m)=manual int.

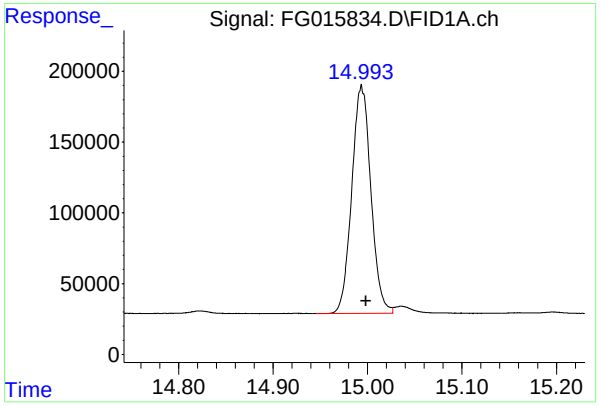
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015834.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 21:16
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 14 03:57:07 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.993 min
Delta R.T.: -0.005 mi
Response: 2264007
Conc: 19.23 ug/m

Instrument :
FID_G
ClientSampleId :
I.BLK

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015834.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 21:16
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	14.994	14.945	15.027	BV	161443	2264007	100.00%	100.000%
			Sum of corrected areas:			2264007		

FG042425.M Wed May 14 05:10:08 2025

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

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	
Project:	NJ Soil PT	Date Received:	
Client Sample ID:	PB167975BS	SDG No.:	Q1872
Lab Sample ID:	PB167975BS	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	100 Decanted:
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015821.D	1	05/13/25 10:05	05/13/25 13:51	PB167975

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	6320		169	1670	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	18.6		37 - 130	93%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance 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
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015821.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 13:51
Operator : YP\AJ
Sample : PB167975BS
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB167975BS

Integration File: autoint1.e
Quant Time: May 14 03:54:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	14.995	2185648	18.564 ug/ml
	Target Compounds			
2)	N-DECANE	4.496	2017520	18.121 ug/ml
3)	N-DODECANE	6.678	2165188	18.893 ug/ml
4)	N-TETRADECANE	8.514	2240728	18.492 ug/ml
5)	N-HEXADECANE	10.128	2388319	19.024 ug/ml
6)	N-OCTADECANE	11.576	2548747	19.448 ug/ml
7)	N-EICOSANE	12.891	2541732	18.748 ug/ml
8)	N-DOCOSANE	14.093	2547744	19.210 ug/ml
10)	N-TETRACOSANE	15.200	2567239	19.319 ug/ml
11)	N-HEXACOSANE	16.223	2544712	19.188 ug/ml
12)	N-OCTACOSANE	17.176	2522495	19.134 ug/ml

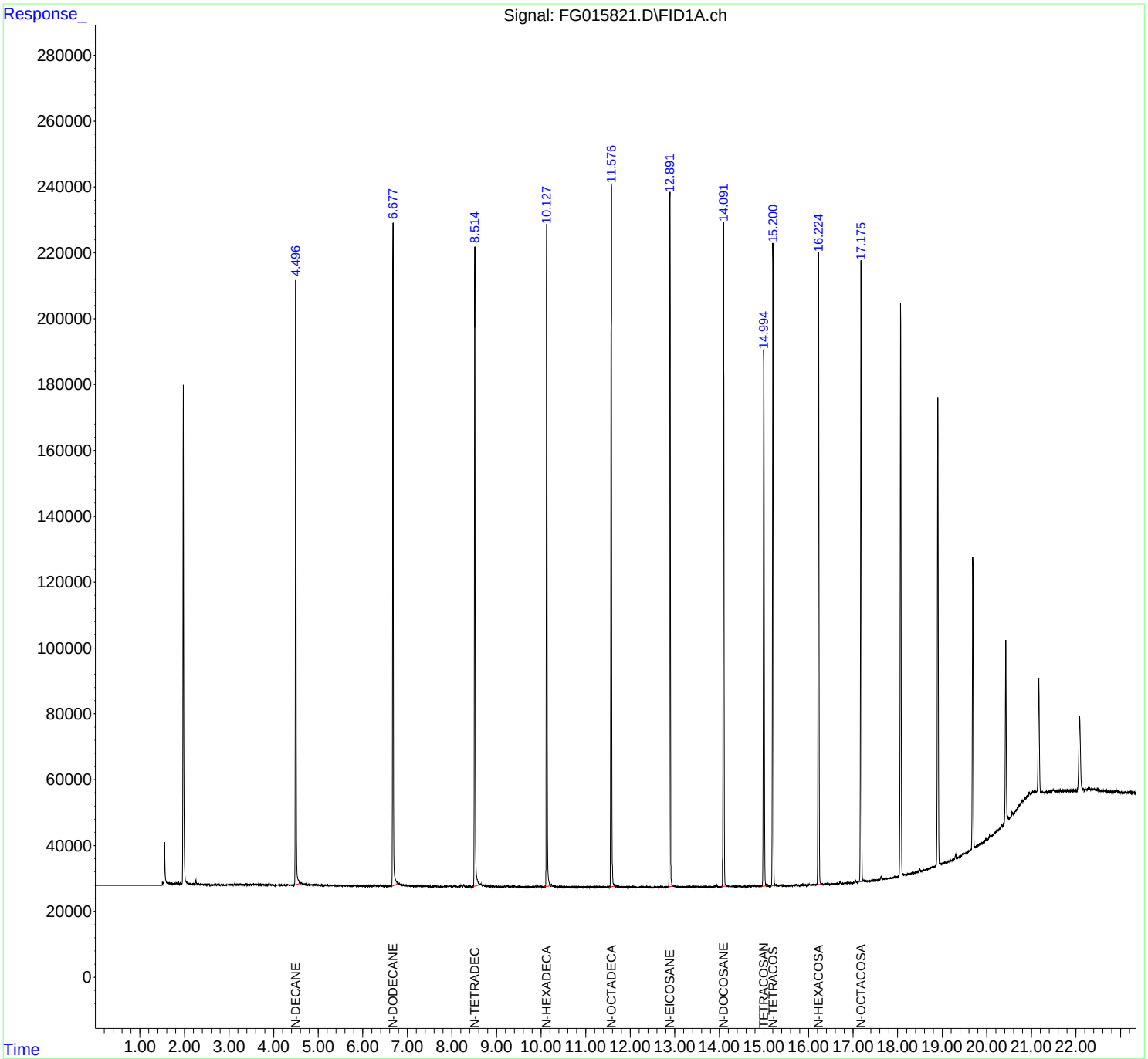
(f)=RT Delta > 1/2 Window (m)=manual int.

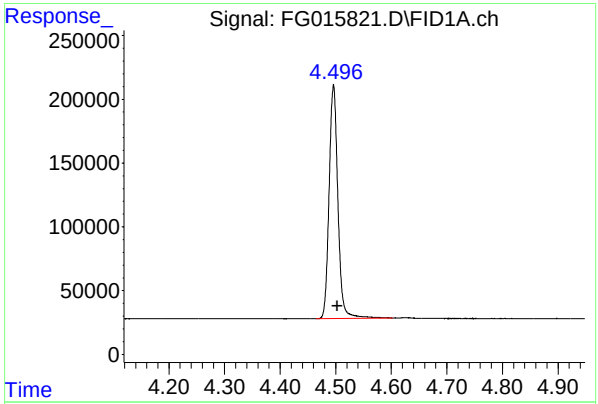
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015821.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 13:51
Operator : YP\AJ
Sample : PB167975BS
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB167975BS

Integration File: autoint1.e
Quant Time: May 14 03:54:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

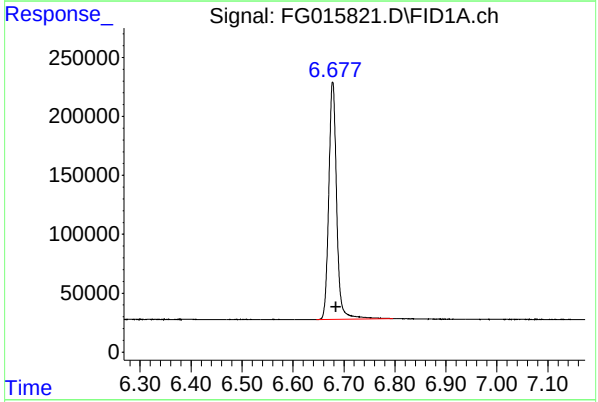




#2 N-DECANE

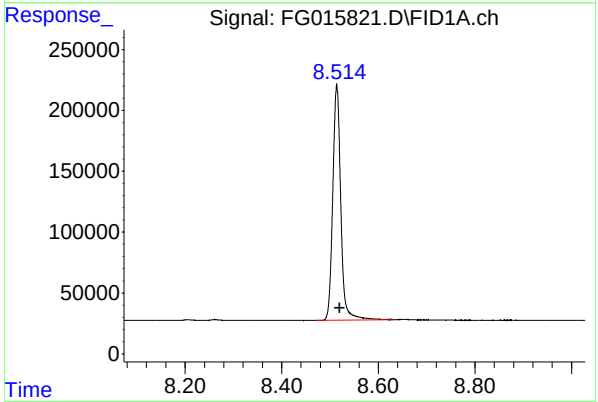
R.T.: 4.496 min
Delta R.T.: -0.006 min
Response: 2017520
Conc: 18.12 ug/ml

Instrument :
FID_G
ClientSampleId :
PB167975BS



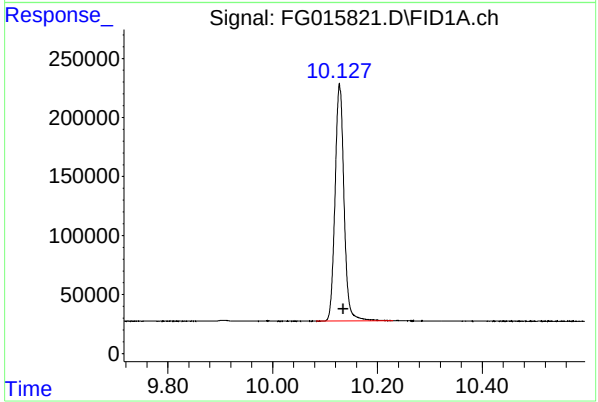
#3 N-DODECANE

R.T.: 6.678 min
Delta R.T.: -0.006 min
Response: 2165188
Conc: 18.89 ug/ml



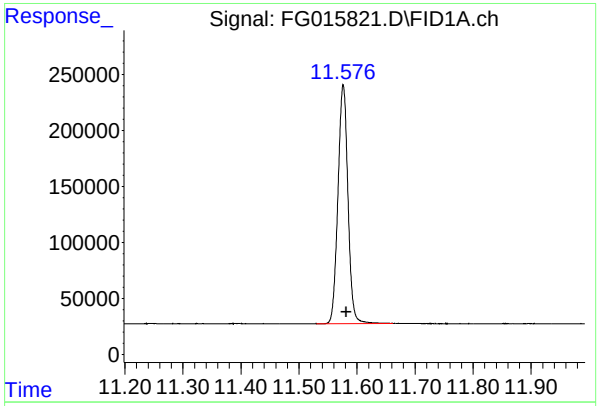
#4 N-TETRADECANE

R.T.: 8.514 min
Delta R.T.: -0.006 min
Response: 2240728
Conc: 18.49 ug/ml



#5 N-HEXADECANE

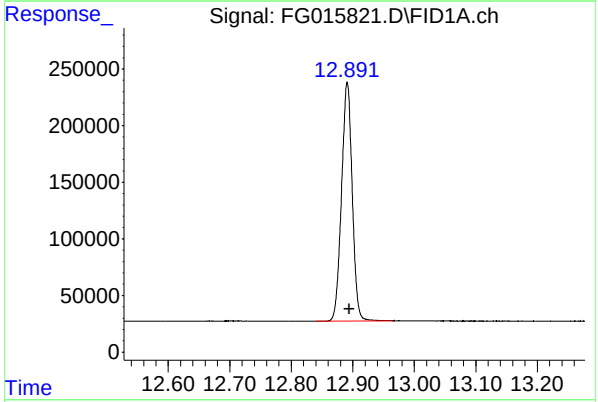
R.T.: 10.128 min
Delta R.T.: -0.007 min
Response: 2388319
Conc: 19.02 ug/ml



#6 N-OCTADECANE

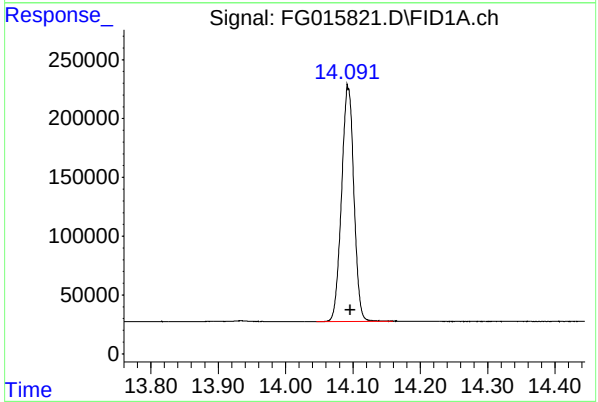
R.T.: 11.576 min
Delta R.T.: -0.005 min
Response: 2548747
Conc: 19.45 ug/ml

Instrument :
FID_G
ClientSampleId :
PB167975BS



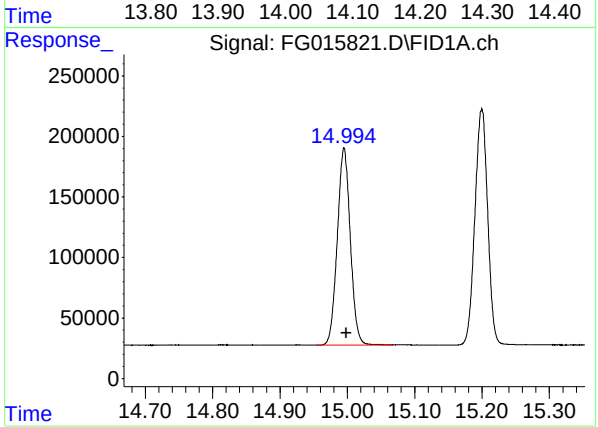
#7 N-EICOSANE

R.T.: 12.891 min
Delta R.T.: -0.004 min
Response: 2541732
Conc: 18.75 ug/ml



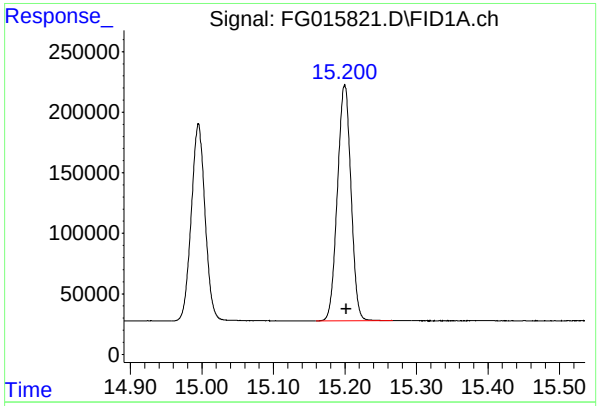
#8 N-DOCOSANE

R.T.: 14.093 min
Delta R.T.: -0.003 min
Response: 2547744
Conc: 19.21 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

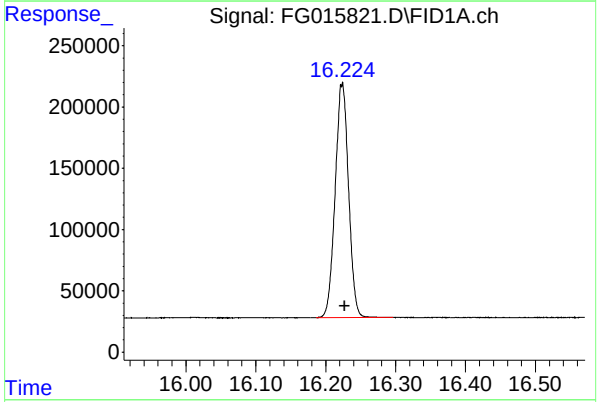
R.T.: 14.995 min
Delta R.T.: -0.003 min
Response: 2185648
Conc: 18.56 ug/ml



#10 N-TETRACOSANE

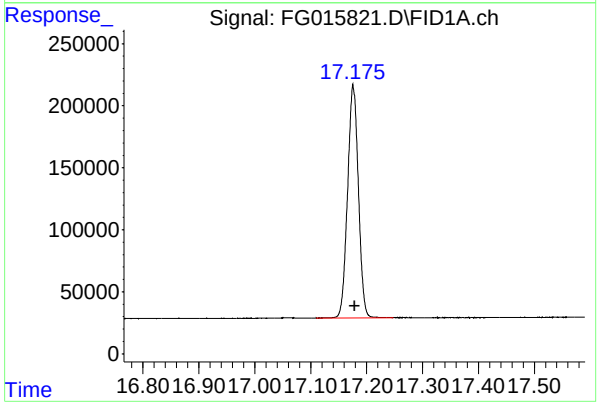
R.T.: 15.200 min
Delta R.T.: -0.003 mi
Response: 2567239
Conc: 19.32 ug/m

Instrument :
FID_G
ClientSampleId :
PB167975BS



#11 N-HEXACOSANE

R.T.: 16.223 min
Delta R.T.: -0.003 min
Response: 2544712
Conc: 19.19 ug/ml



#12 N-OCTACOSANE

R.T.: 17.176 min
Delta R.T.: -0.003 min
Response: 2522495
Conc: 19.13 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015821.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 13:51
Sample : PB167975BS
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.496	4.465	4.603	BB	183477	2017520	78.59%	7.680%
2	6.678	6.645	6.796	BB	201370	2165188	84.34%	8.242%
3	8.514	8.471	8.630	BB	193715	2240728	87.28%	8.530%
4	10.128	10.083	10.230	BB	200023	2388319	93.03%	9.091%
5	11.576	11.530	11.662	BB	213270	2548747	99.28%	9.702%
6	12.891	12.840	12.965	BB	210536	2541732	99.01%	9.675%
7	14.093	14.045	14.160	BB	197124	2547744	99.24%	9.698%
8	14.995	14.954	15.068	BB	162783	2185648	85.14%	8.320%
9	15.200	15.160	15.267	BB	194682	2567239	100.00%	9.772%
10	16.223	16.186	16.296	BB	189926	2544712	99.12%	9.687%
11	17.176	17.110	17.247	BB	186993	2522495	98.26%	9.602%

Sum of corrected areas: 26270071

FG042425.M Wed May 14 05:06:52 2025

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

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	05/02/25
Project:	NJ Soil PT	Date Received:	05/02/25
Client Sample ID:	SB2-4-5MS	SDG No.:	Q1872
Lab Sample ID:	Q1956-03MS	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	93.5 Decanted:
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015828.D	1	05/13/25 10:05	05/13/25 18:21	PB167975

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	7670		181	1780	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	11.6		37 - 130	58%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance 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
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015828.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 18:21
Operator : YP\AJ
Sample : Q1956-03MS
Misc :
ALS Vial : 27 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
SB2-4-5MS

Integration File: autoint1.e
Quant Time: May 14 03:56:05 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	14.994	1370551	11.641 ug/ml
	Target Compounds			
2)	N-DECANE	4.496	1904045	17.102 ug/ml
3)	N-DODECANE	6.678	2060041	17.976 ug/ml
4)	N-TETRADECANE	8.514	2111814	17.428 ug/ml
5)	N-HEXADECANE	10.127	2317576	18.460 ug/ml
6)	N-OCTADECANE	11.576	2409191	18.383 ug/ml
7)	N-EICOSANE	12.890	2381127	17.563 ug/ml
8)	N-DOCOSANE	14.092	2362384	17.812 ug/ml
10)	N-TETRACOSANE	15.199	2393119	18.009 ug/ml
11)	N-HEXACOSANE	16.223	2350398	17.723 ug/ml
12)	N-OCTACOSANE	17.175	2353664	17.853 ug/ml

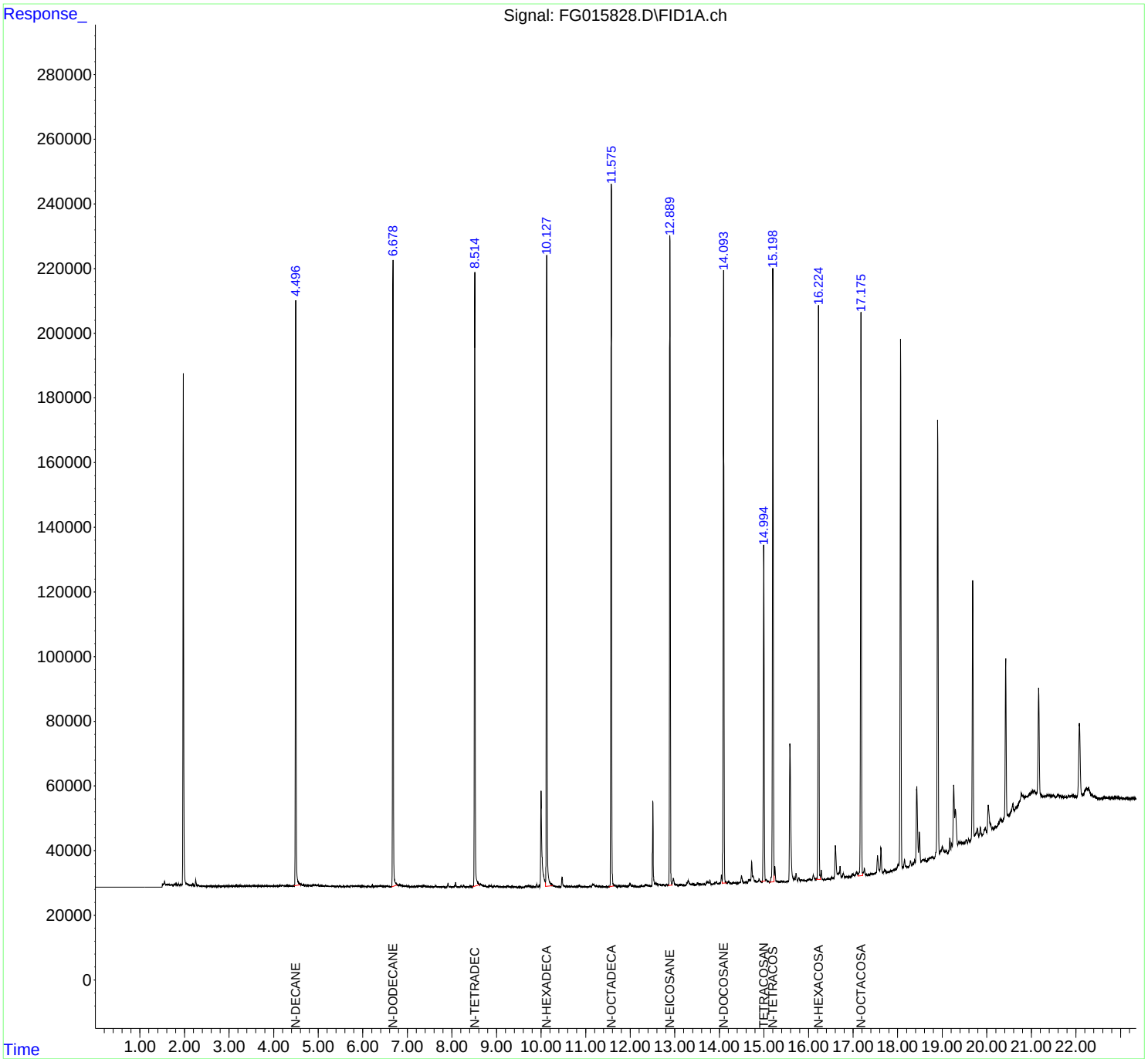
(f)=RT Delta > 1/2 Window (m)=manual int.

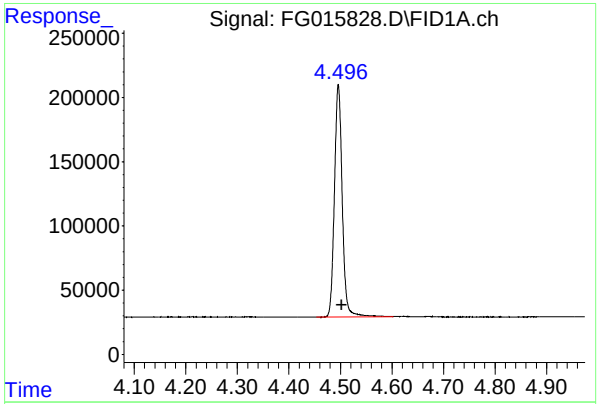
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015828.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 18:21
Operator : YP\AJ
Sample : Q1956-03MS
Misc :
ALS Vial : 27 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
SB2-4-5MS

Integration File: autoint1.e
Quant Time: May 14 03:56:05 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

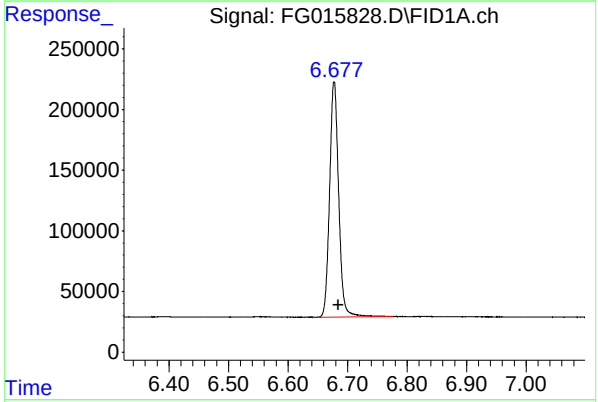




#2 N-DECANE

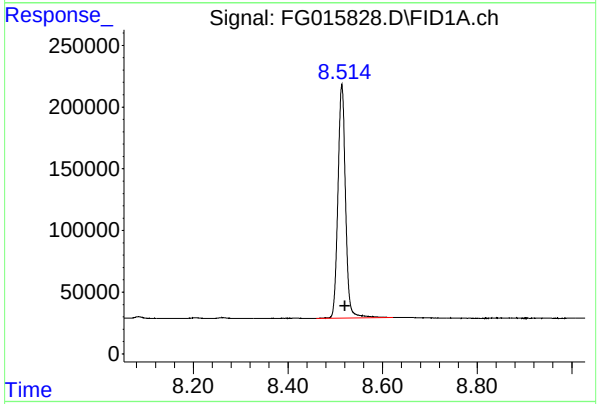
R.T.: 4.496 min
Delta R.T.: -0.006 min
Response: 1904045
Conc: 17.10 ug/ml

Instrument :
FID_G
ClientSampleId :
SB2-4-5MS



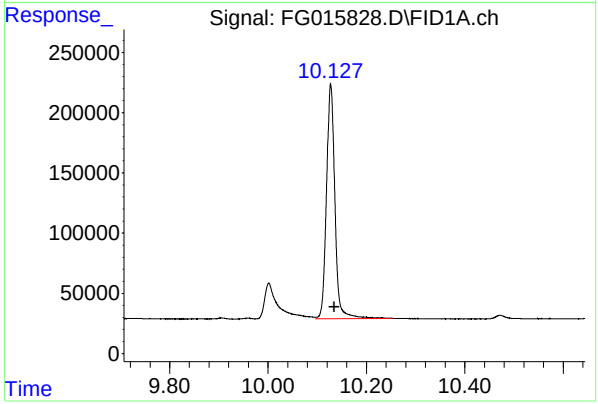
#3 N-DODECANE

R.T.: 6.678 min
Delta R.T.: -0.007 min
Response: 2060041
Conc: 17.98 ug/ml



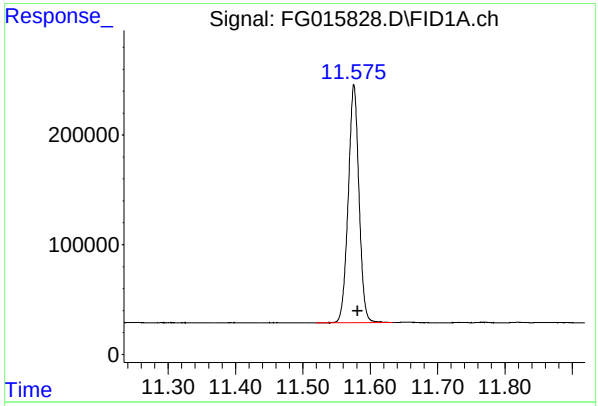
#4 N-TETRADECANE

R.T.: 8.514 min
Delta R.T.: -0.006 min
Response: 2111814
Conc: 17.43 ug/ml



#5 N-HEXADECANE

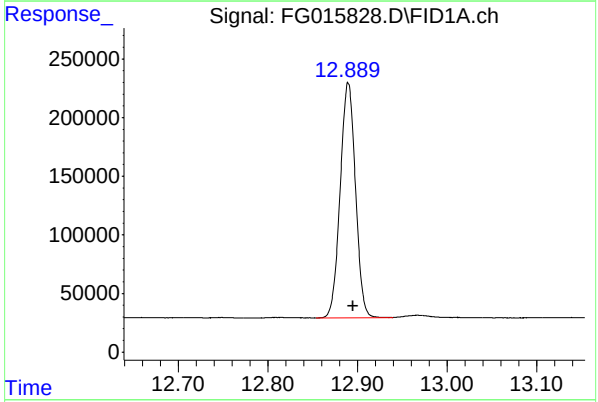
R.T.: 10.127 min
Delta R.T.: -0.007 min
Response: 2317576
Conc: 18.46 ug/ml



#6 N-OCTADECANE

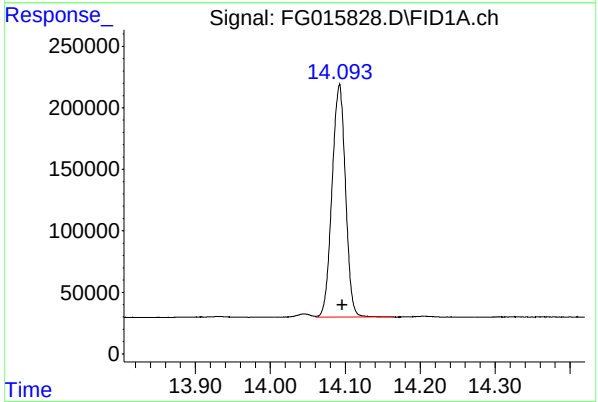
R.T.: 11.576 min
Delta R.T.: -0.006 min
Response: 2409191
Conc: 18.38 ug/ml

Instrument :
FID_G
ClientSampleId :
SB2-4-5MS



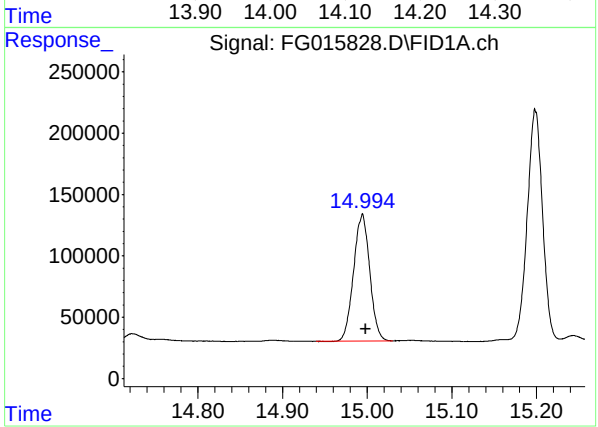
#7 N-EICOSANE

R.T.: 12.890 min
Delta R.T.: -0.005 min
Response: 2381127
Conc: 17.56 ug/ml



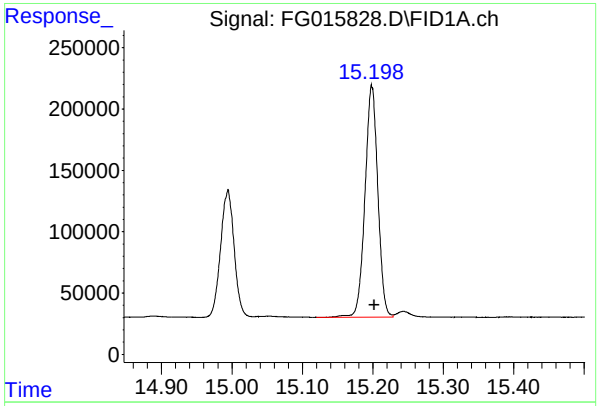
#8 N-DOCOSANE

R.T.: 14.092 min
Delta R.T.: -0.004 min
Response: 2362384
Conc: 17.81 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

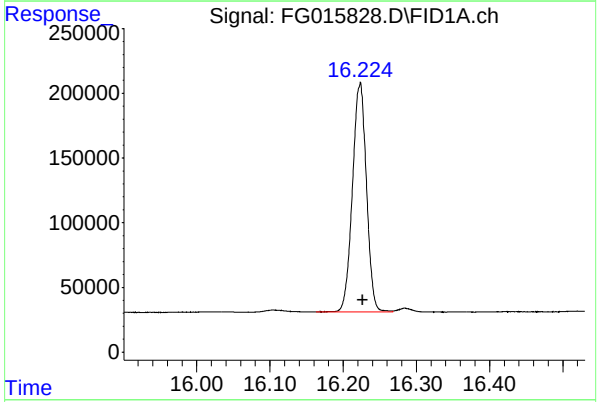
R.T.: 14.994 min
Delta R.T.: -0.004 min
Response: 1370551
Conc: 11.64 ug/ml



#10 N-TETRACOSANE

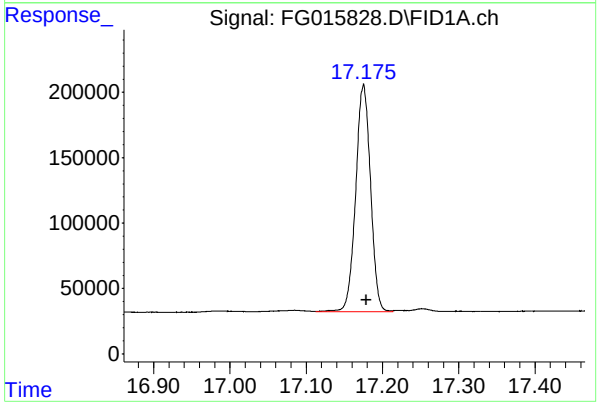
R.T.: 15.199 min
Delta R.T.: -0.004 min
Response: 2393119
Conc: 18.01 ug/ml

Instrument :
FID_G
ClientSampleId :
SB2-4-5MS



#11 N-HEXACOSANE

R.T.: 16.223 min
Delta R.T.: -0.004 min
Response: 2350398
Conc: 17.72 ug/ml



#12 N-OCTACOSANE

R.T.: 17.175 min
Delta R.T.: -0.004 min
Response: 2353664
Conc: 17.85 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015828.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 18:21
Sample : Q1956-03
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.321	4.300	4.358	BV	215	2923	0.12%	0.010%
2	4.383	4.358	4.401	PV	136	1982	0.08%	0.007%
3	4.406	4.401	4.422	VV	96	750	0.03%	0.003%
4	4.427	4.422	4.439	VV	111	716	0.03%	0.002%
5	4.442	4.439	4.463	VV	167	1204	0.05%	0.004%
6	4.496	4.463	4.605	PV	180925	1931642	79.59%	6.727%
7	4.623	4.605	4.653	VV	744	15322	0.63%	0.053%
8	4.672	4.653	4.728	VV	581	16038	0.66%	0.056%
9	4.739	4.728	4.760	VV	319	4982	0.21%	0.017%
10	4.782	4.760	4.792	VV	339	5028	0.21%	0.018%
11	4.797	4.792	4.805	VV	270	1845	0.08%	0.006%
12	4.808	4.805	4.825	VV	318	2929	0.12%	0.010%
13	4.830	4.825	4.843	VV	279	2480	0.10%	0.009%
14	4.847	4.843	4.851	VV	299	1258	0.05%	0.004%
15	4.873	4.851	4.880	VV	386	5281	0.22%	0.018%
16	4.903	4.880	4.907	VV	474	6324	0.26%	0.022%
17	4.918	4.907	4.924	VV	508	4637	0.19%	0.016%
18	4.928	4.924	4.949	VV	514	6596	0.27%	0.023%
19	4.952	4.949	4.966	VV	398	4119	0.17%	0.014%
20	4.973	4.966	4.981	VV	411	3165	0.13%	0.011%
21	4.984	4.981	4.993	VV	370	2393	0.10%	0.008%
22	5.013	4.993	5.035	VV	395	7356	0.30%	0.026%
23	5.049	5.035	5.054	VV	361	2831	0.12%	0.010%
24	5.068	5.054	5.072	VV	296	2617	0.11%	0.009%
25	5.076	5.072	5.110	VV	288	4871	0.20%	0.017%
26	5.113	5.110	5.121	VV	206	1221	0.05%	0.004%
27	5.127	5.121	5.131	VV	211	1039	0.04%	0.004%
28	5.159	5.131	5.173	VV	308	5658	0.23%	0.020%
29	5.177	5.173	5.183	VV	217	1123	0.05%	0.004%
30	5.188	5.183	5.205	VV	228	2185	0.09%	0.008%
31	5.206	5.205	5.224	VV	190	1702	0.07%	0.006%
32	5.227	5.224	5.235	VV	170	841	0.03%	0.003%
33	5.237	5.235	5.243	VV	162	727	0.03%	0.003%
34	5.250	5.243	5.262	VV	151	1618	0.07%	0.006%
35	5.267	5.262	5.275	VV	152	874	0.04%	0.003%
36	5.279	5.275	5.286	VV	190	794	0.03%	0.003%

rteres

37	5.297	5.286	5.311	VV	152	1847	0.08%	0.006%
38	5.327	5.311	5.341	VV	205	2749	0.11%	0.010%
39	5.347	5.341	5.366	VV	147	1684	0.07%	0.006%
40	5.371	5.366	5.375	VV	114	539	0.02%	0.002%
41	5.379	5.375	5.388	VV	117	899	0.04%	0.003%
42	5.395	5.388	5.400	VV	155	857	0.04%	0.003%
43	5.410	5.400	5.421	VV	159	1397	0.06%	0.005%
44	5.442	5.421	5.454	VV	159	1963	0.08%	0.007%
45	5.480	5.454	5.510	VV	240	4982	0.21%	0.017%
46	5.520	5.510	5.529	VV	125	1200	0.05%	0.004%
47	5.534	5.529	5.541	PV	103	642	0.03%	0.002%
48	5.547	5.541	5.565	VV	127	1276	0.05%	0.004%
49	5.568	5.565	5.572	VV	188	475	0.02%	0.002%
50	5.575	5.572	5.586	VV	125	742	0.03%	0.003%
51	5.589	5.586	5.595	VV	97	300	0.01%	0.001%
52	5.605	5.595	5.621	VV	108	1282	0.05%	0.004%
53	5.626	5.621	5.630	VV	92	360	0.01%	0.001%
54	5.645	5.630	5.660	VV	200	2625	0.11%	0.009%
55	5.665	5.660	5.680	VV	136	1075	0.04%	0.004%
56	5.684	5.680	5.692	VV	79	476	0.02%	0.002%
57	5.696	5.692	5.703	VV	101	450	0.02%	0.002%
58	5.735	5.703	5.741	VV	404	4721	0.19%	0.016%
59	5.746	5.741	5.757	VV	386	3162	0.13%	0.011%
60	5.765	5.757	5.797	VV	351	7169	0.30%	0.025%
61	5.804	5.797	5.820	VV	295	3698	0.15%	0.013%
62	5.833	5.820	5.840	VV	279	2933	0.12%	0.010%
63	5.842	5.840	5.863	VV	222	2930	0.12%	0.010%
64	5.875	5.863	5.895	VV	298	4614	0.19%	0.016%
65	5.910	5.895	5.969	VV	305	9645	0.40%	0.034%
66	5.977	5.969	5.996	VV	269	2893	0.12%	0.010%
67	6.000	5.996	6.005	VV	166	726	0.03%	0.003%
68	6.025	6.005	6.042	VV	245	4062	0.17%	0.014%
69	6.048	6.042	6.057	VV	173	1126	0.05%	0.004%
70	6.061	6.057	6.069	VV	96	751	0.03%	0.003%
71	6.078	6.069	6.083	VV	136	947	0.04%	0.003%
72	6.095	6.083	6.108	VV	243	2295	0.09%	0.008%
73	6.116	6.108	6.120	VV	212	1211	0.05%	0.004%
74	6.125	6.120	6.134	VV	192	1164	0.05%	0.004%
75	6.138	6.134	6.152	VV	146	1240	0.05%	0.004%
76	6.155	6.152	6.182	VV	152	1422	0.06%	0.005%
77	6.214	6.182	6.231	VV	579	8264	0.34%	0.029%
78	6.235	6.231	6.241	VV	290	1378	0.06%	0.005%
79	6.248	6.241	6.287	VV	320	5893	0.24%	0.021%
80	6.293	6.287	6.298	VV	272	1544	0.06%	0.005%
81	6.302	6.298	6.307	VV	242	1268	0.05%	0.004%
82	6.315	6.307	6.330	VV	346	3461	0.14%	0.012%
83	6.333	6.330	6.338	VV	328	1329	0.05%	0.005%
84	6.343	6.338	6.353	VV	245	1933	0.08%	0.007%
85	6.392	6.353	6.426	VV	519	12916	0.53%	0.045%
86	6.437	6.426	6.445	VV	246	2036	0.08%	0.007%
87	6.447	6.445	6.460	VV	213	1637	0.07%	0.006%
88	6.465	6.460	6.489	VV	294	3459	0.14%	0.012%
89	6.497	6.489	6.508	VV	213	1998	0.08%	0.007%

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90	6.549	6.508	6.614	VV	485	15163	0.62%	0.053%
91	6.622	6.614	6.637	VV	117	1260	0.05%	0.004%
92	6.640	6.637	6.648	VV	147	589	0.02%	0.002%
93	6.678	6.648	6.806	VV	193763	2098355	86.46%	7.307%
94	6.831	6.806	6.899	VV	748	30239	1.25%	0.105%
95	6.907	6.899	6.946	VV	454	11153	0.46%	0.039%
96	6.951	6.946	6.954	VV	355	1671	0.07%	0.006%
97	6.958	6.954	6.966	VV	398	2210	0.09%	0.008%
98	6.968	6.966	7.017	VV	353	8007	0.33%	0.028%
99	7.022	7.017	7.047	VV	229	3800	0.16%	0.013%
100	7.051	7.047	7.065	VV	224	1929	0.08%	0.007%
101	7.082	7.065	7.116	VV	237	5198	0.21%	0.018%
102	7.121	7.116	7.126	VV	180	1020	0.04%	0.004%
103	7.157	7.126	7.188	VV	233	6669	0.27%	0.023%
104	7.207	7.188	7.216	VV	251	3727	0.15%	0.013%
105	7.251	7.216	7.264	VV	391	9069	0.37%	0.032%
106	7.270	7.264	7.277	VV	349	2495	0.10%	0.009%
107	7.281	7.277	7.290	VV	325	2228	0.09%	0.008%
108	7.300	7.290	7.307	VV	292	2921	0.12%	0.010%
109	7.310	7.307	7.316	VV	277	1250	0.05%	0.004%
110	7.322	7.316	7.329	VV	236	1712	0.07%	0.006%
111	7.332	7.329	7.342	VV	259	1656	0.07%	0.006%
112	7.366	7.342	7.371	VV	448	5728	0.24%	0.020%
113	7.374	7.371	7.394	VV	416	5193	0.21%	0.018%
114	7.398	7.394	7.418	VV	352	4167	0.17%	0.015%
115	7.423	7.418	7.445	VV	266	3091	0.13%	0.011%
116	7.452	7.445	7.466	VV	233	2361	0.10%	0.008%
117	7.472	7.466	7.495	VV	239	2641	0.11%	0.009%
118	7.501	7.495	7.519	VV	195	1922	0.08%	0.007%
119	7.524	7.519	7.583	VV	174	4015	0.17%	0.014%
120	7.596	7.583	7.602	VV	144	1242	0.05%	0.004%
121	7.629	7.602	7.649	VV	483	7470	0.31%	0.026%
122	7.654	7.649	7.682	VV	274	2554	0.11%	0.009%
123	7.690	7.682	7.693	VV	139	534	0.02%	0.002%
124	7.697	7.693	7.704	VV	151	810	0.03%	0.003%
125	7.706	7.704	7.721	VV	160	898	0.04%	0.003%
126	7.725	7.721	7.732	VV	98	516	0.02%	0.002%
127	7.740	7.732	7.775	VV	112	1953	0.08%	0.007%
128	7.785	7.775	7.801	VV	119	1281	0.05%	0.004%
129	7.806	7.801	7.841	VV	116	1971	0.08%	0.007%
130	7.846	7.841	7.869	VV	79	929	0.04%	0.003%
131	7.872	7.869	7.874	PV	80	138	0.01%	0.000%
132	7.912	7.874	7.951	VV	1248	18595	0.77%	0.065%
133	7.954	7.951	7.976	VV	178	2114	0.09%	0.007%
134	7.977	7.976	7.996	VV	187	1331	0.05%	0.005%
135	8.001	7.996	8.017	VV	145	1276	0.05%	0.004%
136	8.033	8.017	8.041	VV	166	1790	0.07%	0.006%
137	8.084	8.041	8.112	VV	1524	24024	0.99%	0.084%
138	8.118	8.112	8.144	VV	167	2216	0.09%	0.008%
139	8.164	8.144	8.181	VV	202	2489	0.10%	0.009%
140	8.205	8.181	8.238	VV	661	9514	0.39%	0.033%
141	8.262	8.238	8.291	VV	768	10706	0.44%	0.037%

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142	8.296	8.291	8.304	VV	175	1073	0.04%	0.004%
143	8.335	8.304	8.342	VV	148	2504	0.10%	0.009%
144	8.345	8.342	8.354	VV	152	803	0.03%	0.003%
145	8.368	8.354	8.381	VV	234	2566	0.11%	0.009%
146	8.396	8.381	8.407	VV	272	3384	0.14%	0.012%
147	8.417	8.407	8.440	VV	320	4418	0.18%	0.015%
148	8.514	8.440	8.633	VV	189564	2170072	89.42%	7.557%
149	8.650	8.633	8.685	VV	943	25160	1.04%	0.088%
150	8.691	8.685	8.729	VV	611	13301	0.55%	0.046%
151	8.744	8.729	8.761	VV	461	7414	0.31%	0.026%
152	8.763	8.761	8.779	VV	354	3331	0.14%	0.012%
153	8.783	8.779	8.814	VV	289	4830	0.20%	0.017%
154	8.842	8.814	8.849	VV	504	7865	0.32%	0.027%
155	8.851	8.849	8.857	VV	498	2126	0.09%	0.007%
156	8.862	8.857	8.866	VV	419	2095	0.09%	0.007%
157	8.870	8.866	8.904	VV	495	8694	0.36%	0.030%
158	8.907	8.904	8.912	VV	318	1230	0.05%	0.004%
159	8.918	8.912	8.922	VV	302	1523	0.06%	0.005%
160	8.928	8.922	8.931	VV	308	1593	0.07%	0.006%
161	8.934	8.931	8.937	VV	312	1153	0.05%	0.004%
162	8.943	8.937	8.976	VV	401	6729	0.28%	0.023%
163	9.002	8.976	9.040	VV	449	12103	0.50%	0.042%
164	9.046	9.040	9.078	VV	309	5221	0.22%	0.018%
165	9.080	9.078	9.095	VV	199	1709	0.07%	0.006%
166	9.108	9.095	9.121	VV	200	2399	0.10%	0.008%
167	9.138	9.121	9.159	VV	278	4658	0.19%	0.016%
168	9.169	9.159	9.192	VV	255	3277	0.14%	0.011%
169	9.247	9.192	9.285	VV	496	13866	0.57%	0.048%
170	9.290	9.285	9.327	VV	224	3423	0.14%	0.012%
171	9.343	9.327	9.369	VV	504	7006	0.29%	0.024%
172	9.393	9.369	9.411	VV	262	4735	0.20%	0.016%
173	9.417	9.411	9.429	VV	154	945	0.04%	0.003%
174	9.431	9.429	9.441	VV	111	500	0.02%	0.002%
175	9.449	9.441	9.462	VV	139	577	0.02%	0.002%
176	9.479	9.462	9.485	VV	112	658	0.03%	0.002%
177	9.489	9.485	9.498	VV	78	339	0.01%	0.001%
178	9.531	9.498	9.574	VV	269	4500	0.19%	0.016%
179	9.586	9.574	9.613	VV	89	1172	0.05%	0.004%
180	9.650	9.613	9.665	PV	528	7857	0.32%	0.027%
181	9.676	9.665	9.689	VV	561	6094	0.25%	0.021%
182	9.729	9.689	9.800	VV	617	24102	0.99%	0.084%
183	9.809	9.800	9.839	VV	232	3773	0.16%	0.013%
184	9.864	9.839	9.872	VV	239	3766	0.16%	0.013%
185	9.879	9.872	9.884	VV	193	1260	0.05%	0.004%
186	9.905	9.884	9.934	VV	946	12633	0.52%	0.044%
187	9.959	9.934	9.975	VV	837	10285	0.42%	0.036%
188	10.002	9.975	10.097	VV	29987	588364	24.24%	2.049%
189	10.127	10.097	10.332	VV	195003	2378616	98.01%	8.283%
190	10.335	10.332	10.340	VV	280	1039	0.04%	0.004%
191	10.343	10.340	10.361	VV	249	2514	0.10%	0.009%
192	10.366	10.361	10.397	VV	204	3407	0.14%	0.012%
193	10.404	10.397	10.426	VV	223	2615	0.11%	0.009%
194	10.428	10.426	10.440	VV	178	1228	0.05%	0.004%

195	10.472	10.440	10.539	VV	3169	55735	2.30%	0.194%
196	10.547	10.539	10.593	VV	346	9461	0.39%	0.033%
197	10.599	10.593	10.603	VV	258	1484	0.06%	0.005%
198	10.612	10.603	10.632	VV	273	3793	0.16%	0.013%
199	10.645	10.632	10.667	VV	508	5822	0.24%	0.020%
200	10.688	10.667	10.712	VV	368	5977	0.25%	0.021%
201	10.723	10.712	10.729	VV	182	1554	0.06%	0.005%
202	10.733	10.729	10.740	VV	177	1013	0.04%	0.004%
203	10.759	10.740	10.776	VV	242	4019	0.17%	0.014%
204	10.794	10.776	10.809	VV	228	3283	0.14%	0.011%
205	10.815	10.809	10.817	VV	231	839	0.03%	0.003%
206	10.831	10.817	10.856	VV	560	9787	0.40%	0.034%
207	10.870	10.856	10.894	VV	533	7317	0.30%	0.025%
208	10.901	10.894	10.906	VV	125	835	0.03%	0.003%
209	10.940	10.906	10.949	VV	235	4108	0.17%	0.014%
210	10.952	10.949	10.962	VV	187	1175	0.05%	0.004%
211	10.975	10.962	11.031	VV	282	6624	0.27%	0.023%
212	11.041	11.031	11.046	VV	103	641	0.03%	0.002%
213	11.059	11.046	11.072	VV	144	1677	0.07%	0.006%
214	11.100	11.072	11.127	VV	351	6886	0.28%	0.024%
215	11.161	11.127	11.226	VV	878	33131	1.37%	0.115%
216	11.249	11.226	11.281	VV	439	10161	0.42%	0.035%
217	11.290	11.281	11.313	VV	305	4647	0.19%	0.016%
218	11.321	11.313	11.335	VV	264	2770	0.11%	0.010%
219	11.343	11.335	11.352	VV	169	1359	0.06%	0.005%
220	11.357	11.352	11.367	VV	112	696	0.03%	0.002%
221	11.393	11.367	11.421	VV	286	4707	0.19%	0.016%
222	11.442	11.421	11.449	VV	174	2252	0.09%	0.008%
223	11.462	11.449	11.485	VV	279	3072	0.13%	0.011%
224	11.507	11.485	11.530	VV	182	3498	0.14%	0.012%
225	11.576	11.530	11.639	VV	217491	2426959	100.00%	8.452%
226	11.655	11.639	11.706	VV	802	15862	0.65%	0.055%
227	11.733	11.706	11.750	VV	490	7324	0.30%	0.026%
228	11.772	11.750	11.793	VV	605	8140	0.34%	0.028%
229	11.819	11.793	11.839	VV	616	8536	0.35%	0.030%
230	11.859	11.839	11.917	VV	466	13489	0.56%	0.047%
231	11.994	11.917	12.040	VV	1206	34176	1.41%	0.119%
232	12.058	12.040	12.079	VV	567	8804	0.36%	0.031%
233	12.105	12.079	12.121	VV	316	5482	0.23%	0.019%
234	12.131	12.121	12.152	VV	247	3030	0.12%	0.011%
235	12.157	12.152	12.167	VV	117	545	0.02%	0.002%
236	12.181	12.167	12.191	PV	121	1140	0.05%	0.004%
237	12.249	12.191	12.272	VV	518	11956	0.49%	0.042%
238	12.305	12.272	12.316	VV	369	5750	0.24%	0.020%
239	12.348	12.316	12.356	VV	699	10773	0.44%	0.038%
240	12.363	12.356	12.402	VV	637	12058	0.50%	0.042%
241	12.411	12.402	12.423	VV	325	3680	0.15%	0.013%
242	12.428	12.423	12.437	VV	283	2202	0.09%	0.008%
243	12.458	12.437	12.476	VV	380	5962	0.25%	0.021%
244	12.507	12.476	12.562	VV	26446	316566	13.04%	1.102%
245	12.573	12.562	12.591	VV	1092	14486	0.60%	0.050%
246	12.600	12.591	12.622	VV	916	13178	0.54%	0.046%

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247	12.631	12.622	12.637	VV	565	4681	0.19%	0.016%
248	12.643	12.637	12.646	VV	537	2686	0.11%	0.009%
249	12.658	12.646	12.686	VV	579	11644	0.48%	0.041%
250	12.711	12.686	12.731	VV	545	11533	0.48%	0.040%
251	12.749	12.731	12.772	VV	580	9158	0.38%	0.032%
252	12.778	12.772	12.786	VV	215	1430	0.06%	0.005%
253	12.816	12.786	12.851	VV	619	14026	0.58%	0.049%
254	12.890	12.851	12.935	VV	201307	2392479	98.58%	8.332%
255	12.967	12.935	13.006	VV	2433	54742	2.26%	0.191%
256	13.009	13.006	13.053	VV	525	9486	0.39%	0.033%
257	13.060	13.053	13.084	VV	217	2784	0.11%	0.010%
258	13.103	13.084	13.127	VV	287	5747	0.24%	0.020%
259	13.148	13.127	13.182	VV	372	7712	0.32%	0.027%
260	13.193	13.182	13.231	VV	219	3960	0.16%	0.014%
261	13.235	13.231	13.244	PV	114	601	0.02%	0.002%
262	13.299	13.244	13.362	VV	1555	50570	2.08%	0.176%
263	13.381	13.362	13.404	VV	482	8839	0.36%	0.031%
264	13.411	13.404	13.417	VV	415	2457	0.10%	0.009%
265	13.421	13.417	13.434	VV	288	2540	0.10%	0.009%
266	13.436	13.434	13.482	VV	261	5656	0.23%	0.020%
267	13.504	13.482	13.540	VV	744	13790	0.57%	0.048%
268	13.561	13.540	13.615	VV	382	10804	0.45%	0.038%
269	13.630	13.615	13.673	VV	406	7642	0.31%	0.027%
270	13.676	13.673	13.681	VV	156	582	0.02%	0.002%
271	13.719	13.681	13.731	VV	995	14651	0.60%	0.051%
272	13.744	13.731	13.767	VV	847	14819	0.61%	0.052%
273	13.787	13.767	13.814	VV	1394	20329	0.84%	0.071%
274	13.820	13.814	13.836	VV	214	1914	0.08%	0.007%
275	13.933	13.836	13.971	VV	853	29986	1.24%	0.104%
276	13.992	13.971	14.004	VV	363	5353	0.22%	0.019%
277	14.007	14.004	14.011	VV	306	1175	0.05%	0.004%
278	14.046	14.011	14.061	VV	2945	40828	1.68%	0.142%
279	14.092	14.061	14.168	VV	189531	2383805	98.22%	8.301%
280	14.205	14.168	14.251	VV	982	23507	0.97%	0.082%
281	14.254	14.251	14.265	VV	218	1548	0.06%	0.005%
282	14.315	14.265	14.347	VV	342	11629	0.48%	0.040%
283	14.378	14.347	14.406	VV	299	7999	0.33%	0.028%
284	14.409	14.406	14.422	VV	308	1634	0.07%	0.006%
285	14.454	14.422	14.466	VV	442	7452	0.31%	0.026%
286	14.495	14.466	14.554	VV	2406	54991	2.27%	0.191%
287	14.600	14.554	14.636	VV	394	14008	0.58%	0.049%
288	14.656	14.636	14.667	VV	1164	14690	0.61%	0.051%
289	14.685	14.667	14.699	VV	1152	18154	0.75%	0.063%
290	14.723	14.699	14.839	VV	6656	157218	6.48%	0.547%
291	14.856	14.839	14.866	VV	411	6024	0.25%	0.021%
292	14.889	14.866	14.956	VV	1273	32117	1.32%	0.112%
293	14.994	14.956	15.032	VV	103866	1396077	57.52%	4.862%
294	15.052	15.032	15.132	VV	1077	30911	1.27%	0.108%
295	15.199	15.132	15.229	VV	188084	2405198	99.10%	8.376%
296	15.243	15.229	15.370	VV	4948	79829	3.29%	0.278%
297	15.394	15.370	15.429	VV	387	6300	0.26%	0.022%
298	15.454	15.429	15.483	VV	133	2807	0.12%	0.010%
299	15.531	15.483	15.546	PV	241	4871	0.20%	0.017%

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300	15.582	15.546	15.664	VV	42321	829993	34.20%	2.890%
301	15.676	15.664	15.696	VV	1367	19118	0.79%	0.067%
302	15.719	15.696	15.756	VV	2607	44446	1.83%	0.155%
303	15.783	15.756	15.821	VV	1188	21910	0.90%	0.076%
304	15.851	15.821	15.875	VV	465	8240	0.34%	0.029%
305	15.898	15.875	15.929	VV	222	4795	0.20%	0.017%
306	15.938	15.929	15.957	VV	142	1403	0.06%	0.005%
307	15.976	15.957	15.984	VV	287	3167	0.13%	0.011%
308	16.020	15.984	16.073	VV	438	16625	0.69%	0.058%
309	16.105	16.073	16.149	VV	1743	39546	1.63%	0.138%
310	16.223	16.149	16.267	VV	175489	2370624	97.68%	8.255%
311	16.285	16.267	16.341	VV	3140	43330	1.79%	0.151%
312	16.356	16.341	16.381	VV	227	2961	0.12%	0.010%
313	16.432	16.381	16.461	PV	320	7515	0.31%	0.026%
314	16.468	16.461	16.484	VV	142	1456	0.06%	0.005%
315	16.521	16.484	16.546	VV	553	11972	0.49%	0.042%
316	16.602	16.546	16.644	VV	10323	208470	8.59%	0.726%
317	16.706	16.644	16.734	VV	3698	94735	3.90%	0.330%
318	16.781	16.734	16.829	VV	1372	35903	1.48%	0.125%
319	16.849	16.829	16.886	VV	306	7779	0.32%	0.027%
320	16.897	16.886	16.927	VV	217	2535	0.10%	0.009%
321	16.984	16.927	17.036	PV	941	28567	1.18%	0.099%
322	17.085	17.036	17.113	VV	1315	37100	1.53%	0.129%
323	17.175	17.113	17.212	VV	174615	2358240	97.17%	8.212%
324	17.222	17.212	17.236	VV	1019	13002	0.54%	0.045%
325	17.252	17.236	17.282	VV	2292	33235	1.37%	0.116%
326	17.298	17.282	17.332	VV	273	4441	0.18%	0.015%

Sum of corrected areas: 28715910

FG042425.M Wed May 14 05:36:39 2025

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	05/02/25
Project:	NJ Soil PT	Date Received:	05/02/25
Client Sample ID:	SB2-4-5MSD	SDG No.:	Q1872
Lab Sample ID:	Q1956-04MSD	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	93.5 Decanted:
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015829.D	1	05/13/25 10:05	05/13/25 18:50	PB167975

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	7820		181	1780	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	11.9		37 - 130	60%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance 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
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015829.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 18:50
Operator : YP\AJ
Sample : Q1956-04MSD
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
SB2-4-5MSD

Integration File: autoint1.e
Quant Time: May 14 03:56:16 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	14.993	1406410	11.945 ug/ml
	Target Compounds			
2)	N-DECANE	4.496	1863836	16.741 ug/ml
3)	N-DODECANE	6.678	2046373	17.856 ug/ml
4)	N-TETRADECANE	8.514	2131192	17.588 ug/ml
5)	N-HEXADECANE	10.127	2361126	18.807 ug/ml
6)	N-OCTADECANE	11.576	2465513	18.813 ug/ml
7)	N-EICOSANE	12.890	2438874	17.989 ug/ml
8)	N-DOCOSANE	14.092	2427066	18.300 ug/ml
10)	N-TETRACOSANE	15.198	2459726	18.510 ug/ml
11)	N-HEXACOSANE	16.222	2413835	18.201 ug/ml
12)	N-OCTACOSANE	17.175	2403412	18.231 ug/ml

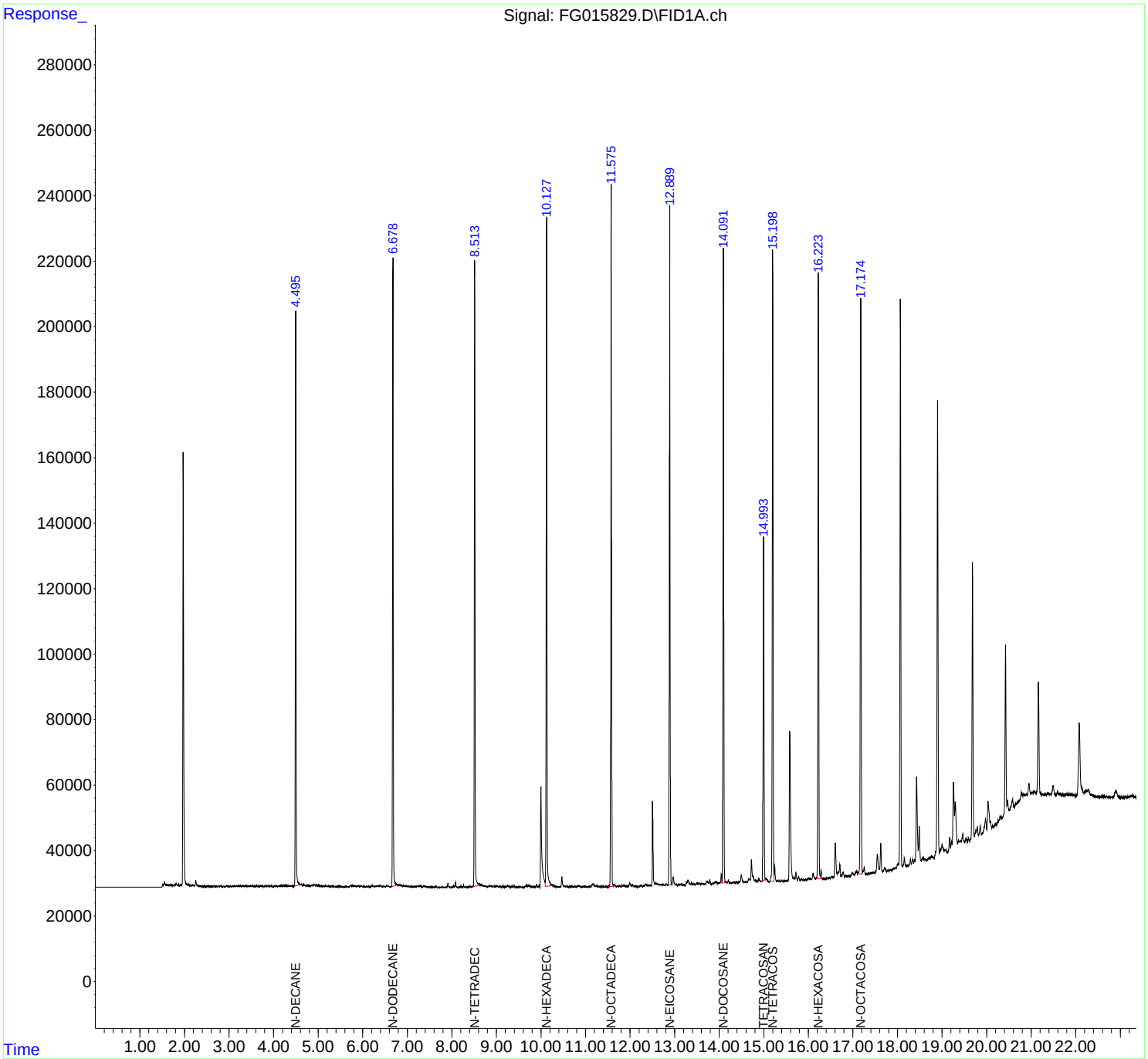
(f)=RT Delta > 1/2 Window (m)=manual int.

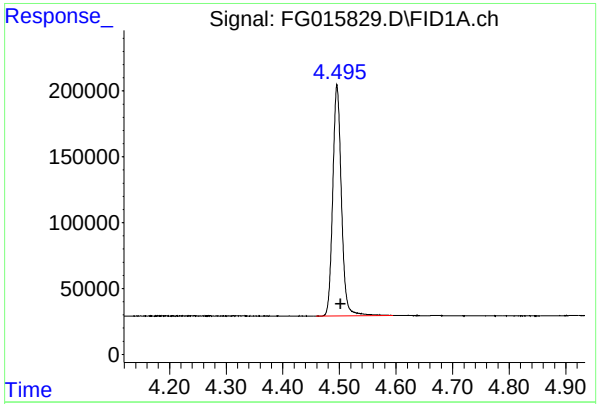
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015829.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 18:50
Operator : YP\AJ
Sample : Q1956-04MSD
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
SB2-4-5MSD

Integration File: autoint1.e
Quant Time: May 14 03:56:16 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

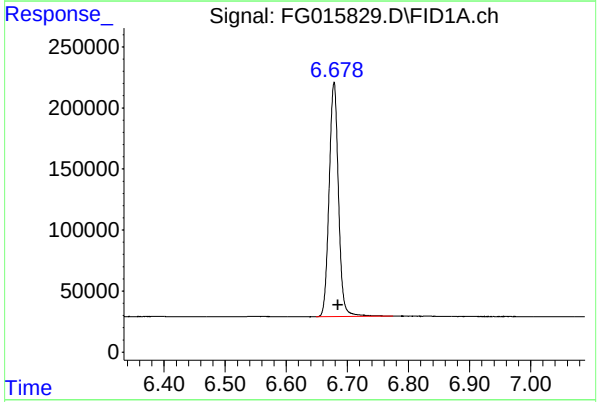




#2 N-DECANE

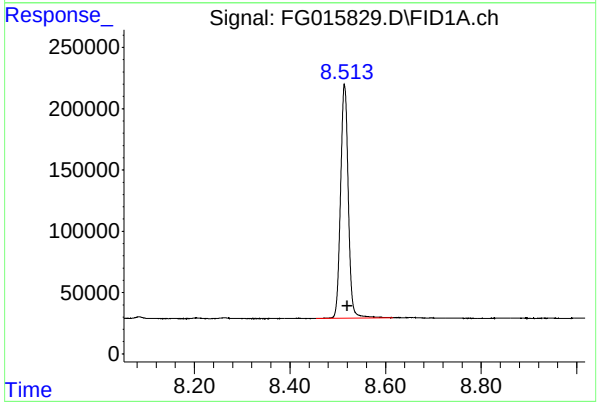
R.T.: 4.496 min
Delta R.T.: -0.007 min
Response: 1863836
Conc: 16.74 ug/ml

Instrument :
FID_G
ClientSampleId :
SB2-4-5MSD



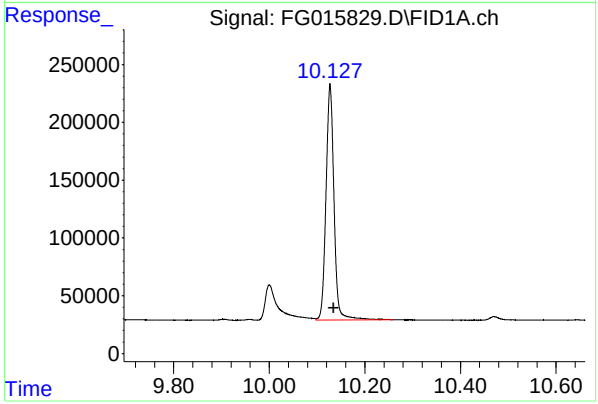
#3 N-DODECANE

R.T.: 6.678 min
Delta R.T.: -0.006 min
Response: 2046373
Conc: 17.86 ug/ml



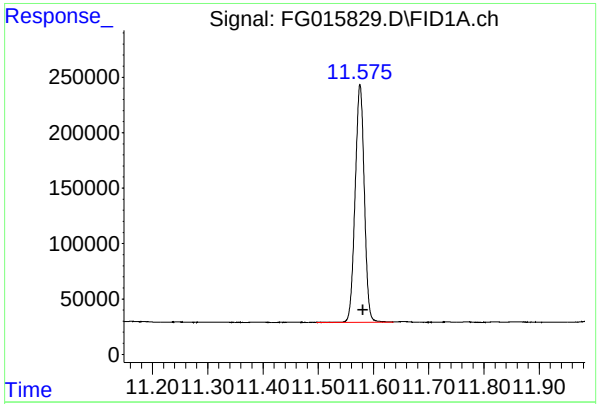
#4 N-TETRADECANE

R.T.: 8.514 min
Delta R.T.: -0.006 min
Response: 2131192
Conc: 17.59 ug/ml



#5 N-HEXADECANE

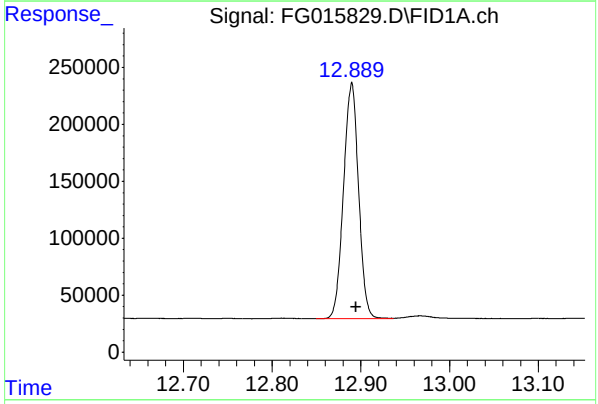
R.T.: 10.127 min
Delta R.T.: -0.007 min
Response: 2361126
Conc: 18.81 ug/ml



#6 N-OCTADECANE

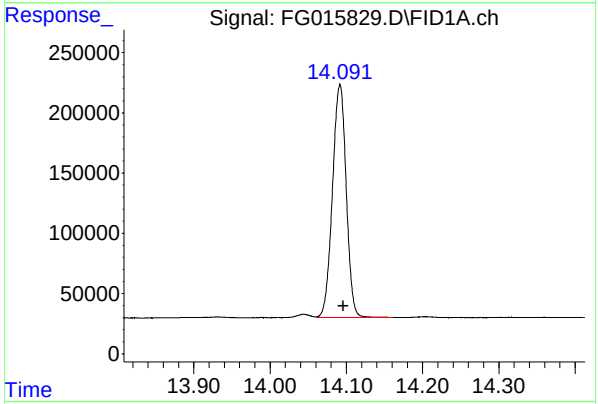
R.T.: 11.576 min
Delta R.T.: -0.006 min
Response: 2465513
Conc: 18.81 ug/ml

Instrument :
FID_G
ClientSampleId :
SB2-4-5MSD



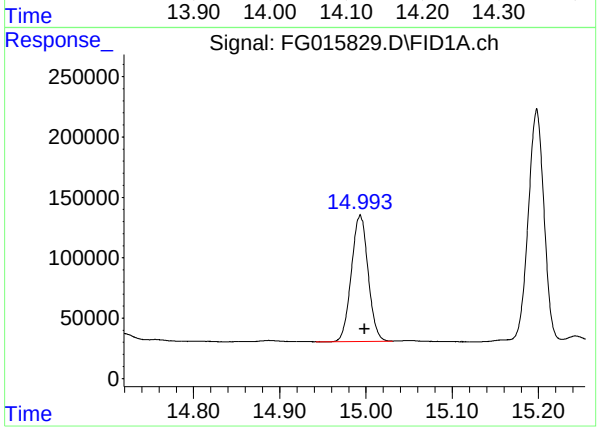
#7 N-EICOSANE

R.T.: 12.890 min
Delta R.T.: -0.005 min
Response: 2438874
Conc: 17.99 ug/ml



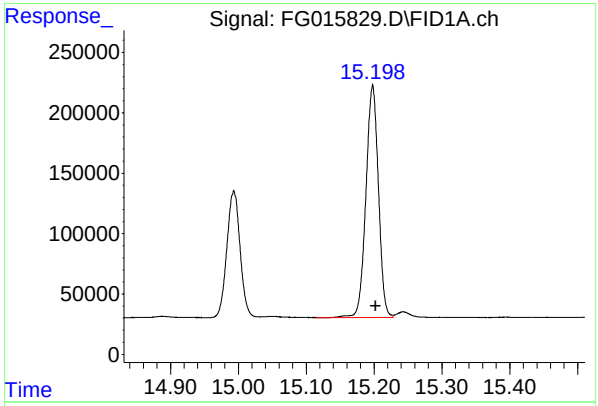
#8 N-DOCOSANE

R.T.: 14.092 min
Delta R.T.: -0.004 min
Response: 2427066
Conc: 18.30 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

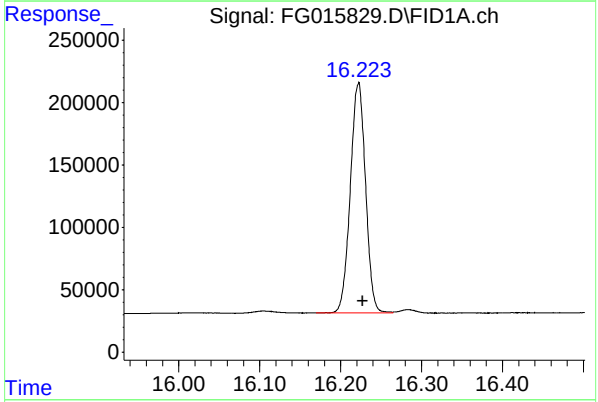
R.T.: 14.993 min
Delta R.T.: -0.005 min
Response: 1406410
Conc: 11.95 ug/ml



#10 N-TETRACOSANE

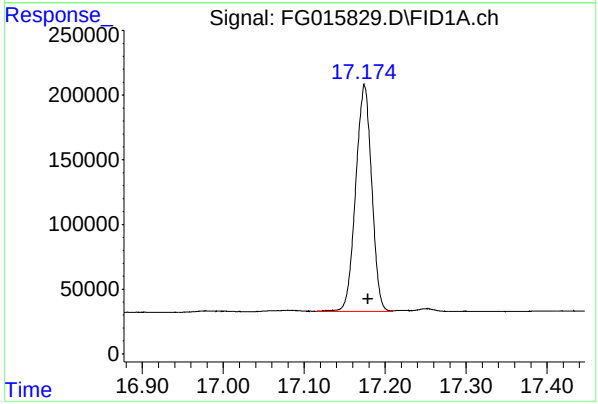
R.T.: 15.198 min
Delta R.T.: -0.004 min
Response: 2459726
Conc: 18.51 ug/ml

Instrument :
FID_G
ClientSampleId :
SB2-4-5MSD



#11 N-HEXACOSANE

R.T.: 16.222 min
Delta R.T.: -0.005 min
Response: 2413835
Conc: 18.20 ug/ml



#12 N-OCTACOSANE

R.T.: 17.175 min
Delta R.T.: -0.004 min
Response: 2403412
Conc: 18.23 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015829.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 18:50
Sample : Q1956-04
Misc :
ALS Vial : 28 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.313	4.300	4.385	BV	100	2262	0.09%	0.008%
2	4.390	4.385	4.406	PV	118	732	0.03%	0.002%
3	4.412	4.406	4.421	VV	145	547	0.02%	0.002%
4	4.428	4.421	4.455	VV	96	1343	0.05%	0.005%
5	4.463	4.455	4.468	PV	144	623	0.03%	0.002%
6	4.496	4.468	4.595	VV	175326	1888750	76.10%	6.448%
7	4.598	4.595	4.604	VV	569	2949	0.12%	0.010%
8	4.621	4.604	4.657	VV	633	15031	0.61%	0.051%
9	4.668	4.657	4.695	VV	603	10032	0.40%	0.034%
10	4.698	4.695	4.705	VV	375	1666	0.07%	0.006%
11	4.707	4.705	4.721	VV	329	2582	0.10%	0.009%
12	4.728	4.721	4.741	VV	361	3569	0.14%	0.012%
13	4.755	4.741	4.794	VV	325	8643	0.35%	0.030%
14	4.805	4.794	4.852	VV	323	8729	0.35%	0.030%
15	4.890	4.852	4.894	VV	456	8422	0.34%	0.029%
16	4.919	4.894	4.981	VV	587	23250	0.94%	0.079%
17	5.012	4.981	5.045	VV	450	12375	0.50%	0.042%
18	5.047	5.045	5.081	VV	297	5166	0.21%	0.018%
19	5.083	5.081	5.089	VV	281	1076	0.04%	0.004%
20	5.090	5.089	5.125	VV	268	4557	0.18%	0.016%
21	5.128	5.125	5.141	VV	228	1762	0.07%	0.006%
22	5.161	5.141	5.190	VV	353	6282	0.25%	0.021%
23	5.196	5.190	5.212	VV	187	1937	0.08%	0.007%
24	5.218	5.212	5.224	VV	145	776	0.03%	0.003%
25	5.231	5.224	5.240	VV	127	1071	0.04%	0.004%
26	5.248	5.240	5.270	VV	165	1877	0.08%	0.006%
27	5.287	5.270	5.302	VV	183	2091	0.08%	0.007%
28	5.309	5.302	5.314	VV	155	854	0.03%	0.003%
29	5.319	5.314	5.322	VV	181	533	0.02%	0.002%
30	5.344	5.322	5.349	VV	189	2186	0.09%	0.007%
31	5.354	5.349	5.363	VV	149	843	0.03%	0.003%
32	5.367	5.363	5.404	VV	138	2288	0.09%	0.008%
33	5.410	5.404	5.415	VV	91	444	0.02%	0.002%
34	5.423	5.415	5.427	VV	143	619	0.02%	0.002%
35	5.440	5.427	5.445	VV	161	1163	0.05%	0.004%
36	5.482	5.445	5.500	VV	267	5087	0.20%	0.017%

rteres

37	5.505	5.500	5.519	VV	140	919	0.04%	0.003%
38	5.522	5.519	5.554	VV	140	1714	0.07%	0.006%
39	5.560	5.554	5.568	VV	117	568	0.02%	0.002%
40	5.575	5.568	5.583	VV	161	613	0.02%	0.002%
41	5.588	5.583	5.607	VV	142	1124	0.05%	0.004%
42	5.612	5.607	5.625	VV	66	777	0.03%	0.003%
43	5.641	5.625	5.695	VV	209	4595	0.19%	0.016%
44	5.702	5.695	5.708	VV	97	401	0.02%	0.001%
45	5.741	5.708	5.772	PV	456	11850	0.48%	0.040%
46	5.776	5.772	5.792	VV	367	4059	0.16%	0.014%
47	5.794	5.792	5.805	VV	378	2518	0.10%	0.009%
48	5.807	5.805	5.858	VV	384	8420	0.34%	0.029%
49	5.878	5.858	5.891	VV	341	5105	0.21%	0.017%
50	5.895	5.891	5.901	VV	266	1437	0.06%	0.005%
51	5.908	5.901	5.935	VV	336	5498	0.22%	0.019%
52	5.940	5.935	5.962	VV	254	3293	0.13%	0.011%
53	5.974	5.962	6.000	VV	257	4697	0.19%	0.016%
54	6.027	6.000	6.032	VV	254	3826	0.15%	0.013%
55	6.035	6.032	6.049	VV	236	1851	0.07%	0.006%
56	6.056	6.049	6.068	VV	179	1598	0.06%	0.005%
57	6.073	6.068	6.086	VV	135	1399	0.06%	0.005%
58	6.097	6.086	6.101	VV	224	1584	0.06%	0.005%
59	6.106	6.101	6.117	VV	192	1598	0.06%	0.005%
60	6.125	6.117	6.142	VV	206	2249	0.09%	0.008%
61	6.148	6.142	6.160	VV	194	1189	0.05%	0.004%
62	6.163	6.160	6.175	VV	102	723	0.03%	0.002%
63	6.181	6.175	6.193	VV	149	1168	0.05%	0.004%
64	6.213	6.193	6.231	VV	614	8599	0.35%	0.029%
65	6.234	6.231	6.265	VV	279	4872	0.20%	0.017%
66	6.275	6.265	6.279	VV	267	2040	0.08%	0.007%
67	6.286	6.279	6.291	VV	290	1760	0.07%	0.006%
68	6.301	6.291	6.317	VV	311	4133	0.17%	0.014%
69	6.335	6.317	6.358	VV	369	7404	0.30%	0.025%
70	6.370	6.358	6.376	VV	363	3634	0.15%	0.012%
71	6.388	6.376	6.428	VV	544	11002	0.44%	0.038%
72	6.433	6.428	6.442	VV	275	1799	0.07%	0.006%
73	6.450	6.442	6.469	VV	282	3848	0.16%	0.013%
74	6.473	6.469	6.493	VV	257	3155	0.13%	0.011%
75	6.497	6.493	6.510	VV	252	2017	0.08%	0.007%
76	6.517	6.510	6.523	VV	260	1681	0.07%	0.006%
77	6.546	6.523	6.599	VV	542	15523	0.63%	0.053%
78	6.605	6.599	6.620	VV	250	2365	0.10%	0.008%
79	6.625	6.620	6.632	VV	205	1121	0.05%	0.004%
80	6.635	6.632	6.640	VV	198	732	0.03%	0.003%
81	6.678	6.640	6.800	VV	192602	2089797	84.20%	7.135%
82	6.804	6.800	6.810	VV	703	4133	0.17%	0.014%
83	6.811	6.810	6.824	VV	693	5359	0.22%	0.018%
84	6.833	6.824	6.881	VV	728	19600	0.79%	0.067%
85	6.896	6.881	6.904	VV	495	6137	0.25%	0.021%
86	6.907	6.904	6.919	VV	558	3967	0.16%	0.014%
87	6.920	6.919	6.934	VV	422	3420	0.14%	0.012%
88	6.938	6.934	6.956	VV	396	5076	0.20%	0.017%
89	6.961	6.956	6.983	VV	482	6104	0.25%	0.021%

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90	6.986	6.983	6.993	VV	365	1936	0.08%	0.007%
91	6.999	6.993	7.010	VV	373	3327	0.13%	0.011%
92	7.017	7.010	7.027	VV	356	3158	0.13%	0.011%
93	7.032	7.027	7.059	VV	298	4818	0.19%	0.016%
94	7.073	7.059	7.086	VV	277	3432	0.14%	0.012%
95	7.092	7.086	7.108	VV	298	2796	0.11%	0.010%
96	7.110	7.108	7.122	VV	243	1516	0.06%	0.005%
97	7.132	7.122	7.167	VV	233	4853	0.20%	0.017%
98	7.198	7.167	7.205	VV	276	4314	0.17%	0.015%
99	7.240	7.205	7.271	VV	397	12853	0.52%	0.044%
100	7.276	7.271	7.284	VV	335	2434	0.10%	0.008%
101	7.285	7.284	7.291	VV	344	1333	0.05%	0.005%
102	7.299	7.291	7.340	VV	368	7970	0.32%	0.027%
103	7.365	7.340	7.390	VV	497	10890	0.44%	0.037%
104	7.397	7.390	7.444	VV	399	8116	0.33%	0.028%
105	7.462	7.444	7.497	VV	220	4977	0.20%	0.017%
106	7.502	7.497	7.531	VV	153	2226	0.09%	0.008%
107	7.545	7.531	7.550	VV	160	1292	0.05%	0.004%
108	7.560	7.550	7.599	VV	155	2652	0.11%	0.009%
109	7.610	7.599	7.613	VV	131	714	0.03%	0.002%
110	7.631	7.613	7.686	VV	505	8635	0.35%	0.029%
111	7.697	7.686	7.717	PV	140	1206	0.05%	0.004%
112	7.728	7.717	7.738	VV	118	847	0.03%	0.003%
113	7.743	7.738	7.747	VV	133	497	0.02%	0.002%
114	7.752	7.747	7.779	VV	95	1381	0.06%	0.005%
115	7.784	7.779	7.790	VV	100	473	0.02%	0.002%
116	7.798	7.790	7.809	VV	148	912	0.04%	0.003%
117	7.831	7.809	7.837	VV	122	1541	0.06%	0.005%
118	7.839	7.837	7.843	VV	92	213	0.01%	0.001%
119	7.847	7.843	7.865	VV	98	1002	0.04%	0.003%
120	7.870	7.865	7.886	VV	104	1042	0.04%	0.004%
121	7.912	7.886	8.011	VV	1317	21023	0.85%	0.072%
122	8.084	8.011	8.110	VV	1547	24188	0.97%	0.083%
123	8.115	8.110	8.146	VV	147	2144	0.09%	0.007%
124	8.162	8.146	8.174	VV	202	1676	0.07%	0.006%
125	8.204	8.174	8.234	VV	602	7828	0.32%	0.027%
126	8.262	8.234	8.292	VV	741	10255	0.41%	0.035%
127	8.296	8.292	8.313	VV	151	1254	0.05%	0.004%
128	8.317	8.313	8.327	VV	122	563	0.02%	0.002%
129	8.333	8.327	8.355	VV	100	1225	0.05%	0.004%
130	8.368	8.355	8.384	VV	168	1971	0.08%	0.007%
131	8.420	8.384	8.439	VV	338	6396	0.26%	0.022%
132	8.514	8.439	8.640	VV	190922	2187877	88.15%	7.470%
133	8.652	8.640	8.687	VV	920	20589	0.83%	0.070%
134	8.696	8.687	8.702	VV	636	5328	0.21%	0.018%
135	8.704	8.702	8.708	VV	549	1754	0.07%	0.006%
136	8.711	8.708	8.739	VV	536	8733	0.35%	0.030%
137	8.748	8.739	8.766	VV	453	6214	0.25%	0.021%
138	8.772	8.766	8.787	VV	352	3811	0.15%	0.013%
139	8.793	8.787	8.799	VV	284	1741	0.07%	0.006%
140	8.802	8.799	8.815	VV	265	2257	0.09%	0.008%
141	8.848	8.815	8.864	VV	514	11648	0.47%	0.040%

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142	8.874	8.864	8.907	VV	463	9507	0.38%	0.032%
143	8.948	8.907	8.971	VV	494	11631	0.47%	0.040%
144	8.973	8.971	8.978	VV	254	1026	0.04%	0.004%
145	9.002	8.978	9.041	VV	476	12385	0.50%	0.042%
146	9.058	9.041	9.086	VV	335	6555	0.26%	0.022%
147	9.089	9.086	9.097	VV	182	1071	0.04%	0.004%
148	9.113	9.097	9.122	VV	182	2293	0.09%	0.008%
149	9.140	9.122	9.146	VV	234	2842	0.11%	0.010%
150	9.149	9.146	9.153	VV	235	900	0.04%	0.003%
151	9.161	9.153	9.194	VV	313	4480	0.18%	0.015%
152	9.199	9.194	9.206	VV	209	1245	0.05%	0.004%
153	9.211	9.206	9.225	VV	200	2146	0.09%	0.007%
154	9.247	9.225	9.288	VV	595	13421	0.54%	0.046%
155	9.292	9.288	9.306	VV	197	1271	0.05%	0.004%
156	9.314	9.306	9.325	VV	156	1369	0.06%	0.005%
157	9.345	9.325	9.371	VV	541	7975	0.32%	0.027%
158	9.398	9.371	9.423	VV	495	6250	0.25%	0.021%
159	9.428	9.423	9.444	VV	99	753	0.03%	0.003%
160	9.448	9.444	9.487	VB	90	962	0.04%	0.003%
161	9.532	9.497	9.569	BV	262	2937	0.12%	0.010%
162	9.582	9.569	9.591	PV	86	572	0.02%	0.002%
163	9.596	9.591	9.601	VV	89	287	0.01%	0.001%
164	9.607	9.601	9.628	VV	66	713	0.03%	0.002%
165	9.652	9.628	9.662	PV	565	6809	0.27%	0.023%
166	9.674	9.662	9.689	VV	775	8765	0.35%	0.030%
167	9.728	9.689	9.750	VV	612	16941	0.68%	0.058%
168	9.762	9.750	9.804	VV	346	7408	0.30%	0.025%
169	9.808	9.804	9.832	VV	234	2664	0.11%	0.009%
170	9.841	9.832	9.845	VV	190	1050	0.04%	0.004%
171	9.860	9.845	9.872	VV	237	2886	0.12%	0.010%
172	9.878	9.872	9.884	VV	172	1098	0.04%	0.004%
173	9.905	9.884	9.929	VV	939	11492	0.46%	0.039%
174	9.961	9.929	9.975	VV	792	9874	0.40%	0.034%
175	10.000	9.975	10.097	VV	30635	601238	24.22%	2.053%
176	10.127	10.097	10.224	VV	204163	2385129	96.09%	8.143%
177	10.231	10.224	10.286	VV	958	24891	1.00%	0.085%
178	10.294	10.286	10.324	VV	447	7945	0.32%	0.027%
179	10.329	10.324	10.339	VV	263	1837	0.07%	0.006%
180	10.352	10.339	10.373	VV	218	3543	0.14%	0.012%
181	10.378	10.373	10.384	VV	167	979	0.04%	0.003%
182	10.390	10.384	10.402	VV	161	1482	0.06%	0.005%
183	10.407	10.402	10.424	VV	149	1367	0.06%	0.005%
184	10.470	10.424	10.538	VV	3178	55876	2.25%	0.191%
185	10.547	10.538	10.567	VV	330	4967	0.20%	0.017%
186	10.574	10.567	10.589	VV	342	3129	0.13%	0.011%
187	10.594	10.589	10.598	VV	209	1099	0.04%	0.004%
188	10.614	10.598	10.628	VV	249	3454	0.14%	0.012%
189	10.645	10.628	10.666	VV	473	5476	0.22%	0.019%
190	10.687	10.666	10.716	VV	401	6887	0.28%	0.024%
191	10.720	10.716	10.736	VV	175	1375	0.06%	0.005%
192	10.754	10.736	10.779	VV	298	4957	0.20%	0.017%
193	10.795	10.779	10.811	VV	174	2771	0.11%	0.009%
194	10.834	10.811	10.855	VV	535	10398	0.42%	0.035%

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195	10.868	10.855	10.906	VV	511	8095	0.33%	0.028%
196	10.929	10.906	10.934	VV	173	2202	0.09%	0.008%
197	10.942	10.934	10.957	VV	247	2261	0.09%	0.008%
198	10.971	10.957	10.993	VV	300	4520	0.18%	0.015%
199	10.997	10.993	11.031	VV	227	3059	0.12%	0.010%
200	11.053	11.031	11.070	VV	155	2075	0.08%	0.007%
201	11.095	11.070	11.119	VV	410	7080	0.29%	0.024%
202	11.162	11.119	11.178	VV	1067	23596	0.95%	0.081%
203	11.185	11.178	11.232	VV	784	15659	0.63%	0.053%
204	11.246	11.232	11.281	VV	539	10319	0.42%	0.035%
205	11.293	11.281	11.314	VV	279	5119	0.21%	0.017%
206	11.321	11.314	11.356	VV	308	5100	0.21%	0.017%
207	11.360	11.356	11.369	VV	100	684	0.03%	0.002%
208	11.400	11.369	11.417	VV	337	5322	0.21%	0.018%
209	11.423	11.417	11.426	PV	99	415	0.02%	0.001%
210	11.434	11.426	11.440	VV	221	1420	0.06%	0.005%
211	11.446	11.440	11.449	VV	224	1035	0.04%	0.004%
212	11.455	11.449	11.482	VV	297	3509	0.14%	0.012%
213	11.505	11.482	11.527	VV	232	4061	0.16%	0.014%
214	11.531	11.527	11.534	VV	161	597	0.02%	0.002%
215	11.576	11.534	11.634	VV	214676	2482060	100.00%	8.474%
216	11.653	11.634	11.696	VV	871	16616	0.67%	0.057%
217	11.701	11.696	11.704	VV	124	557	0.02%	0.002%
218	11.735	11.704	11.752	VV	514	7890	0.32%	0.027%
219	11.769	11.752	11.796	VV	609	7226	0.29%	0.025%
220	11.821	11.796	11.836	PV	633	8111	0.33%	0.028%
221	11.864	11.836	11.919	VV	522	15860	0.64%	0.054%
222	11.924	11.919	11.946	VV	209	2510	0.10%	0.009%
223	11.990	11.946	12.039	VV	1281	31503	1.27%	0.108%
224	12.057	12.039	12.079	VV	610	9427	0.38%	0.032%
225	12.101	12.079	12.120	VV	310	5089	0.21%	0.017%
226	12.124	12.120	12.128	VV	226	830	0.03%	0.003%
227	12.131	12.128	12.184	VV	189	2446	0.10%	0.008%
228	12.195	12.184	12.207	VV	104	957	0.04%	0.003%
229	12.250	12.207	12.274	PV	511	10156	0.41%	0.035%
230	12.304	12.274	12.324	VV	393	6009	0.24%	0.021%
231	12.350	12.324	12.411	VV	802	23460	0.95%	0.080%
232	12.425	12.411	12.430	VV	338	3056	0.12%	0.010%
233	12.439	12.430	12.444	VV	281	2045	0.08%	0.007%
234	12.459	12.444	12.475	VV	316	4641	0.19%	0.016%
235	12.505	12.475	12.555	VV	26018	315619	12.72%	1.078%
236	12.572	12.555	12.588	VV	1045	16984	0.68%	0.058%
237	12.603	12.588	12.631	VV	865	16792	0.68%	0.057%
238	12.634	12.631	12.645	VV	545	4347	0.18%	0.015%
239	12.659	12.645	12.682	VV	582	11237	0.45%	0.038%
240	12.688	12.682	12.691	VV	393	2055	0.08%	0.007%
241	12.714	12.691	12.731	VV	556	10413	0.42%	0.036%
242	12.748	12.731	12.779	VV	595	9980	0.40%	0.034%
243	12.813	12.779	12.856	VV	618	16210	0.65%	0.055%
244	12.890	12.856	12.936	VV	206145	2452110	98.79%	8.372%
245	12.967	12.936	13.076	VV	2668	69532	2.80%	0.237%
246	13.097	13.076	13.122	VV	329	6449	0.26%	0.022%

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247	13.145	13.122	13.151	VV	395	5451	0.22%	0.019%
248	13.154	13.151	13.184	VV	340	4181	0.17%	0.014%
249	13.195	13.184	13.198	VV	215	1513	0.06%	0.005%
250	13.201	13.198	13.224	VV	199	2153	0.09%	0.007%
251	13.231	13.224	13.234	VV	97	405	0.02%	0.001%
252	13.301	13.234	13.361	PV	1578	55710	2.24%	0.190%
253	13.383	13.361	13.411	VV	641	12190	0.49%	0.042%
254	13.415	13.411	13.482	VV	380	10315	0.42%	0.035%
255	13.502	13.482	13.539	VV	783	14727	0.59%	0.050%
256	13.562	13.539	13.596	VV	432	10282	0.41%	0.035%
257	13.602	13.596	13.609	VV	241	1778	0.07%	0.006%
258	13.630	13.609	13.653	VV	425	7274	0.29%	0.025%
259	13.663	13.653	13.691	VV	205	3679	0.15%	0.013%
260	13.720	13.691	13.730	VV	963	14855	0.60%	0.051%
261	13.743	13.730	13.766	VV	868	14369	0.58%	0.049%
262	13.786	13.766	13.816	VV	1476	20695	0.83%	0.071%
263	13.821	13.816	13.837	VV	162	1660	0.07%	0.006%
264	13.913	13.837	13.919	VV	609	16651	0.67%	0.057%
265	13.931	13.919	13.972	VV	902	16505	0.66%	0.056%
266	13.989	13.972	14.001	VV	365	5305	0.21%	0.018%
267	14.010	14.001	14.014	VV	358	2628	0.11%	0.009%
268	14.044	14.014	14.060	VV	3035	40888	1.65%	0.140%
269	14.092	14.060	14.171	VV	193799	2448890	98.66%	8.361%
270	14.206	14.171	14.237	VV	1017	21311	0.86%	0.073%
271	14.241	14.237	14.270	VV	237	3951	0.16%	0.013%
272	14.275	14.270	14.281	VV	237	1206	0.05%	0.004%
273	14.303	14.281	14.323	VV	380	7221	0.29%	0.025%
274	14.329	14.323	14.339	VV	336	2970	0.12%	0.010%
275	14.343	14.339	14.357	VV	351	3310	0.13%	0.011%
276	14.360	14.357	14.393	VV	360	5916	0.24%	0.020%
277	14.401	14.393	14.434	VV	302	5467	0.22%	0.019%
278	14.456	14.434	14.462	VV	502	6349	0.26%	0.022%
279	14.492	14.462	14.556	VV	2487	58497	2.36%	0.200%
280	14.594	14.556	14.626	VV	468	13295	0.54%	0.045%
281	14.654	14.626	14.667	VV	1246	17320	0.70%	0.059%
282	14.679	14.667	14.697	VV	1181	18365	0.74%	0.063%
283	14.721	14.697	14.749	VV	7067	114107	4.60%	0.390%
284	14.756	14.749	14.796	VV	2229	36550	1.47%	0.125%
285	14.808	14.796	14.836	VV	734	13217	0.53%	0.045%
286	14.852	14.836	14.859	VV	424	5014	0.20%	0.017%
287	14.888	14.859	14.956	VV	1363	33383	1.34%	0.114%
288	14.993	14.956	15.031	VV	105247	1431105	57.66%	4.886%
289	15.051	15.031	15.095	VV	1154	27068	1.09%	0.092%
290	15.098	15.095	15.128	VV	338	3518	0.14%	0.012%
291	15.198	15.128	15.228	VV	191874	2469844	99.51%	8.432%
292	15.243	15.228	15.307	VV	4925	73784	2.97%	0.252%
293	15.311	15.307	15.315	VV	304	1128	0.05%	0.004%
294	15.322	15.315	15.327	VV	235	1593	0.06%	0.005%
295	15.332	15.327	15.337	VV	262	964	0.04%	0.003%
296	15.345	15.337	15.367	VV	186	1904	0.08%	0.007%
297	15.394	15.367	15.420	PV	376	5947	0.24%	0.020%
298	15.428	15.420	15.432	VV	114	622	0.03%	0.002%
299	15.456	15.432	15.474	VV	200	2205	0.09%	0.008%

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300	15.510	15.474	15.516	VV	203	2190	0.09%	0.007%
301	15.529	15.516	15.533	VV	161	1411	0.06%	0.005%
302	15.536	15.533	15.547	VV	199	1059	0.04%	0.004%
303	15.580	15.547	15.656	VV	45695	852467	34.35%	2.910%
304	15.675	15.656	15.696	VV	1366	22108	0.89%	0.075%
305	15.719	15.696	15.756	VV	2732	44895	1.81%	0.153%
306	15.782	15.756	15.812	VV	1152	20620	0.83%	0.070%
307	15.819	15.812	15.824	VV	168	925	0.04%	0.003%
308	15.850	15.824	15.879	VV	460	8640	0.35%	0.029%
309	15.900	15.879	15.921	VV	293	4102	0.17%	0.014%
310	15.941	15.921	15.951	PV	139	1539	0.06%	0.005%
311	16.013	15.951	16.034	VV	568	16966	0.68%	0.058%
312	16.039	16.034	16.071	VV	441	6059	0.24%	0.021%
313	16.105	16.071	16.156	VV	1979	43820	1.77%	0.150%
314	16.222	16.156	16.264	VV	184900	2433053	98.03%	8.307%
315	16.283	16.264	16.322	VV	2876	43081	1.74%	0.147%
316	16.325	16.322	16.343	VV	163	1466	0.06%	0.005%
317	16.359	16.343	16.381	VV	252	3775	0.15%	0.013%
318	16.427	16.381	16.443	PV	345	7329	0.30%	0.025%
319	16.447	16.443	16.459	VV	212	1570	0.06%	0.005%
320	16.463	16.459	16.488	VV	210	2162	0.09%	0.007%
321	16.519	16.488	16.528	VV	584	8749	0.35%	0.030%
322	16.532	16.528	16.554	VV	507	6476	0.26%	0.022%
323	16.560	16.554	16.567	VV	365	2769	0.11%	0.009%
324	16.601	16.567	16.645	VV	10789	212922	8.58%	0.727%
325	16.658	16.645	16.667	VV	1614	20768	0.84%	0.071%
326	16.682	16.667	16.686	VV	1671	17550	0.71%	0.060%
327	16.705	16.686	16.731	VV	4048	59859	2.41%	0.204%
328	16.781	16.731	16.819	VV	1454	38136	1.54%	0.130%
329	16.821	16.819	16.824	VV	184	535	0.02%	0.002%
330	16.844	16.824	16.861	VV	448	6178	0.25%	0.021%
331	16.865	16.861	16.889	VV	368	4171	0.17%	0.014%
332	16.894	16.889	16.898	VV	206	875	0.04%	0.003%
333	16.903	16.898	16.910	VV	200	1112	0.04%	0.004%
334	16.924	16.910	16.931	VV	114	1240	0.05%	0.004%
335	16.979	16.931	17.030	PV	1139	33088	1.33%	0.113%
336	17.082	17.030	17.114	VV	1365	44850	1.81%	0.153%
337	17.175	17.114	17.209	VV	176001	2428896	97.86%	8.292%
338	17.219	17.209	17.231	VV	1096	12580	0.51%	0.043%
339	17.251	17.231	17.284	VV	2328	36395	1.47%	0.124%
340	17.298	17.284	17.314	VV	306	3502	0.14%	0.012%
341	17.322	17.314	17.327	VV	54	554	0.02%	0.002%
342	17.331	17.327	17.335	VV	96	273	0.01%	0.001%
343	17.343	17.335	17.349	VV	122	384	0.02%	0.001%
344	17.356	17.349	17.362	PV	108	522	0.02%	0.002%
345	17.388	17.362	17.401	PBA	125	3016	0.12%	0.010%

Sum of corrected areas: 29290555

FG042425.M Wed May 14 05:37:13 2025

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

Manual Integration Report

Sample ID	ClientId ID	File ID	Sequence ID	Parameter	Supervised By	Supervised On	Reason
Q1872-14		FG015822.D	FG051325	TETRACOSANE-d50 (SURROGA	mohammad	5/15/2025 3:42:38 AM	Peak Integrated by Software incorrectly
Q1872-14		FG015823.D	FG051325	TETRACOSANE-d50 (SURROGA	mohammad	5/15/2025 3:42:38 AM	Peak Integrated by Software incorrectly

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

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG042425

Review By	yogesh	Review On	4/24/2025 12:59:08 PM		
Supervise By	mohammad	Supervise On	4/26/2025 2:19:49 AM		
SubDirectory	FG042425	HP Acquire Method		HP Processing Method	FG042425

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472
CCC	
Internal Standard/PEM	
ICV/I.BLK	PP24468,PP24473
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FG015754.D	24 Apr 2025 09:50	YP\AJ	Ok
2	I.BLK	FG015755.D	24 Apr 2025 10:19	YP\AJ	Ok
3	100 TRPH STD	FG015756.D	24 Apr 2025 10:48	YP\AJ	Ok
4	50 TRPH STD	FG015757.D	24 Apr 2025 11:17	YP\AJ	Ok
5	20 TRPH STD	FG015758.D	24 Apr 2025 11:46	YP\AJ	Ok
6	10 TRPH STD	FG015759.D	24 Apr 2025 12:16	YP\AJ	Ok
7	5 TRPH STD	FG015760.D	24 Apr 2025 12:45	YP\AJ	Ok
8	FG042225ICV	FG015761.D	24 Apr 2025 13:14	YP\AJ	Ok

M : Manual Integration

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

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG051325

Review By	yogesh	Review On	5/13/2025 11:25:05 AM		
Supervise By	mohammad	Supervise On	5/15/2025 3:42:38 AM		
SubDirectory	FG051325	HP Acquire Method		HP Processing Method	FG042425

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472
CCC	PP24469
Internal Standard/PEM	
ICV/I.BLK	PP24468,PP24473
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FG015816.D	13 May 2025 10:42	YP\AJ	Ok
2	I.BLK	FG015817.D	13 May 2025 11:11	YP\AJ	Ok
3	50 PPM TRPH STD	FG015818.D	13 May 2025 11:40	YP\AJ	Ok
4	RT MARKER	FG015819.D	13 May 2025 12:13	YP\AJ	Ok
5	PB167975BL	FG015820.D	13 May 2025 13:22	YP\AJ	Ok
6	PB167975BS	FG015821.D	13 May 2025 13:51	YP\AJ	Ok
7	Q1872-14	FG015822.D	13 May 2025 14:38	YP\AJ	Dilution
8	Q1872-14	FG015823.D	13 May 2025 15:25	YP\AJ	Ok,M
9	I.BLK	FG015824.D	13 May 2025 15:54	YP\AJ	Ok
10	50 PPM TRPH STD	FG015825.D	13 May 2025 16:53	YP\AJ	Ok
11	Q1956-01	FG015826.D	13 May 2025 17:22	YP\AJ	Ok
12	Q1956-02	FG015827.D	13 May 2025 17:51	YP\AJ	Ok
13	Q1956-03MS	FG015828.D	13 May 2025 18:21	YP\AJ	Ok
14	Q1956-04MSD	FG015829.D	13 May 2025 18:50	YP\AJ	Ok
15	Q1956-06	FG015830.D	13 May 2025 19:19	YP\AJ	Ok
16	Q1982-01	FG015831.D	13 May 2025 19:49	YP\AJ	Ok
17	Q1982-02	FG015832.D	13 May 2025 20:18	YP\AJ	Ok
18	Q1982-03	FG015833.D	13 May 2025 20:47	YP\AJ	Ok
19	I.BLK	FG015834.D	13 May 2025 21:16	YP\AJ	Ok
20	50 PPM TRPH STD	FG015835.D	13 May 2025 21:46	YP\AJ	Ok
21	Q2010-01	FG015836.D	13 May 2025 22:44	YP\AJ	Ok

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

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG051325

Review By	yogesh	Review On	5/13/2025 11:25:05 AM		
Supervise By	mohammad	Supervise On	5/15/2025 3:42:38 AM		
SubDirectory	FG051325	HP Acquire Method		HP Processing Method	FG042425

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472
CCC	PP24469
Internal Standard/PEM	
ICV/I.BLK	PP24468,PP24473
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q2010-02	FG015837.D	13 May 2025 23:14	YP\AJ	Ok
23	Q2010-03	FG015838.D	13 May 2025 23:43	YP\AJ	Ok
24	Q2010-04	FG015839.D	14 May 2025 00:12	YP\AJ	Ok
25	I.BLK	FG015840.D	14 May 2025 00:41	YP\AJ	Ok
26	50 PPM TRPH STD	FG015841.D	14 May 2025 01:10	YP\AJ	Ok

M : Manual Integration

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

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG042425

Review By	yogesh	Review On	4/24/2025 12:59:08 PM		
Supervise By	mohammad	Supervise On	4/26/2025 2:19:49 AM		
SubDirectory	FG042425	HP Acquire Method		HP Processing Method	FG042425

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472
CCC	
Internal Standard/PEM	
ICV/I.BLK	PP24468,PP24473
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FG015754.D	24 Apr 2025 09:50		YP\AJ	Ok
2	I.BLK		FG015755.D	24 Apr 2025 10:19		YP\AJ	Ok
3	100 TRPH STD		FG015756.D	24 Apr 2025 10:48		YP\AJ	Ok
4	50 TRPH STD		FG015757.D	24 Apr 2025 11:17		YP\AJ	Ok
5	20 TRPH STD		FG015758.D	24 Apr 2025 11:46		YP\AJ	Ok
6	10 TRPH STD		FG015759.D	24 Apr 2025 12:16		YP\AJ	Ok
7	5 TRPH STD		FG015760.D	24 Apr 2025 12:45		YP\AJ	Ok
8	FG042225ICV		FG015761.D	24 Apr 2025 13:14		YP\AJ	Ok

M : Manual Integration

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

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG051325

Review By	yogesh	Review On	5/13/2025 11:25:05 AM		
Supervise By	mohammad	Supervise On	5/15/2025 3:42:38 AM		
SubDirectory	FG051325	HP Acquire Method		HP Processing Method	FG042425

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472
CCC	PP24469
Internal Standard/PEM	
ICV/I.BLK	PP24468,PP24473
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FG015816.D	13 May 2025 10:42		YP\AJ	Ok
2	I.BLK		FG015817.D	13 May 2025 11:11		YP\AJ	Ok
3	50 PPM TRPH STD		FG015818.D	13 May 2025 11:40		YP\AJ	Ok
4	RT MARKER		FG015819.D	13 May 2025 12:13		YP\AJ	Ok
5	PB167975BL		FG015820.D	13 May 2025 13:22		YP\AJ	Ok
6	PB167975BS		FG015821.D	13 May 2025 13:51		YP\AJ	Ok
7	Q1872-14		FG015822.D	13 May 2025 14:38	need 5x dilution	YP\AJ	Dilution
8	Q1872-14		FG015823.D	13 May 2025 15:25		YP\AJ	Ok,M
9	I.BLK		FG015824.D	13 May 2025 15:54		YP\AJ	Ok
10	50 PPM TRPH STD		FG015825.D	13 May 2025 16:53		YP\AJ	Ok
11	Q1956-01		FG015826.D	13 May 2025 17:22		YP\AJ	Ok
12	Q1956-02		FG015827.D	13 May 2025 17:51		YP\AJ	Ok
13	Q1956-03MS		FG015828.D	13 May 2025 18:21		YP\AJ	Ok
14	Q1956-04MSD		FG015829.D	13 May 2025 18:50		YP\AJ	Ok
15	Q1956-06		FG015830.D	13 May 2025 19:19		YP\AJ	Ok
16	Q1982-01		FG015831.D	13 May 2025 19:49		YP\AJ	Ok
17	Q1982-02		FG015832.D	13 May 2025 20:18		YP\AJ	Ok
18	Q1982-03		FG015833.D	13 May 2025 20:47		YP\AJ	Ok

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

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG051325

Review By	yogesh	Review On	5/13/2025 11:25:05 AM		
Supervise By	mohammad	Supervise On	5/15/2025 3:42:38 AM		
SubDirectory	FG051325	HP Acquire Method		HP Processing Method	FG042425

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472
CCC	PP24469
Internal Standard/PEM	
ICV/I.BLK	PP24468,PP24473
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	I.BLK		FG015834.D	13 May 2025 21:16		YP\AJ	Ok
20	50 PPM TRPH STD		FG015835.D	13 May 2025 21:46		YP\AJ	Ok
21	Q2010-01		FG015836.D	13 May 2025 22:44		YP\AJ	Ok
22	Q2010-02		FG015837.D	13 May 2025 23:14		YP\AJ	Ok
23	Q2010-03		FG015838.D	13 May 2025 23:43		YP\AJ	Ok
24	Q2010-04		FG015839.D	14 May 2025 00:12		YP\AJ	Ok
25	I.BLK		FG015840.D	14 May 2025 00:41		YP\AJ	Ok
26	50 PPM TRPH STD		FG015841.D	14 May 2025 01:10		YP\AJ	Ok

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 4/25/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 04/24/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

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

QC: LB135545

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
Q1869-01	MH-F	1	1.14	10.43	11.57	10.47	89.5	
Q1869-02	MH-F-EPH	2	1.18	9.96	11.14	10.12	89.8	
Q1869-03	MH-F-VOC	3	1.16	10.28	11.44	10.4	89.9	
Q1871-01	MH-A	4	1.14	9.59	10.73	9.86	90.9	
Q1871-02	MH-A-EPH	5	1.18	9.97	11.15	10.25	91.0	
Q1871-03	MH-A-VOC	6	1.15	10.22	11.37	10.47	91.2	
Q1871-05	MH-B	7	1.18	10.31	11.49	10.58	91.2	
Q1871-06	MH-B-EPH	8	1.16	9.63	10.79	10.05	92.3	
Q1871-07	MH-B-VOC	9	1.18	10.35	11.53	10.75	92.5	
Q1872-01	HW0425-PT-AN-SOIL	31	1.00	1.00	2.00	2.00	100.0	
Q1872-02	HW0425-PT-CORR-SOIL	32	1.00	1.00	2.00	2.00	100.0	
Q1872-03	HW0425-PT-CN-SOIL	33	1.00	1.00	2.00	2.00	100.0	
Q1872-04	HW0425-PT-CN-SOIL	34	1.00	1.00	2.00	2.00	100.0	
Q1872-05	HW0425-PT-FP-SOIL	35	1.00	1.00	2.00	2.00	100.0	
Q1872-06	HW0425-PT-CR6-SOIL	36	1.00	1.00	2.00	2.00	100.0	
Q1872-07	HW0425-PT-NUT-SOIL	37	1.00	1.00	2.00	2.00	100.0	
Q1872-08	HW0425-PT-NUT-SOIL	38	1.00	1.00	2.00	2.00	100.0	
Q1872-09	HW0425-PT-OGR-SOIL	39	1.00	1.00	2.00	2.00	100.0	
Q1872-10	HW0425-PT-MET-SOIL	40	1.00	1.00	2.00	2.00	100.0	
Q1872-11	HW0425-PT-BNA-SOIL	41	1.00	1.00	2.00	2.00	100.0	
Q1872-12	HW0425-PT-TRIAZINE-SOIL	42	1.00	1.00	2.00	2.00	100.0	
Q1872-13	HW0425-PT-PAH-SOIL	43	1.00	1.00	2.00	2.00	100.0	
Q1872-14	HW0425-PT-DIES-SOIL	44	1.00	1.00	2.00	2.00	100.0	
Q1872-15	HW0425-PT-GAS-SOIL	45	1.00	1.00	2.00	2.00	100.0	
Q1872-16	HW0425-PT-NJEPH-SOIL	46	1.00	1.00	2.00	2.00	100.0	
Q1872-17	HW0425-PT-HERB-SOIL	47	1.00	1.00	2.00	2.00	100.0	
Q1872-18	HW0425-PT-PCB-SOIL	48	1.00	1.00	2.00	2.00	100.0	
Q1872-19	HW0425-PT-PCBO-SOIL	49	1.00	1.00	2.00	2.00	100.0	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 4/25/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 04/24/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

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

QC: LB135545

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
Q1872-20	HW0425-PT-PEST-SOIL	50	1.00	1.00	2.00	2.00	100.0	
Q1872-21	HW0425-PT-CHLR-SOIL	51	1.00	1.00	2.00	2.00	100.0	
Q1872-22	HW0425-PT-TXP-SOIL	52	1.00	1.00	2.00	2.00	100.0	
Q1872-23	HW0425-PT-VOA-SOIL	53	1.00	1.00	2.00	2.00	100.0	
Q1872-25	HW0425-PT-NO2-SOIL	54	1.00	1.00	2.00	2.00	100.0	
Q1873-01	CAM-40619	10	1.14	10.70	11.84	4.97	35.8	
Q1873-02	CAM-40620	11	1.15	10.42	11.57	6.19	48.4	
Q1873-03	CAM-40619-20	12	1.18	10.21	11.39	4.77	35.2	
Q1874-01	VNJ-236	13	1.19	10.45	11.64	10.89	92.8	
Q1874-03	RT1491	14	1.19	11.16	12.35	11.43	91.8	
Q1874-05	HT3727	15	1.16	10.63	11.79	11.06	93.1	
Q1875-01	AUD-25-0053	16	1.14	10.75	11.89	11.19	93.5	
Q1875-03	AUD-25-0054	17	1.14	10.02	11.16	10.52	93.6	
Q1875-04	AUD-25-0024	18	1.14	10.03	11.17	10.77	96.0	
Q1876-01	AUD-25-0058	19	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1876-02	AUD-25-0059	20	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1876-03	AUD-25-0060	21	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1876-04	AUD-25-0061	22	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1876-05	AUD-25-0062	23	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1876-06	AUD-25-0063	24	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1876-07	AUD-25-0064	25	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1876-08	AUD-25-0065	26	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1876-09	AUD-25-0066	27	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1877-01	AU-6-042425	55	1.14	10.25	11.39	10.72	93.5	
Q1877-02	AU-6-042425	28	1.14	10.21	11.35	10.54	92.1	
Q1878-01	TR-4-042425	29	1.14	10.17	11.31	11.2	98.9	
Q1878-02	TR-4-042425-E2	30	1.19	10.28	11.47	10.92	94.6	

Alliance TECHNICAL GROUP

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 4/25/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 04/24/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

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

QC: LB135545

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

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

WORKLIST(Hardcopy Internal Chain)

LB 135545

WorkList Name : %1-042425 **WorkList ID :** 189122 **Department :** Wet-Chemistry **Date :** 04-24-2025 08:52:24

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1869-01	MH-F	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO
Q1869-02	MH-F-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO
Q1869-03	MH-F-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO
Q1871-01	MH-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO
Q1871-02	MH-A-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO
Q1871-03	MH-A-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO
Q1871-05	MH-B	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO
Q1871-06	MH-B-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO
Q1871-07	MH-B-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO
Q1872-01	HW0425-PT-AN-SOIL	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO
Q1872-02	HW0425-PT-CORR-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-03	HW0425-PT-CN-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-04	HW0425-PT-CN-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-05	HW0425-PT-FP-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-06	HW0425-PT-CR6-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-07	HW0425-PT-NUT-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-08	HW0425-PT-NUT-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-09	HW0425-PT-OGR-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-10	HW0425-PT-MET-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-11	HW0425-PT-BNA-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-12	HW0425-PT-TRIAZINE-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO

Date/Time 04/24/25 1530

Raw Sample Received by: DWC

Raw Sample Relinquished by: SR

Date/Time 04/24/25 1725

Raw Sample Received by: SR

Raw Sample Relinquished by: DWC

WORKLIST(Hardcopy Internal Chain)

135545

WorkList Name : %1-042425 **WorkList ID :** 189122 **Department :** Wet-Chemistry **Date :** 04-24-2025 08:52:24

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1872-13	HW0425-PT-PAH-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-14	HW0425-PT-DIES-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-15	HW0425-PT-GAS-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-16	HW0425-PT-NJEPH-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-17	HW0425-PT-HERB-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-18	HW0425-PT-PCB-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-19	HW0425-PT-PCBO-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-20	HW0425-PT-PEST-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-21	HW0425-PT-CHLR-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-22	HW0425-PT-TXP-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-23	HW0425-PT-VOA-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1872-25	HW0425-PT-NO2-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1873-01	CAM-40619	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO
Q1873-02	CAM-40620	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO
Q1873-03	CAM-40619-20	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO
Q1874-01	VNJ-236	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/24/2025	Chemtech -SO
Q1874-03	RT1491	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/24/2025	Chemtech -SO
Q1874-05	HT3727	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/24/2025	Chemtech -SO
Q1875-01	AUD-25-0053	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO
Q1875-03	AUD-25-0054	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO
Q1875-04	AUD-25-0024	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/24/2025	Chemtech -SO

Date/Time 04/24/25 15:30

Raw Sample Received by: JD WDC

Raw Sample Relinquished by: SH

Date/Time 04/24/25 17:25

Raw Sample Received by: SH

Raw Sample Relinquished by: JD WDC

WORKLIST(Hardcopy Internal Chain)

135545

WorkList Name : %1-042425 **WorkList ID :** 189122 **Department :** Wet-Chemistry **Date :** 04-24-2025 08:52:24

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1876-01	AUD-25-0058	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/24/2025	Chemtech -SO
Q1876-02	AUD-25-0059	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/24/2025	Chemtech -SO
Q1876-03	AUD-25-0060	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/24/2025	Chemtech -SO
Q1876-04	AUD-25-0061	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/24/2025	Chemtech -SO
Q1876-05	AUD-25-0062	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/24/2025	Chemtech -SO
Q1876-06	AUD-25-0063	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/24/2025	Chemtech -SO
Q1876-07	AUD-25-0064	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/24/2025	Chemtech -SO
Q1876-08	AUD-25-0065	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/24/2025	Chemtech -SO
Q1876-09	AUD-25-0066	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/24/2025	Chemtech -SO
Q1877-01	AU-6-042425	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/24/2025	Chemtech -SO
Q1877-02	AU-6-042425	Solid	Percent Solids	Cool 4 deg C	PSEG05	L41	04/24/2025	Chemtech -SO
Q1878-01	TR-4-042425	Solid	Percent Solids	Cool 4 deg C	PSEG05	L41	04/24/2025	Chemtech -SO
Q1878-02	TR-4-042425-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	L41	04/24/2025	Chemtech -SO

Date/Time 04/24/25 15:30

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature] SM

Date/Time 04/24/25 ~~17:35~~ 17:25

Raw Sample Received by: [signature] SM

Raw Sample Relinquished by: [signature]

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 4/29/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
In Date: 04/28/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:37
Out Date: 04/29/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB135575

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
Q1872-24	HW0425-PT-SOL-SOIL	8	0.92	10.30	11.22	8.82	76.7	
Q1901-01	B-170-SB00	1	1.14	5.55	6.69	6.28	92.6	
Q1901-02	B-167-SB01	2	1.14	10.22	11.36	9.58	82.6	
Q1901-03	B-170-SB01	3	1.19	10.31	11.5	9.75	83.0	
Q1901-04	B-167-SB02	4	1.15	9.78	10.93	6.35	53.2	
Q1901-05	B-170-SB02	5	1.14	10.16	11.3	8.77	75.1	
Q1902-01	343	6	1.19	10.23	11.42	10.7	93.0	
Q1902-02	343	7	1.13	10.19	11.32	10.33	90.3	
Q1903-01	COMP-4	9	1.18	11.14	12.32	10.46	83.3	
Q1903-02	COMP-5	10	1.16	10.50	11.66	9.44	78.9	
Q1903-03	COMP-6	11	1.17	10.60	11.77	10.06	83.9	
Q1904-01	VNJ-210	12	1.19	10.39	11.58	10.6	90.6	
Q1905-01	MH-G	13	1.15	10.35	11.5	10.38	89.2	
Q1905-02	MH-G-EPH	14	1.16	9.65	10.81	9.71	88.6	
Q1905-03	MH-G-VOC	15	1.16	10.33	11.49	10.36	89.1	
Q1905-05	MH-H	16	1.12	10.03	11.15	10.5	93.5	
Q1905-06	MH-H-EPH	17	1.13	10.30	11.43	10.5	91.0	
Q1905-07	MH-H-VOC	18	1.12	10.03	11.15	10.01	88.6	
Q1906-01	WC-4	19	1.15	9.85	11.00	10.14	91.3	
Q1906-02	WC-4-EPH	20	1.16	9.97	11.13	10.17	90.4	
Q1906-03	WC-4-VOC	21	1.18	9.99	11.17	9.91	87.4	
Q1906-05	WC-5	22	1.16	10.82	11.98	10.19	83.5	
Q1906-06	WC-5-EPH	23	1.13	10.41	11.54	9.94	84.6	
Q1906-07	WC-5-VOC	24	1.18	10.47	11.65	11.63	99.8	
Q1906-09	WC-6	25	1.14	10.04	11.18	10.4	92.2	
Q1906-10	WC-6-EPH	26	1.15	10.77	11.92	10.23	84.3	
Q1906-11	WC-6-VOC	27	1.14	10.47	11.61	10.86	92.8	
Q1906-13	WC-7	28	1.14	10.85	11.99	10.31	84.5	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 4/29/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
In Date: 04/28/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:37
Out Date: 04/29/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB135575

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
Q1906-14	WC-7-EPH	29	1.12	9.86	10.98	9.7	87.0	
Q1906-15	WC-7-VOC	30	1.13	10.27	11.4	10.23	88.6	
Q1907-01	CO-8R-WC	31	1.13	10.26	11.39	9.81	84.6	

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

WORKLIST(Hardcopy Internal Chain)

VB B5575

WorkList Name : %1-042825 **WorkList ID :** 189159 **Department :** Wet-Chemistry **Date :** 04-28-2025 07:59:12

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1872-24	HW0425-PT-SOL-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1903-01	COMP-4	Solid	Percent Solids	Cool 4 deg C	POWE02	L51	04/25/2025	Chemtech -SO
Q1903-02	COMP-5	Solid	Percent Solids	Cool 4 deg C	POWE02	L51	04/25/2025	Chemtech -SO
Q1903-03	COMP-6	Solid	Percent Solids	Cool 4 deg C	POWE02	L51	04/25/2025	Chemtech -SO
Q1901-01	B-170-SB00	Solid	Percent Solids	Cool 4 deg C	PORT06	L51	04/26/2025	Chemtech -SO
Q1901-02	B-167-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	L51	04/26/2025	Chemtech -SO
Q1901-03	B-170-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	L51	04/26/2025	Chemtech -SO
Q1901-04	B-167-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	L51	04/26/2025	Chemtech -SO
Q1901-05	B-170-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	L51	04/26/2025	Chemtech -SO
Q1902-01	343	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1902-02	343	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1904-01	VNJ-210	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1905-01	MH-G	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/28/2025	Chemtech -SO
Q1905-02	MH-G-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/28/2025	Chemtech -SO
Q1905-03	MH-G-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/28/2025	Chemtech -SO
Q1906-13	WC-7	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-14	WC-7-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-15	WC-7-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-05	WC-5	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-06	WC-5-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-07	WC-5-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO

Date/Time 04/28/25 16:15

Raw Sample Received by: -20 deg C

Raw Sample Relinquished by:

Date/Time 04/28/25 17:30

Raw Sample Received by:

Raw Sample Relinquished by: -20 deg C

WORKLIST(Hardcopy Internal Chain)

WB 1355775

WorkList Name : %1-042825 **WorkList ID :** 189159 **Department :** Wet-Chemistry **Date :** 04-28-2025 07:59:12

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1906-09	WC-6	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-10	WC-6-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-11	WC-6-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1905-05	MH-H	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1905-06	MH-H-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/28/2025	Chemtech -SO
Q1905-07	MH-H-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/28/2025	Chemtech -SO
Q1906-01	WC-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/28/2025	Chemtech -SO
Q1906-02	WC-4-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-03	WC-4-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1907-01	CO-8R-WC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
					WALS01	L51	04/28/2025	Chemtech -SO

Date/Time 04/28/25 16:15
Raw Sample Received by: JD WOC
Raw Sample Relinquished by:

Date/Time 04/28/25 17:30
Raw Sample Received by:
Raw Sample Relinquished by: JD WOC

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB167975

SOP ID: M3541-ASE Extraction-14

Clean Up SOP #: N/A

Matrix : Solid

Weigh By: EH

Balance check: RJ

Balance ID: EX-SC-2

pH Strip Lot#: N/A

Extraction By: RJ

Filter By: RJ

pH Meter ID: N/A

Hood ID: 3,7

Extraction Start Date : 05/13/2025

Extraction Start Time : 10:05

Extraction End Date : 05/13/2025

Extraction End Time : 13:10

Concentration By: EH

Supervisor By : RUPESH

Extraction Method: [ ] Seperatory Funnel [ ] Continious Liquid/Liquid [ ] Sonication [ ] Waste Dilution [√] Soxhlet

Standared Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	20 PPM	PP24162
Surrogate	1.0ML	20 PPM	PP24180
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	EP2611
Sand	N/A	E2865
Methylene Chloride	N/A	E3930
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5 ML Vial lot# 2210673.

KD Bath ID: N/A

KD Bath Temperature: N/A

Envap ID: NEVAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
5/13/25	RS (Ext lab)	Y.P. Pest PCD.
13:15	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB167975

Analytical Method: M3541-ASE Extraction-14 **Concentration Date:** 05/13/2025

Sample ID	Client Sample ID	Test	g/ mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB167975BL	PB167975BL	Diesel Range Organics	30.01	N/A	ritesh	Evelyn	1			U1-1
PB167975BS	PB167975BS	Diesel Range Organics	30.02	N/A	ritesh	Evelyn	1			2
Q1872-14	HW0425-PT-DIES-SOIL	Diesel Range Organics	20.24	N/A	ritesh	Evelyn	1			3
Q1956-01	SB1-3-4	Diesel Range Organics	30.06	N/A	ritesh	Evelyn	1	M		4
Q1956-02	SB2-4-5	Diesel Range Organics	30.05	N/A	ritesh	Evelyn	1	M		5
Q1956-03	Q1956-02MS	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1	M		6
Q1956-04	Q1956-02MSD	Diesel Range Organics	30.04	N/A	ritesh	Evelyn	1	M		U2-1
Q1956-06	SB91-3-4	Diesel Range Organics	30.01	N/A	ritesh	Evelyn	1	M		2
Q1982-01	TP-1	Diesel Range Organics	30.07	N/A	ritesh	Evelyn	1	E		3
Q1982-02	TP-2B	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1	E		4
Q1982-03	TP-3	Diesel Range Organics	30.02	N/A	ritesh	Evelyn	1	E		5
Q1982-04	TP-4	Diesel Range Organics	30.01	N/A	ritesh	Evelyn	1	E		6
Q1982-05	TP-5	Diesel Range Organics	30.04	N/A	ritesh	Evelyn	1	E		U3-1
Q1982-06	TP-6	Diesel Range Organics	30.06	N/A	ritesh	Evelyn	1	E		2
Q1982-07	TP-8	Diesel Range Organics	30.02	N/A	ritesh	Evelyn	1	E		3
Q1982-08	TP-9	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1	E		4
Q2010-01	TP-10	Diesel Range Organics	30.07	N/A	ritesh	Evelyn	1	E		5
Q2010-02	TP-13	Diesel Range Organics	30.04	N/A	ritesh	Evelyn	1	E		6
Q2010-03	TP-14	Diesel Range Organics	30.06	N/A	ritesh	Evelyn	1	E		U6-1
Q2010-04	TP-17	Diesel Range Organics	30.08	N/A	ritesh	Evelyn	1	E		2

RJ 5/16

RJ 5/13

* **Extracts relinquished on the same date as received.**

167975 10:05

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1982D **WorkList ID :** 189483 **Department :** Extraction **Date :** 05-13-2025 08:56:47

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1872-14	HW0425-PT-DIES-SOIL	Solid	Diesel Range Organics	Cool 4 deg C	ALLI03	QA Of	04/25/2025	8015D
Q1956-01	SB1-3-4	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L31	05/01/2025	8015D
Q1956-02	SB2-4-5	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L31	05/02/2025	8015D
Q1956-03	Q1956-02MS	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L31	05/02/2025	8015D
Q1956-04	Q1956-02MSD	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L31	05/02/2025	8015D
Q1956-06	SB91-3-4	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L31	05/01/2025	8015D
Q1982-01	TP-1	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/07/2025	8015D
Q1982-02	TP-2B	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/07/2025	8015D
Q1982-03	TP-3	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/07/2025	8015D
Q1982-04	TP-4	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/07/2025	8015D
Q1982-05	TP-5	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/07/2025	8015D
Q1982-06	TP-6	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/07/2025	8015D
Q1982-07	TP-8	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/07/2025	8015D
Q1982-08	TP-9	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/07/2025	8015D
Q2010-01	TP-10	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L51	05/08/2025	8015D
Q2010-02	TP-13	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L51	05/08/2025	8015D
Q2010-03	TP-14	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L51	05/08/2025	8015D
Q2010-04	TP-17	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L51	05/08/2025	8015D

RJ 5/16

Date/Time 05/13/25 10:00
Raw Sample Received by: RJ (LEAL-LAB)
Raw Sample Relinquished by: CP SM

Date/Time 05/13/25 10:30
Raw Sample Received by: CP SM
Raw Sample Relinquished by: RJ (LEAL-LAB)

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

Prep Standard - Chemical Standard Summary

Order ID : Q1872

Test : Diesel Range Organics

Prepbatch ID : PB167975,

Sequence ID/Qc Batch ID: FG051325,

Standard ID :
EP2611,EP2612,PP24162,PP24180,PP24467,PP24468,PP24469,PP24470,PP24471,PP24472,PP24473,

Chemical ID :
E2865,E3551,E3874,E3926,E3930,E3932,P11951,P11952,P11955,P11956,P13106,P13108,P13477,P13479,P13487,P13488,P13489,P13490,

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

Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2611	05/09/2025	07/01/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 05/09/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3609	20 PPM DRO SPIKE SOLUTION (RESTEK)	PP24162	01/31/2025	07/30/2025	Yogesh Patel	None	None	Ankita Jodhani 01/31/2025

FROM 1.00000ml of P11955 + 1.00000ml of P11956 + 48.00000ml of E3874 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
147	20 PPM DRO Surrogate Spike Solution	PP24180	02/03/2025	07/30/2025	Yogesh Patel	None	None	Ankita Jodhani 02/03/2025

FROM 1.00000ml of P13487 + 1.00000ml of P13488 + 1.00000ml of P13489 + 1.00000ml of P13490 + 196.00000ml of E3874 = Final Quantity: 200.000 ml

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
433	100/100 PPM DRO (Restek)	PP24467	04/22/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza 05/08/2025

FROM 1.00000ml of P11951 + 1.00000ml of P11952 + 1.00000ml of P13477 + 7.00000ml of E3926 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3979	100/100 PPM DRO ICV (RESTEK)	PP24468	04/22/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza 05/08/2025

FROM 1.00000ml of P13106 + 1.00000ml of P13108 + 1.00000ml of P13479 + 7.00000ml of E3926 = Final Quantity: 10.000 ml

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
435	50 PPM ICC DRO STD (Restek)	PP24469	04/22/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza 05/08/2025

FROM 0.50000ml of E3926 + 0.50000ml of PP24467 = Final Quantity: 1.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
437	20 PPM ICC DRO STD (Restek)	PP24470	04/22/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza 05/08/2025

FROM 0.80000ml of E3926 + 0.20000ml of PP24467 = Final Quantity: 1.000 ml

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
438	10 PPM ICC DRO STD (Restek)	PP24471	04/22/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza 05/08/2025

FROM 0.90000ml of E3926 + 0.10000ml of PP24467 = Final Quantity: 1.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
439	5 PPM ICC DRO STD (Restek)	PP24472	04/22/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza 05/08/2025

FROM 0.90000ml of E3926 + 0.10000ml of PP24469 = Final Quantity: 1.000 ml

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3608	50 PPM ICV DRO STD (RESTEK)	PP24473	04/22/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza 05/08/2025

FROM 0.50000ml of E3926 + 0.50000ml of PP24468 = Final Quantity: 1.000 ml

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

CHEMICAL RECEIPT LOG BOOK

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A0262002	07/30/2025	01/30/2025 / Rajesh	01/20/2025 / Rajesh	E3874

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	10/08/2025	04/08/2025 / Rajesh	02/07/2025 / Rajesh	E3926

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0186840	10/22/2025	04/22/2025 / yogesh	07/11/2022 / Yogesh	P11951

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0186840	10/22/2025	04/22/2025 / yogesh	07/11/2022 / Yogesh	P11952

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0186840	07/31/2025	01/31/2025 / yogesh	07/11/2022 / Yogesh	P11955

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0186840	07/31/2025	01/31/2025 / yogesh	07/11/2022 / Yogesh	P11956

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0204859	10/22/2025	04/22/2025 / yogesh	01/12/2024 / Yogesh	P13106

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0204859	10/22/2025	04/22/2025 / yogesh	01/12/2024 / Yogesh	P13108

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Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	10/22/2025	04/22/2025 / yogesh	07/24/2024 / yogesh	P13477

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	10/22/2025	04/22/2025 / yogesh	07/24/2024 / yogesh	P13479

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	08/03/2025	02/03/2025 / yogesh	07/24/2024 / yogesh	P13487

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	08/03/2025	02/03/2025 / yogesh	07/24/2024 / yogesh	P13488

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	08/03/2025	02/03/2025 / yogesh	07/24/2024 / yogesh	P13489

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	08/03/2025	02/03/2025 / yogesh	07/24/2024 / yogesh	P13490

Sand
Purified
Washed and Ignited

avantor™ | J.T.Baker®

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	<= 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

James T Ethier

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 QUIMICOS 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_2SO_4
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_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 foreing 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 RB on 7/24/23 E3551

PO: PO2-1178.2 PRODUCT CODE: SHIP DATE: 1/20/2025

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

avantor | J.T.Baker

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_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.8 ppm
Titrable Acid (µeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

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

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

E 3874

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

PO: PO2-1308 PRODUCT CODE: SHIP DATE: 2/7/25

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

avantor | J.T.Baker

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_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.8 ppm
Titrable Acid (µeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

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

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

E 3926

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

PO: PO2-1178.2 PRODUCT CODE: SHIP DATE: 1/20/2025

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

avantor | J.T.Baker

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_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.8 ppm
Titrable Acid (µeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 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

JCroak
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™ | J.T.Baker

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 ($(CH_3)_2CO$) (by GC, corrected forwater)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	<= 0.3	0.2
Titrable Base (µeq/g)	<= 0.6	<0.1
Water (H_2O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as HeptachlorEpoxide) 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

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

RESTEK®
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Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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.

P11948 & P11962 } 7.8 07/11/2

Catalog No. : 31266 **Lot No.:** A0186840

Description : Florida TRPH Standard

Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

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

Expiration Date : July 31, 2029 **Storage:** 25°C nominal

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Octane (C8) **CAS #** 111-65-9 (Lot SHBN3807) **Purity** 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Stressed
2	n-Decane (C10) **CAS #** 124-18-5 (Lot SHBN8619) **Purity** 99%	503.0 µg/mL	+/- 2.9877 µg/mL +/- 12.4968 µg/mL +/- 14.9795 µg/mL	Gravimetric Unstressed Stressed
3	n-Dodecane (C12) **CAS #** 112-40-3 (Lot SHBN7174) **Purity** 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Stressed
4	n-Tetradecane (C14) **CAS #** 629-59-4 (Lot STBK2282) **Purity** 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Stressed
5	n-Hexadecane (C16) **CAS #** 544-76-3 (Lot SHBM4146) **Purity** 98%	504.7 µg/mL	+/- 2.9978 µg/mL +/- 12.5390 µg/mL +/- 15.0301 µg/mL	Gravimetric Unstressed Stressed
6	n-Octadecane (C18) **CAS #** 593-45-3 (Lot VZKOJ) **Purity** 97%	504.4 µg/mL	+/- 2.9960 µg/mL +/- 12.5316 µg/mL +/- 15.0212 µg/mL	Gravimetric Unstressed Stressed
7	n-Eicosane (C20) **CAS #** 112-95-8 (Lot MKCF7888) **Purity** 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Stressed

8	n-Docosane (C22) **CAS #** 629-97-0 **Purity** 99%	(Lot MKCL8918)	504.5	µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	n-Tetracosane (C24) **CAS #** 646-31-1 **Purity** 99%	(Lot MKCN2863)	503.5	µg/mL	+/- 2.9906 +/- 12.5092 +/- 14.9944	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	n-Hexacosane (C26) **CAS #** 630-01-3 **Purity** 99%	(Lot MKCD4540)	504.0	µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Octacosane (C28) **CAS #** 630-02-4 **Purity** 99%	(Lot BCCG0084)	504.5	µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	n-Triacontane (C30) **CAS #** 638-68-6 **Purity** 99%	(Lot MKCN9321)	505.0	µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Dotriacontane (C32) **CAS #** 544-85-4 **Purity** 99%	(Lot BCBW0661)	505.0	µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	n-Tetratriacontane (C34) **CAS #** 14167-59-0 **Purity** 99%	(Lot OML4N)	504.5	µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	n-Hexatriacontane (C36) **CAS #** 630-06-8 **Purity** 99%	(Lot U25B014)	504.0	µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	n-Octatriacontane (C38) **CAS #** 7194-85-6 **Purity** 97%	(Lot 0000127235)	504.4	µg/mL	+/- 2.9960 +/- 12.5316 +/- 15.0212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	n-Tetracontane (C40) **CAS #** 4181-95-7 **Purity** 98%	(Lot PADGI)	504.7	µg/mL	+/- 2.9978 +/- 12.5390 +/- 15.0301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

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

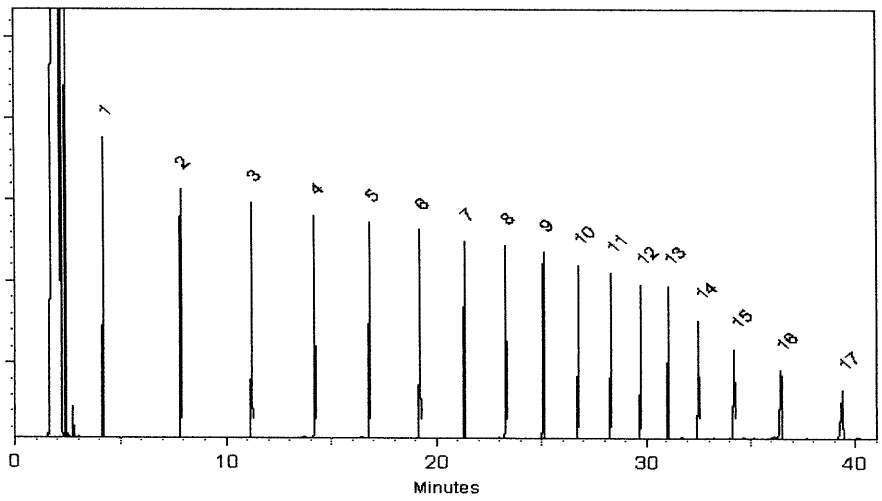
Carrier Gas:
hydrogen-constant pressure 10 psi.

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



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.

Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022 **Balance:** 1128360905

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-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:

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

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.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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.

P11948 & P11962 } 7.8 07/11/2

Catalog No. : 31266 **Lot No.:** A0186840

Description : Florida TRPH Standard

Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

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

Expiration Date : July 31, 2029 **Storage:** 25°C nominal

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Octane (C8) **CAS #** 111-65-9 (Lot SHBN3807) **Purity** 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Stressed
2	n-Decane (C10) **CAS #** 124-18-5 (Lot SHBN8619) **Purity** 99%	503.0 µg/mL	+/- 2.9877 µg/mL +/- 12.4968 µg/mL +/- 14.9795 µg/mL	Gravimetric Unstressed Stressed
3	n-Dodecane (C12) **CAS #** 112-40-3 (Lot SHBN7174) **Purity** 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Stressed
4	n-Tetradecane (C14) **CAS #** 629-59-4 (Lot STBK2282) **Purity** 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Stressed
5	n-Hexadecane (C16) **CAS #** 544-76-3 (Lot SHBM4146) **Purity** 98%	504.7 µg/mL	+/- 2.9978 µg/mL +/- 12.5390 µg/mL +/- 15.0301 µg/mL	Gravimetric Unstressed Stressed
6	n-Octadecane (C18) **CAS #** 593-45-3 (Lot VZKOJ) **Purity** 97%	504.4 µg/mL	+/- 2.9960 µg/mL +/- 12.5316 µg/mL +/- 15.0212 µg/mL	Gravimetric Unstressed Stressed
7	n-Eicosane (C20) **CAS #** 112-95-8 (Lot MKCF7888) **Purity** 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Stressed

8	n-Docosane (C22) **CAS #** 629-97-0 **Purity** 99%	(Lot MKCL8918)	504.5	µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	n-Tetracosane (C24) **CAS #** 646-31-1 **Purity** 99%	(Lot MKCN2863)	503.5	µg/mL	+/- 2.9906 +/- 12.5092 +/- 14.9944	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	n-Hexacosane (C26) **CAS #** 630-01-3 **Purity** 99%	(Lot MKCD4540)	504.0	µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Octacosane (C28) **CAS #** 630-02-4 **Purity** 99%	(Lot BCCG0084)	504.5	µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	n-Triacontane (C30) **CAS #** 638-68-6 **Purity** 99%	(Lot MKCN9321)	505.0	µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Dotriacontane (C32) **CAS #** 544-85-4 **Purity** 99%	(Lot BCBW0661)	505.0	µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	n-Tetratriacontane (C34) **CAS #** 14167-59-0 **Purity** 99%	(Lot OML4N)	504.5	µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	n-Hexatriacontane (C36) **CAS #** 630-06-8 **Purity** 99%	(Lot U25B014)	504.0	µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	n-Octatriacontane (C38) **CAS #** 7194-85-6 **Purity** 97%	(Lot 0000127235)	504.4	µg/mL	+/- 2.9960 +/- 12.5316 +/- 15.0212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	n-Tetracontane (C40) **CAS #** 4181-95-7 **Purity** 98%	(Lot PADGI)	504.7	µg/mL	+/- 2.9978 +/- 12.5390 +/- 15.0301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

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

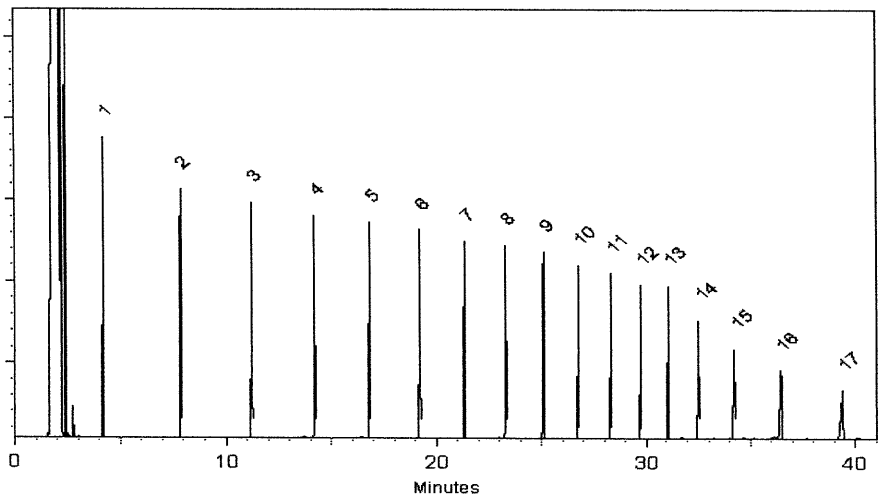
Carrier Gas:
hydrogen-constant pressure 10 psi.

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



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.

Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022 **Balance:** 1128360905

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-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:

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

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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Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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.

P11948 & P11962 } 7.8 07/11/2

Catalog No. : 31266 **Lot No.:** A0186840

Description : Florida TRPH Standard

Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

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

Expiration Date : July 31, 2029 **Storage:** 25°C nominal

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Octane (C8) **CAS #** 111-65-9 (Lot SHBN3807) **Purity** 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Stressed
2	n-Decane (C10) **CAS #** 124-18-5 (Lot SHBN8619) **Purity** 99%	503.0 µg/mL	+/- 2.9877 µg/mL +/- 12.4968 µg/mL +/- 14.9795 µg/mL	Gravimetric Unstressed Stressed
3	n-Dodecane (C12) **CAS #** 112-40-3 (Lot SHBN7174) **Purity** 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Stressed
4	n-Tetradecane (C14) **CAS #** 629-59-4 (Lot STBK2282) **Purity** 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Stressed
5	n-Hexadecane (C16) **CAS #** 544-76-3 (Lot SHBM4146) **Purity** 98%	504.7 µg/mL	+/- 2.9978 µg/mL +/- 12.5390 µg/mL +/- 15.0301 µg/mL	Gravimetric Unstressed Stressed
6	n-Octadecane (C18) **CAS #** 593-45-3 (Lot VZKOJ) **Purity** 97%	504.4 µg/mL	+/- 2.9960 µg/mL +/- 12.5316 µg/mL +/- 15.0212 µg/mL	Gravimetric Unstressed Stressed
7	n-Eicosane (C20) **CAS #** 112-95-8 (Lot MKCF7888) **Purity** 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Stressed

8	n-Docosane (C22) **CAS #** 629-97-0 **Purity** 99%	(Lot MKCL8918)	504.5	µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	n-Tetracosane (C24) **CAS #** 646-31-1 **Purity** 99%	(Lot MKCN2863)	503.5	µg/mL	+/- 2.9906 +/- 12.5092 +/- 14.9944	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	n-Hexacosane (C26) **CAS #** 630-01-3 **Purity** 99%	(Lot MKCD4540)	504.0	µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Octacosane (C28) **CAS #** 630-02-4 **Purity** 99%	(Lot BCCG0084)	504.5	µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	n-Triacontane (C30) **CAS #** 638-68-6 **Purity** 99%	(Lot MKCN9321)	505.0	µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Dotriacontane (C32) **CAS #** 544-85-4 **Purity** 99%	(Lot BCBW0661)	505.0	µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	n-Tetratriacontane (C34) **CAS #** 14167-59-0 **Purity** 99%	(Lot OML4N)	504.5	µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	n-Hexatriacontane (C36) **CAS #** 630-06-8 **Purity** 99%	(Lot U25B014)	504.0	µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	n-Octatriacontane (C38) **CAS #** 7194-85-6 **Purity** 97%	(Lot 0000127235)	504.4	µg/mL	+/- 2.9960 +/- 12.5316 +/- 15.0212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	n-Tetracontane (C40) **CAS #** 4181-95-7 **Purity** 98%	(Lot PADGI)	504.7	µg/mL	+/- 2.9978 +/- 12.5390 +/- 15.0301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

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

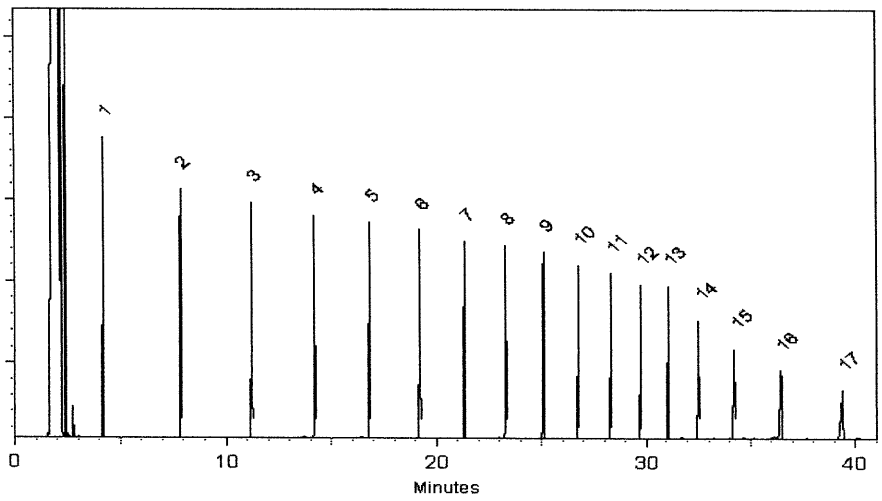
Carrier Gas:
hydrogen-constant pressure 10 psi.

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



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.

Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022 **Balance:** 1128360905

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-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:

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

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

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- 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.

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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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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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.

P11948 & P11962 } 7.8 07/11/2

Catalog No. : 31266 **Lot No.:** A0186840

Description : Florida TRPH Standard

Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

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

Expiration Date : July 31, 2029 **Storage:** 25°C nominal

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Octane (C8) **CAS #** 111-65-9 (Lot SHBN3807) **Purity** 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Stressed
2	n-Decane (C10) **CAS #** 124-18-5 (Lot SHBN8619) **Purity** 99%	503.0 µg/mL	+/- 2.9877 µg/mL +/- 12.4968 µg/mL +/- 14.9795 µg/mL	Gravimetric Unstressed Stressed
3	n-Dodecane (C12) **CAS #** 112-40-3 (Lot SHBN7174) **Purity** 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Stressed
4	n-Tetradecane (C14) **CAS #** 629-59-4 (Lot STBK2282) **Purity** 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Stressed
5	n-Hexadecane (C16) **CAS #** 544-76-3 (Lot SHBM4146) **Purity** 98%	504.7 µg/mL	+/- 2.9978 µg/mL +/- 12.5390 µg/mL +/- 15.0301 µg/mL	Gravimetric Unstressed Stressed
6	n-Octadecane (C18) **CAS #** 593-45-3 (Lot VZKOJ) **Purity** 97%	504.4 µg/mL	+/- 2.9960 µg/mL +/- 12.5316 µg/mL +/- 15.0212 µg/mL	Gravimetric Unstressed Stressed
7	n-Eicosane (C20) **CAS #** 112-95-8 (Lot MKCF7888) **Purity** 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Stressed

8	n-Docosane (C22) **CAS #** 629-97-0 **Purity** 99%	(Lot MKCL8918)	504.5	µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	n-Tetracosane (C24) **CAS #** 646-31-1 **Purity** 99%	(Lot MKCN2863)	503.5	µg/mL	+/- 2.9906 +/- 12.5092 +/- 14.9944	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	n-Hexacosane (C26) **CAS #** 630-01-3 **Purity** 99%	(Lot MKCD4540)	504.0	µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Octacosane (C28) **CAS #** 630-02-4 **Purity** 99%	(Lot BCCG0084)	504.5	µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	n-Triacontane (C30) **CAS #** 638-68-6 **Purity** 99%	(Lot MKCN9321)	505.0	µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Dotriacontane (C32) **CAS #** 544-85-4 **Purity** 99%	(Lot BCBW0661)	505.0	µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	n-Tetratriacontane (C34) **CAS #** 14167-59-0 **Purity** 99%	(Lot OML4N)	504.5	µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	n-Hexatriacontane (C36) **CAS #** 630-06-8 **Purity** 99%	(Lot U25B014)	504.0	µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	n-Octatriacontane (C38) **CAS #** 7194-85-6 **Purity** 97%	(Lot 0000127235)	504.4	µg/mL	+/- 2.9960 +/- 12.5316 +/- 15.0212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	n-Tetracontane (C40) **CAS #** 4181-95-7 **Purity** 98%	(Lot PADGI)	504.7	µg/mL	+/- 2.9978 +/- 12.5390 +/- 15.0301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

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

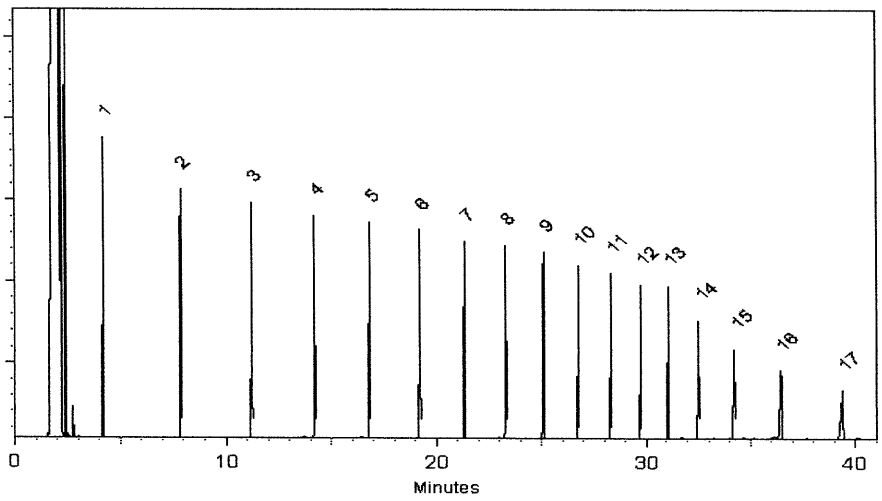
Carrier Gas:
hydrogen-constant pressure 10 psi.

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



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.

Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022 **Balance:** 1128360905

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-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.
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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 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:

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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.

RESTEK

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

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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. : 31266 **Lot No.:** A0204859

Description : Florida TRPH Standard

Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

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

Expiration Date : December 31, 2030 **Storage:** 25°C nominal

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

P13103 → P13112 Y.P. 01/12/2024

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Octane (C8)	111-65-9	SHBP9758	99%	504.4 µg/mL	+/- 13.0305
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	503.6 µg/mL	+/- 13.0098
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	503.6 µg/mL	+/- 13.0098
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	504.0 µg/mL	+/- 13.0201
5	n-Hexadecane (C16)	544-76-3	SHBP8192	99%	504.0 µg/mL	+/- 13.0201
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	504.1 µg/mL	+/- 13.0230
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	504.0 µg/mL	+/- 13.0204
8	n-Docosane (C22)	629-97-0	MKCQ3882	99%	503.6 µg/mL	+/- 13.0098
9	n-Tetracosane (C24)	646-31-1	MKCQ8345	99%	504.0 µg/mL	+/- 13.0201
10	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	504.0 µg/mL	+/- 13.0201
11	n-Octacosane (C28)	630-02-4	BCCG0084	99%	504.0 µg/mL	+/- 13.0201
12	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	504.0 µg/mL	+/- 13.0204
13	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	504.0 µg/mL	+/- 13.0201
14	n-Tetratriacontane (C34)	14167-59-0	OML4N	99%	504.4 µg/mL	+/- 13.0305
15	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	504.0 µg/mL	+/- 13.0201
16	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	503.8 µg/mL	+/- 13.0152
17	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	503.6 µg/mL	+/- 13.0098

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

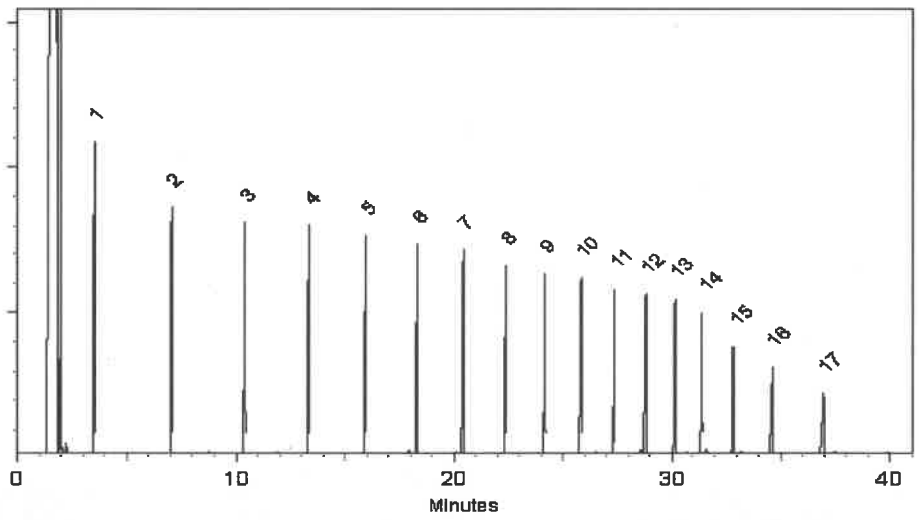
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Dakota Parson - Operations Technician I

Date Mixed: 29-Nov-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 01-Dec-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  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.

RESTEK

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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. : 31266 **Lot No.:** A0204859

Description : Florida TRPH Standard

Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

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

Expiration Date : December 31, 2030 **Storage:** 25°C nominal

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

P13103 → P13112 Y.P. 01/12/2024

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Octane (C8)	111-65-9	SHBP9758	99%	504.4 µg/mL	+/- 13.0305
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7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	504.0 µg/mL	+/- 13.0204
8	n-Docosane (C22)	629-97-0	MKCQ3882	99%	503.6 µg/mL	+/- 13.0098
9	n-Tetracosane (C24)	646-31-1	MKCQ8345	99%	504.0 µg/mL	+/- 13.0201
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12	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	504.0 µg/mL	+/- 13.0204
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14	n-Tetratriacontane (C34)	14167-59-0	OML4N	99%	504.4 µg/mL	+/- 13.0305
15	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	504.0 µg/mL	+/- 13.0201
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17	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	503.6 µg/mL	+/- 13.0098

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

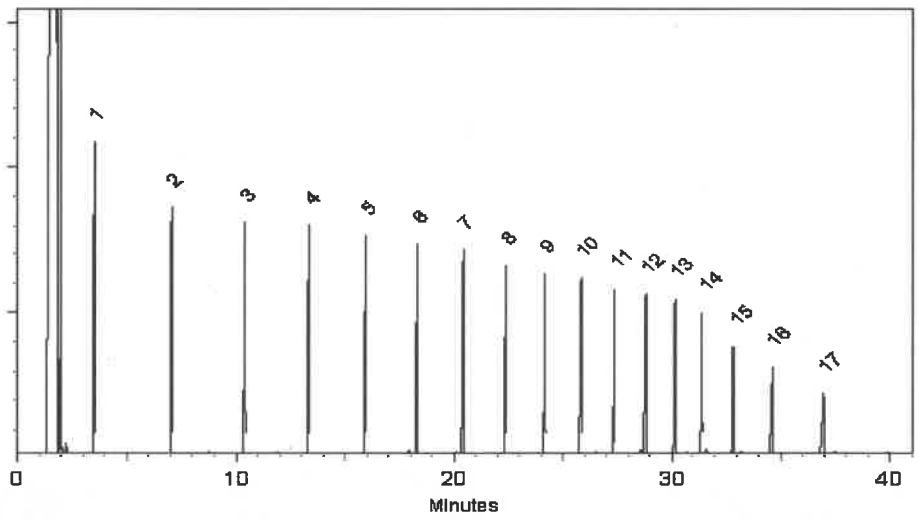
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Dakota Parson - Operations Technician I

Date Mixed: 29-Nov-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 01-Dec-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  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.

ABSOLUTE STANDARDS, INC.

ISO - 17034

Certificate of Analysis

Certified Reference Material (CRM)

Conformance: The "Certificate of Analysis" is applicable for CRM's, fulfilling the requirements in the current version of: ISO 17034.

Health & Safety: See the attached SDS & Certified Weight Report before use.

Intended Use: This Certified Reference Material (CRM) is intended primarily for use in the characterization of unknowns and the establishment of analyzer or instrument response factors by qualified personnel. Typical instrumental organic assays include: GC & LC, and inorganic assays include: ICP & AA. This product is for laboratory use only.

Characterization Values: In production, gravimetric/volumetric readings are certified to be within +/- 0.5% of the stated value & are valid between 18 °C & 30 °C. The measured characterization of uncertainty can be found on the Certified Weight Report. All product weighings are performed on an analytical balance that is calibrated to NIST Traceable standard weights & certified by the manufacturer. The volumetric glassware used is Class "A" type & conforms to ASTM E-288 unless otherwise stated. The solvents & compounds used are of the highest practical purity & typically meet or exceed ACS Reagent Grade & ACS Standards Grade specifications. The expanded uncertainty field on Certified Wt. Report represents CRM uncertainty as described in ISO 17034.

Homogeneity: Uncertainties that are due to the analytical procedure(s) are within +/-5% unless specifically stated on the Certified Wt. Report.

Verification: Uncertainties that are due to the analytical procedure(s) are within +/-5% unless specifically stated on the Certified Wt. Report.

Stability: Uncertainties for short-term stability are determined in accordance with ISO 17034. Long-term stability is determined in accordance with ISO 17034. The shelf life is limited by the stated expiration for each product. Expiration dates and additional technical information can be found on the Certified Weight Report and on the product label.

Uncertainty: U_{CRM} is the expanded uncertainty which utilizes a K = 2 (coverage factor of 2), in accordance with ISO 17034 as listed above (Characterization, Homogeneity, Verification, and Stability).

Purity & Identity: Organic solutions are typically formulated from neat materials whose purity & identity have been characterized by GC-MSD & LC-PDA techniques with comparison to a NIST Traceable library of mass spectra when available. Additional characterization techniques may include but are not limited to: refractive index measurements of liquids, melting point measurements of solids, & GC-FID, ECD, PID, ELCD, LC-PDA measurements for purity. Inorganic solutions & neats are typically formulated from materials whose purity & identity have been characterized by ICPMS with comparison to a NIST SRM® when available. Additional characterization techniques may include but are not limited to: titrimetry, and densitometry.

Storage: Sealed ampules and other containers should be stored in the dark and at temperatures indicated on the Certified Weight Report or product label. Certification by Absolute Standards, Inc. is typically valid for 3 years from the date of manufacture. Each product will show its own expiration date as the limit of certification. Certified values are not applicable to opened ampules or for any materials stored in re-sealable containers. Please see the "Certified Weight Report" for specific values and any exceptions.

Usage: Ampules & bottles should be brought to room temperature (18 to 30 °C) before opening. Sonication may be required for high concentration solutions or solutions that may precipitate during storage. After opening, care should be exercised to avoid concentration changes owing to evaporation of the solvent or essential components. We recommend that a suitable re-sealable container be available before opening an ampule to decant the standard for short-term storage and use.

Minimum Sample Size: 0.5 uL for analytical applications.

Legal Notice: Warranty of products are as described when shipped. No warranty as to fitness for any particular application is expressed or implied. Errant shipments and/or quality claims must be made within 10 days of receipt. Liability is limited solely to the replacement of the product or refund of purchase price.

Certifying Officer: Stephen J. Arpie, M.S., Director General

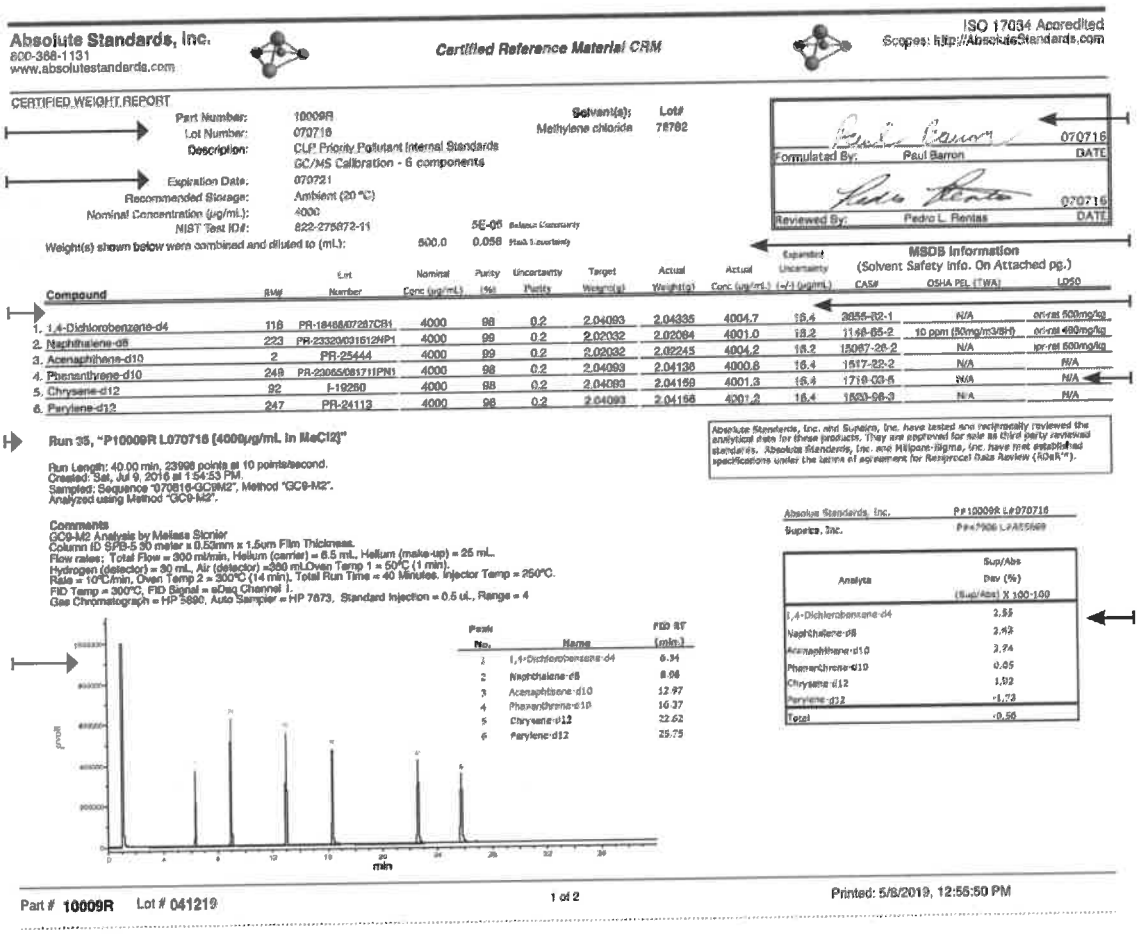
Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

Each Certified Reference Material (CRM) is supported by a Certified Weight Report. Assigned values for concentrations and associated uncertainties are based upon NIST traceable masses & volumes used in production.



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ISO 17034 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part Number: 10009R
Lot Number: 070716
Description: CLP Priority Pollutant Internal Standards GC/MS Calibration - 6 components

Solvent(s): Methylene chloride
Lot#: 78782

Expiration Date: 070721
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 4000
NIST Test ID#: 822-275872-11

5E-05 Balance Uncertainty
0.056 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 500.0

Formulated By: Paul Barron 070716 DATE
Reviewed By: Pedro L. Reinas 070716 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-18488/07267CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	or-rat 500mg/kg
2. Naphthalene-d8	223	PR-233230/31612NP1	4000	99	0.2	2.02032	2.02064	4001.0	16.2	1146-65-2	10 ppm (50mg/m3/8H)	or-rat 490mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	16.2	15067-26-2	N/A	ipr-rat 500mg/kg
4. Phenanthrene-d10	248	PR-23065/061711PN1	4000	98	0.2	2.04093	2.04136	4000.8	16.4	1517-22-2	N/A	N/A
5. Chrysene-d12	92	I-19250	4000	98	0.2	2.04093	2.04159	4001.3	16.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	96	0.2	2.04093	2.04156	4001.2	16.4	1520-96-3	N/A	N/A

Absolute Standards, Inc. and Supelco, Inc. have tested and reciprocally reviewed the analytical data for these products. They are approved for sale as third party reviewed standards. Absolute Standards, Inc. and Millipore-Sigma, Inc. have met established specifications under the terms of agreement for Reciprocal Data Review (RDaR™).

Run 35, "P10009R L070716 (4000µg/mL in MeC12)"

Run Length: 40.00 min, 23998 points at 10 points/second.
Created: Sat, Jul 9, 2016 at 1:54:53 PM.
Sampled: Sequence "070816-GC9M2", Method "GC9-M2".
Analyzed using Method "GC9-M2".

Comments
GC9-M2 Analysis by Melissa Sicnier
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates: Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) =300 mL.Oven Temp 1 = 50°C (1 min).
Rate = 10°C/min, Oven Temp 2 = 300°C (14 min). Total Run Time = 40 Minutes. Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = aDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 uL, Range = 4

Peak No.	Name	FID RT (min.)
1	1,4-Dichlorobenzene-d4	6.34
2	Naphthalene-d8	8.06
3	Acenaphthene-d10	12.97
4	Phenanthrene-d10	16.37
5	Chrysene-d12	22.62
6	Perylene-d12	25.75

Absolute Standards, Inc. P# 10009R L# 070716
Supelco, Inc. P# [illegible] L# [illegible]

Analyte	Sup/Abs Dev (%) (Sup/Abs) X 100-100
1,4-Dichlorobenzene-d4	2.55
Naphthalene-d8	2.43
Acenaphthene-d10	3.74
Phenanthrene-d10	0.05
Chrysene-d12	1.02
Perylene-d12	-1.73
Total	-0.56

counts
min

Part # 10009R Lot # 041219 1 of 2 Printed: 5/8/2019, 12:55:50 PM

Part #
Lot #
Shelf Life

Formulator
Reviewer

Actual Concentration

Target Compounds

Uncertainty Values

Health & Safety

Method of Analysis

3rd Party Comparison

Qualitative
Quantitative

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

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Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 72072
Lot Number: 101122
Description: n-Tetracosane-d50

Expiration Date: 101132
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

Solvent(s):	Lot#
Methylene chloride	105345

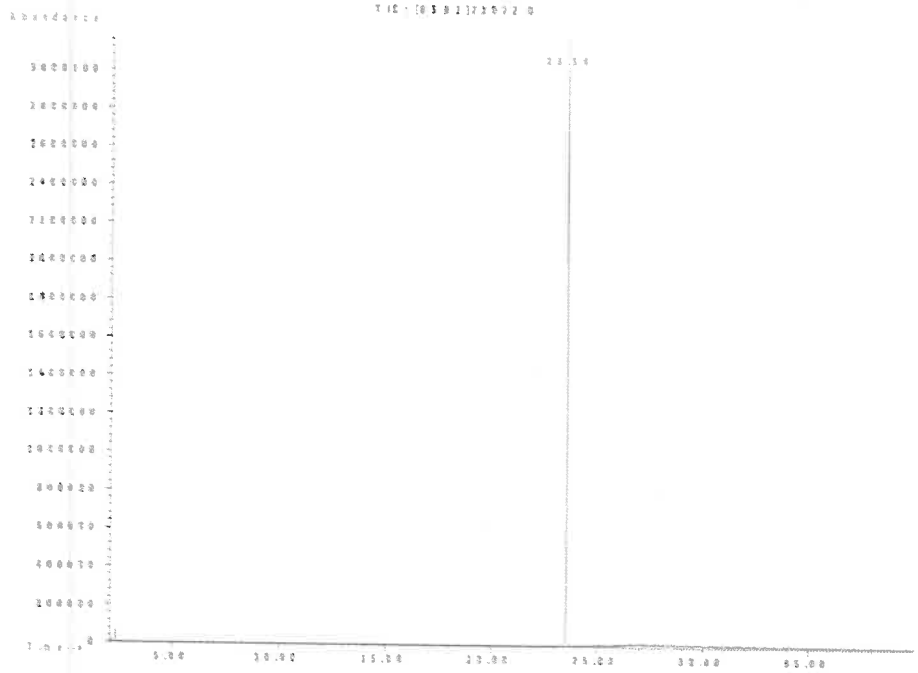
P13477 → P13496 } X.P. 07/24/24

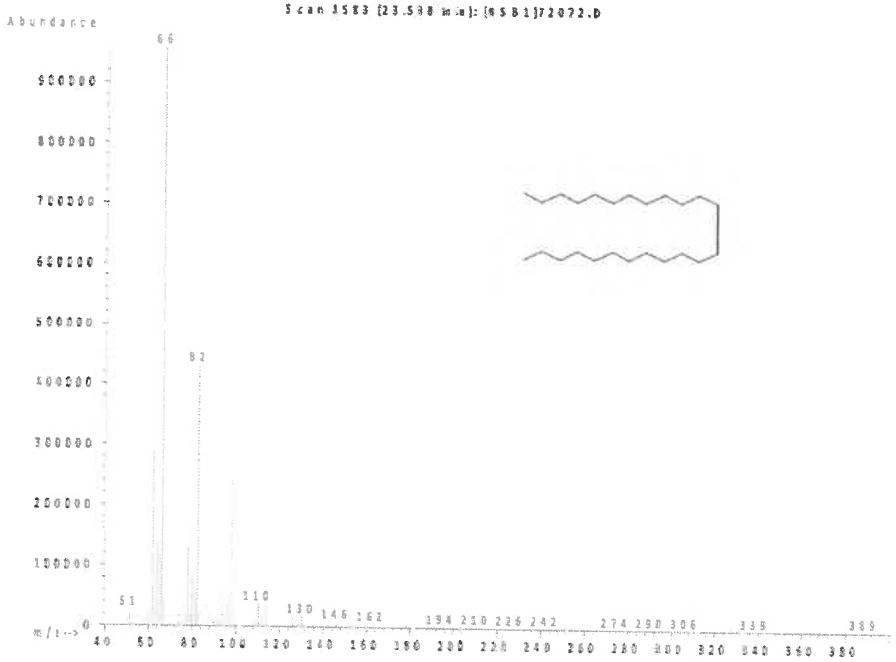
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 200.0 0.058 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Assay (%D)	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. n-Tetracosane-d50	2072	PR-26606	1000	98.7	0.2	99.0	0.20471	0.20482	1000.6	4.1	16416-32-3	N/A	N/A

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





- 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).

ABSOLUTE STANDARDS, INC.

ISO - 17034

Certificate of Analysis

Certified Reference Material (CRM)

Conformance: The "Certificate of Analysis" is applicable for CRM's, fulfilling the requirements in the current version of: ISO 17034.

Health & Safety: See the attached SDS & Certified Weight Report before use.

Intended Use: This Certified Reference Material (CRM) is intended primarily for use in the characterization of unknowns and the establishment of analyzer or instrument response factors by qualified personnel. Typical instrumental organic assays include: GC & LC, and inorganic assays include: ICP & AA. This product is for laboratory use only.

Characterization Values: In production, gravimetric/volumetric readings are certified to be within +/- 0.5% of the stated value & are valid between 18 °C & 30 °C. The measured characterization of uncertainty can be found on the Certified Weight Report. All product weighings are performed on an analytical balance that is calibrated to NIST Traceable standard weights & certified by the manufacturer. The volumetric glassware used is Class "A" type & conforms to ASTM E-288 unless otherwise stated. The solvents & compounds used are of the highest practical purity & typically meet or exceed ACS Reagent Grade & ACS Standards Grade specifications. The expanded uncertainty field on Certified Wt. Report represents CRM uncertainty as described in ISO 17034.

Homogeneity: Uncertainties that are due to the analytical procedure(s) are within +/-5% unless specifically stated on the Certified Wt. Report.

Verification: Uncertainties that are due to the analytical procedure(s) are within +/-5% unless specifically stated on the Certified Wt. Report.

Stability: Uncertainties for short-term stability are determined in accordance with ISO 17034. Long-term stability is determined in accordance with ISO 17034. The shelf life is limited by the stated expiration for each product. Expiration dates and additional technical information can be found on the Certified Weight Report and on the product label.

Uncertainty: U_{CRM} is the expanded uncertainty which utilizes a K = 2 (coverage factor of 2), in accordance with ISO 17034 as listed above (Characterization, Homogeneity, Verification, and Stability).

Purity & Identity: Organic solutions are typically formulated from neat materials whose purity & identity have been characterized by GC-MSD & LC-PDA techniques with comparison to a NIST Traceable library of mass spectra when available. Additional characterization techniques may include but are not limited to: refractive index measurements of liquids, melting point measurements of solids, & GC-FID, ECD, PID, ELCD, LC-PDA measurements for purity. Inorganic solutions & neats are typically formulated from materials whose purity & identity have been characterized by ICPMS with comparison to a NIST SRM® when available. Additional characterization techniques may include but are not limited to: titrimetry, and densitometry.

Storage: Sealed ampules and other containers should be stored in the dark and at temperatures indicated on the Certified Weight Report or product label. Certification by Absolute Standards, Inc. is typically valid for 3 years from the date of manufacture. Each product will show its own expiration date as the limit of certification. Certified values are not applicable to opened ampules or for any materials stored in re-sealable containers. Please see the "Certified Weight Report" for specific values and any exceptions.

Usage: Ampules & bottles should be brought to room temperature (18 to 30 °C) before opening. Sonication may be required for high concentration solutions or solutions that may precipitate during storage. After opening, care should be exercised to avoid concentration changes owing to evaporation of the solvent or essential components. We recommend that a suitable re-sealable container be available before opening an ampule to decant the standard for short-term storage and use.

Minimum Sample Size: 0.5 uL for analytical applications.

Legal Notice: Warranty of products are as described when shipped. No warranty as to fitness for any particular application is expressed or implied. Errant shipments and/or quality claims must be made within 10 days of receipt. Liability is limited solely to the replacement of the product or refund of purchase price.

Certifying Officer: Stephen J. Arpie, M.S., Director General

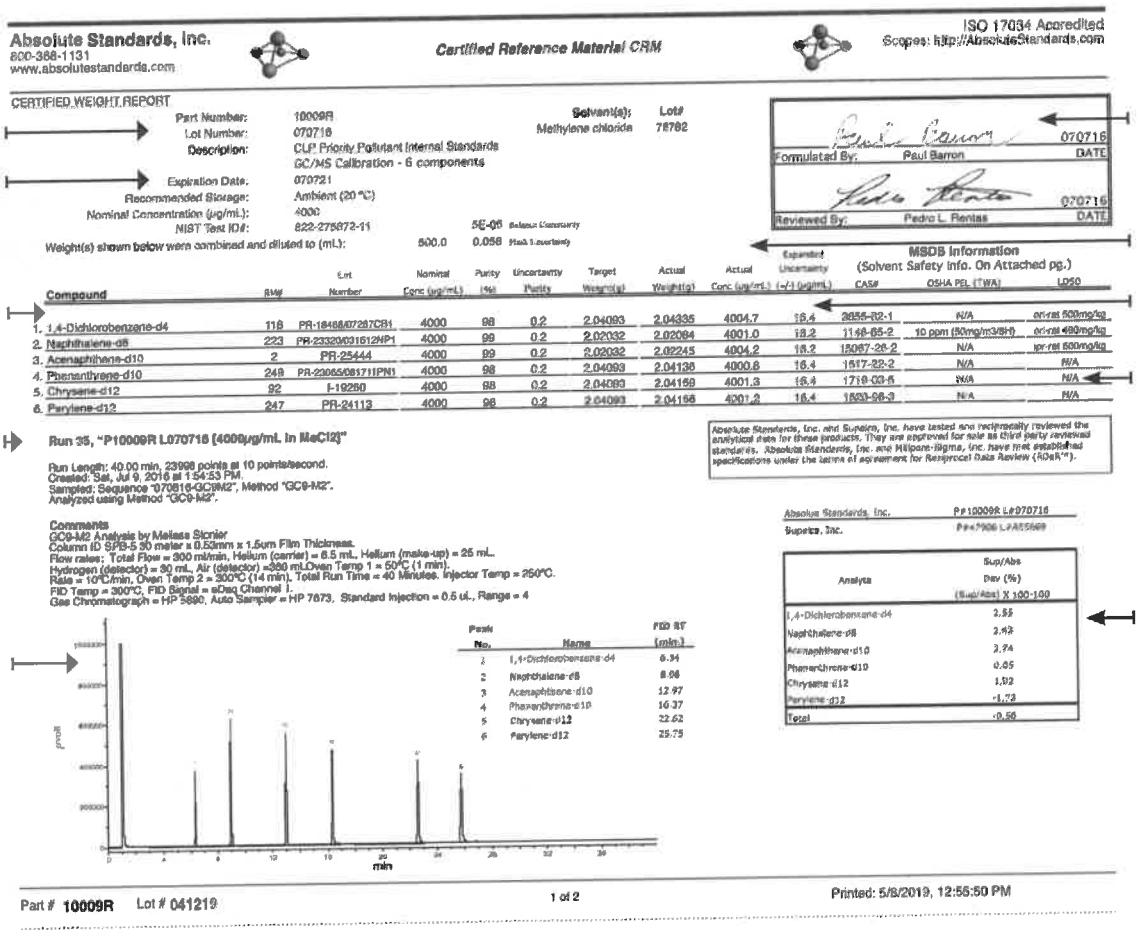
Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

Each Certified Reference Material (CRM) is supported by a Certified Weight Report. Assigned values for concentrations and associated uncertainties are based upon NIST traceable masses & volumes used in production.



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ISO 17034 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part Number: 10009R
Lot Number: 070716
Description: CLP Priority Pollutant Internal Standards GC/MS Calibration - 6 components

Solvent(s): Methylene chloride
Lot#: 78782

Expiration Date: 070721
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 4000
NIST Test ID#: 822-275872-11

5E-05 Balance Uncertainty
0.056 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 500.0

Formulated By: Paul Barron 070716 DATE
Reviewed By: Pedro L. Reinas 070716 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-18488/07267CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	or-rat 500mg/kg
2. Naphthalene-d8	223	PR-233230/31612NP1	4000	99	0.2	2.02032	2.02064	4001.0	16.2	1146-65-2	10 ppm (50mg/m3/8H)	or-rat 490mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	16.2	15067-26-2	N/A	ipr-rat 500mg/kg
4. Phenanthrene-d10	248	PR-23065/061711PN1	4000	98	0.2	2.04093	2.04136	4000.8	16.4	1517-22-2	N/A	N/A
5. Chrysene-d12	92	I-19250	4000	98	0.2	2.04093	2.04159	4001.3	16.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	96	0.2	2.04093	2.04156	4001.2	16.4	1520-96-3	N/A	N/A

Absolute Standards, Inc. and Supelco, Inc. have tested and reciprocally reviewed the analytical data for these products. They are approved for sale as third party reviewed standards. Absolute Standards, Inc. and Millipore-Sigma, Inc. have met established specifications under the terms of agreement for Reciprocal Data Review (RDaR™).

Run 35, "P10009R L070716 (4000µg/mL in MeC12)"

Run Length: 40.00 min, 23998 points at 10 points/second.
Created: Sat, Jul 9, 2016 at 1:54:53 PM.
Sampled: Sequence "070816-GC9M2", Method "GC9-M2".
Analyzed using Method "GC9-M2".

Comments
GC9-M2 Analysis by Melissa Sicnier
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates: Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) =300 mL.Oven Temp 1 = 50°C (1 min).
Rate = 10°C/min, Oven Temp 2 = 300°C (14 min). Total Run Time = 40 Minutes. Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = aDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 uL, Range = 4

Peak No.	Name	FID RT (min.)
1	1,4-Dichlorobenzene-d4	6.34
2	Naphthalene-d8	8.06
3	Acenaphthene-d10	12.97
4	Phenanthrene-d10	16.37
5	Chrysene-d12	22.62
6	Perylene-d12	25.75

Absolute Standards, Inc. P# 10009R L# 070716
Supelco, Inc. P# [illegible] L# [illegible]

Analyte	Sup/Abs Dev (%) (Sup/Abs) X 100-100
1,4-Dichlorobenzene-d4	2.55
Naphthalene-d8	2.43
Acenaphthene-d10	3.74
Phenanthrene-d10	0.05
Chrysene-d12	1.02
Perylene-d12	-1.73
Total	-0.56

counts
min

Part # 10009R Lot # 041219 1 of 2 Printed: 5/8/2019, 12:55:50 PM

Part #
Lot #
Shelf Life

Formulator
Reviewer

Actual Concentration

Target Compounds

Uncertainty Values

Health & Safety

Method of Analysis

3rd Party Comparison

Qualitative
Quantitative

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 72072
Lot Number: 101122
Description: n-Tetracosane-d50

Expiration Date: 101132
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

Solvent(s):	Lot#
Methylene chloride	105345

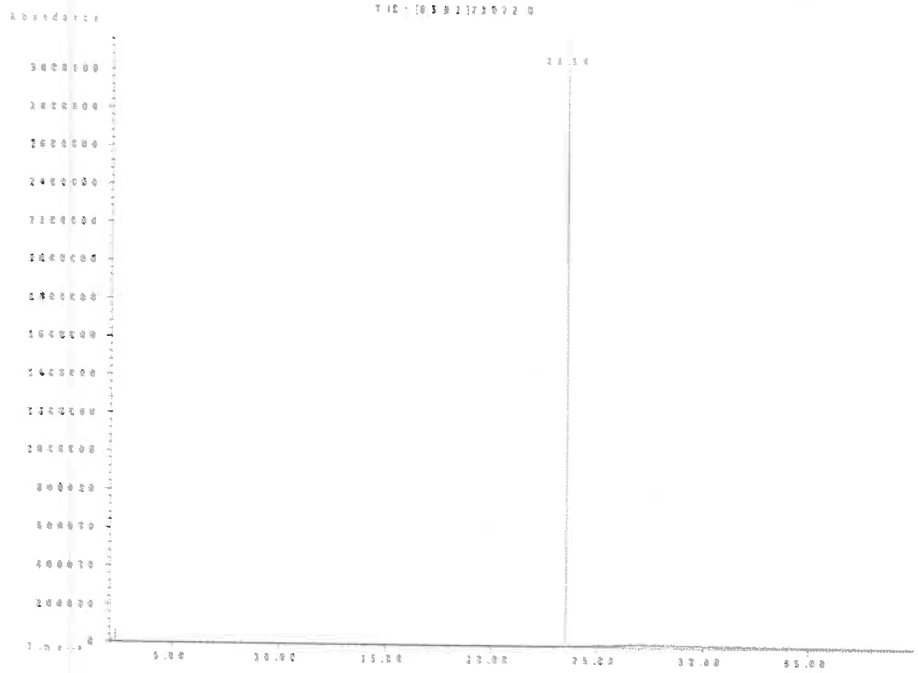
P13477 → P13496 } X.P. 07/24/24

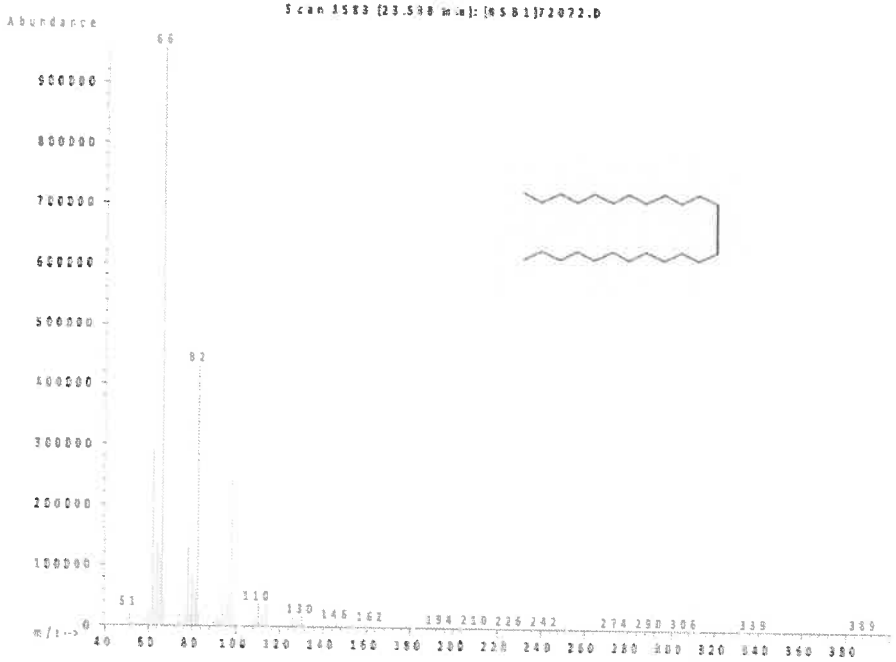
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 200.0 0.058 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Assay (%D)	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. n-Tetracosane-d50	2072	PR-26606	1000	98.7	0.2	99.0	0.20471	0.20482	1000.6	4.1	16416-32-3	N/A	N/A

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





- 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).

ABSOLUTE STANDARDS, INC.

ISO - 17034

Certificate of Analysis

Certified Reference Material (CRM)

Conformance: The "Certificate of Analysis" is applicable for CRM's, fulfilling the requirements in the current version of: ISO 17034.

Health & Safety: See the attached SDS & Certified Weight Report before use.

Intended Use: This Certified Reference Material (CRM) is intended primarily for use in the characterization of unknowns and the establishment of analyzer or instrument response factors by qualified personnel. Typical instrumental organic assays include: GC & LC, and inorganic assays include: ICP & AA. This product is for laboratory use only.

Characterization Values: In production, gravimetric/volumetric readings are certified to be within +/- 0.5% of the stated value & are valid between 18 °C & 30 °C. The measured characterization of uncertainty can be found on the Certified Weight Report. All product weighings are performed on an analytical balance that is calibrated to NIST Traceable standard weights & certified by the manufacturer. The volumetric glassware used is Class "A" type & conforms to ASTM E-288 unless otherwise stated. The solvents & compounds used are of the highest practical purity & typically meet or exceed ACS Reagent Grade & ACS Standards Grade specifications. The expanded uncertainty field on Certified Wt. Report represents CRM uncertainty as described in ISO 17034.

Homogeneity: Uncertainties that are due to the analytical procedure(s) are within +/-5% unless specifically stated on the Certified Wt. Report.

Verification: Uncertainties that are due to the analytical procedure(s) are within +/-5% unless specifically stated on the Certified Wt. Report.

Stability: Uncertainties for short-term stability are determined in accordance with ISO 17034. Long-term stability is determined in accordance with ISO 17034. The shelf life is limited by the stated expiration for each product. Expiration dates and additional technical information can be found on the Certified Weight Report and on the product label.

Uncertainty: U_{CRM} is the expanded uncertainty which utilizes a K = 2 (coverage factor of 2), in accordance with ISO 17034 as listed above (Characterization, Homogeneity, Verification, and Stability).

Purity & Identity: Organic solutions are typically formulated from neat materials whose purity & identity have been characterized by GC-MSD & LC-PDA techniques with comparison to a NIST Traceable library of mass spectra when available. Additional characterization techniques may include but are not limited to: refractive index measurements of liquids, melting point measurements of solids, & GC-FID, ECD, PID, ELCD, LC-PDA measurements for purity. Inorganic solutions & neats are typically formulated from materials whose purity & identity have been characterized by ICPMS with comparison to a NIST SRM® when available. Additional characterization techniques may include but are not limited to: titrimetry, and densitometry.

Storage: Sealed ampules and other containers should be stored in the dark and at temperatures indicated on the Certified Weight Report or product label. Certification by Absolute Standards, Inc. is typically valid for 3 years from the date of manufacture. Each product will show its own expiration date as the limit of certification. Certified values are not applicable to opened ampules or for any materials stored in re-sealable containers. Please see the "Certified Weight Report" for specific values and any exceptions.

Usage: Ampules & bottles should be brought to room temperature (18 to 30 °C) before opening. Sonication may be required for high concentration solutions or solutions that may precipitate during storage. After opening, care should be exercised to avoid concentration changes owing to evaporation of the solvent or essential components. We recommend that a suitable re-sealable container be available before opening an ampule to decant the standard for short-term storage and use.

Minimum Sample Size: 0.5 uL for analytical applications.

Legal Notice: Warranty of products are as described when shipped. No warranty as to fitness for any particular application is expressed or implied. Errant shipments and/or quality claims must be made within 10 days of receipt. Liability is limited solely to the replacement of the product or refund of purchase price.

Certifying Officer: Stephen J. Arpie, M.S., Director General

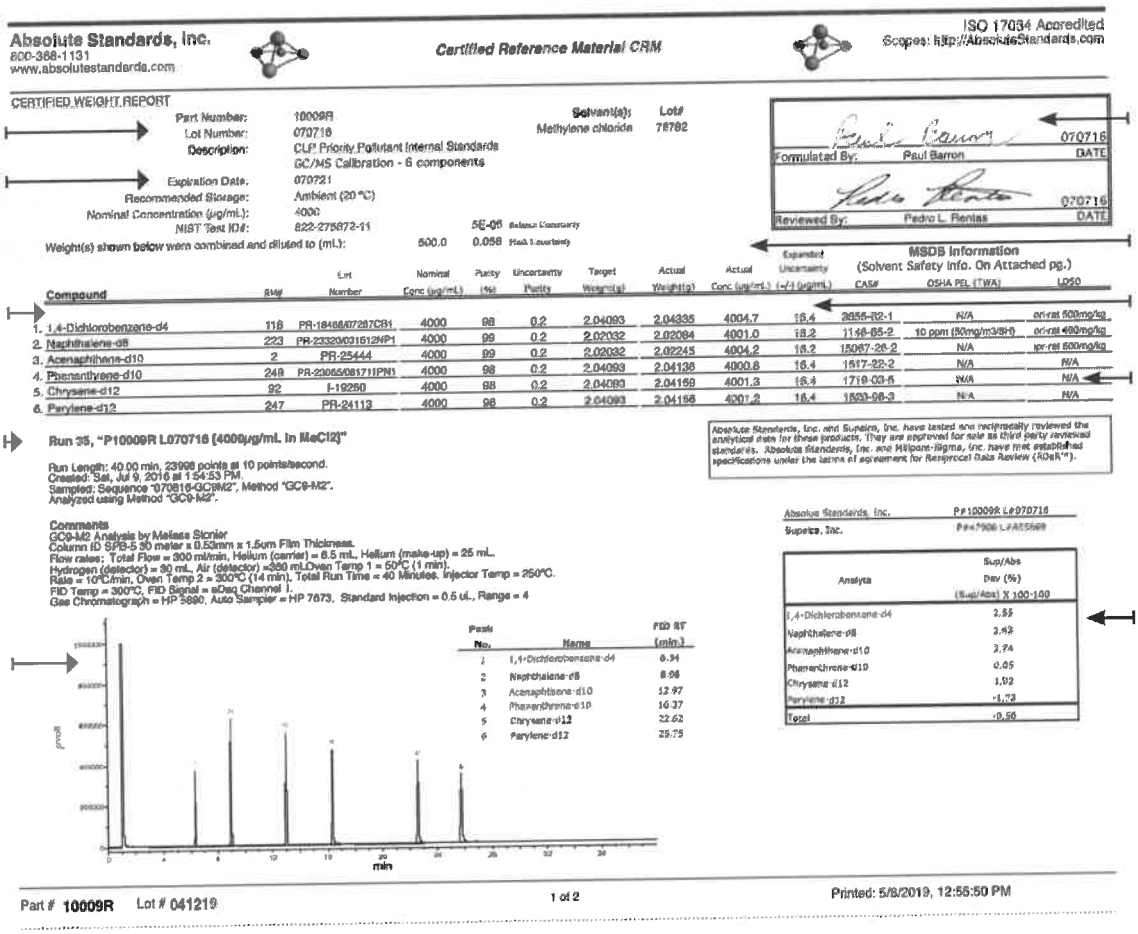
Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

Each Certified Reference Material (CRM) is supported by a Certified Weight Report. Assigned values for concentrations and associated uncertainties are based upon NIST traceable masses & volumes used in production.



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ISO 17034 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part Number: 10009R
Lot Number: 070716
Description: CLP Priority Pollutant Internal Standards GC/MS Calibration - 6 components

Solvent(s): Methylene chloride
Lot#: 78782

Expiration Date: 070721
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 4000
NIST Test ID#: 822-275872-11

5E-05 Balance Uncertainty
0.056 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 500.0

Formulated By: Paul Barron 070716 DATE
Reviewed By: Pedro L. Reinas 070716 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-18488/07267CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	or-rat 500mg/kg
2. Naphthalene-d8	223	PR-233230/31612NP1	4000	99	0.2	2.02032	2.02064	4001.0	16.2	1146-65-2	10 ppm (50mg/m3/8H)	or-rat 490mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	16.2	15067-26-2	N/A	ipr-rat 500mg/kg
4. Phenanthrene-d10	248	PR-23065/061711PN1	4000	98	0.2	2.04093	2.04136	4000.8	16.4	1517-22-2	N/A	N/A
5. Chrysene-d12	92	I-19250	4000	98	0.2	2.04093	2.04159	4001.3	16.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	96	0.2	2.04093	2.04156	4001.2	16.4	1520-96-3	N/A	N/A

Absolute Standards, Inc. and Supelco, Inc. have tested and reciprocally reviewed the analytical data for these products. They are approved for sale as third party reviewed standards. Absolute Standards, Inc. and Millipore-Sigma, Inc. have met established specifications under the terms of agreement for Reciprocal Data Review (RDaR™).

Run 35, "P10009R L070716 (4000µg/mL in MeC12)"

Run Length: 40.00 min, 23998 points at 10 points/second.
Created: Sat, Jul 9, 2016 at 1:54:53 PM.
Sampled: Sequence "070816-GC9M2", Method "GC9-M2".
Analyzed using Method "GC9-M2".

Comments
GC9-M2 Analysis by Melissa Sicnier
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates: Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) =300 mL.Oven Temp 1 = 50°C (1 min).
Rate = 10°C/min, Oven Temp 2 = 300°C (14 min). Total Run Time = 40 Minutes. Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = aDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 uL, Range = 4

Peak No.	Name	FID RT (min.)
1	1,4-Dichlorobenzene-d4	6.34
2	Naphthalene-d8	8.06
3	Acenaphthene-d10	12.97
4	Phenanthrene-d10	16.37
5	Chrysene-d12	22.62
6	Perylene-d12	25.75

Absolute Standards, Inc. P# 10009R L# 070716
Supelco, Inc. P# [illegible] L# [illegible]

Analyte	Sup/Abs Dev (%) (Sup/Abs) X 100-100
1,4-Dichlorobenzene-d4	2.55
Naphthalene-d8	2.43
Acenaphthene-d10	3.74
Phenanthrene-d10	0.05
Chrysene-d12	1.02
Perylene-d12	-1.73
Total	-0.56

counts
min

Part # 10009R Lot # 041219 1 of 2 Printed: 5/8/2019, 12:55:50 PM

Part #
Lot #
Shelf Life

Formulator
Reviewer

Actual Concentration

Target Compounds

Uncertainty Values

Health & Safety

Method of Analysis

3rd Party Comparison

Qualitative
Quantitative

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

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Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 72072
Lot Number: 101122
Description: n-Tetracosane-d50

Expiration Date: 101132
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

Solvent(s):	Lot#
Methylene chloride	105345

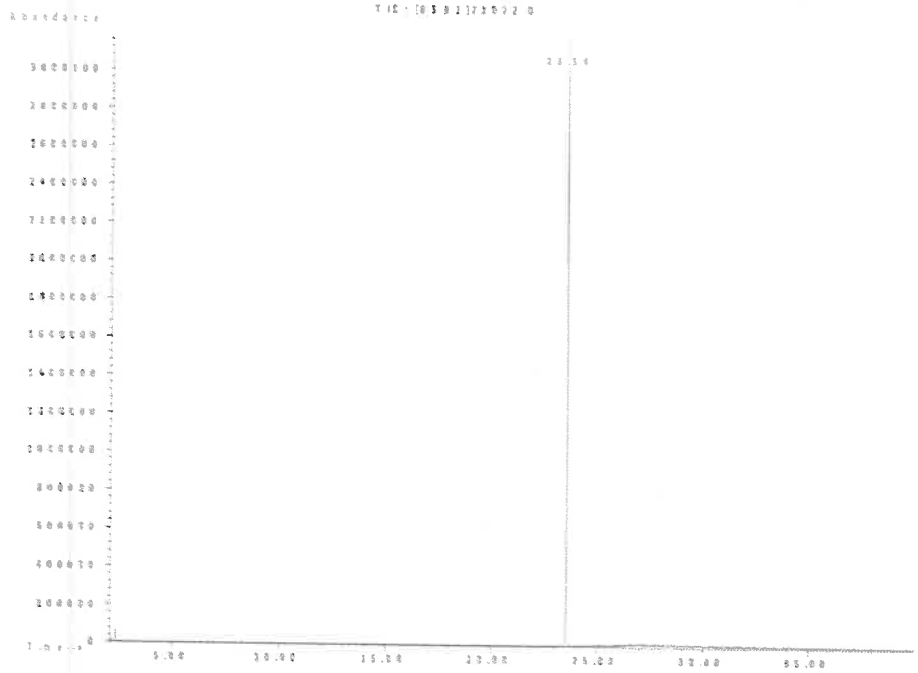
P13477 → P13496 } X.P. 07/24/24

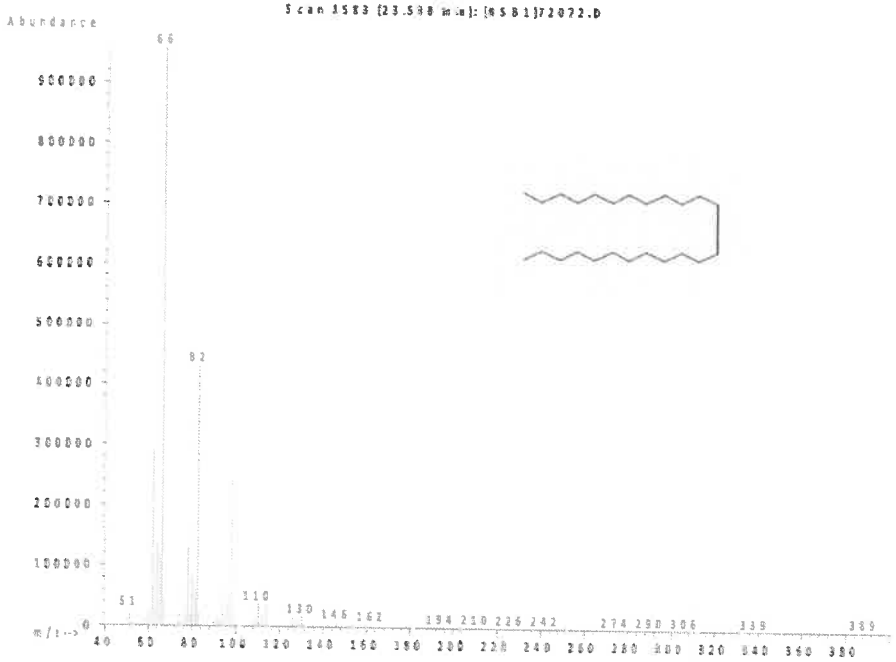
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 200.0 0.058 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Assay (%D)	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. n-Tetracosane-d50	2072	PR-26606	1000	98.7	0.2	99.0	0.20471	0.20482	1000.6	4.1	16416-32-3	N/A	N/A

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





- 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).

ABSOLUTE STANDARDS, INC.

ISO - 17034

Certificate of Analysis

Certified Reference Material (CRM)

Conformance: The "Certificate of Analysis" is applicable for CRM's, fulfilling the requirements in the current version of: ISO 17034.

Health & Safety: See the attached SDS & Certified Weight Report before use.

Intended Use: This Certified Reference Material (CRM) is intended primarily for use in the characterization of unknowns and the establishment of analyzer or instrument response factors by qualified personnel. Typical instrumental organic assays include: GC & LC, and inorganic assays include: ICP & AA. This product is for laboratory use only.

Characterization Values: In production, gravimetric/volumetric readings are certified to be within +/- 0.5% of the stated value & are valid between 18 °C & 30 °C. The measured characterization of uncertainty can be found on the Certified Weight Report. All product weighings are performed on an analytical balance that is calibrated to NIST Traceable standard weights & certified by the manufacturer. The volumetric glassware used is Class "A" type & conforms to ASTM E-288 unless otherwise stated. The solvents & compounds used are of the highest practical purity & typically meet or exceed ACS Reagent Grade & ACS Standards Grade specifications. The expanded uncertainty field on Certified Wt. Report represents CRM uncertainty as described in ISO 17034.

Homogeneity: Uncertainties that are due to the analytical procedure(s) are within +/-5% unless specifically stated on the Certified Wt. Report.

Verification: Uncertainties that are due to the analytical procedure(s) are within +/-5% unless specifically stated on the Certified Wt. Report.

Stability: Uncertainties for short-term stability are determined in accordance with ISO 17034. Long-term stability is determined in accordance with ISO 17034. The shelf life is limited by the stated expiration for each product. Expiration dates and additional technical information can be found on the Certified Weight Report and on the product label.

Uncertainty: U_{CRM} is the expanded uncertainty which utilizes a K = 2 (coverage factor of 2), in accordance with ISO 17034 as listed above (Characterization, Homogeneity, Verification, and Stability).

Purity & Identity: Organic solutions are typically formulated from neat materials whose purity & identity have been characterized by GC-MSD & LC-PDA techniques with comparison to a NIST Traceable library of mass spectra when available. Additional characterization techniques may include but are not limited to: refractive index measurements of liquids, melting point measurements of solids, & GC-FID, ECD, PID, ELCD, LC-PDA measurements for purity. Inorganic solutions & neats are typically formulated from materials whose purity & identity have been characterized by ICPMS with comparison to a NIST SRM® when available. Additional characterization techniques may include but are not limited to: titrimetry, and densitometry.

Storage: Sealed ampules and other containers should be stored in the dark and at temperatures indicated on the Certified Weight Report or product label. Certification by Absolute Standards, Inc. is typically valid for 3 years from the date of manufacture. Each product will show its own expiration date as the limit of certification. Certified values are not applicable to opened ampules or for any materials stored in re-sealable containers. Please see the "Certified Weight Report" for specific values and any exceptions.

Usage: Ampules & bottles should be brought to room temperature (18 to 30 °C) before opening. Sonication may be required for high concentration solutions or solutions that may precipitate during storage. After opening, care should be exercised to avoid concentration changes owing to evaporation of the solvent or essential components. We recommend that a suitable re-sealable container be available before opening an ampule to decant the standard for short-term storage and use.

Minimum Sample Size: 0.5 uL for analytical applications.

Legal Notice: Warranty of products are as described when shipped. No warranty as to fitness for any particular application is expressed or implied. Errant shipments and/or quality claims must be made within 10 days of receipt. Liability is limited solely to the replacement of the product or refund of purchase price.

Certifying Officer: Stephen J. Arpie, M.S., Director General

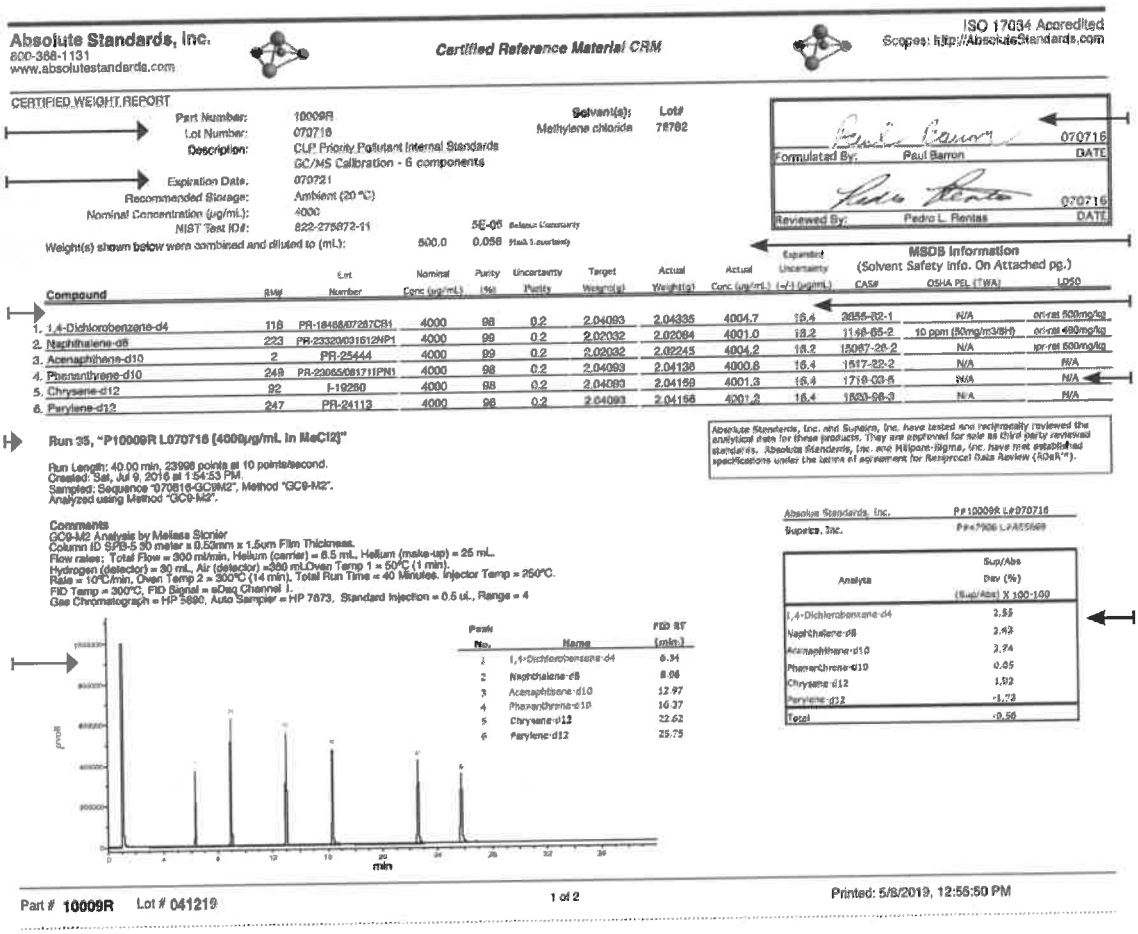
Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

Each Certified Reference Material (CRM) is supported by a Certified Weight Report. Assigned values for concentrations and associated uncertainties are based upon NIST traceable masses & volumes used in production.



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ISO 17034 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part Number: 10009R
Lot Number: 070716
Description: CLP Priority Pollutant Internal Standards GC/MS Calibration - 6 components

Solvent(s): Methylene chloride
Lot#: 78782

Expiration Date: 070721
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 4000
NIST Test ID#: 822-275872-11

5E-05 Balance Uncertainty
0.056 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 500.0

Formulated By: Paul Barron 070716 DATE
Reviewed By: Pedro L. Reinas 070716 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-18488/07267CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	or-rat 500mg/kg
2. Naphthalene-d8	223	PR-233230/31612NP1	4000	99	0.2	2.02032	2.02064	4001.0	16.2	1146-65-2	10 ppm (50mg/m3/8H)	or-rat 490mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	16.2	15067-26-2	N/A	ipr-rat 500mg/kg
4. Phenanthrene-d10	248	PR-23065/061711PN1	4000	98	0.2	2.04093	2.04136	4000.8	16.4	1517-22-2	N/A	N/A
5. Chrysene-d12	92	I-19250	4000	98	0.2	2.04093	2.04159	4001.3	16.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	96	0.2	2.04093	2.04156	4001.2	16.4	1520-96-3	N/A	N/A

Absolute Standards, Inc. and Supelco, Inc. have tested and reciprocally reviewed the analytical data for these products. They are approved for sale as third party reviewed standards. Absolute Standards, Inc. and Millipore-Sigma, Inc. have met established specifications under the terms of agreement for Reciprocal Data Review (RDaR™).

Run 35, "P10009R L070716 (4000µg/mL in MeC12)"

Run Length: 40.00 min, 23998 points at 10 points/second.
Created: Sat, Jul 9, 2016 at 1:54:53 PM.
Sampled: Sequence "070816-GC9M2", Method "GC9-M2".
Analyzed using Method "GC9-M2".

Comments
GC9-M2 Analysis by Melissa Sicnier
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates: Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) =300 mL.Oven Temp 1 = 50°C (1 min).
Rate = 10°C/min, Oven Temp 2 = 300°C (14 min). Total Run Time = 40 Minutes. Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = aDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 uL, Range = 4

Peak No.	Name	FID RT (min.)
1	1,4-Dichlorobenzene-d4	6.34
2	Naphthalene-d8	8.06
3	Acenaphthene-d10	12.97
4	Phenanthrene-d10	16.37
5	Chrysene-d12	22.62
6	Perylene-d12	25.75

Absolute Standards, Inc. P# 10009R L# 070716
Supelco, Inc. P# [illegible] L# [illegible]

Analyte	Sup/Abs Dev (%) (Sup/Abs) X 100-100
1,4-Dichlorobenzene-d4	2.55
Naphthalene-d8	2.43
Acenaphthene-d10	3.74
Phenanthrene-d10	0.05
Chrysene-d12	1.02
Perylene-d12	-1.73
Total	-0.56

counts
min

Part # 10009R Lot # 041219 1 of 2 Printed: 5/8/2019, 12:55:50 PM

Part #
Lot #
Shelf Life

Formulator
Reviewer

Actual Concentration

Target Compounds

Uncertainty Values

Health & Safety

Method of Analysis

3rd Party Comparison

Qualitative
Quantitative

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 72072
Lot Number: 101122
Description: n-Tetracosane-d50

Expiration Date: 101132
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

Solvent(s):	Lot#
Methylene chloride	105345

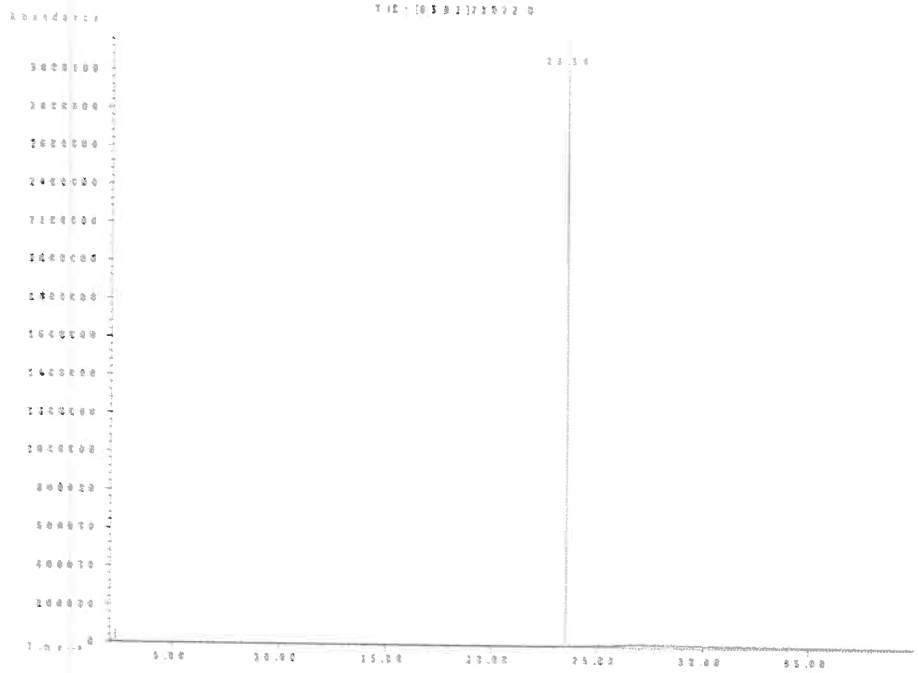
P13477 → P13496 } X.P. 07/24/24

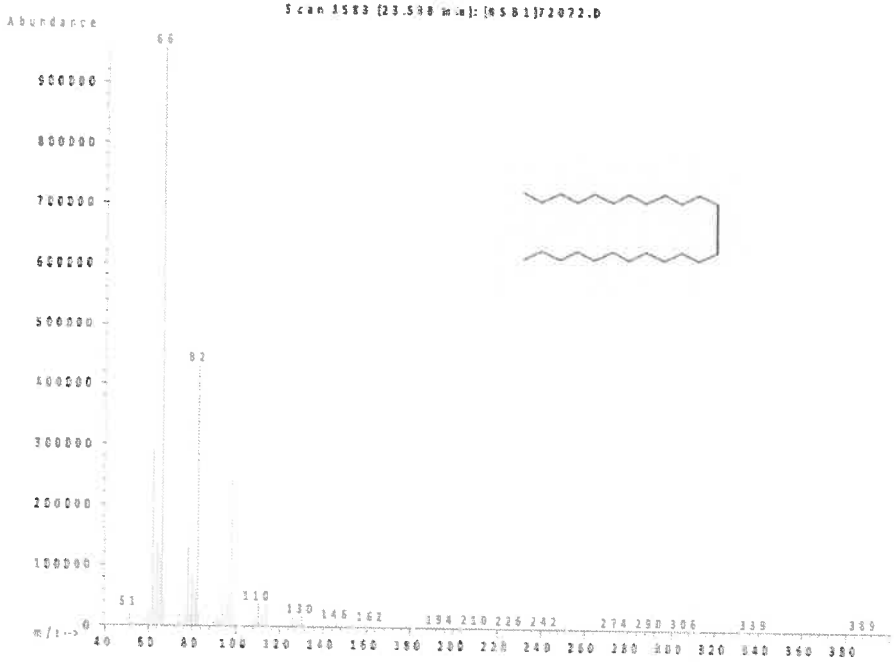
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 200.0 0.058 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Assay (%D)	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. n-Tetracosane-d50	2072	PR-26606	1000	98.7	0.2	99.0	0.20471	0.20482	1000.6	4.1	16416-32-3	N/A	N/A

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





- 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).

ABSOLUTE STANDARDS, INC.

ISO - 17034

Certificate of Analysis

Certified Reference Material (CRM)

Conformance: The "Certificate of Analysis" is applicable for CRM's, fulfilling the requirements in the current version of: ISO 17034.

Health & Safety: See the attached SDS & Certified Weight Report before use.

Intended Use: This Certified Reference Material (CRM) is intended primarily for use in the characterization of unknowns and the establishment of analyzer or instrument response factors by qualified personnel. Typical instrumental organic assays include: GC & LC, and inorganic assays include: ICP & AA. This product is for laboratory use only.

Characterization Values: In production, gravimetric/volumetric readings are certified to be within +/- 0.5% of the stated value & are valid between 18 °C & 30 °C. The measured characterization of uncertainty can be found on the Certified Weight Report. All product weighings are performed on an analytical balance that is calibrated to NIST Traceable standard weights & certified by the manufacturer. The volumetric glassware used is Class "A" type & conforms to ASTM E-288 unless otherwise stated. The solvents & compounds used are of the highest practical purity & typically meet or exceed ACS Reagent Grade & ACS Standards Grade specifications. The expanded uncertainty field on Certified Wt. Report represents CRM uncertainty as described in ISO 17034.

Homogeneity: Uncertainties that are due to the analytical procedure(s) are within +/-5% unless specifically stated on the Certified Wt. Report.

Verification: Uncertainties that are due to the analytical procedure(s) are within +/-5% unless specifically stated on the Certified Wt. Report.

Stability: Uncertainties for short-term stability are determined in accordance with ISO 17034. Long-term stability is determined in accordance with ISO 17034. The shelf life is limited by the stated expiration for each product. Expiration dates and additional technical information can be found on the Certified Weight Report and on the product label.

Uncertainty: U_{CRM} is the expanded uncertainty which utilizes a K = 2 (coverage factor of 2), in accordance with ISO 17034 as listed above (Characterization, Homogeneity, Verification, and Stability).

Purity & Identity: Organic solutions are typically formulated from neat materials whose purity & identity have been characterized by GC-MSD & LC-PDA techniques with comparison to a NIST Traceable library of mass spectra when available. Additional characterization techniques may include but are not limited to: refractive index measurements of liquids, melting point measurements of solids, & GC-FID, ECD, PID, ELCD, LC-PDA measurements for purity. Inorganic solutions & neats are typically formulated from materials whose purity & identity have been characterized by ICPMS with comparison to a NIST SRM® when available. Additional characterization techniques may include but are not limited to: titrimetry, and densitometry.

Storage: Sealed ampules and other containers should be stored in the dark and at temperatures indicated on the Certified Weight Report or product label. Certification by Absolute Standards, Inc. is typically valid for 3 years from the date of manufacture. Each product will show its own expiration date as the limit of certification. Certified values are not applicable to opened ampules or for any materials stored in re-sealable containers. Please see the "Certified Weight Report" for specific values and any exceptions.

Usage: Ampules & bottles should be brought to room temperature (18 to 30 °C) before opening. Sonication may be required for high concentration solutions or solutions that may precipitate during storage. After opening, care should be exercised to avoid concentration changes owing to evaporation of the solvent or essential components. We recommend that a suitable re-sealable container be available before opening an ampule to decant the standard for short-term storage and use.

Minimum Sample Size: 0.5 uL for analytical applications.

Legal Notice: Warranty of products are as described when shipped. No warranty as to fitness for any particular application is expressed or implied. Errant shipments and/or quality claims must be made within 10 days of receipt. Liability is limited solely to the replacement of the product or refund of purchase price.

Certifying Officer: Stephen J. Arpie, M.S., Director General

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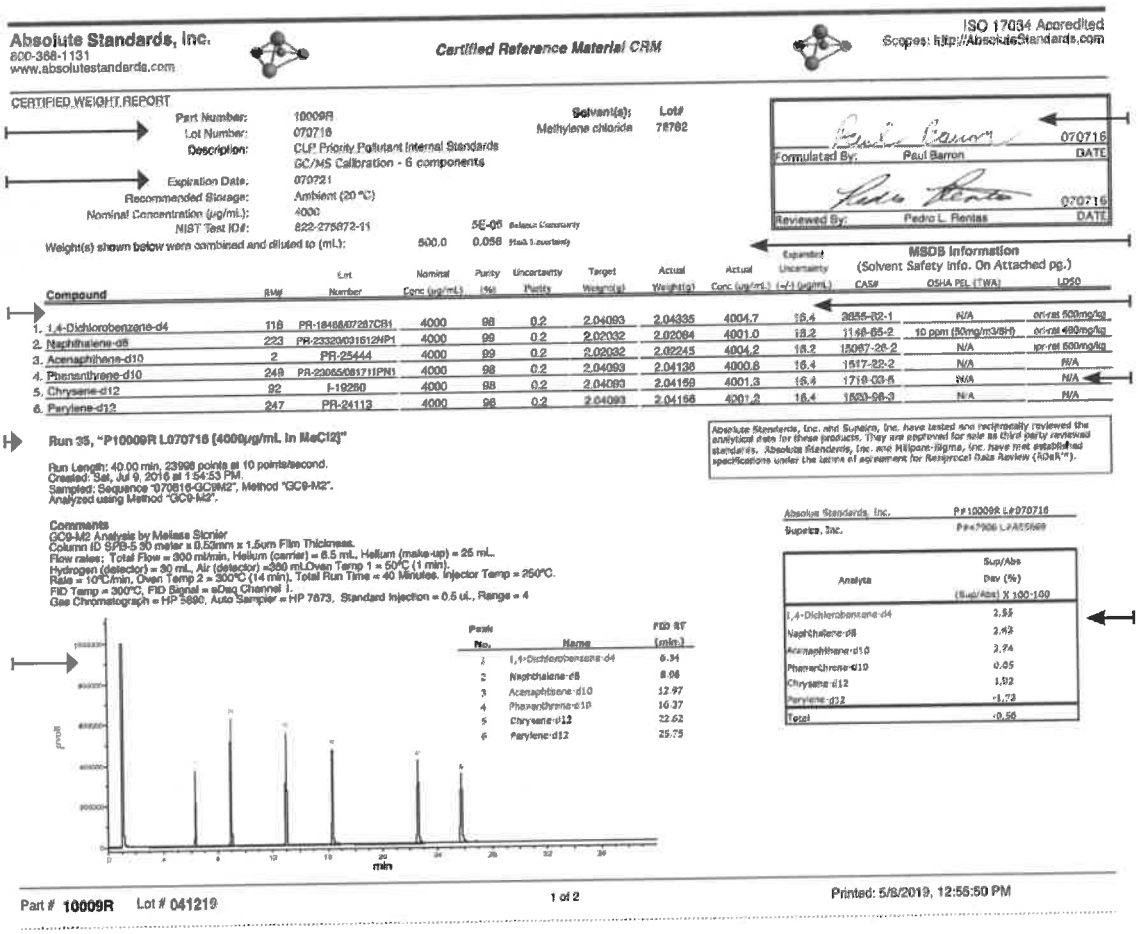
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

Each Certified Reference Material (CRM) is supported by a Certified Weight Report. Assigned values for concentrations and associated uncertainties are based upon NIST traceable masses & volumes used in production.



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Certified Reference Material CRM

ISO 17034 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part Number: 10009R
Lot Number: 070716
Description: CLP Priority Pollutant Internal Standards GC/MS Calibration - 6 components

Solvent(s): Methylene chloride
Lot#: 78782

Expiration Date: 070721
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 4000
NIST Test ID#: 822-275872-11

5E-05 Balance Uncertainty
0.056 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 500.0

Formulated By: Paul Barron 070716 DATE
Reviewed By: Pedro L. Reinas 070716 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-18488/07267CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	or-rat 500mg/kg
2. Naphthalene-d8	223	PR-233230/31612NP1	4000	99	0.2	2.02032	2.02064	4001.0	16.2	1146-65-2	10 ppm (50mg/m3/8H)	or-rat 490mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	16.2	15067-26-2	N/A	ipr-rat 500mg/kg
4. Phenanthrene-d10	248	PR-23065/061711PN1	4000	98	0.2	2.04093	2.04136	4000.8	16.4	1517-22-2	N/A	N/A
5. Chrysene-d12	92	I-19250	4000	98	0.2	2.04093	2.04159	4001.3	16.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	96	0.2	2.04093	2.04156	4001.2	16.4	1520-96-3	N/A	N/A

Absolute Standards, Inc. and Supelco, Inc. have tested and reciprocally reviewed the analytical data for these products. They are approved for sale as third party reviewed standards. Absolute Standards, Inc. and Millipore-Sigma, Inc. have met established specifications under the terms of agreement for Reciprocal Data Review (RDaR™).

Run 35, "P10009R L070716 (4000µg/mL in MeC12)"

Run Length: 40.00 min, 23998 points at 10 points/second.
Created: Sat, Jul 9, 2016 at 1:54:53 PM.
Sampled: Sequence "070816-GC9M2", Method "GC9-M2".
Analyzed using Method "GC9-M2".

Comments
GC9-M2 Analysis by Melissa Sicnier
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates: Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) =300 mL.Oven Temp 1 = 50°C (1 min).
Rate = 10°C/min, Oven Temp 2 = 300°C (14 min). Total Run Time = 40 Minutes. Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = aDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 uL, Range = 4

Peak No.	Name	FID RT (min.)
1	1,4-Dichlorobenzene-d4	6.34
2	Naphthalene-d8	8.06
3	Acenaphthene-d10	12.97
4	Phenanthrene-d10	16.37
5	Chrysene-d12	22.62
6	Perylene-d12	25.75

Absolute Standards, Inc. P# 10009R L# 070716
Supelco, Inc. P# [illegible] L# [illegible]

Analyte	Sup/Abs Dev (%) (Sup/Abs) X 100-100
1,4-Dichlorobenzene-d4	2.55
Naphthalene-d8	2.43
Acenaphthene-d10	3.74
Phenanthrene-d10	0.05
Chrysene-d12	1.02
Perylene-d12	-1.73
Total	-0.56

counts
min

Part # 10009R Lot # 041219 1 of 2 Printed: 5/8/2019, 12:55:50 PM

Part #
Lot #
Shelf Life

Formulator
Reviewer

Actual Concentration

Target Compounds

Uncertainty Values

Health & Safety

Method of Analysis

3rd Party Comparison

Qualitative
Quantitative

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

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Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 72072
Lot Number: 101122
Description: n-Tetracosane-d50

Expiration Date: 101132
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

Solvent(s):	Lot#
Methylene chloride	105345

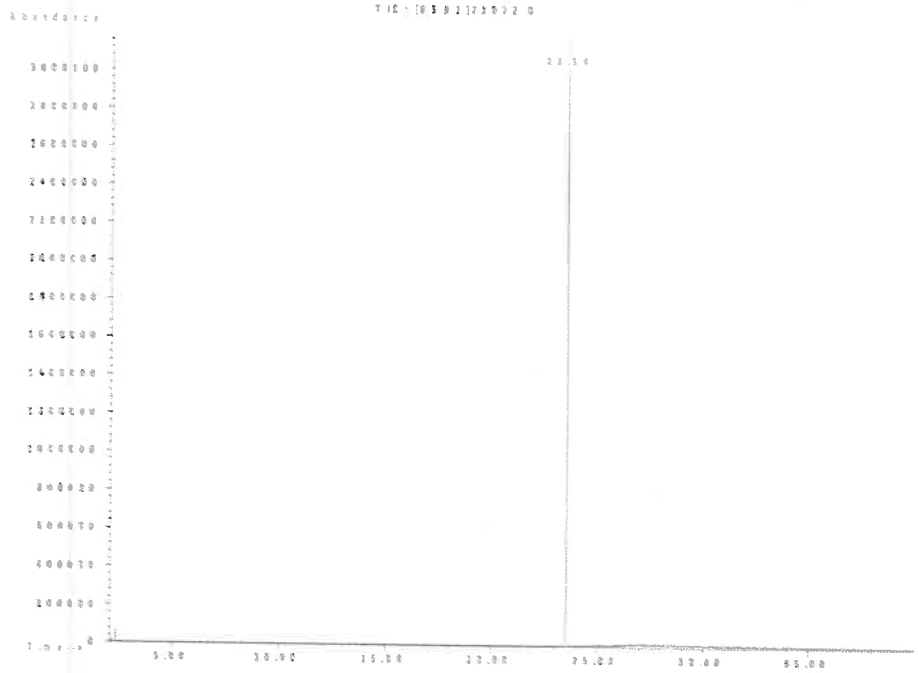
P13477 → P13496 } X.P. 07/24/24

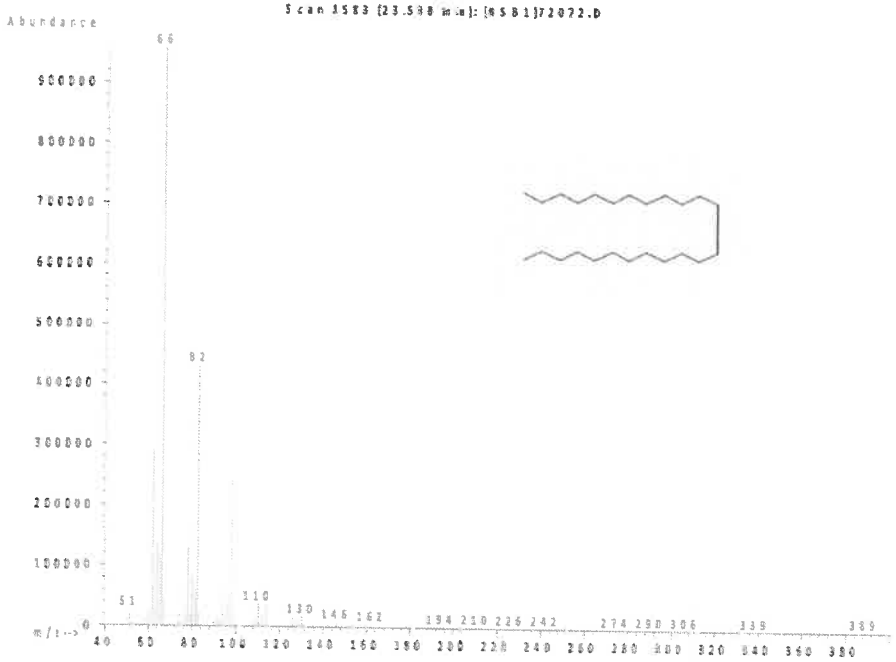
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 200.0 0.058 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Assay (%D)	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. n-Tetracosane-d50	2072	PR-26606	1000	98.7	0.2	99.0	0.20471	0.20482	1000.6	4.1	16416-32-3	N/A	N/A

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





- 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).

ABSOLUTE STANDARDS, INC.

ISO - 17034

Certificate of Analysis

Certified Reference Material (CRM)

Conformance: The "Certificate of Analysis" is applicable for CRM's, fulfilling the requirements in the current version of: ISO 17034.

Health & Safety: See the attached SDS & Certified Weight Report before use.

Intended Use: This Certified Reference Material (CRM) is intended primarily for use in the characterization of unknowns and the establishment of analyzer or instrument response factors by qualified personnel. Typical instrumental organic assays include: GC & LC, and inorganic assays include: ICP & AA. This product is for laboratory use only.

Characterization Values: In production, gravimetric/volumetric readings are certified to be within +/- 0.5% of the stated value & are valid between 18 °C & 30 °C. The measured characterization of uncertainty can be found on the Certified Weight Report. All product weighings are performed on an analytical balance that is calibrated to NIST Traceable standard weights & certified by the manufacturer. The volumetric glassware used is Class "A" type & conforms to ASTM E-288 unless otherwise stated. The solvents & compounds used are of the highest practical purity & typically meet or exceed ACS Reagent Grade & ACS Standards Grade specifications. The expanded uncertainty field on Certified Wt. Report represents CRM uncertainty as described in ISO 17034.

Homogeneity: Uncertainties that are due to the analytical procedure(s) are within +/-5% unless specifically stated on the Certified Wt. Report.

Verification: Uncertainties that are due to the analytical procedure(s) are within +/-5% unless specifically stated on the Certified Wt. Report.

Stability: Uncertainties for short-term stability are determined in accordance with ISO 17034. Long-term stability is determined in accordance with ISO 17034. The shelf life is limited by the stated expiration for each product. Expiration dates and additional technical information can be found on the Certified Weight Report and on the product label.

Uncertainty: U_{CRM} is the expanded uncertainty which utilizes a K = 2 (coverage factor of 2), in accordance with ISO 17034 as listed above (Characterization, Homogeneity, Verification, and Stability).

Purity & Identity: Organic solutions are typically formulated from neat materials whose purity & identity have been characterized by GC-MSD & LC-PDA techniques with comparison to a NIST Traceable library of mass spectra when available. Additional characterization techniques may include but are not limited to: refractive index measurements of liquids, melting point measurements of solids, & GC-FID, ECD, PID, ELCD, LC-PDA measurements for purity. Inorganic solutions & neats are typically formulated from materials whose purity & identity have been characterized by ICPMS with comparison to a NIST SRM® when available. Additional characterization techniques may include but are not limited to: titrimetry, and densitometry.

Storage: Sealed ampules and other containers should be stored in the dark and at temperatures indicated on the Certified Weight Report or product label. Certification by Absolute Standards, Inc. is typically valid for 3 years from the date of manufacture. Each product will show its own expiration date as the limit of certification. Certified values are not applicable to opened ampules or for any materials stored in re-sealable containers. Please see the "Certified Weight Report" for specific values and any exceptions.

Usage: Ampules & bottles should be brought to room temperature (18 to 30 °C) before opening. Sonication may be required for high concentration solutions or solutions that may precipitate during storage. After opening, care should be exercised to avoid concentration changes owing to evaporation of the solvent or essential components. We recommend that a suitable re-sealable container be available before opening an ampule to decant the standard for short-term storage and use.

Minimum Sample Size: 0.5 uL for analytical applications.

Legal Notice: Warranty of products are as described when shipped. No warranty as to fitness for any particular application is expressed or implied. Errant shipments and/or quality claims must be made within 10 days of receipt. Liability is limited solely to the replacement of the product or refund of purchase price.

Certifying Officer: Stephen J. Arpie, M.S., Director General

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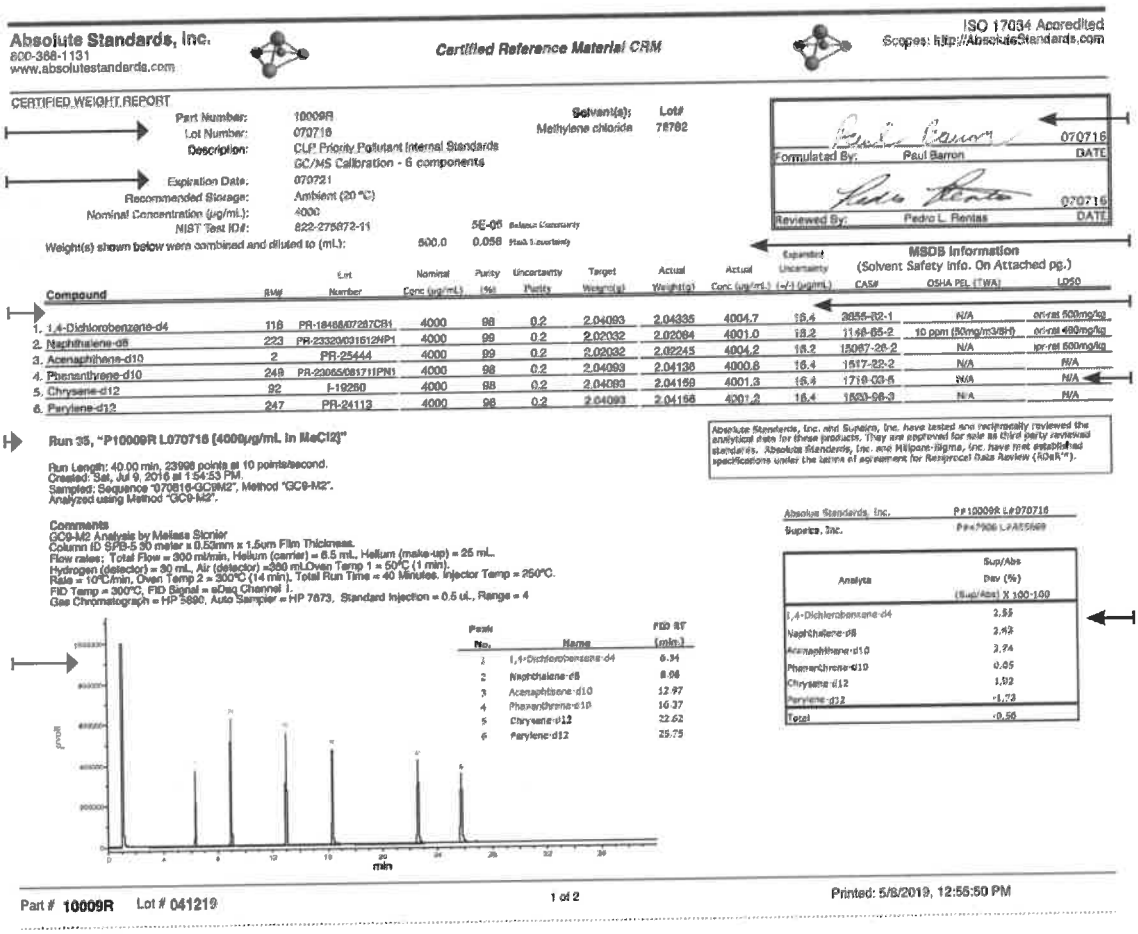
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

Each Certified Reference Material (CRM) is supported by a Certified Weight Report. Assigned values for concentrations and associated uncertainties are based upon NIST traceable masses & volumes used in production.



Absolute Standards, Inc.
800-368-1131
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Certified Reference Material CRM

ISO 17034 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part Number: 10009R
Lot Number: 070716
Description: CLP Priority Pollutant Internal Standards GC/MS Calibration - 6 components

Solvent(s): Methylene chloride
Lot#: 78782

Expiration Date: 070721
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 4000
NIST Test ID#: 822-275872-11

5E-05 Balance Uncertainty
0.056 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 500.0

Formulated By: Paul Barron 070716 DATE
Reviewed By: Pedro L. Reinas 070716 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-18488/07267CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	or-rat 500mg/kg
2. Naphthalene-d8	223	PR-233230/31612NP1	4000	99	0.2	2.02032	2.02064	4001.0	16.2	1146-65-2	10 ppm (50mg/m3/8H)	or-rat 490mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	16.2	15067-26-2	N/A	ipr-rat 500mg/kg
4. Phenanthrene-d10	248	PR-23065/061711PN1	4000	98	0.2	2.04093	2.04136	4000.8	16.4	1517-22-2	N/A	N/A
5. Chrysene-d12	92	I-19250	4000	98	0.2	2.04093	2.04159	4001.3	16.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	96	0.2	2.04093	2.04156	4001.2	16.4	1520-96-3	N/A	N/A

Absolute Standards, Inc. and Supelco, Inc. have tested and reciprocally reviewed the analytical data for these products. They are approved for sale as third party reviewed standards. Absolute Standards, Inc. and Millipore-Sigma, Inc. have met established specifications under the terms of agreement for Reciprocal Data Review (RDaR™).

Run 35, "P10009R L070716 (4000µg/mL in MeC12)"

Run Length: 40.00 min, 23998 points at 10 points/second.
Created: Sat, Jul 9, 2016 at 1:54:53 PM.
Sampled: Sequence "070816-GC9M2", Method "GC9-M2".
Analyzed using Method "GC9-M2".

Comments
GC9-M2 Analysis by Melissa Sicnier
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates: Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) =300 mL.Oven Temp 1 = 50°C (1 min).
Rate = 10°C/min, Oven Temp 2 = 300°C (14 min). Total Run Time = 40 Minutes. Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = aDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 uL, Range = 4

Peak No.	Name	FID RT (min.)
1	1,4-Dichlorobenzene-d4	6.34
2	Naphthalene-d8	8.06
3	Acenaphthene-d10	12.97
4	Phenanthrene-d10	16.37
5	Chrysene-d12	22.62
6	Perylene-d12	25.75

Absolute Standards, Inc. P# 10009R L# 070716
Supelco, Inc. P# [illegible] L# [illegible]

Analyte	Sup/Abs Dev (%) (Sup/Abs) X 100-100
1,4-Dichlorobenzene-d4	2.55
Naphthalene-d8	2.43
Acenaphthene-d10	3.74
Phenanthrene-d10	0.05
Chrysene-d12	1.02
Perylene-d12	-1.73
Total	-0.56

counts
min

Part # 10009R Lot # 041219 1 of 2 Printed: 5/8/2019, 12:55:50 PM

Part #
Lot #
Shelf Life

Formulator
Reviewer

Actual Concentration

Target Compounds

Uncertainty Values

Health & Safety

Method of Analysis

3rd Party Comparison

Qualitative
Quantitative

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

Absolute Standards, Inc.
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www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 72072
Lot Number: 101122
Description: n-Tetracosane-d50

Expiration Date: 101132
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

Solvent(s):	Lot#
Methylene chloride	105345

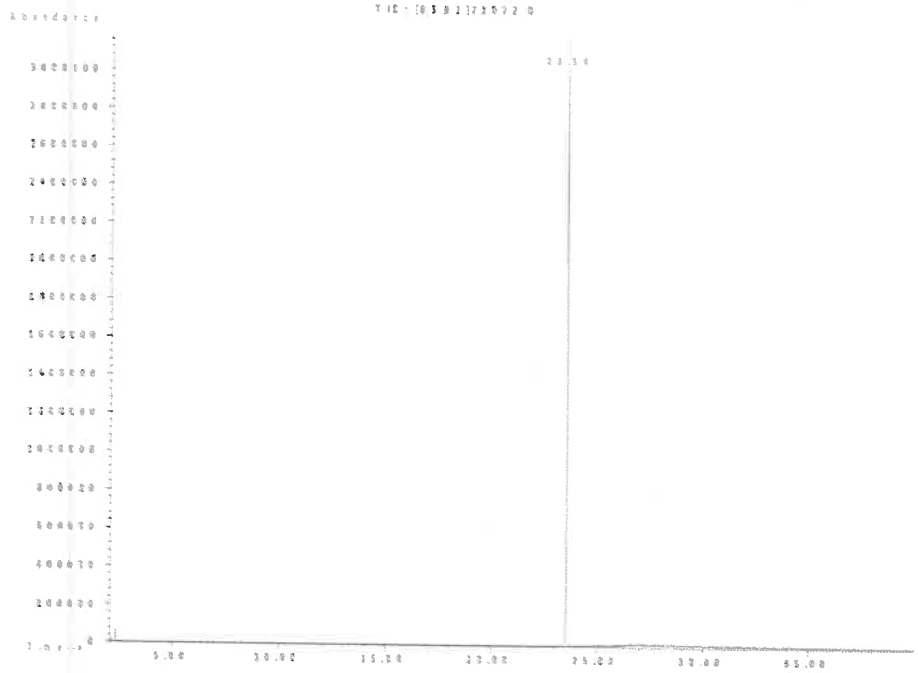
P13477 → P13496 } X.P. 07/24/24

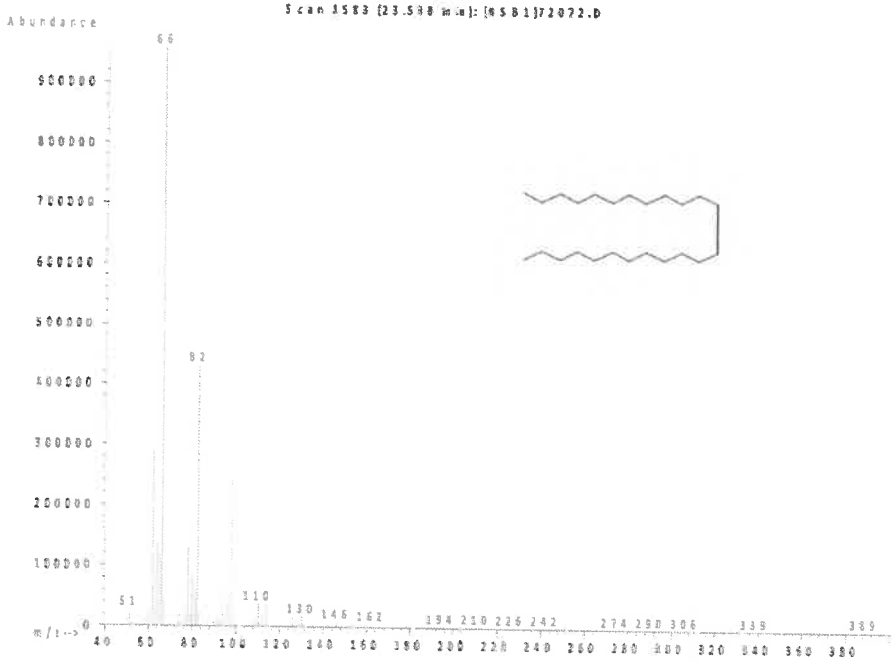
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 200.0 0.058 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Assay (%D)	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. n-Tetracosane-d50	2072	PR-26606	1000	98.7	0.2	99.0	0.20471	0.20482	1000.6	4.1	16416-32-3	N/A	N/A

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





- 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).

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015822.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 14:38
Operator : YP\AJ
Sample : Q1872-14
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
HW0425-PT-DIES-SOIL

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 05/14/2025
Supervised By :mohammad ahmed 05/15/2025

Integration File: autoint1.e
Quant Time: May 14 03:55:05 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	14.997	1134285	9.634 ug/mlm
	Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG051325\
Data File : FG015822.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 14:38
Operator : YP\AJ
Sample : Q1872-14
Misc :
ALS Vial : 23 Sample Multiplier: 1

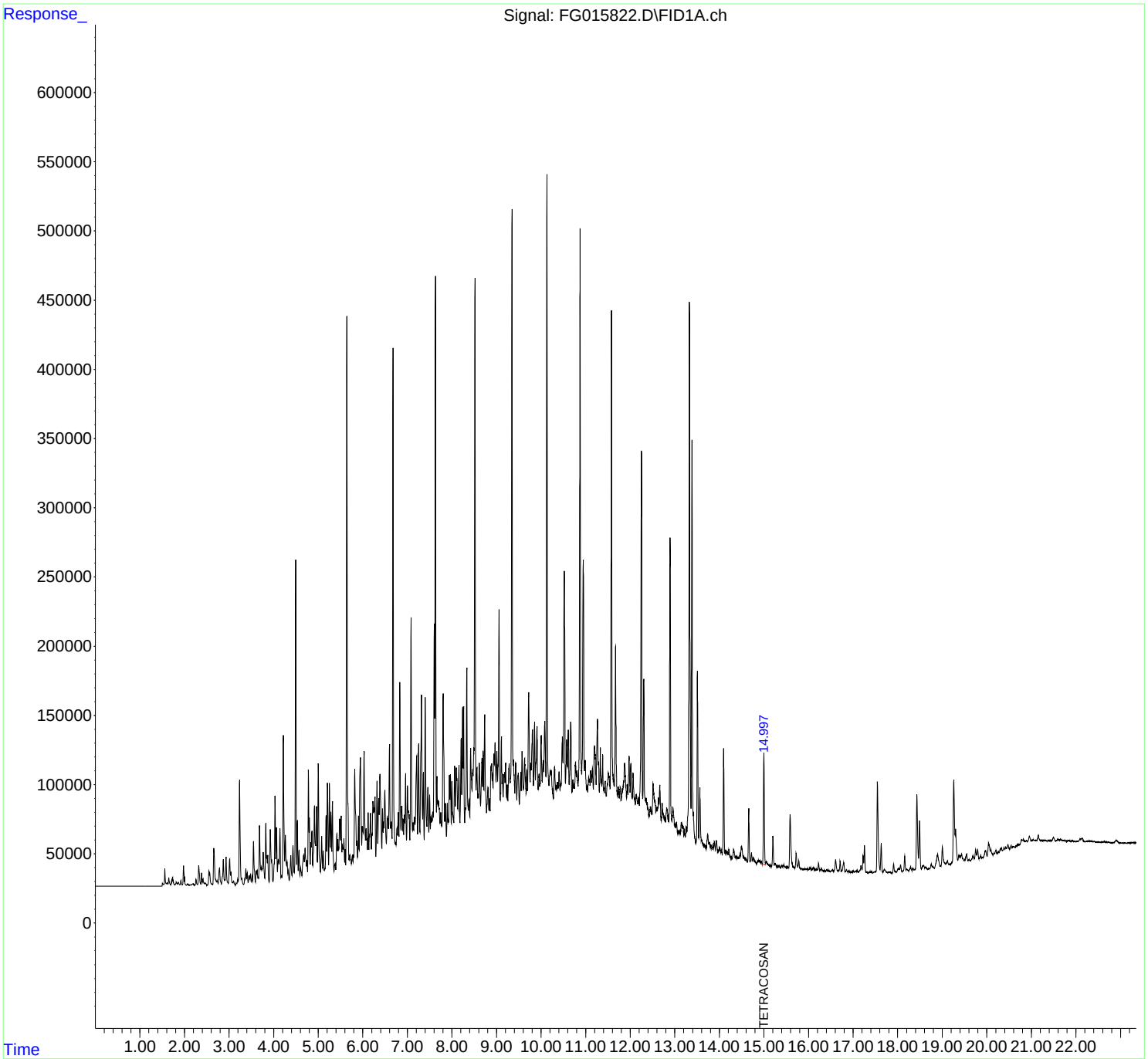
Integration File: autoint1.e
Quant Time: May 14 03:55:05 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

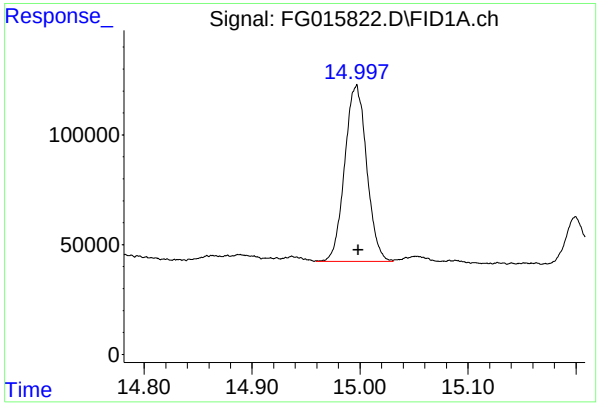
Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_G
ClientSampleId :
HW0425-PT-DIES-SOIL

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 05/14/2025
Supervised By :mohammad ahmed 05/15/2025





#9 TETRACOSANE-d50 (SURROGATE)

R.T.:	14.997 min
Delta R.T.:	-0.002 mi
Response:	1134285
Conc:	9.63 ug/m

Instrument :
FID_G
ClientSampleId :
HW0425-PT-DIES-SOIL

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 05/14/2025
Supervised By :mohammad ahmed 05/15/2025

Instrument :
FID_G
ClientSampleId :
HW0425-PT-DIES-SOIL

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 05/14/2025
Supervised By :mohammad ahmed 05/15/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG05132
Data File : FG015822.D
Signal(s) : FID1A.ch
Acq On : 13 May 2025 14:38
Sample : Q1872-14
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.217	4.200	4.248	BV	93713	1184692	14.79%	0.310%
2	4.264	4.248	4.292	VV	25669	346257	4.32%	0.091%
3	4.303	4.292	4.321	VV	9485	113061	1.41%	0.030%
4	4.330	4.321	4.352	VV	5429	46534	0.58%	0.012%
5	4.386	4.352	4.414	PV	18037	293773	3.67%	0.077%
6	4.434	4.414	4.461	VV	25271	387833	4.84%	0.101%
7	4.496	4.461	4.518	VV	231805	2659217	33.19%	0.695%
8	4.533	4.518	4.552	VV	43490	489875	6.11%	0.128%
9	4.570	4.552	4.590	VV	21703	291995	3.64%	0.076%
10	4.606	4.590	4.635	VV	9166	169199	2.11%	0.044%
11	4.671	4.635	4.690	VV	18198	429031	5.36%	0.112%
12	4.705	4.690	4.736	VV	23342	458276	5.72%	0.120%
13	4.748	4.736	4.762	VV	14582	173083	2.16%	0.045%
14	4.781	4.762	4.794	VV	79634	866328	10.81%	0.226%
15	4.803	4.794	4.821	VV	44824	488364	6.10%	0.128%
16	4.838	4.821	4.847	VV	27314	340474	4.25%	0.089%
17	4.859	4.847	4.876	VV	35737	440526	5.50%	0.115%
18	4.915	4.876	4.943	VV	53891	1131876	14.13%	0.296%
19	4.961	4.943	4.982	VV	53284	777919	9.71%	0.203%
20	5.003	4.982	5.048	VV	84120	1341612	16.75%	0.351%
21	5.079	5.048	5.097	VV	31509	496937	6.20%	0.130%
22	5.112	5.097	5.140	VV	21280	340327	4.25%	0.089%
23	5.176	5.140	5.190	VV	46580	625713	7.81%	0.164%
24	5.208	5.190	5.234	VV	70143	1122944	14.02%	0.294%
25	5.253	5.234	5.269	VV	69781	847193	10.57%	0.221%
26	5.285	5.269	5.304	VV	49210	735337	9.18%	0.192%
27	5.319	5.304	5.356	VV	56687	835436	10.43%	0.218%
28	5.370	5.356	5.378	VV	11107	125272	1.56%	0.033%
29	5.382	5.378	5.396	VV	11250	105026	1.31%	0.027%
30	5.418	5.396	5.431	VV	33352	468471	5.85%	0.122%
31	5.441	5.431	5.455	VV	29212	352285	4.40%	0.092%
32	5.483	5.455	5.502	VV	44020	939337	11.72%	0.246%
33	5.515	5.502	5.531	VV	46085	587568	7.33%	0.154%
34	5.542	5.531	5.559	VV	25587	400092	4.99%	0.105%
35	5.578	5.559	5.593	VV	29845	457369	5.71%	0.120%
36	5.605	5.593	5.618	VV	21977	248739	3.10%	0.065%

Instrument :
FID_G
ClientSampleId :
HW0425-PT-DIES-SOIL

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 05/14/2025
Supervised By :mohammad ahmed 05/15/2025

rteres

37	5.643	5.618	5.690	VV	406940	5504863	68.71%	1.439%
38	5.711	5.690	5.745	VV	17863	502798	6	
39	5.769	5.745	5.781	VV	18076	327020	4	
40	5.792	5.781	5.800	VV	18077	185276	2	
41	5.820	5.800	5.859	VV	79645	1661596	20	
42	5.867	5.859	5.885	VV	28099	353584	4	
43	5.905	5.885	5.918	VV	45984	601370	7.51%	0.157%
44	5.947	5.918	5.977	VV	87206	2085707	26.03%	0.545%
45	5.989	5.977	5.997	VV	38468	395284	4.93%	0.103%
46	6.005	5.997	6.012	VV	37718	334323	4.17%	0.087%
47	6.029	6.012	6.061	VV	92466	1569878	19.60%	0.410%
48	6.074	6.061	6.089	VV	36728	526927	6.58%	0.138%
49	6.093	6.089	6.106	VV	29164	274290	3.42%	0.072%
50	6.121	6.106	6.137	VV	47941	641203	8.00%	0.168%
51	6.149	6.137	6.154	VV	31317	294829	3.68%	0.077%
52	6.174	6.154	6.193	VV	47897	845127	10.55%	0.221%
53	6.207	6.193	6.212	VV	32606	327989	4.09%	0.086%
54	6.229	6.212	6.245	VV	56066	973321	12.15%	0.254%
55	6.253	6.245	6.260	VV	51995	456685	5.70%	0.119%
56	6.273	6.260	6.293	VV	59663	839092	10.47%	0.219%
57	6.320	6.293	6.338	VV	70980	1126426	14.06%	0.295%
58	6.358	6.338	6.371	VV	57967	923267	11.52%	0.241%
59	6.384	6.371	6.428	VV	75532	1787153	22.31%	0.467%
60	6.444	6.428	6.457	VV	50924	670781	8.37%	0.175%
61	6.468	6.457	6.476	VV	41352	445482	5.56%	0.116%
62	6.495	6.476	6.530	VV	64255	1415580	17.67%	0.370%
63	6.549	6.530	6.575	VV	45199	1053428	13.15%	0.275%
64	6.600	6.575	6.625	VV	97509	1761651	21.99%	0.461%
65	6.642	6.625	6.656	VV	41414	686601	8.57%	0.180%
66	6.679	6.656	6.724	VV	383104	4933068	61.57%	1.290%
67	6.733	6.724	6.749	VV	26319	374057	4.67%	0.098%
68	6.768	6.749	6.780	VV	36387	614418	7.67%	0.161%
69	6.797	6.780	6.812	VV	48125	745338	9.30%	0.195%
70	6.832	6.812	6.855	VV	142141	2099259	26.20%	0.549%
71	6.872	6.855	6.894	VV	52040	1041100	12.99%	0.272%
72	6.904	6.894	6.917	VV	43006	535667	6.69%	0.140%
73	6.936	6.917	6.946	VV	46021	721637	9.01%	0.189%
74	6.961	6.946	6.982	VV	75670	1096078	13.68%	0.287%
75	7.004	6.982	7.033	VV	66828	1483554	18.52%	0.388%
76	7.041	7.033	7.055	VV	46393	530366	6.62%	0.139%
77	7.083	7.055	7.116	VV	188206	2905123	36.26%	0.760%
78	7.129	7.116	7.142	VV	40602	584383	7.29%	0.153%
79	7.158	7.142	7.173	VV	44659	749963	9.36%	0.196%
80	7.209	7.173	7.231	VV	88854	2112014	26.36%	0.552%
81	7.254	7.231	7.282	VV	97561	1798189	22.44%	0.470%
82	7.318	7.282	7.345	VV	132872	2946230	36.77%	0.770%
83	7.360	7.345	7.378	VV	76386	1073920	13.40%	0.281%
84	7.402	7.378	7.438	VV	130800	2458839	30.69%	0.643%
85	7.462	7.438	7.483	VV	65918	1358017	16.95%	0.355%
86	7.501	7.483	7.518	VV	60381	964483	12.04%	0.252%
87	7.531	7.518	7.544	VV	44824	646081	8.06%	0.169%
88	7.570	7.544	7.582	VV	47894	1014242	12.66%	0.265%
89	7.604	7.582	7.614	VV	184433	2252280	28.11%	0.589%

Instrument :
FID_G
ClientSampleId :
HW0425-PT-DIES-SOIL

rteres

90	7.631	7.614	7.652	VV	434648	5035198	62.85%	1.316%
91	7.664	7.652	7.689	VV	73634	1325144	16	
92	7.699	7.689	7.713	VV	55594	768238	9	
93	7.717	7.713	7.733	VV	51022	564186	7	
94	7.752	7.733	7.769	VV	47667	929097	11	
95	7.772	7.769	7.777	VV	38574	168053	2	
96	7.803	7.777	7.839	VV	133170	2971475	37.09%	0.777%
97	7.855	7.839	7.878	VV	54048	1050682	13.11%	0.275%
98	7.897	7.878	7.912	VV	54130	871416	10.88%	0.228%
99	7.920	7.912	7.927	VV	42090	370102	4.62%	0.097%
100	7.945	7.927	7.956	VV	74505	1044054	13.03%	0.273%
101	7.969	7.956	7.986	VV	74883	1094248	13.66%	0.286%
102	8.001	7.986	8.042	VV	69459	1696917	21.18%	0.444%
103	8.062	8.042	8.078	VV	81199	1351395	16.87%	0.353%
104	8.098	8.078	8.130	VV	79626	2075165	25.90%	0.543%
105	8.159	8.130	8.179	VV	81486	1781788	22.24%	0.466%
106	8.207	8.179	8.223	VV	101000	1824658	22.78%	0.477%
107	8.240	8.223	8.252	VV	123595	1598193	19.95%	0.418%
108	8.264	8.252	8.288	VV	123757	1739471	21.71%	0.455%
109	8.334	8.288	8.368	VV	151816	3470653	43.32%	0.907%
110	8.384	8.368	8.401	VV	56733	1037422	12.95%	0.271%
111	8.422	8.401	8.452	VV	93422	2164535	27.02%	0.566%
112	8.467	8.452	8.475	VV	77653	1029950	12.86%	0.269%
113	8.518	8.475	8.541	VV	432430	6763204	84.42%	1.768%
114	8.562	8.541	8.580	VV	79574	1637359	20.44%	0.428%
115	8.588	8.580	8.598	VV	60403	624909	7.80%	0.163%
116	8.616	8.598	8.644	VV	82501	1895102	23.65%	0.495%
117	8.675	8.644	8.689	VV	85674	1904025	23.77%	0.498%
118	8.701	8.689	8.718	VV	90547	1309168	16.34%	0.342%
119	8.736	8.718	8.777	VV	117417	2744700	34.26%	0.718%
120	8.809	8.777	8.832	VV	64920	1843471	23.01%	0.482%
121	8.845	8.832	8.856	VV	57127	764580	9.54%	0.200%
122	8.876	8.856	8.884	VV	79899	1121943	14.00%	0.293%
123	8.891	8.884	8.902	VV	82193	850657	10.62%	0.222%
124	8.909	8.902	8.922	VV	73917	847374	10.58%	0.222%
125	8.941	8.922	8.955	VV	88706	1622773	20.26%	0.424%
126	8.970	8.955	8.990	VV	97205	1799057	22.46%	0.470%
127	9.010	8.990	9.026	VV	91294	1703768	21.27%	0.445%
128	9.058	9.026	9.085	VV	193681	3772875	47.09%	0.986%
129	9.111	9.085	9.127	VV	101589	1895110	23.65%	0.495%
130	9.135	9.127	9.149	VV	74787	917100	11.45%	0.240%
131	9.170	9.149	9.176	VV	74166	1103058	13.77%	0.288%
132	9.181	9.176	9.192	VV	75037	705483	8.81%	0.184%
133	9.206	9.192	9.227	VV	82534	1468215	18.33%	0.384%
134	9.240	9.227	9.256	VV	66386	1082046	13.51%	0.283%
135	9.286	9.256	9.308	VV	81729	2227561	27.80%	0.582%
136	9.348	9.308	9.371	VV	481461	7037198	87.84%	1.840%
137	9.380	9.371	9.411	VV	84963	1805862	22.54%	0.472%
138	9.434	9.411	9.456	VV	82102	1923268	24.01%	0.503%
139	9.490	9.456	9.512	VV	73979	2227846	27.81%	0.582%
140	9.546	9.512	9.559	VV	76104	1816650	22.68%	0.475%
141	9.575	9.559	9.603	VV	90845	1984225	24.77%	0.519%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 05/14/2025
Supervised By :mohammad ahmed 05/15/2025

Instrument :
FID_G
ClientSampleId :
HW0425-PT-DIES-SOIL

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 05/14/2025
Supervised By :mohammad ahmed 05/15/2025

142	9.632	9.603	9.663	VV	85348	2602158	32.48%	0.680%
143	9.679	9.663	9.694	VV	77195	1307798	16	
144	9.724	9.694	9.755	VV	133336	3434241	42	
145	9.767	9.755	9.779	VV	81772	1095297	13	
146	9.808	9.779	9.830	VV	106057	2762356	34	
147	9.855	9.830	9.874	VV	112027	2271670	28	
148	9.908	9.874	9.932	VV	108817	2912265	36.35%	0.761%
149	9.956	9.932	9.975	VV	74217	1769245	22.08%	0.463%
150	10.001	9.975	10.028	VV	101213	2577302	32.17%	0.674%
151	10.048	10.028	10.063	VV	83316	1621453	20.24%	0.424%
152	10.082	10.063	10.108	VV	112026	2545015	31.77%	0.665%
153	10.133	10.108	10.179	VV	506035	7816918	97.57%	2.044%
154	10.211	10.179	10.224	VV	76730	1979564	24.71%	0.518%
155	10.231	10.224	10.277	VV	76240	2101069	26.23%	0.549%
156	10.302	10.277	10.333	VV	79192	2288945	28.57%	0.598%
157	10.347	10.333	10.354	VV	65889	805278	10.05%	0.211%
158	10.373	10.354	10.388	VV	67626	1366545	17.06%	0.357%
159	10.405	10.388	10.425	VV	76076	1541005	19.23%	0.403%
160	10.442	10.425	10.450	VV	67492	980430	12.24%	0.256%
161	10.476	10.450	10.493	VV	99787	2178499	27.19%	0.570%
162	10.521	10.493	10.548	VV	220305	4520778	56.43%	1.182%
163	10.572	10.548	10.592	VV	98650	2243124	28.00%	0.586%
164	10.609	10.592	10.632	VV	105512	2045515	25.53%	0.535%
165	10.664	10.632	10.692	VV	111688	3026489	37.78%	0.791%
166	10.712	10.692	10.729	VV	70022	1409544	17.59%	0.369%
167	10.735	10.729	10.750	VV	65577	833457	10.40%	0.218%
168	10.771	10.750	10.795	VV	81721	2030882	25.35%	0.531%
169	10.803	10.795	10.832	VV	75652	1581049	19.73%	0.413%
170	10.876	10.832	10.912	VV	467409	8011607	100.00%	2.095%
171	10.947	10.912	10.977	VV	227696	5009872	62.53%	1.310%
172	10.992	10.977	11.024	VV	83815	2077485	25.93%	0.543%
173	11.034	11.024	11.045	VV	65161	796936	9.95%	0.208%
174	11.067	11.045	11.076	VV	71583	1228002	15.33%	0.321%
175	11.084	11.076	11.098	VV	69314	933561	11.65%	0.244%
176	11.114	11.098	11.133	VV	75623	1464813	18.28%	0.383%
177	11.153	11.133	11.173	VV	78152	1717093	21.43%	0.449%
178	11.197	11.173	11.234	VV	92506	2986701	37.28%	0.781%
179	11.265	11.234	11.311	VV	112810	3903421	48.72%	1.021%
180	11.329	11.311	11.363	VV	93150	2338745	29.19%	0.611%
181	11.381	11.363	11.421	VV	87319	2444463	30.51%	0.639%
182	11.439	11.421	11.462	VV	68709	1583673	19.77%	0.414%
183	11.509	11.462	11.549	VV	74581	3495183	43.63%	0.914%
184	11.581	11.549	11.642	VV	406317	7597150	94.83%	1.986%
185	11.671	11.642	11.714	VV	165828	4123764	51.47%	1.078%
186	11.734	11.714	11.754	VV	64109	1434305	17.90%	0.375%
187	11.775	11.754	11.796	VV	63695	1503448	18.77%	0.393%
188	11.873	11.796	11.919	VV	80985	4899795	61.16%	1.281%
189	11.939	11.919	11.952	VV	65472	1216270	15.18%	0.318%
190	11.974	11.952	11.996	VV	86498	1907995	23.82%	0.499%
191	12.015	11.996	12.044	VV	81225	1928590	24.07%	0.504%
192	12.064	12.044	12.113	VV	73302	2522272	31.48%	0.659%
193	12.133	12.113	12.167	VV	58587	1808319	22.57%	0.473%
194	12.186	12.167	12.203	VV	56237	1150647	14.36%	0.301%

Instrument :
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ClientSampleId :
HW0425-PT-DIES-SOIL

rteres

195	12.252	12.203	12.279	VV	306017	5768100	72.00%	1.508%
196	12.304	12.279	12.349	VV	140184	3303676	41	
197	12.362	12.349	12.421	VV	54923	2177455	27	
198	12.449	12.421	12.472	VV	49946	1404284	17	
199	12.478	12.472	12.491	VV	46255	513079	6	
200	12.511	12.491	12.576	VV	66340	2841797	35	
201	12.589	12.576	12.609	VV	48782	933483	11.65%	0.244%
202	12.635	12.609	12.647	VV	55721	1188905	14.84%	0.311%
203	12.664	12.647	12.697	VV	65073	1531004	19.11%	0.400%
204	12.717	12.697	12.789	VV	51898	2424044	30.26%	0.634%
205	12.818	12.789	12.865	VV	48321	1961861	24.49%	0.513%
206	12.894	12.865	12.937	VV	241163	4106579	51.26%	1.074%
207	12.956	12.937	13.002	VV	48948	1643778	20.52%	0.430%
208	13.006	13.002	13.021	VV	36184	389455	4.86%	0.102%
209	13.035	13.021	13.087	VV	37360	1321581	16.50%	0.346%
210	13.098	13.087	13.103	VV	30988	289738	3.62%	0.076%
211	13.110	13.103	13.126	VV	31385	424060	5.29%	0.111%
212	13.145	13.126	13.161	VV	37735	731580	9.13%	0.191%
213	13.165	13.161	13.173	VV	35325	246961	3.08%	0.065%
214	13.181	13.173	13.201	VV	35463	557588	6.96%	0.146%
215	13.216	13.201	13.237	VV	32800	663792	8.29%	0.174%
216	13.255	13.237	13.272	VV	34857	676243	8.44%	0.177%
217	13.327	13.272	13.362	VV	410707	7330751	91.50%	1.917%
218	13.384	13.362	13.407	VV	314021	4202427	52.45%	1.099%
219	13.415	13.407	13.479	VV	45217	1326773	16.56%	0.347%
220	13.507	13.479	13.535	VV	147103	2223507	27.75%	0.581%
221	13.562	13.535	13.631	VV	63239	1907085	23.80%	0.499%
222	13.637	13.631	13.657	VV	22443	338658	4.23%	0.089%
223	13.669	13.657	13.700	VV	22092	522663	6.52%	0.137%
224	13.736	13.700	13.765	VV	29155	955776	11.93%	0.250%
225	13.784	13.765	13.802	VV	23625	479866	5.99%	0.125%
226	13.815	13.802	13.837	VV	21301	422650	5.28%	0.111%
227	13.853	13.837	13.871	VV	21368	397228	4.96%	0.104%
228	13.887	13.871	13.909	VV	23861	481992	6.02%	0.126%
229	13.931	13.909	13.969	VV	24715	727546	9.08%	0.190%
230	14.003	13.969	14.031	VV	19090	647266	8.08%	0.169%
231	14.040	14.031	14.064	VV	17313	322084	4.02%	0.084%
232	14.094	14.064	14.133	VV	90771	1516012	18.92%	0.396%
233	14.149	14.133	14.166	VV	17238	324201	4.05%	0.085%
234	14.179	14.166	14.195	VV	16616	267652	3.34%	0.070%
235	14.214	14.195	14.285	VV	17863	737653	9.21%	0.193%
236	14.323	14.285	14.351	VV	17638	571864	7.14%	0.150%
237	14.356	14.351	14.361	VV	12383	72764	0.91%	0.019%
238	14.365	14.361	14.375	VV	12499	104654	1.31%	0.027%
239	14.383	14.375	14.391	VV	12784	118155	1.47%	0.031%
240	14.394	14.391	14.411	VV	13007	145972	1.82%	0.038%
241	14.423	14.411	14.437	VV	12060	179934	2.25%	0.047%
242	14.458	14.437	14.472	VV	14219	274588	3.43%	0.072%
243	14.499	14.472	14.542	VV	19981	659283	8.23%	0.172%
244	14.549	14.542	14.584	VV	12687	286298	3.57%	0.075%
245	14.595	14.584	14.627	VV	11296	260796	3.26%	0.068%
246	14.658	14.627	14.692	VV	46973	820181	10.24%	0.214%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 05/14/2025
Supervised By :mohammad ahmed 05/15/2025

Instrument :
FID_G
ClientSampleId :
HW0425-PT-DIES-SOIL

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 05/14/2025
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rteres

247	14.718	14.692	14.742	VV	15091	351414	4.39%	0.092%
248	14.759	14.742	14.826	VV	11823	482882	6	
249	14.832	14.826	14.838	VV	7743	57995	0	
250	14.864	14.838	14.872	VV	9511	175074	2	
251	14.888	14.872	14.927	VV	9951	296044	3	
252	14.937	14.927	14.962	VV	9179	169011	2	
253	14.996	14.962	15.030	VV	86456	1412562	17.63%	0.369%
254	15.052	15.030	15.074	VV	9062	213085	2.66%	0.056%
255	15.083	15.074	15.122	VV	7234	184959	2.31%	0.048%
256	15.128	15.122	15.145	VV	6229	77969	0.97%	0.020%
257	15.153	15.145	15.158	VV	6003	46047	0.57%	0.012%
258	15.163	15.158	15.169	VV	6019	37902	0.47%	0.010%
259	15.199	15.169	15.230	VV	26939	471578	5.89%	0.123%
260	15.250	15.230	15.286	VV	7491	218215	2.72%	0.057%
261	15.292	15.286	15.327	VV	5832	129327	1.61%	0.034%
262	15.333	15.327	15.369	VV	5502	122239	1.53%	0.032%
263	15.394	15.369	15.420	VV	5714	152513	1.90%	0.040%
264	15.443	15.420	15.508	VV	6191	264478	3.30%	0.069%
265	15.515	15.508	15.522	VV	4800	39682	0.50%	0.010%
266	15.537	15.522	15.556	VV	5168	91585	1.14%	0.024%
267	15.585	15.556	15.659	VV	42040	1014515	12.66%	0.265%
268	15.664	15.659	15.668	VV	4404	23601	0.29%	0.006%
269	15.670	15.668	15.692	VV	4487	60669	0.76%	0.016%
270	15.721	15.692	15.759	VV	14371	322136	4.02%	0.084%
271	15.781	15.759	15.831	VV	9003	223768	2.79%	0.059%
272	15.849	15.831	15.877	VV	3431	84504	1.05%	0.022%
273	15.888	15.877	15.899	VV	2874	35304	0.44%	0.009%
274	15.906	15.899	15.921	VV	3146	38861	0.49%	0.010%
275	15.930	15.921	15.934	VV	2873	21206	0.26%	0.006%
276	15.942	15.934	15.967	VV	3066	55670	0.69%	0.015%
277	15.983	15.967	16.000	VV	3235	55891	0.70%	0.015%
278	16.043	16.000	16.066	VV	3876	122936	1.53%	0.032%
279	16.074	16.066	16.080	VV	2625	22400	0.28%	0.006%
280	16.110	16.080	16.134	VV	3952	100611	1.26%	0.026%
281	16.139	16.134	16.158	VV	2662	33176	0.41%	0.009%
282	16.181	16.158	16.201	VV	2718	61669	0.77%	0.016%
283	16.224	16.201	16.264	VV	7122	144591	1.80%	0.038%
284	16.287	16.264	16.336	VV	3735	96571	1.21%	0.025%
285	16.348	16.336	16.352	VV	1617	14341	0.18%	0.004%
286	16.357	16.352	16.380	VV	1779	24099	0.30%	0.006%
287	16.404	16.380	16.448	VV	2173	68489	0.85%	0.018%
288	16.457	16.448	16.469	VV	1710	15929	0.20%	0.004%
289	16.484	16.469	16.503	VV	1360	24386	0.30%	0.006%
290	16.531	16.503	16.556	VV	2100	50880	0.64%	0.013%
291	16.607	16.556	16.647	VV	9570	221743	2.77%	0.058%
292	16.656	16.647	16.661	VV	1566	11996	0.15%	0.003%
293	16.708	16.661	16.736	VV	8392	148436	1.85%	0.039%
294	16.789	16.736	16.821	VV	7254	174717	2.18%	0.046%
295	16.850	16.821	16.884	VV	2304	49384	0.62%	0.013%
296	16.888	16.884	16.894	VV	707	4003	0.05%	0.001%
297	16.906	16.894	16.930	VV	974	15824	0.20%	0.004%
298	16.934	16.930	16.963	VV	657	7521	0.09%	0.002%
299	16.981	16.963	16.993	VV	762	9046	0.11%	0.002%

Instrument :
FID_G
ClientSampleId :
HW0425-PT-DIES-SOIL

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 05/14/2025
Supervised By :mohammad ahmed 05/15/2025

					rteres			
300	17.005	16.993	17.025	VV	1078	14092	0.18%	0.004%
301	17.058	17.025	17.062	VV	845	12561		
302	17.091	17.062	17.113	VV	1506	28075		
303	17.176	17.113	17.201	VV	4925	105204		
304	17.223	17.201	17.237	VV	11938	162677		
305	17.253	17.237	17.285	VV	19350	263277		

Sum of corrected areas: 382485071

FG042425.M Wed May 14 05:19:22 2025

SHIPPING DOCUMENTS

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Packing List

Date	Order #
04/21/2025	333293

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

Received by: SJ
4/23/2025 15:50

For terms and conditions of your order, please visit:
www.phenova.com/home/termsofsale

Ship To

Alliance Tech Group - Newark
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
PO2-1668	Net 30	ZCM-100	1500470	FedEx Collect 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	PT-MET-SOIL	SOIL/HW Trace Metals	HW0425	7100-04
1	1	0	PT-CR6-SOIL	SOIL/HW Hexavalent Chromium	HW0425	7100-05B
1	1	0	PT-CN-SOIL	SOIL/HW Cyanide	HW0425	7100-06
1	1	0	PT-CORR-SOIL	SOIL/HW Corrosivity/pH	HW0425	7100-11
1	1	0	PT-FP-SOIL	SOIL/HW Flash Point	HW0425	7100-10
1	1	0	PT-AN-SOIL	SOIL/HW Anions	HW0425	7100-08
1	1	0	PT-NUT-SOIL	SOIL/HW Nutrients	HW0425	7100-09B
1	1	0	PT-SOL-SOIL	SOIL/HW Solids	HW0425	7100-31
1	1	0	PT-NO2-SOIL	SOIL/HW Nitrite as N	HW0425	7100-71
1	1	0	PT-GAS-SOIL	SOIL/HW Gasoline	HW0425	7100-96
1	1	0	PT-OGR-SOIL	SOIL/HW Oil and Grease	HW0425	7100-94
1	1	0	PT-VOA-SOIL	SOIL/HW Volatiles	HW0425	7100-12
1	1	0	PT-BNA-SOIL	SOIL/HW BNAs	HW0425	7100-13
1	1	0	PT-PEST-SOIL	SOIL/HW Pesticides	HW0425	7100-14
1	1	0	PT-CHLR-SOIL	SOIL/HW Chlordane	HW0425	7100-15
1	1	0	PT-TXP-SOIL	SOIL/HW Toxaphene	HW0425	7100-16
1	1	0	PT-PCB-SOIL	SOIL/HW PCBs	HW0425	7100-17
1	1	0	PT-PCBO-SOIL	SOIL/HW PCBs in Oil	HW0425	7100-88
1	1	0	PT-HERB-SOIL	SOIL/HW Herbicides	HW0425	7100-18
1	1	0	PT-PAH-SOIL	SOIL/HW PAHs	HW0425	7100-22
1	1	0	PT-TRIAZINE-SOIL	SOIL/HW Triazine Pesticides	HW0425	7100-106
1	1	0	PT-NJEPH-SOIL	NJ EPH in SOIL	HW0425	7100-105

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Packing List

Date	Order #
04/25/2025	337220

6390 Joyce Dr., #100
Golden, CO 80403

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Fax: +1-303-940-0043
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Ship To

Alliance Tech Group - Newark
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by: SJ
4/28/2025 9:40

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
CPR	Net 30	ZCM-100	1500470	FedEx Next Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	PT-DIES-SOIL	SOIL/HW Diesel in Soil	HW0425	7100-100

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

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

QA Control Code: A2070148