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

DATA PACKAGE

GC SEMI-VOLATILES

PROJECT NAME : CON EDISON - EAST RIVER SITE 2

PARSONS ENGINEERING OF NEW YORK, INC.

301 Plainfield Road

Suite 350

Syracuse, NY - 13212

Phone No: 315-451-9560

ORDER ID : Q2592

ATTENTION : Zohar Lavy

Laboratory Certification ID # 20012

Table Of Contents for Q2592

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

Cover Page

Order ID : Q2592

Project ID : Con Edison - East River Site 2

Client : PARSONS Engineering of New York, Inc.

Lab Sample Number	Client Sample Number
Q2592-01	WC-SOIL-20250711
Q2592-02	WC-SOIL-20250711

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: 7/25/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

PARSONS Engineering of New York, Inc.
Project Name: Con Edison - East River Site 2
Project # N/A
Order ID # Q2592
Test Name: TPH GC

A. Number of Samples and Date of Receipt:
1 Solid sample was received on 07/11/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: TPH GC. This data package contains results for TPH GC.

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 TPH GC 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 were met for all analysis except for WC-SOIL-20250711 [TETRACOSANE-d50 - 0%]Surrogate was diluted out due to the high dilution, no further corrective action was taken.

The Retention Times were met for all analysis.

The MS {Q2592-01MS} with File ID: FG016339.D recoveries met the requirements for all compounds except for Petroleum Hydrocarbons[2163%]due to matrix interference.

The MSD {Q2592-01MSD} with File ID: FG016340.D recoveries met the requirements for all compounds except for Petroleum Hydrocarbons[2106%]due to matrix interference.

The RPD were met for all analysis.
The Blank Spike met requirements for all compounds.
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements.
The Continuous Calibration met the requirements.

Samples WC-SOIL-20250711 was diluted due to bad matrix The above samples original run is reported as screening data in miscellaneous data.

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Phone: 908 789 8900 Fax: 908 789 8922

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_____

284 Sheffield Street, Mountainside NJ 07092 Tel.
908-789-8900 Fax: 908-789-8922

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: Q2592 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. The Surrogate recoveries were met for all analysis except for WC-SOIL-20250711 [TETRACOSANE-d50 - 0%]Surrogate was diluted out due to the high dilution, no further corrective action was taken.		✓	
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 {Q2592-01MS} with File ID: FG016339.D recoveries met the requirements for all compounds except for Petroleum Hydrocarbons[2163%]due to matrix interference. The MSD {Q2592-01MSD} with File ID: FG016340.D recoveries met the requirements for all compounds except for Petroleum Hydrocarbons[2106%]due to matrix interference. The Blank Spike met requirements for all compounds. The RPD were met for all analysis.		✓	
7.	Retention Time Shift Meet Criteria (if applicable) Comments:			✓

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GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

		NA	NO	YES
8.	Extraction Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			
9.	Analysis Holding Time Met			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			

ADDITIONAL COMMENTS:

Samples WC-SOIL-20250711 was diluted due to bad matrix The above samples original run is reported as screening data in miscellaneous data.

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

_____ _____

QA REVIEW Date

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Fax : 908 789 8922

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2592

	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:** 07/25/2025

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LAB CHRONICLE

OrderID:	Q2592	**OrderDate:**	7/11/2025 3:05:25 PM
Client:	PARSONS Engineering of New York, Inc.	**Project:**	Con Edison - East River Site 2
Contact:	Zohar Lavy	**Location:**	D51,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2592-01	**WC-SOIL-20250711**	**SOIL**			**07/11/25**			**07/11/25**
			PCB Group1	8082A		07/15/25	07/15/25	
			TPH GC	8015D		07/17/25	07/18/25	
Q2592-02	**WC-SOIL-20250711**	**TCLP**			**07/11/25**			**07/11/25**
			TCLP Herbicide	8151A		07/16/25	07/17/25	
			TCLP Pesticide	8081B		07/16/25	07/18/25	

QC SUMMARY

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SOIL TPH GC SURROGATE RECOVERY

Lab Name: Alliance Client: PARSONS Engineering of New York, Inc.

Lab Code: ACE SDG No.: Q2592

CLIENT ID	S1 TETRACOSANE-d50	S2	S3	S4	TOT OUT
PIBLK-FG016328.D	91				0
PIBLK-FG016335.D	91				0
PIBLK-FG016341.D	91				0
PB168895BL	93				0
PB168895BS	85				0
WC-SOIL-20250711	0 *				1
WC-SOIL-20250711MS	101				0
WC-SOIL-20250711MSD	72				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 TPH GC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Alliance **Client:** PARSONS Engineering of New York, Inc.

Lab Code: ACE **SDG No:** Q2592

Client Sample ID : WC-SOIL-20250711MS **Datafile:** FG016339.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS(%)
Petroleum Hydrocarbons	14747	139000	458000	2163%	*	68-131

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SOIL TPH GC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Alliance **Client:** PARSONS Engineering of New York, Inc.

Lab Code: ACE **SDG No:** Q2592

Client Sample ID : WC-SOIL-20250711MSD **Datafile:** FG016340.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS(%)
Petroleum Hydrocarbons	14766	139000	450000	2106%	*	68-131

MS/MSD % Recovery RPD : 2.67

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SOIL TPH GC LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Alliance **Client:** PARSONS Engineering of New York, Inc.

Lab Code: ACE **SDG No:** Q2592

Client Sample ID : PB168895BS **Datafile:** FG016338.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS (%)
Petroleum Hydrocarbons	11322	0	9614	85	68-131

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4B

METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PB168895BL

Lab Name: Alliance Contract: PARS02

Lab Code: ACE SDG NO.: Q2592

Lab File ID: FG016337.D Lab Sample ID: PB168895BL

Instrument ID: FG Date Extracted: 07/18/2025

Matrix: (soil/water) Soil Date Analyzed: 07/18/25

Level: (low/med) low Time Analyzed: 13:23

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

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
WC-SOIL-20250711	Q2592-01	FG016332.D	07/18/25
PB168895BS	PB168895BS	FG016338.D	07/18/25
WC-SOIL-20250711MS	Q2592-01MS	FG016339.D	07/18/25
WC-SOIL-20250711MSD	Q2592-01MSD	FG016340.D	07/18/25

COMMENTS:

Form IV

SAMPLE DATA

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Report of Analysis

Client:	PARSONS Engineering of New York, Inc.	Date Collected:	07/11/25
Project:	Con Edison - East River Site 2	Date Received:	07/11/25
Client Sample ID:	WC-SOIL-20250711	SDG No.:	Q2592
Lab Sample ID:	Q2592-01	Matrix:	SOIL
Analytical Method:	8015D TPH	% Solid:	76.7 Decanted:
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	TPH GC
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG016332.D	25	07/17/25 08:25	07/18/25 10:55	PB168895

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
PHC	Petroleum Hydrocarbons	384000		12500	92200	ug/kg
SURROGATES						
16416-32-3	TETRACOSANE-d50	0.00	*	37 - 130	0%	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\FG071825\
Data File : FG016332.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 10:55
Operator : YP\AJ
Sample : Q2592-01 25X
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711

Integration File: autoint1.e
Quant Time: Jul 18 11:33:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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				
Target Compounds				

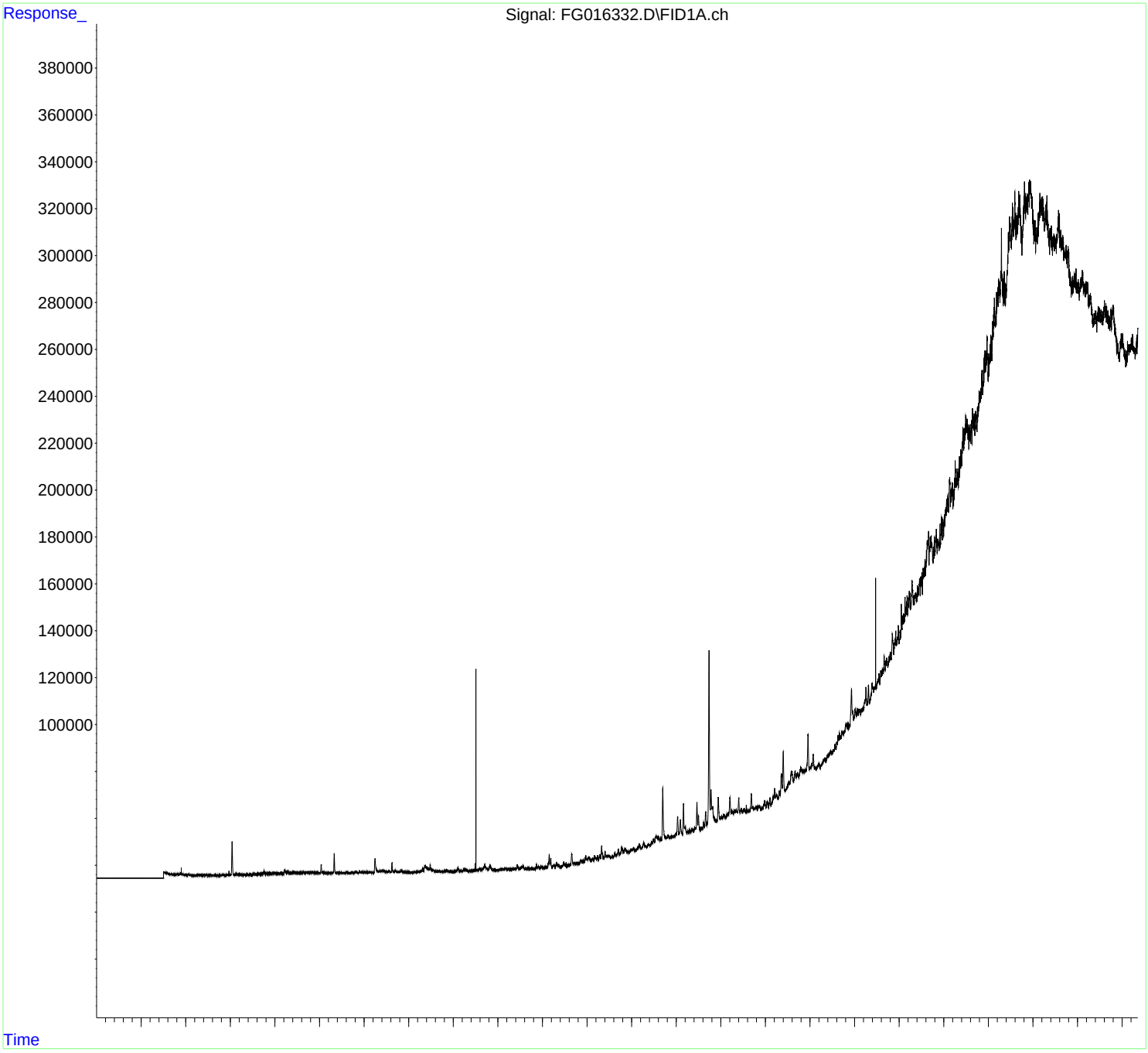
(f)=RT Delta > 1/2 Window (m)=manual int.

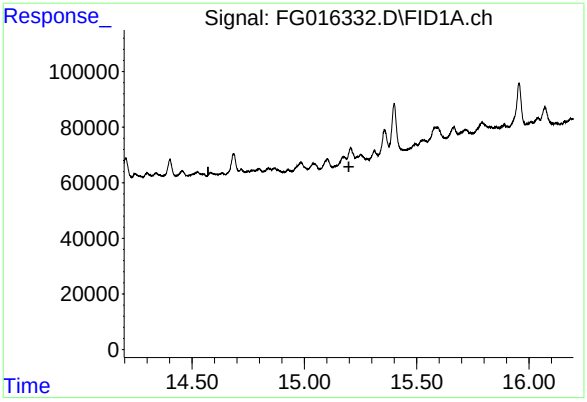
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016332.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 10:55
Operator : YP\AJ
Sample : Q2592-01 25X
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711

Integration File: autoint1.e
Quant Time: Jul 18 11:33:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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.: 0.000 min
Exp R.T. : 15.198 min
Response: 0
Conc: N.D.

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016332.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 10:55
Sample : Q2592-01 25X
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.040	2.988	3.077	BB	14218	160854	15.95%	0.439%
2	5.037	5.009	5.064	BV	3158	31311	3.10%	0.085%
3	5.331	5.297	5.366	BB	8095	79187	7.85%	0.216%
4	6.244	6.211	6.313	BB	5911	99002	9.82%	0.270%
5	6.625	6.594	6.670	BB	4109	47728	4.73%	0.130%
6	7.313	7.235	7.330	BV	1227	11734	1.16%	0.032%
7	7.365	7.330	7.396	PB	1399	26095	2.59%	0.071%
8	7.482	7.455	7.520	BB	1949	20415	2.02%	0.056%
9	8.508	8.475	8.532	BB	59376	47786	4.74%	0.130%
10	8.707	8.608	8.743	BV	1697	40441	4.01%	0.110%
11	8.826	8.784	8.875	BB	1748	37054	3.67%	0.101%
12	9.865	9.828	9.890	BV	1736	17468	1.73%	0.048%
13	10.130	10.100	10.135	BV	1787	13922	1.38%	0.038%
14	10.152	10.135	10.173	VV	5492	70004	6.94%	0.191%
15	10.187	10.173	10.210	VB	3704	40254	3.99%	0.110%
16	10.314	10.289	10.349	BV	1599	25498	2.53%	0.070%
17	10.472	10.405	10.505	BB	1549	21326	2.11%	0.058%
18	10.655	10.611	10.693	BV	4482	71961	7.14%	0.196%
19	10.910	10.890	10.932	PV	1339	16646	1.65%	0.045%
20	10.970	10.932	10.987	VV	2776	47870	4.75%	0.131%
21	11.002	10.987	11.012	VV	1430	16573	1.64%	0.045%
22	11.031	11.012	11.051	VV	1625	32094	3.18%	0.088%
23	11.167	11.150	11.181	PV	1554	14881	1.48%	0.041%
24	11.232	11.213	11.252	BV	1872	18589	1.84%	0.051%
25	11.289	11.252	11.305	PV	1778	28221	2.80%	0.077%
26	11.327	11.305	11.371	VV	5644	80888	8.02%	0.221%
27	11.404	11.371	11.423	PV	2482	27398	2.72%	0.075%
28	11.624	11.528	11.646	BV	1816	32767	3.25%	0.089%
29	11.698	11.646	11.720	PV	2505	36715	3.64%	0.100%
30	11.776	11.720	11.815	VB	2603	50916	5.05%	0.139%
31	12.043	11.951	12.080	BB	1389	54717	5.43%	0.149%
32	12.168	12.142	12.212	VB	2161	42742	4.24%	0.117%
33	12.269	12.215	12.314	BB	2352	45869	4.55%	0.125%
34	12.448	12.415	12.466	BV	1638	26189	2.60%	0.071%
35	12.496	12.466	12.520	VV	2073	42983	4.26%	0.117%
36	12.552	12.520	12.566	VV	3132	66011	6.55%	0.180%

rteres

37	12.573	12.566	12.590	VV	2339	29595	2.93%	0.081%
38	12.608	12.590	12.640	VV	2282	41197	4.08%	0.112%
39	12.698	12.674	12.762	VV	22389	326155	32.34%	0.890%
40	12.814	12.762	12.844	VB	1283	27607	2.74%	0.075%
41	12.995	12.896	13.003	PV	1412	32295	3.20%	0.088%
42	13.030	13.003	13.062	VV	8411	127103	12.60%	0.347%
43	13.094	13.062	13.141	VV	6709	110694	10.98%	0.302%
44	13.163	13.141	13.192	VV	12966	168983	16.76%	0.461%
45	13.202	13.192	13.241	VB	3031	44046	4.37%	0.120%
46	13.294	13.277	13.312	PV	1671	20760	2.06%	0.057%
47	13.355	13.312	13.390	VV	1519	40197	3.99%	0.110%
48	13.413	13.390	13.434	VV	2109	33981	3.37%	0.093%
49	13.465	13.434	13.482	VV	12371	155182	15.39%	0.424%
50	13.499	13.482	13.535	VV	6534	97740	9.69%	0.267%
51	13.615	13.594	13.637	VV	2801	37022	3.67%	0.101%
52	13.659	13.637	13.683	VV	6540	87698	8.70%	0.239%
53	13.736	13.683	13.762	VV	74689	1008532	100.00%	2.752%
54	13.780	13.762	13.799	VV	15108	232977	23.10%	0.636%
55	13.815	13.799	13.847	VV	7523	152652	15.14%	0.417%
56	13.943	13.901	13.989	VV	10149	164494	16.31%	0.449%
57	14.025	13.989	14.034	VV	1034	22932	2.27%	0.063%
58	14.058	14.034	14.071	VV	1766	23411	2.32%	0.064%
59	14.077	14.071	14.108	VB	1514	16924	1.68%	0.046%
60	14.169	14.147	14.179	VV	2011	25608	2.54%	0.070%
61	14.205	14.179	14.232	VV	7875	132166	13.10%	0.361%
62	14.247	14.232	14.282	VV	2404	48675	4.83%	0.133%
63	14.299	14.282	14.318	VV	2611	37721	3.74%	0.103%
64	14.342	14.318	14.366	VV	2153	45807	4.54%	0.125%
65	14.402	14.366	14.428	VV	6967	106323	10.54%	0.290%
66	14.457	14.428	14.472	VV	2561	41819	4.15%	0.114%
67	14.525	14.472	14.563	VB	2018	55327	5.49%	0.151%
68	14.684	14.650	14.709	PV	7485	112327	11.14%	0.307%
69	14.718	14.709	14.735	VV	1906	20449	2.03%	0.056%
70	14.798	14.735	14.814	VV	1860	52631	5.22%	0.144%
71	14.840	14.814	14.855	VV	1924	30531	3.03%	0.083%
72	14.869	14.855	14.905	VV	1862	30759	3.05%	0.084%
73	14.985	14.948	15.015	VV	3372	65449	6.49%	0.179%
74	15.039	15.015	15.067	VV	2660	41824	4.15%	0.114%
75	15.102	15.067	15.128	PV	3391	53235	5.28%	0.145%
76	15.177	15.128	15.190	PV	3040	56806	5.63%	0.155%
77	15.206	15.190	15.227	VV	6041	88649	8.79%	0.242%
78	15.251	15.227	15.275	VV	2919	59755	5.92%	0.163%
79	15.278	15.275	15.286	VV	1077	5976	0.59%	0.016%
80	15.312	15.286	15.330	VV	3681	51074	5.06%	0.139%
81	15.357	15.330	15.377	VV	9966	167772	16.64%	0.458%
82	15.400	15.377	15.436	VV	18969	305332	30.27%	0.833%
83	15.493	15.436	15.505	VV	3074	89899	8.91%	0.245%
84	15.528	15.505	15.549	VV	4234	92316	9.15%	0.252%
85	15.593	15.549	15.635	VV	7893	280873	27.85%	0.767%
86	15.667	15.635	15.684	VV	7069	149240	14.80%	0.407%
87	15.715	15.684	15.735	VV	5129	136030	13.49%	0.371%
88	15.739	15.735	15.750	VV	3931	31542	3.13%	0.086%
89	15.791	15.750	15.841	VV	6740	263370	26.11%	0.719%

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90	15.855	15.841	15.869	VV	4202	65844	6.53%	0.180%
91	15.890	15.869	15.913	VV	4541	98845	9.80%	0.270%
92	15.955	15.913	15.986	VV	18135	359247	35.62%	0.980%
93	16.008	15.986	16.019	VV	3731	65947	6.54%	0.180%
94	16.042	16.019	16.051	VV	4726	77424	7.68%	0.211%
95	16.071	16.051	16.115	VV	8338	164337	16.29%	0.449%
96	16.185	16.138	16.190	VV	2422	46493	4.61%	0.127%
97	16.202	16.190	16.229	VV	2333	36104	3.58%	0.099%
98	16.281	16.229	16.286	PV	1225	23059	2.29%	0.063%
99	16.307	16.286	16.317	VV	2058	26949	2.67%	0.074%
100	16.326	16.317	16.354	VV	2176	27267	2.70%	0.074%
101	16.405	16.354	16.419	PV	1758	48782	4.84%	0.133%
102	16.463	16.419	16.479	VV	1968	50344	4.99%	0.137%
103	16.490	16.479	16.505	VV	1117	10848	1.08%	0.030%
104	16.529	16.505	16.539	VV	989	14593	1.45%	0.040%
105	16.560	16.539	16.582	PV	2429	31347	3.11%	0.086%
106	16.597	16.582	16.611	VV	2360	25071	2.49%	0.068%
107	16.631	16.611	16.643	VV	4351	51769	5.13%	0.141%
108	16.659	16.643	16.674	VV	4877	61259	6.07%	0.167%
109	16.684	16.674	16.696	VV	2357	27132	2.69%	0.074%
110	16.717	16.696	16.736	VV	4044	69331	6.87%	0.189%
111	16.742	16.736	16.758	VV	2942	33376	3.31%	0.091%
112	16.774	16.758	16.779	VV	2956	29399	2.92%	0.080%
113	16.815	16.779	16.833	VV	4906	119343	11.83%	0.326%
114	16.853	16.833	16.866	VV	4143	56483	5.60%	0.154%
115	16.883	16.866	16.892	VV	2447	31586	3.13%	0.086%
116	16.930	16.892	16.950	VV	16651	293964	29.15%	0.802%
117	16.959	16.950	16.979	VV	6668	82158	8.15%	0.224%
118	17.013	16.979	17.044	VV	5895	145469	14.42%	0.397%
119	17.059	17.044	17.082	VV	4813	74062	7.34%	0.202%
120	17.099	17.082	17.110	VV	3399	42390	4.20%	0.116%
121	17.125	17.110	17.135	VV	2757	32412	3.21%	0.088%
122	17.168	17.135	17.174	VV	1946	30809	3.05%	0.084%
123	17.180	17.174	17.188	VV	1997	12598	1.25%	0.034%
124	17.199	17.188	17.204	VV	1687	11844	1.17%	0.032%
125	17.255	17.204	17.276	VV	8925	174988	17.35%	0.478%
126	17.287	17.276	17.292	VV	1907	15037	1.49%	0.041%
127	17.312	17.292	17.331	VV	8140	94751	9.39%	0.259%
128	17.393	17.331	17.428	PV	6717	173792	17.23%	0.474%
129	17.445	17.428	17.459	VV	3061	45014	4.46%	0.123%
130	17.472	17.459	17.476	VV	18708	50610	5.02%	0.138%
131	17.483	17.476	17.492	VV	2767	19340	1.92%	0.053%
132	17.509	17.492	17.514	VV	2987	30585	3.03%	0.083%
133	17.521	17.514	17.534	VV	3483	34654	3.44%	0.095%
134	17.548	17.534	17.567	VV	5034	62125	6.16%	0.170%
135	17.585	17.567	17.600	PV	4812	51494	5.11%	0.141%
136	17.609	17.600	17.616	VV	3624	26208	2.60%	0.072%
137	17.624	17.616	17.634	VV	4024	32870	3.26%	0.090%
138	17.663	17.634	17.676	VV	8242	109866	10.89%	0.300%
139	17.681	17.676	17.691	VV	4485	27575	2.73%	0.075%
140	17.703	17.691	17.713	VV	4431	40856	4.05%	0.112%
141	17.721	17.713	17.746	VV	4727	55368	5.49%	0.151%

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142	17.773	17.746	17.780	PV	3453	32159	3.19%	0.088%
143	17.807	17.780	17.824	VV	4075	57638	5.72%	0.157%
144	17.848	17.824	17.875	VV	10215	166328	16.49%	0.454%
145	17.906	17.875	17.913	VV	5757	75531	7.49%	0.206%
146	17.923	17.913	17.935	VV	8121	64524	6.40%	0.176%
147	17.947	17.935	17.955	VV	3616	32715	3.24%	0.089%
148	17.983	17.955	17.997	VV	8361	111022	11.01%	0.303%
149	18.021	17.997	18.030	VV	4904	39898	3.96%	0.109%
150	18.048	18.030	18.066	VV	10459	98839	9.80%	0.270%
151	18.075	18.066	18.086	VV	8827	85803	8.51%	0.234%
152	18.097	18.086	18.120	VV	8805	148008	14.68%	0.404%
153	18.130	18.120	18.142	VV	14643	130068	12.90%	0.355%
154	18.150	18.142	18.156	VV	9479	64826	6.43%	0.177%
155	18.164	18.156	18.170	VV	11008	77564	7.69%	0.212%
156	18.178	18.170	18.190	VV	13323	120413	11.94%	0.329%
157	18.209	18.190	18.218	VV	11135	147666	14.64%	0.403%
158	18.226	18.218	18.234	VV	13257	95496	9.47%	0.261%
159	18.240	18.234	18.256	VV	12111	105466	10.46%	0.288%
160	18.263	18.256	18.268	VV	6786	43269	4.29%	0.118%
161	18.288	18.268	18.317	VV	15508	295458	29.30%	0.806%
162	18.328	18.317	18.339	VV	7441	73599	7.30%	0.201%
163	18.353	18.339	18.365	VV	7122	88083	8.73%	0.240%
164	18.372	18.365	18.384	VV	6682	54837	5.44%	0.150%
165	18.391	18.384	18.398	VV	5149	31599	3.13%	0.086%
166	18.410	18.398	18.427	VV	8181	81839	8.11%	0.223%
167	18.433	18.427	18.439	VV	5696	35567	3.53%	0.097%
168	18.457	18.439	18.471	VV	9274	124720	12.37%	0.340%
169	18.484	18.471	18.495	VV	9044	93267	9.25%	0.255%
170	18.508	18.495	18.520	VV	10052	86556	8.58%	0.236%
171	18.537	18.520	18.547	PV	10306	118609	11.76%	0.324%
172	18.558	18.547	18.569	VV	9097	96421	9.56%	0.263%
173	18.579	18.569	18.588	VV	12158	102079	10.12%	0.279%
174	18.611	18.588	18.617	VV	14359	164884	16.35%	0.450%
175	18.627	18.617	18.634	VV	16454	147171	14.59%	0.402%
176	18.641	18.634	18.647	VV	17058	119261	11.83%	0.325%
177	18.659	18.647	18.670	VV	19993	211237	20.94%	0.577%
178	18.696	18.670	18.706	VV	15660	242442	24.04%	0.662%
179	18.718	18.706	18.731	VV	15081	189219	18.76%	0.516%
180	18.736	18.731	18.761	VV	11127	113967	11.30%	0.311%
181	18.771	18.761	18.778	VV	7755	54853	5.44%	0.150%
182	18.790	18.778	18.799	VV	11110	94056	9.33%	0.257%
183	18.833	18.799	18.841	VV	12385	177398	17.59%	0.484%
184	18.846	18.841	18.852	VV	6094	27863	2.76%	0.076%
185	18.861	18.852	18.872	VV	6410	51757	5.13%	0.141%
186	18.876	18.872	18.895	VV	5462	41087	4.07%	0.112%
187	18.916	18.895	18.924	PV	10204	68148	6.76%	0.186%
188	18.951	18.924	18.967	VV	11123	134149	13.30%	0.366%
189	18.981	18.967	18.998	VV	8157	81159	8.05%	0.221%
190	19.020	18.998	19.026	VV	7992	83302	8.26%	0.227%
191	19.045	19.026	19.055	VV	9225	130351	12.92%	0.356%
192	19.065	19.055	19.074	VV	11610	111785	11.08%	0.305%
193	19.084	19.074	19.095	VV	11887	112500	11.15%	0.307%
194	19.099	19.095	19.106	VV	10322	54258	5.38%	0.148%

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195	19.134	19.106	19.148	VV	17379	305137	30.26%	0.833%
196	19.162	19.148	19.167	VV	10664	95219	9.44%	0.260%
197	19.178	19.167	19.182	VV	9582	59717	5.92%	0.163%
198	19.188	19.182	19.205	VV	11902	115588	11.46%	0.315%
199	19.214	19.205	19.221	PV	7415	37898	3.76%	0.103%
200	19.227	19.221	19.232	PV	5900	22304	2.21%	0.061%
201	19.257	19.232	19.273	VV	16475	202588	20.09%	0.553%
202	19.277	19.273	19.284	VV	7061	37403	3.71%	0.102%
203	19.298	19.284	19.312	VV	10347	102285	10.14%	0.279%
204	19.318	19.312	19.328	VV	7488	46649	4.63%	0.127%
205	19.351	19.328	19.358	VV	11925	113422	11.25%	0.310%
206	19.378	19.358	19.383	VV	12920	111906	11.10%	0.305%
207	19.393	19.383	19.402	VV	11065	90678	8.99%	0.247%
208	19.429	19.402	19.447	VV	18619	328039	32.53%	0.895%
209	19.457	19.447	19.463	VV	16108	112835	11.19%	0.308%
210	19.469	19.463	19.478	VV	15441	124073	12.30%	0.339%
211	19.492	19.478	19.508	VV	19454	272431	27.01%	0.744%
212	19.517	19.508	19.522	VV	14724	106758	10.59%	0.291%
213	19.530	19.522	19.543	VV	15488	144922	14.37%	0.396%
214	19.548	19.543	19.562	VV	11475	81276	8.06%	0.222%
215	19.571	19.562	19.576	VV	7921	40476	4.01%	0.110%
216	19.581	19.576	19.596	VV	9157	69643	6.91%	0.190%
217	19.599	19.596	19.604	VV	5152	18327	1.82%	0.050%
218	19.643	19.621	19.670	BV	8052	30404	3.01%	0.083%
219	19.682	19.670	19.698	VV	7858	68314	6.77%	0.186%
220	19.706	19.698	19.713	PV	9727	53932	5.35%	0.147%
221	19.719	19.713	19.734	VV	8808	80691	8.00%	0.220%
222	19.741	19.734	19.746	VV	4098	16202	1.61%	0.044%
223	19.755	19.746	19.760	PV	9294	46411	4.60%	0.127%
224	19.768	19.760	19.772	VV	8311	45141	4.48%	0.123%
225	19.791	19.772	19.797	VV	13294	122635	12.16%	0.335%
226	19.801	19.797	19.817	VV	11619	113508	11.25%	0.310%
227	19.867	19.817	19.873	VV	15697	342151	33.93%	0.934%
228	19.923	19.873	19.930	VV	18695	392037	38.87%	1.070%
229	19.934	19.930	19.938	VV	12160	52147	5.17%	0.142%
230	19.972	19.938	19.999	VV	20551	415586	41.21%	1.134%
231	20.007	19.999	20.014	VV	10073	36881	3.66%	0.101%
232	20.023	20.014	20.027	PV	7001	31153	3.09%	0.085%
233	20.056	20.027	20.079	VV	13558	236934	23.49%	0.647%
234	20.097	20.079	20.102	VV	14793	115287	11.43%	0.315%
235	20.135	20.102	20.149	VV	21461	371359	36.82%	1.013%
236	20.155	20.149	20.161	VV	11960	66997	6.64%	0.183%
237	20.172	20.161	20.178	VV	13399	97346	9.65%	0.266%
238	20.184	20.178	20.190	VV	19526	100556	9.97%	0.274%
239	20.201	20.190	20.220	VV	17004	256233	25.41%	0.699%
240	20.226	20.220	20.231	VV	20987	110625	10.97%	0.302%
241	20.240	20.231	20.261	VV	18372	277432	27.51%	0.757%
242	20.294	20.261	20.304	VV	36315	489449	48.53%	1.336%
243	20.310	20.304	20.316	VV	15498	92919	9.21%	0.254%
244	20.321	20.316	20.326	VV	12641	52847	5.24%	0.144%
245	20.329	20.326	20.332	VV	7602	17955	1.78%	0.049%
246	20.337	20.332	20.342	VV	9370	33561	3.33%	0.092%

247	20.347	20.342	20.351	PV	10515	25730	2.55%	0.070%
248	20.378	20.361	20.385	BV	6875	15971	1.58%	0.044%
249	20.398	20.385	20.403	PV	6281	35096	3.48%	0.096%
250	20.434	20.403	20.438	VV	12838	144557	14.33%	0.395%
251	20.448	20.438	20.461	VV	20398	199723	19.80%	0.545%
252	20.476	20.461	20.481	VV	21854	193381	19.17%	0.528%
253	20.485	20.481	20.487	VV	17134	61292	6.08%	0.167%
254	20.492	20.487	20.499	VV	17040	96867	9.60%	0.264%
255	20.505	20.499	20.511	VV	9310	56614	5.61%	0.155%
256	20.540	20.511	20.562	VV	17373	243979	24.19%	0.666%
257	20.570	20.562	20.576	PV	5429	25599	2.54%	0.070%
258	20.594	20.576	20.601	VBA	13054	76005	7.54%	0.207%
259	20.614	20.601	20.629	BV	6453	8889	0.88%	0.024%
260	20.636	20.629	20.658	PV	8151	92275	9.15%	0.252%
261	20.670	20.658	20.674	VV	13048	87258	8.65%	0.238%
262	20.681	20.674	20.699	VV	19853	223501	22.16%	0.610%
263	20.708	20.699	20.729	VV	19479	190983	18.94%	0.521%
264	20.739	20.729	20.762	VV	5205	49320	4.89%	0.135%
265	20.784	20.762	20.789	PV	15095	113300	11.23%	0.309%
266	20.799	20.789	20.804	VV	19480	145372	14.41%	0.397%
267	20.810	20.804	20.836	VV	26626	375889	37.27%	1.026%
268	20.843	20.836	20.867	VV	20453	328999	32.62%	0.898%
269	20.873	20.867	20.878	VV	22475	118561	11.76%	0.324%
270	20.882	20.878	20.886	VV	20615	88303	8.76%	0.241%
271	20.904	20.886	20.917	VV	27019	394299	39.10%	1.076%
272	20.926	20.917	20.979	VV	28917	894510	88.69%	2.441%
273	20.983	20.979	20.992	VV	22357	151660	15.04%	0.414%
274	20.997	20.992	21.011	VV	17373	147262	14.60%	0.402%
275	21.015	21.011	21.020	VV	11831	42701	4.23%	0.117%
276	21.026	21.020	21.044	VV	12890	120497	11.95%	0.329%
277	21.049	21.044	21.053	VV	13380	49550	4.91%	0.135%
278	21.056	21.053	21.061	VV	10294	26653	2.64%	0.073%
279	21.066	21.061	21.071	PV	3739	12427	1.23%	0.034%
280	21.111	21.081	21.120	BV	10180	43543	4.32%	0.119%
281	21.126	21.120	21.131	VV	10767	41795	4.14%	0.114%
282	21.138	21.131	21.142	VV	11017	65965	6.54%	0.180%
283	21.147	21.142	21.150	VV	15586	62639	6.21%	0.171%
284	21.156	21.150	21.161	VV	20387	99474	9.86%	0.271%
285	21.195	21.161	21.212	VV	20044	494813	49.06%	1.350%
286	21.216	21.212	21.257	VV	20982	375379	37.22%	1.024%
287	21.313	21.257	21.319	VV	25005	538419	53.39%	1.469%
288	21.323	21.319	21.334	VV	18165	122510	12.15%	0.334%
289	21.339	21.334	21.357	VV	13601	138085	13.69%	0.377%
290	21.366	21.357	21.374	VV	10745	71747	7.11%	0.196%
291	21.381	21.374	21.404	VV	12630	169469	16.80%	0.463%
292	21.414	21.404	21.439	VV	14523	185788	18.42%	0.507%
293	21.446	21.439	21.451	VV	11235	55670	5.52%	0.152%
294	21.458	21.451	21.465	VV	12100	86399	8.57%	0.236%
295	21.471	21.465	21.483	VV	13396	111255	11.03%	0.304%
296	21.489	21.483	21.507	VV	12845	152317	15.10%	0.416%
297	21.513	21.507	21.524	VV	11849	113623	11.27%	0.310%
298	21.534	21.524	21.541	VV	15323	120918	11.99%	0.330%
299	21.574	21.541	21.590	VV	26548	577170	57.23%	1.575%

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300	21.596	21.590	21.601	VV	26236	125386	12.43%	0.342%
301	21.614	21.601	21.619	VV	18299	164193	16.28%	0.448%
302	21.624	21.619	21.635	VV	20051	160227	15.89%	0.437%
303	21.642	21.635	21.647	VV	16891	105105	10.42%	0.287%
304	21.667	21.647	21.698	VV	19533	469727	46.58%	1.282%
305	21.702	21.698	21.708	VV	14152	78459	7.78%	0.214%
306	21.713	21.708	21.727	VV	13507	138881	13.77%	0.379%
307	21.746	21.727	21.753	VV	17407	220636	21.88%	0.602%
308	21.761	21.753	21.773	VV	15236	149325	14.81%	0.408%
309	21.788	21.773	21.831	VV	18673	389803	38.65%	1.064%
310	21.835	21.831	21.856	VV	8784	79685	7.90%	0.217%
311	21.862	21.856	21.881	PV	6176	61847	6.13%	0.169%
312	21.894	21.881	21.899	VV	9254	64935	6.44%	0.177%
313	21.915	21.899	21.919	VV	7114	67056	6.65%	0.183%
314	21.925	21.919	21.943	VV	10398	120568	11.95%	0.329%
315	21.958	21.943	21.962	VV	11407	91442	9.07%	0.250%
316	21.967	21.962	21.973	VV	14375	62335	6.18%	0.170%
317	21.978	21.973	21.983	VV	8846	44337	4.40%	0.121%
318	21.990	21.983	22.004	VV	8847	88900	8.81%	0.243%
319	22.015	22.004	22.037	VV	11192	143014	14.18%	0.390%
320	22.046	22.037	22.050	VV	8070	47214	4.68%	0.129%
321	22.076	22.050	22.100	VV	13711	319144	31.64%	0.871%
322	22.107	22.100	22.114	VV	17416	114208	11.32%	0.312%
323	22.120	22.114	22.131	VV	16924	130984	12.99%	0.357%
324	22.136	22.131	22.146	VV	13422	103400	10.25%	0.282%
325	22.152	22.146	22.177	VV	12968	198071	19.64%	0.541%
326	22.186	22.177	22.216	VV	14873	295749	29.32%	0.807%
327	22.223	22.216	22.228	VV	15536	95007	9.42%	0.259%
328	22.231	22.228	22.256	VV	15060	152355	15.11%	0.416%
329	22.267	22.256	22.278	VV	11244	110918	11.00%	0.303%
330	22.290	22.278	22.316	VV	12712	222846	22.10%	0.608%
331	22.322	22.316	22.341	VV	6493	60758	6.02%	0.166%
332	22.372	22.341	22.380	PV	6207	65971	6.54%	0.180%
333	22.397	22.380	22.407	VV	8010	85794	8.51%	0.234%
334	22.410	22.407	22.415	VV	8146	24254	2.40%	0.066%
335	22.418	22.415	22.423	VV	6148	23972	2.38%	0.065%
336	22.428	22.423	22.433	VV	6116	23979	2.38%	0.065%
337	22.441	22.433	22.455	PV	7467	72345	7.17%	0.197%
338	22.471	22.455	22.477	VV	9581	88380	8.76%	0.241%
339	22.482	22.477	22.487	VV	8609	40231	3.99%	0.110%
340	22.495	22.487	22.512	VV	8639	75907	7.53%	0.207%
341	22.525	22.512	22.531	VV	6938	56727	5.62%	0.155%
342	22.538	22.531	22.546	VV	6207	37252	3.69%	0.102%
343	22.566	22.546	22.571	VV	4535	36936	3.66%	0.101%
344	22.578	22.571	22.581	PV	2330	8394	0.83%	0.023%
345	22.586	22.581	22.591	VV	5527	14993	1.49%	0.041%

Sum of corrected areas: 36641224

FG070925.M Fri Jul 18 11:53:20 2025

CALIBRATION SUMMARY

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

TPH GC INITIAL CALIBRATION SUMMARY

Lab Name: Alliance
Contract: PARS02
ProjectID: Con Edison - East River Site 2
Lab Code: ACE
SDG No.: Q2592

Calibration Sequence : FG070925		Test : TPH GC	
Concentration (PPM)	**Area Count**	**Reference Factor**	**File ID**
1700	164717398	96893	FG016264.D
850	83171210	97848	FG016265.D
340	35101863	103241	FG016266.D
170	18639349	109643	FG016267.D
85	9352448	110029	FG016268.D
AVG RF : 103531	**% RSD : 6.032**		**AVG RT : 15.201**

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016264.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 10:02
Operator : YP\AJ
Sample : 100 TRPH STD
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
100 TRPH STD

Integration File: autoint1.e
Quant Time: Jul 09 11:31:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 11:29:23 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...	15.206	9405279	100.082 ug/ml
	Target Compounds			
1)	N-OCTANE	2.122	10513227	99.450 ug/ml
2)	N-DECANE	4.674	10702599	99.406 ug/ml
3)	N-DODECANE	6.857	10800733	99.625 ug/ml
4)	N-TETRADECANE	8.698	10882051	99.537 ug/ml
5)	N-HEXADECANE	10.318	10797207	99.753 ug/ml
6)	N-OCTADECANE	11.772	10989703	99.792 ug/ml
7)	N-EICOSANE	13.092	11210686	99.913 ug/ml
8)	N-DOCOSANE	14.300	10833018	100.014 ug/ml
10)	N-TETRACOSANE	15.413	10713606	99.998 ug/ml
11)	N-HEXACOSANE	16.440	10326014	100.102 ug/ml
12)	N-OCTACOSANE	17.396	10201832	100.042 ug/ml
13)	N-TRIACONTANE	18.289	9982115	99.871 ug/ml
14)	N-DOTRIACONTANE	19.126	9429909	99.711 ug/ml
15)	N-TETRATRIACONTANE	19.914	8543544	99.113 ug/ml
16)	N-HEXATRIACONTANE	20.657	7167275	98.469 ug/ml
17)	N-OCTATRIACONTANE	21.447	6145879	97.425 ug/ml
18)	N-TETRACONTANE	22.451	5478000	97.074 ug/ml

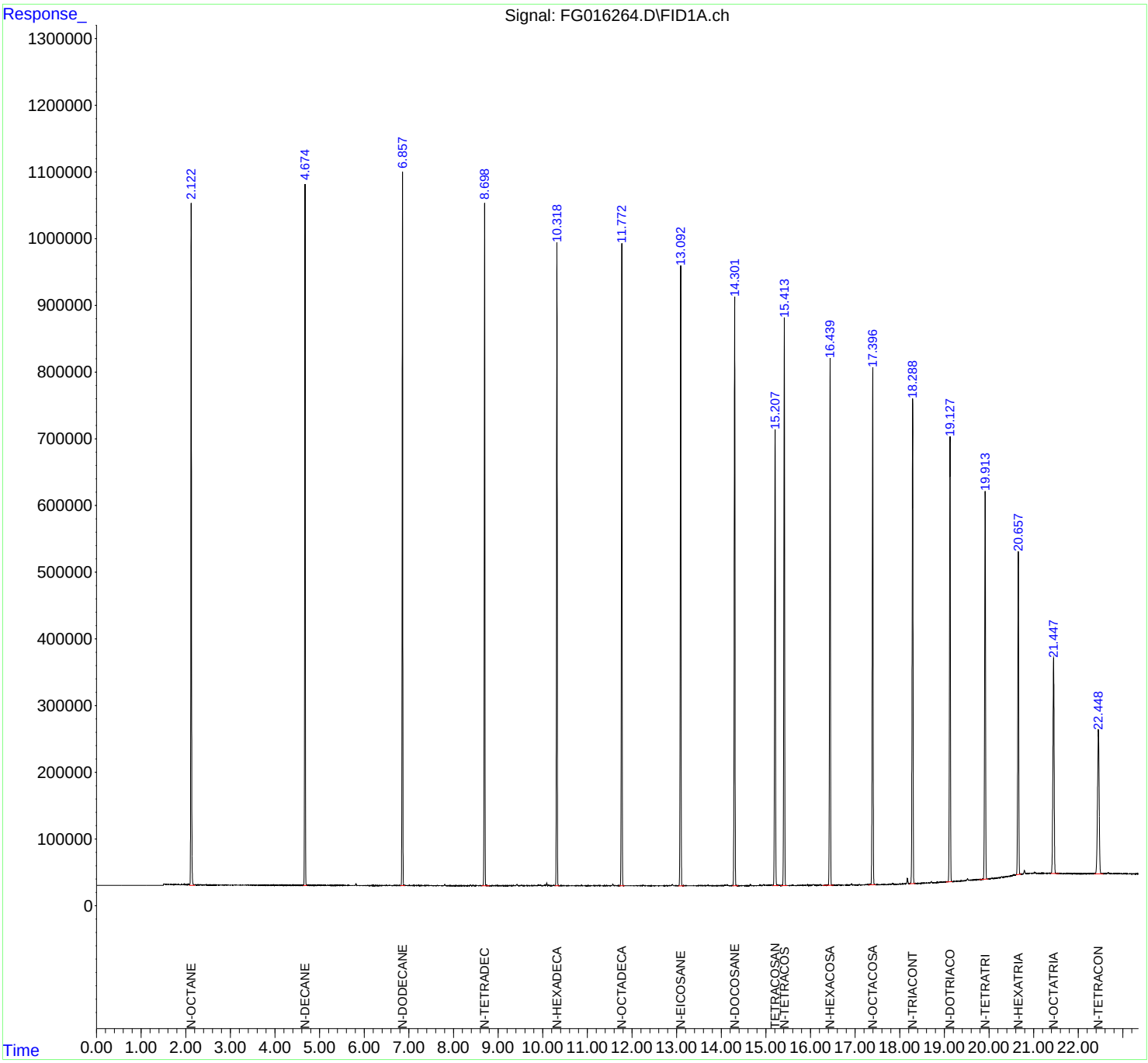
(f)=RT Delta > 1/2 Window (m)=manual int.

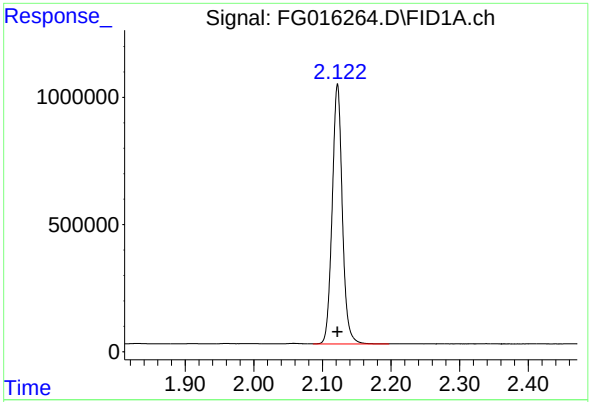
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016264.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 10:02
Operator : YP\AJ
Sample : 100 TRPH STD
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
100 TRPH STD

Integration File: autoint1.e
Quant Time: Jul 09 11:31:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 11:29:23 2025
Response via : Initial Calibration
Integrator: ChemStation

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

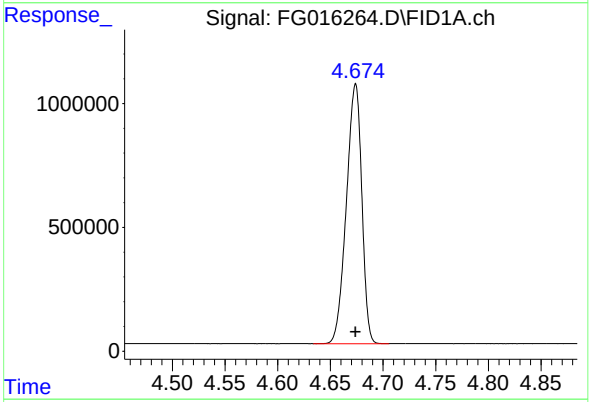




#1 N-OCTANE

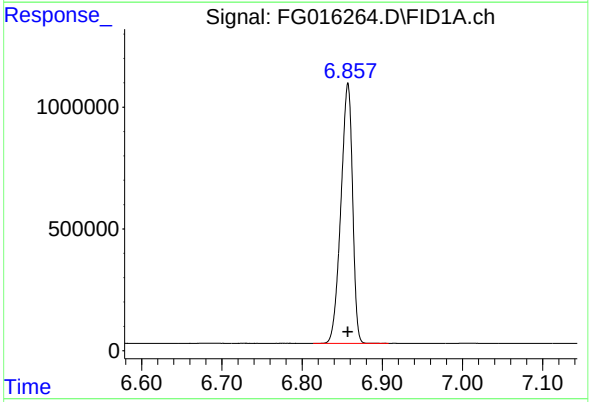
R.T.: 2.122 min
Delta R.T.: 0.000 min
Response: 10513227
Conc: 99.45 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



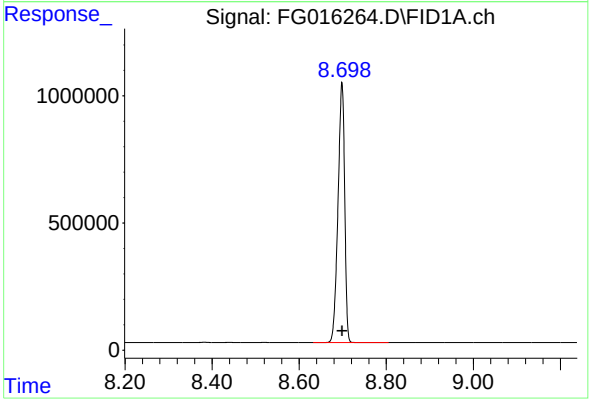
#2 N-DECANE

R.T.: 4.674 min
Delta R.T.: 0.000 min
Response: 10702599
Conc: 99.41 ug/ml



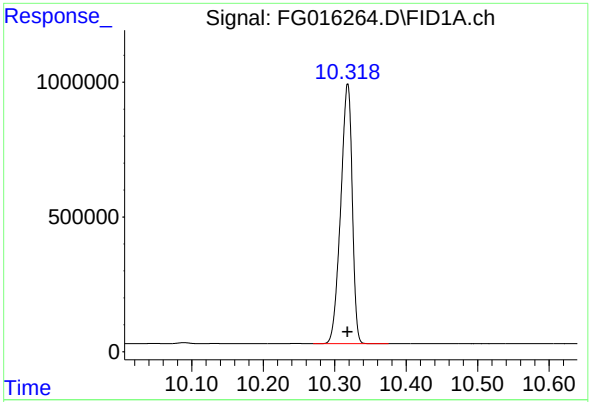
#3 N-DODECANE

R.T.: 6.857 min
Delta R.T.: 0.000 min
Response: 10800733
Conc: 99.62 ug/ml



#4 N-TETRADECANE

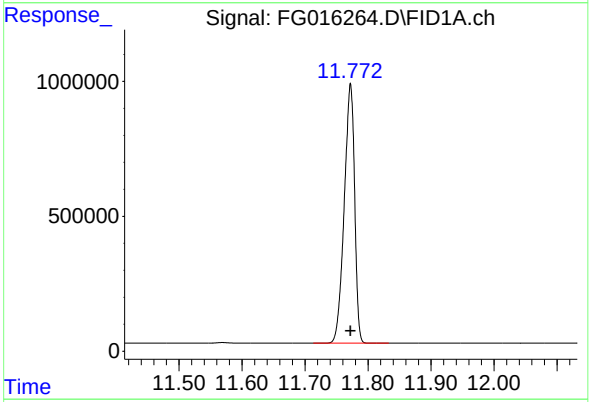
R.T.: 8.698 min
Delta R.T.: 0.000 min
Response: 10882051
Conc: 99.54 ug/ml



#5 N-HEXADECANE

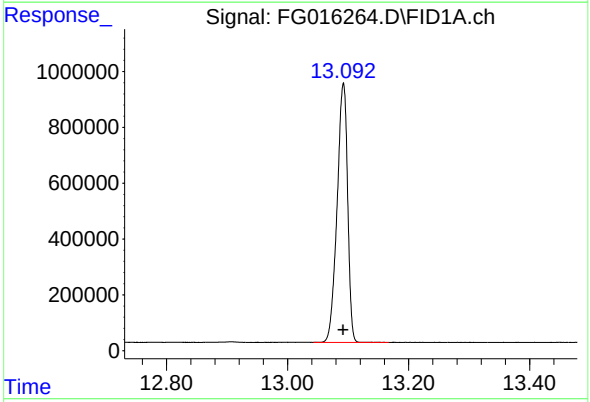
R.T.: 10.318 min
Delta R.T.: 0.000 min
Response: 10797207
Conc: 99.75 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



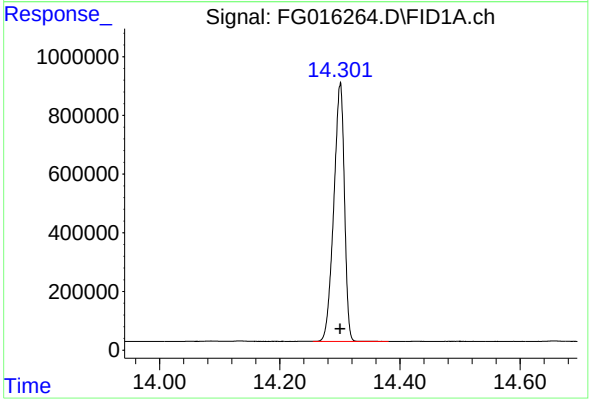
#6 N-OCTADECANE

R.T.: 11.772 min
Delta R.T.: 0.000 min
Response: 10989703
Conc: 99.79 ug/ml



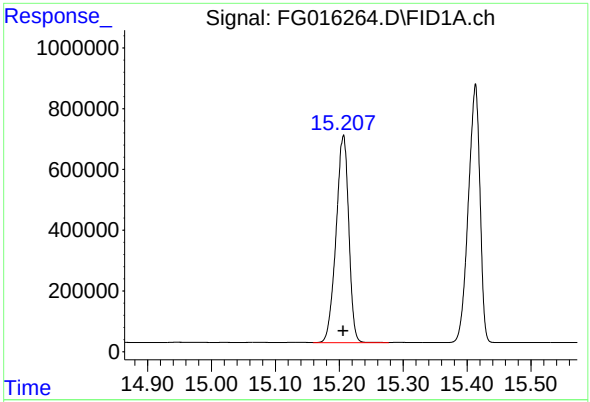
#7 N-EICOSANE

R.T.: 13.092 min
Delta R.T.: 0.000 min
Response: 11210686
Conc: 99.91 ug/ml



#8 N-DOCOSANE

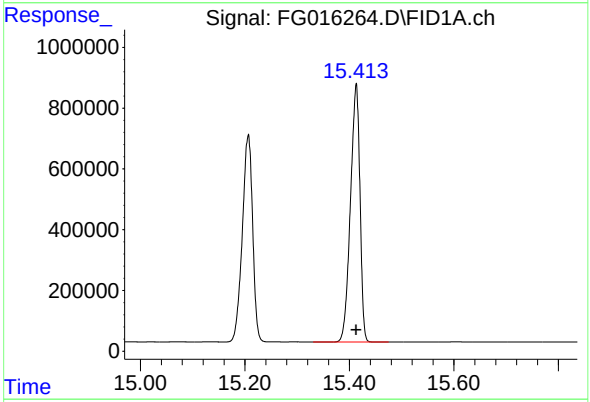
R.T.: 14.300 min
Delta R.T.: 0.000 min
Response: 10833018
Conc: 100.01 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

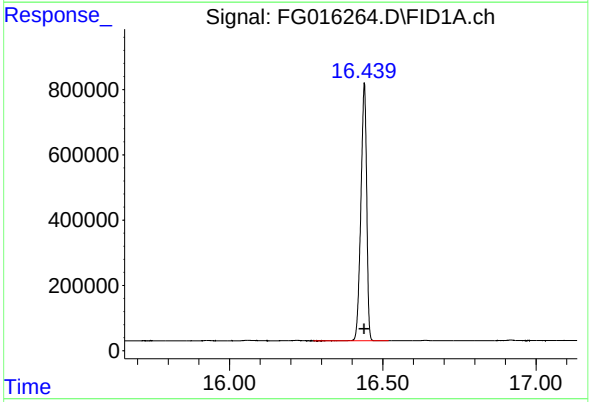
R.T.: 15.206 min
Delta R.T.: 0.000 min
Response: 9405279
Conc: 100.08 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



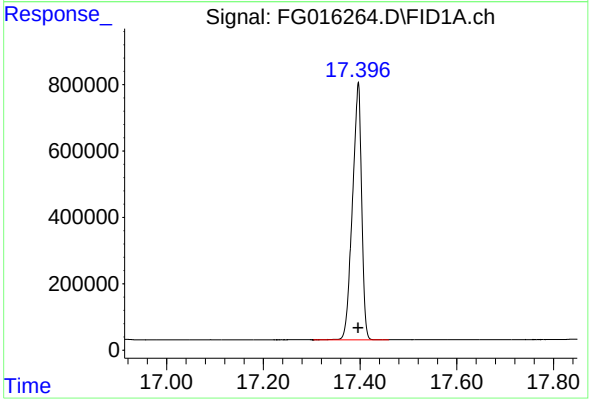
#10 N-TETRACOSANE

R.T.: 15.413 min
Delta R.T.: 0.000 min
Response: 10713606
Conc: 100.00 ug/ml



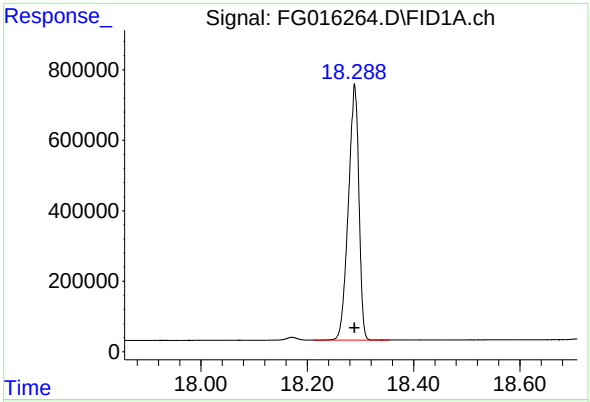
#11 N-HEXACOSANE

R.T.: 16.440 min
Delta R.T.: 0.000 min
Response: 10326014
Conc: 100.10 ug/ml



#12 N-OCTACOSANE

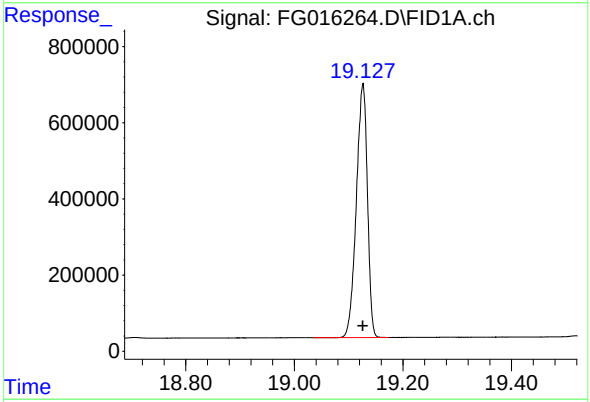
R.T.: 17.396 min
Delta R.T.: 0.000 min
Response: 10201832
Conc: 100.04 ug/ml



#13 N-TRIACONTANE

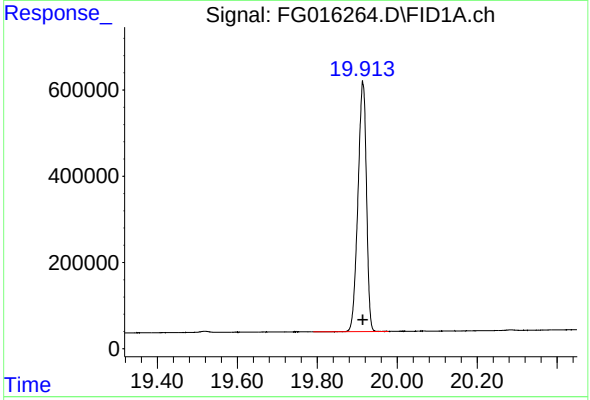
R.T.: 18.289 min
Delta R.T.: 0.000 min
Response: 9982115
Conc: 99.87 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



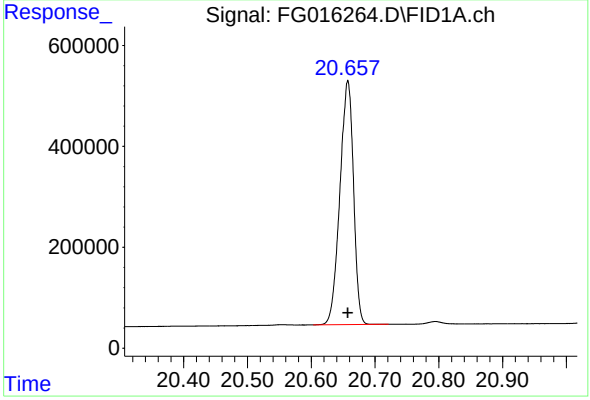
#14 N-DOTRIACONTANE

R.T.: 19.126 min
Delta R.T.: 0.000 min
Response: 9429909
Conc: 99.71 ug/ml



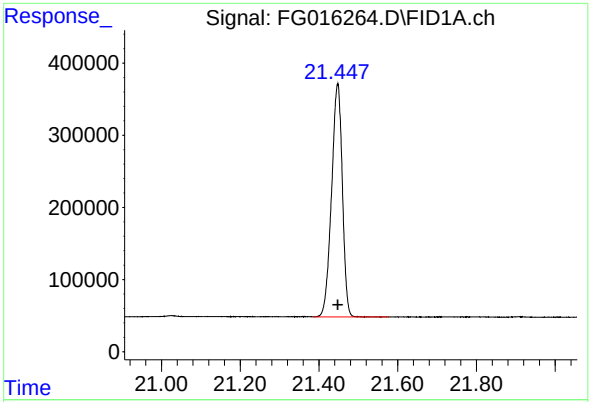
#15 N-TETRATRIACONTANE

R.T.: 19.914 min
Delta R.T.: 0.000 min
Response: 8543544
Conc: 99.11 ug/ml



#16 N-HEXATRIACONTANE

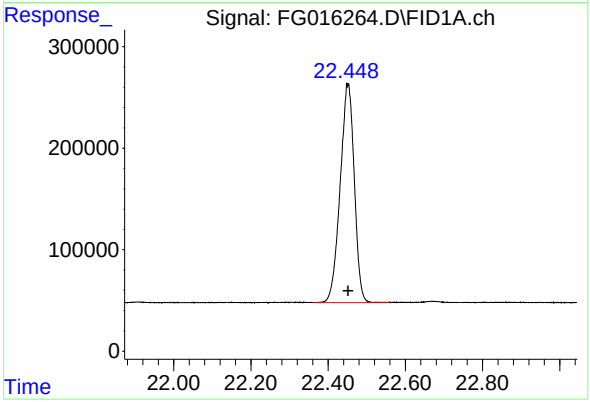
R.T.: 20.657 min
Delta R.T.: 0.000 min
Response: 7167275
Conc: 98.47 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.447 min
Delta R.T.: 0.000 min
Response: 6145879
Conc: 97.42 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.451 min
Delta R.T.: 0.000 min
Response: 5478000
Conc: 97.07 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016264.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 10:02
Sample : 100 TRPH STD
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.122	2.087	2.197	BV	1020910	10466520	93.45%	6.019%
2	4.674	4.634	4.729	BB	1051157	10691060	95.46%	6.149%
3	6.857	6.813	6.906	BB	1070106	10787023	96.31%	6.204%
4	8.698	8.636	8.749	BB	1021475	10860671	96.97%	6.246%
5	10.318	10.272	10.372	BB	963509	10793384	96.37%	6.207%
6	11.772	11.719	11.816	BB	961958	10981588	98.05%	6.316%
7	13.092	13.039	13.143	BB	929619	11199918	100.00%	6.441%
8	14.301	14.218	14.357	BB	878478	10822522	96.63%	6.224%
9	15.207	15.162	15.275	BV	682427	9383425	83.78%	5.397%
10	15.413	15.355	15.468	BB	852505	10701717	95.55%	6.155%
11	16.440	16.368	16.498	BB	788812	10314448	92.09%	5.932%
12	17.396	17.306	17.461	BB	776135	10189144	90.98%	5.860%
13	18.289	18.221	18.352	BB	722627	9979216	89.10%	5.739%
14	19.126	19.061	19.172	BB	668235	9425243	84.15%	5.421%
15	19.914	19.831	19.957	BB	576345	8531462	76.17%	4.907%
16	20.657	20.600	20.718	BB	483955	7166469	63.99%	4.122%
17	21.448	21.377	21.534	BB	322275	6133886	54.77%	3.528%
18	22.452	22.359	22.539	BV	215235	5450683	48.67%	3.135%
			Sum of corrected areas:			173878379		

FG070925.M Wed Jul 09 12:54:07 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016265.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 11:05
Operator : YP\AJ
Sample : 50 TRPH STD
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 TRPH STD

Integration File: autoint1.e
Quant Time: Jul 09 11:29:40 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 11:29:23 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...	15.203	4694890	50.000 ug/ml
	Target Compounds			
1)	N-OCTANE	2.121	5314789	50.000 ug/ml
2)	N-DECANE	4.672	5415291	50.000 ug/ml
3)	N-DODECANE	6.854	5441040	50.000 ug/ml
4)	N-TETRADECANE	8.696	5491667	50.000 ug/ml
5)	N-HEXADECANE	10.316	5425386	50.000 ug/ml
6)	N-OCTADECANE	11.770	5517704	50.000 ug/ml
7)	N-EICOSANE	13.089	5615135	50.000 ug/ml
8)	N-DOCOSANE	14.297	5414999	50.000 ug/ml
10)	N-TETRACOSANE	15.408	5357048	50.000 ug/ml
11)	N-HEXACOSANE	16.437	5152435	50.000 ug/ml
12)	N-OCTACOSANE	17.393	5096594	50.000 ug/ml
13)	N-TRIACONTANE	18.286	5003991	50.000 ug/ml
14)	N-DOTRIACONTANE	19.123	4742292	50.000 ug/ml
15)	N-TETRATRIACONTANE	19.911	4348240	50.000 ug/ml
16)	N-HEXATRIACONTANE	20.654	3695076	50.000 ug/ml
17)	N-OCTATRIACONTANE	21.445	3235381	50.000 ug/ml
18)	N-TETRACONTANE	22.452	2904142	50.000 ug/ml

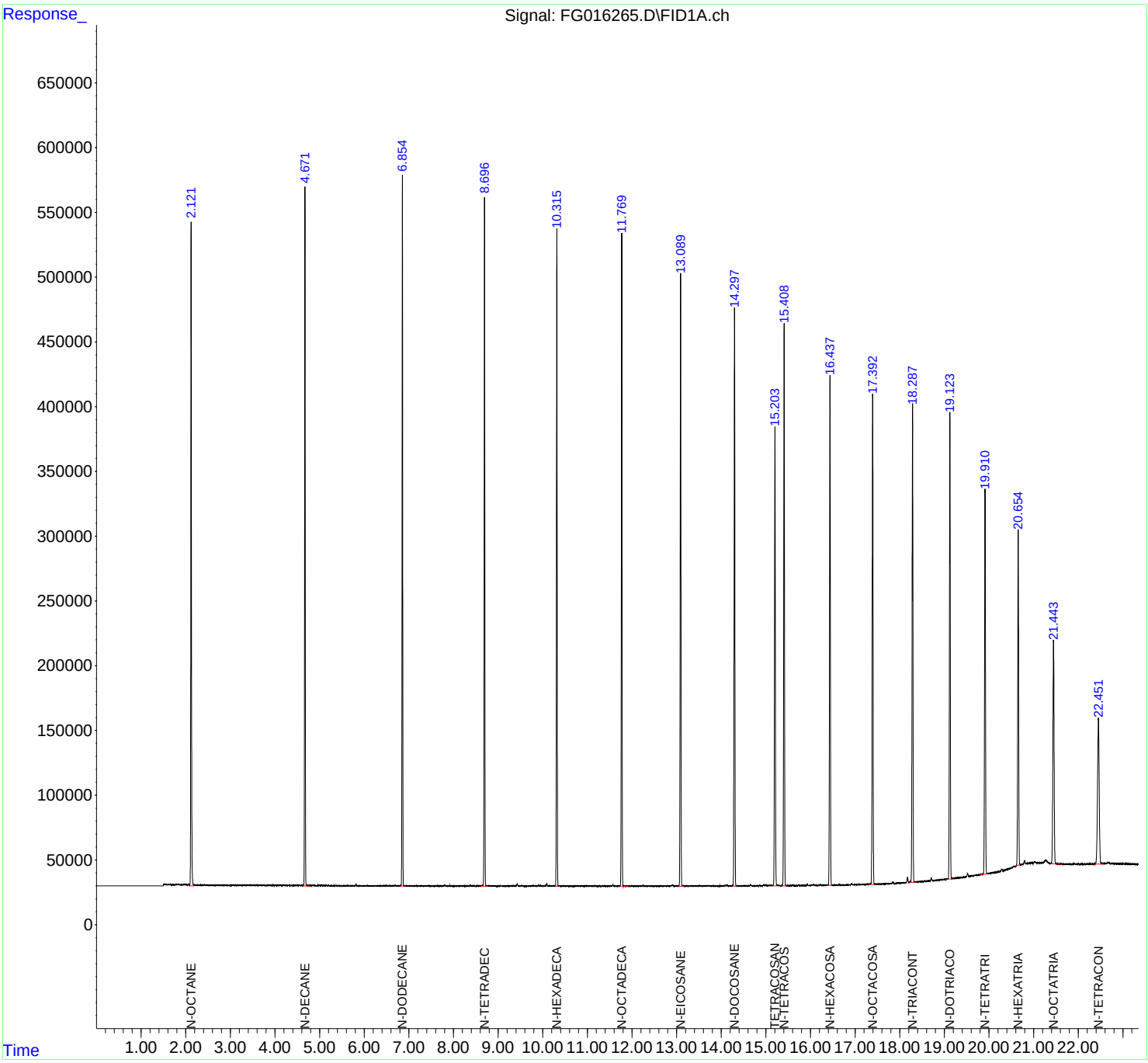
(f)=RT Delta > 1/2 Window (m)=manual int.

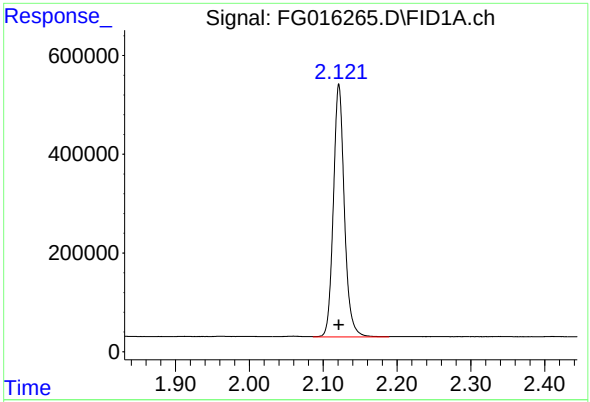
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016265.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 11:05
Operator : YP\AJ
Sample : 50 TRPH STD
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 TRPH STD

Integration File: autoint1.e
Quant Time: Jul 09 11:29:40 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 11:29:23 2025
Response via : Initial Calibration
Integrator: ChemStation

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

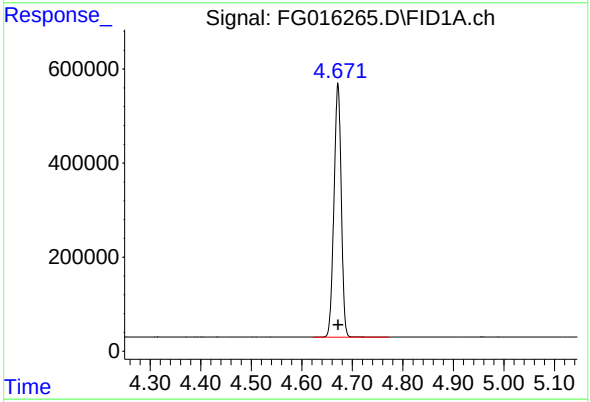




#1 N-OCTANE

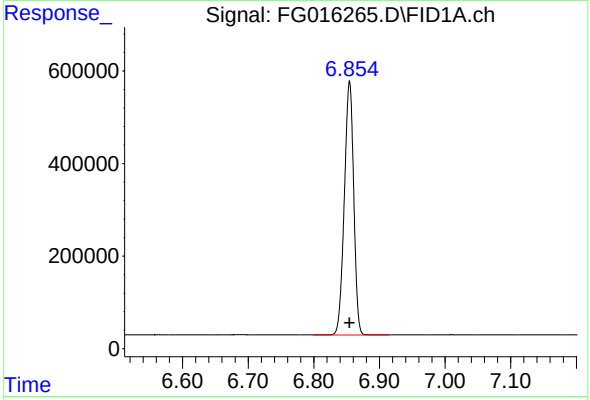
R.T.: 2.121 min
Delta R.T.: 0.000 min
Response: 5314789
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



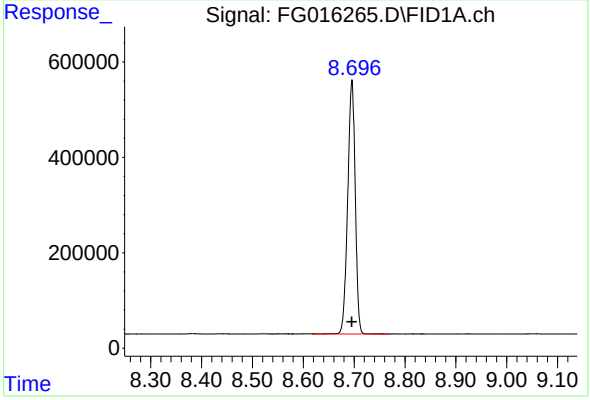
#2 N-DECANE

R.T.: 4.672 min
Delta R.T.: 0.000 min
Response: 5415291
Conc: 50.00 ug/ml



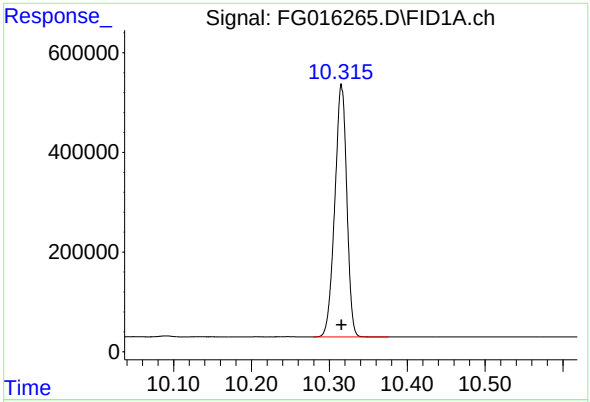
#3 N-DODECANE

R.T.: 6.854 min
Delta R.T.: 0.000 min
Response: 5441040
Conc: 50.00 ug/ml



#4 N-TETRADECANE

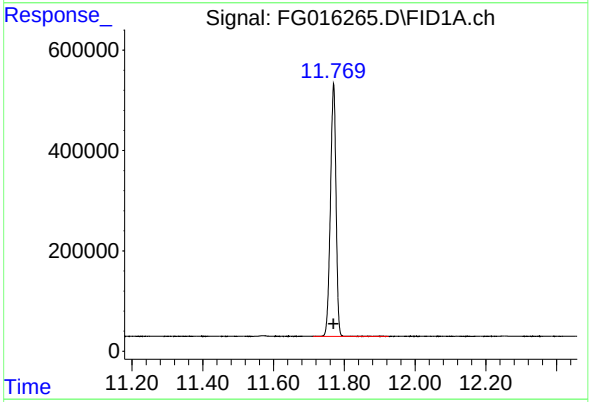
R.T.: 8.696 min
Delta R.T.: 0.000 min
Response: 5491667
Conc: 50.00 ug/ml



#5 N-HEXADECANE

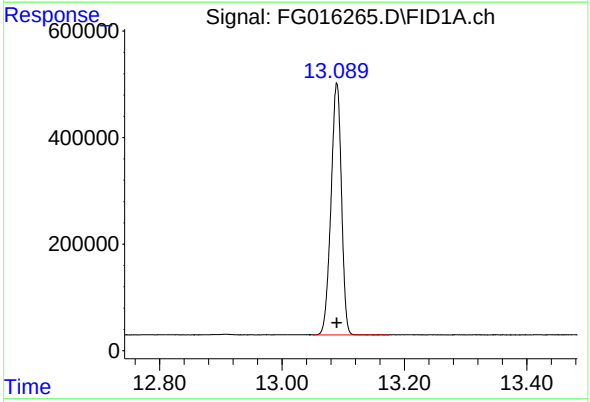
R.T.: 10.316 min
Delta R.T.: 0.000 min
Response: 5425386
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



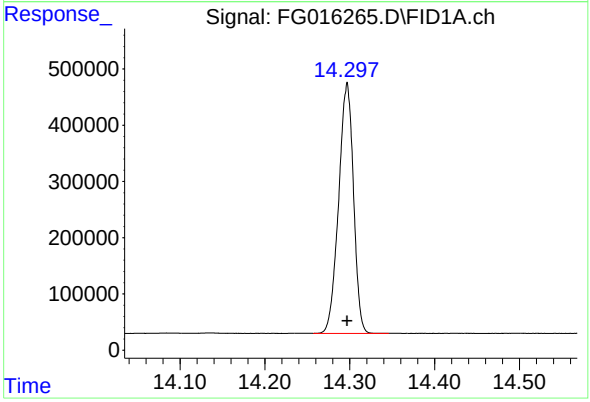
#6 N-OCTADECANE

R.T.: 11.770 min
Delta R.T.: 0.000 min
Response: 5517704
Conc: 50.00 ug/ml



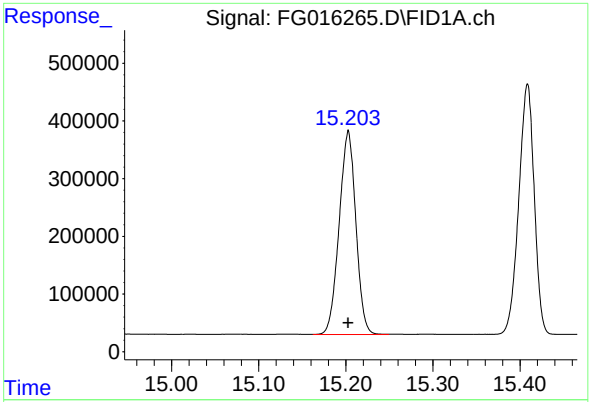
#7 N-EICOSANE

R.T.: 13.089 min
Delta R.T.: 0.000 min
Response: 5615135
Conc: 50.00 ug/ml



#8 N-DOCOSANE

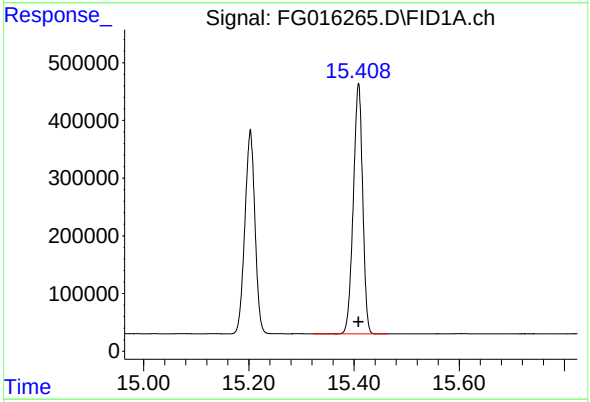
R.T.: 14.297 min
Delta R.T.: 0.000 min
Response: 5414999
Conc: 50.00 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

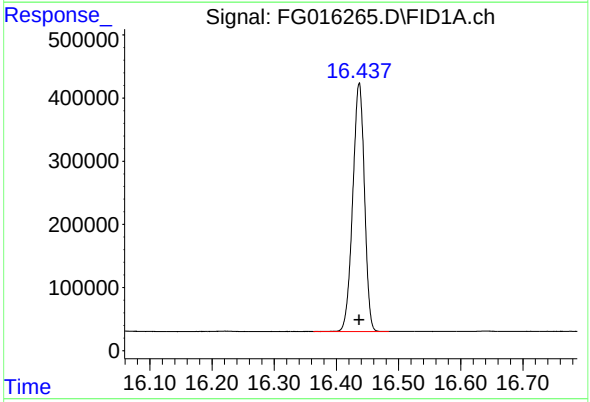
R.T.: 15.203 min
Delta R.T.: 0.000 min
Response: 4694890
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



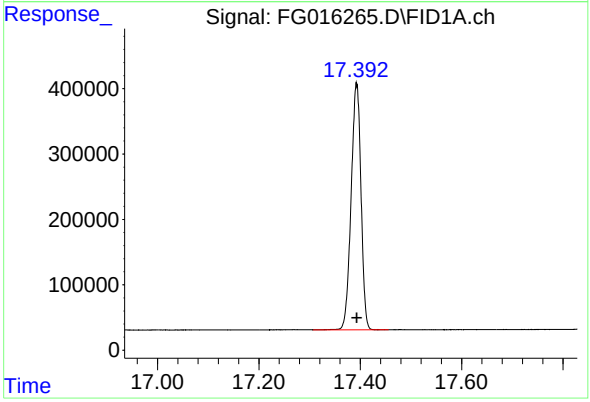
#10 N-TETRACOSANE

R.T.: 15.408 min
Delta R.T.: 0.000 min
Response: 5357048
Conc: 50.00 ug/ml



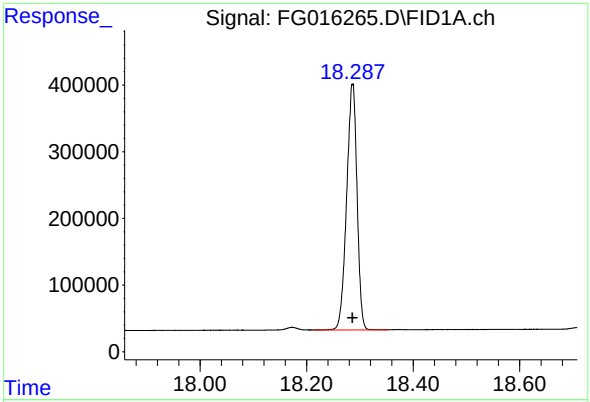
#11 N-HEXACOSANE

R.T.: 16.437 min
Delta R.T.: 0.000 min
Response: 5152435
Conc: 50.00 ug/ml



#12 N-OCTACOSANE

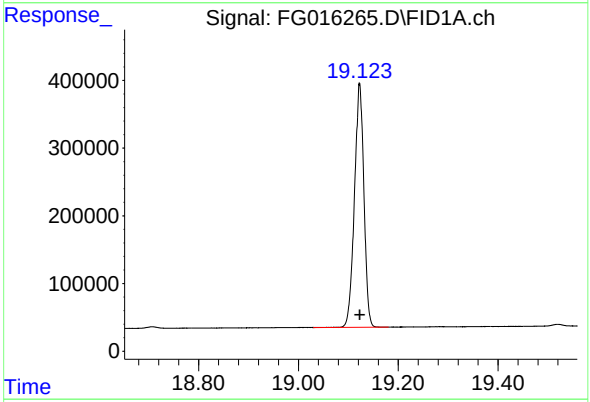
R.T.: 17.393 min
Delta R.T.: 0.000 min
Response: 5096594
Conc: 50.00 ug/ml



#13 N-TRIACONTANE

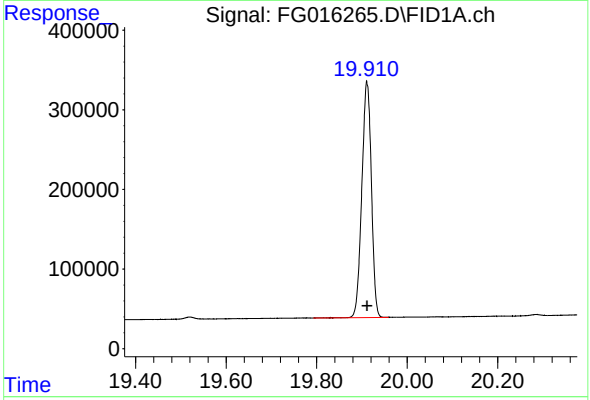
R.T.: 18.286 min
Delta R.T.: 0.000 min
Response: 5003991
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



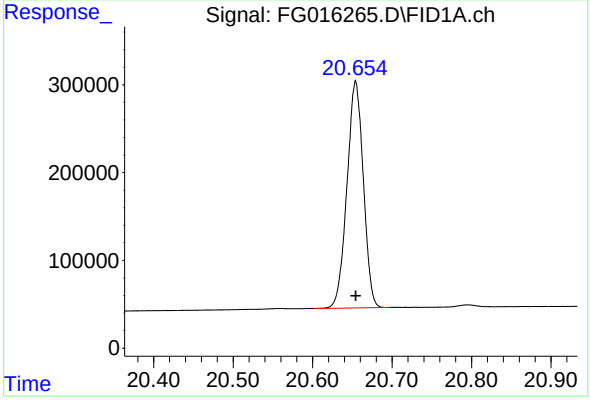
#14 N-DOTRIACONTANE

R.T.: 19.123 min
Delta R.T.: 0.000 min
Response: 4742292
Conc: 50.00 ug/ml



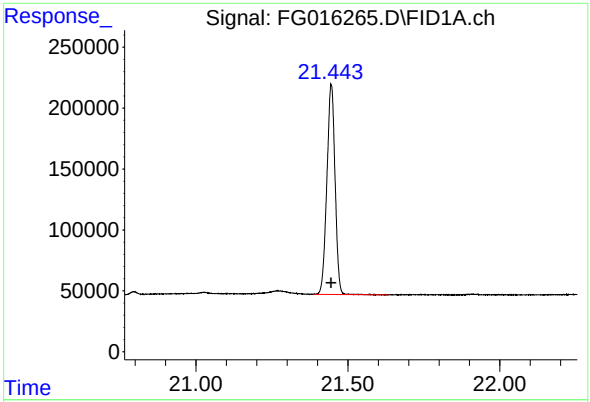
#15 N-TETRATRIACONTANE

R.T.: 19.911 min
Delta R.T.: 0.000 min
Response: 4348240
Conc: 50.00 ug/ml



#16 N-HEXATRIACONTANE

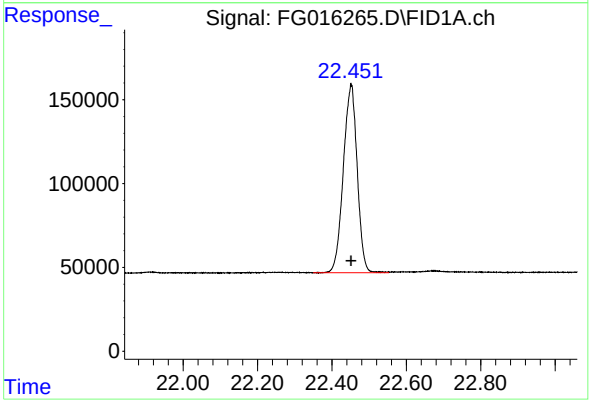
R.T.: 20.654 min
Delta R.T.: 0.000 min
Response: 3695076
Conc: 50.00 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.445 min
Delta R.T.: 0.000 min
Response: 3235381
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.452 min
Delta R.T.: 0.000 min
Response: 2904142
Conc: 50.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016265.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 11:05
Sample : 50 TRPH STD
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.121	2.081	2.202	BB	511513	5271107	93.98%	6.015%
2	4.672	4.630	4.724	BB	537754	5379771	95.92%	6.139%
3	6.855	6.820	6.905	BB	547985	5427628	96.77%	6.194%
4	8.696	8.626	8.735	BB	532283	5474141	97.60%	6.247%
5	10.316	10.270	10.364	BB	506213	5420530	96.64%	6.186%
6	11.770	11.721	11.819	BB	502750	5507884	98.20%	6.285%
7	13.090	13.051	13.139	BB	472496	5608809	100.00%	6.401%
8	14.297	14.225	14.338	BB	446753	5411561	96.48%	6.175%
9	15.203	15.158	15.276	BB	354031	4687245	83.57%	5.349%
10	15.409	15.356	15.465	BB	434164	5344665	95.29%	6.099%
11	16.437	16.371	16.480	BB	393464	5145455	91.74%	5.872%
12	17.393	17.307	17.456	BB	373316	5089293	90.74%	5.808%
13	18.286	18.215	18.339	BB	367267	4990371	88.97%	5.695%
14	19.123	19.066	19.174	BB	359898	4735791	84.43%	5.404%
15	19.911	19.747	19.959	BB	294760	4333586	77.26%	4.945%
16	20.654	20.600	20.694	BB	258414	3694574	65.87%	4.216%
17	21.445	21.370	21.554	BB	171854	3223241	57.47%	3.678%
18	22.452	22.357	22.541	BB	111362	2884716	51.43%	3.292%
			Sum of corrected areas:			87630369		

FG070925.M Wed Jul 09 12:53:06 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016266.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 11:34
Operator : YP\AJ
Sample : 20 TRPH STD
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
20 TRPH STD

Integration File: autoint1.e
Quant Time: Jul 09 11:52:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 11:52:16 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...	15.198	1995225	20.804 ug/ml
	Target Compounds			
1)	N-OCTANE	2.123	2289458	21.075 ug/ml
2)	N-DECANE	4.670	2316024	20.983 ug/ml
3)	N-DODECANE	6.852	2334563	20.997 ug/ml
4)	N-TETRADECANE	8.693	2348376	20.963 ug/ml
5)	N-HEXADECANE	10.312	2315857	20.909 ug/ml
6)	N-OCTADECANE	11.765	2351653	20.883 ug/ml
7)	N-EICOSANE	13.086	2391656	20.858 ug/ml
8)	N-DOCOSANE	14.293	2303271	20.826 ug/ml
10)	N-TETRACOSANE	15.403	2278488	20.827 ug/ml
11)	N-HEXACOSANE	16.432	2194457	20.831 ug/ml
12)	N-OCTACOSANE	17.388	2169947	20.835 ug/ml
13)	N-TRIACONTANE	18.281	2139871	20.918 ug/ml
14)	N-DOTRIACONTANE	19.119	2026483	20.930 ug/ml
15)	N-TETRATRIACONTANE	19.908	1802309	20.597 ug/ml
16)	N-HEXATRIACONTANE	20.652	1470221	20.132 ug/ml
17)	N-OCTATRIACONTANE	21.442	1262549	20.009 ug/ml
18)	N-TETRACONTANE	22.445	1106680	19.739 ug/ml

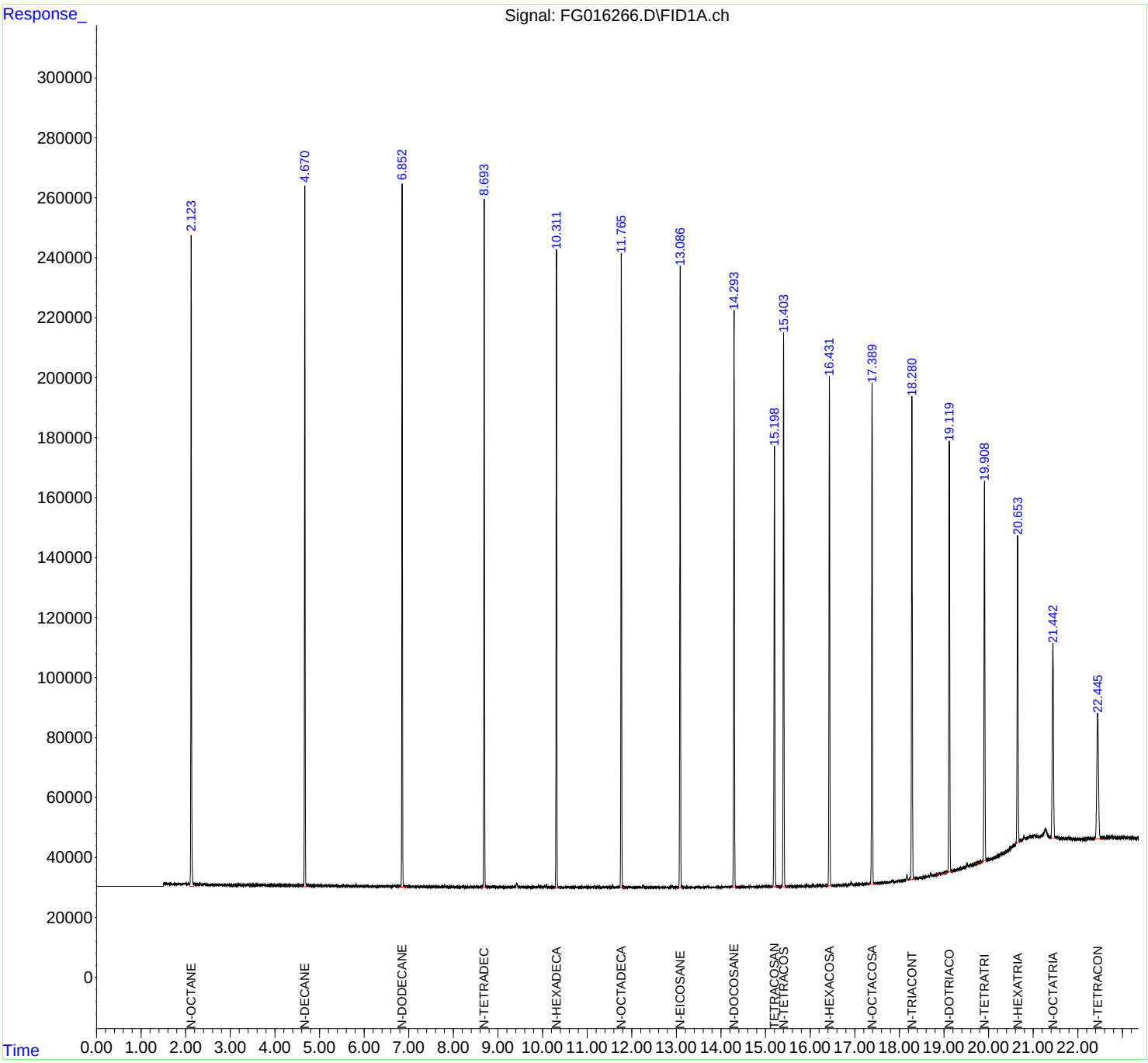
(f)=RT Delta > 1/2 Window (m)=manual int.

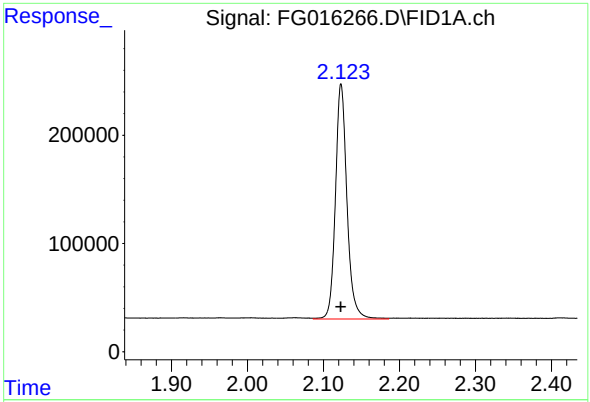
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016266.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 11:34
Operator : YP\AJ
Sample : 20 TRPH STD
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
20 TRPH STD

Integration File: autoint1.e
Quant Time: Jul 09 11:52:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 11:52:16 2025
Response via : Initial Calibration
Integrator: ChemStation

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

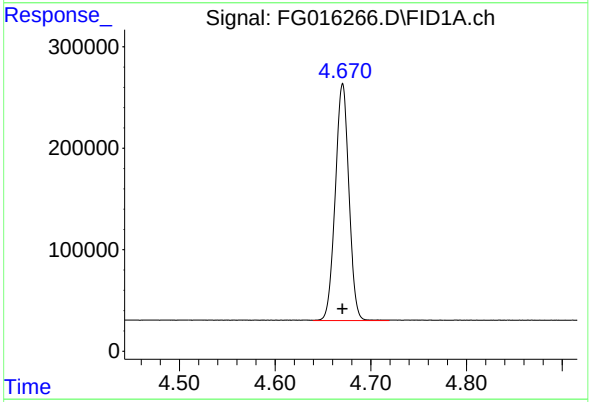




#1 N-OCTANE

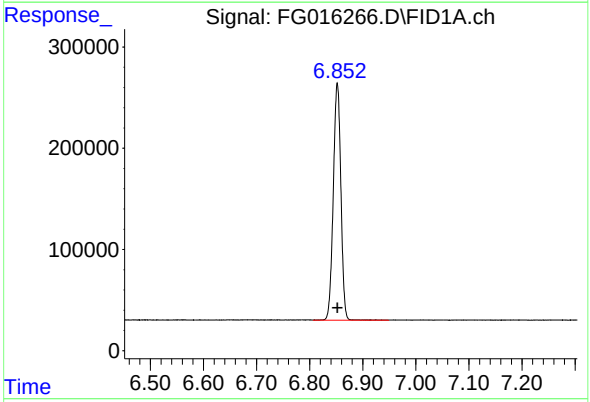
R.T.: 2.123 min
Delta R.T.: 0.000 min
Response: 2289458
Conc: 21.08 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



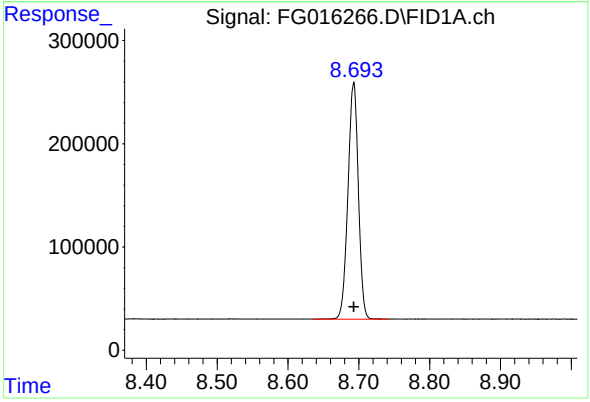
#2 N-DECANE

R.T.: 4.670 min
Delta R.T.: 0.000 min
Response: 2316024
Conc: 20.98 ug/ml



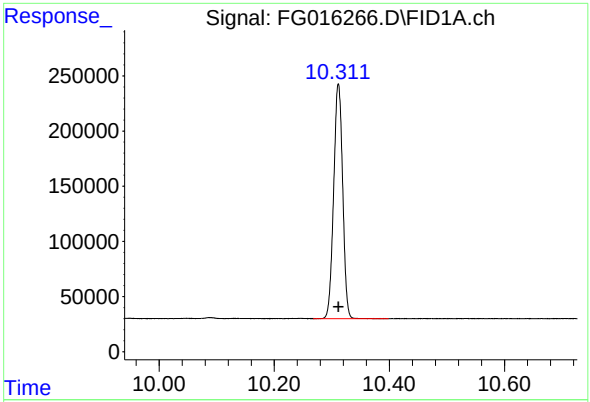
#3 N-DODECANE

R.T.: 6.852 min
Delta R.T.: 0.000 min
Response: 2334563
Conc: 21.00 ug/ml



#4 N-TETRADECANE

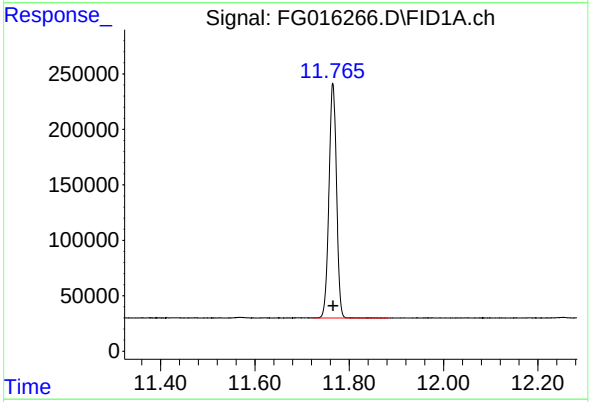
R.T.: 8.693 min
Delta R.T.: 0.000 min
Response: 2348376
Conc: 20.96 ug/ml



#5 N-HEXADECANE

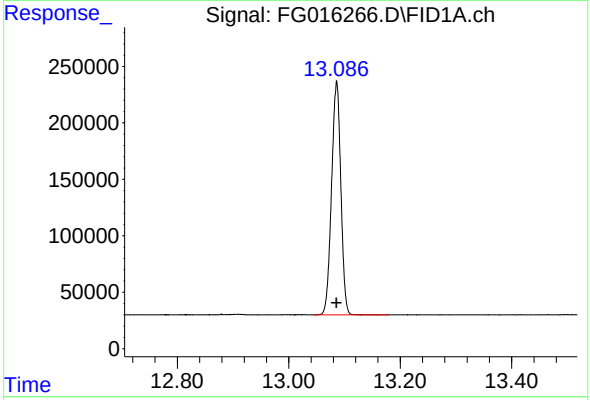
R.T.: 10.312 min
Delta R.T.: 0.000 min
Response: 2315857
Conc: 20.91 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



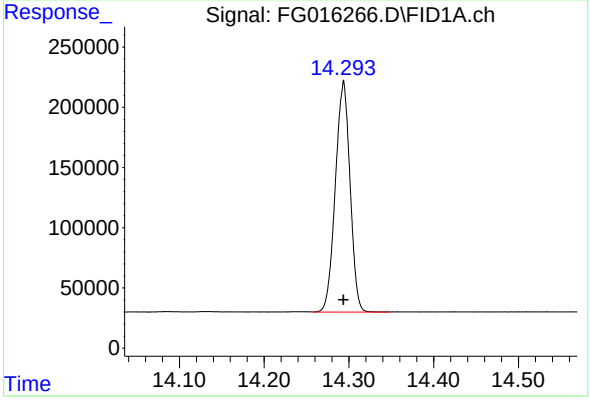
#6 N-OCTADECANE

R.T.: 11.765 min
Delta R.T.: 0.000 min
Response: 2351653
Conc: 20.88 ug/ml



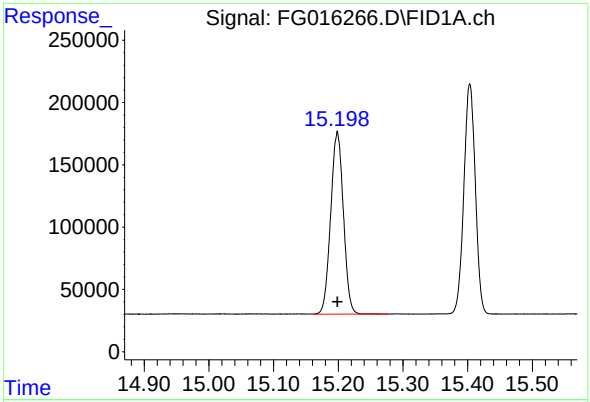
#7 N-EICOSANE

R.T.: 13.086 min
Delta R.T.: 0.000 min
Response: 2391656
Conc: 20.86 ug/ml



#8 N-DOCOSANE

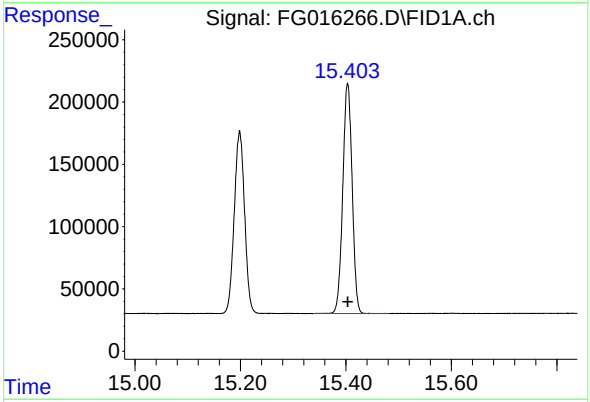
R.T.: 14.293 min
Delta R.T.: 0.000 min
Response: 2303271
Conc: 20.83 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

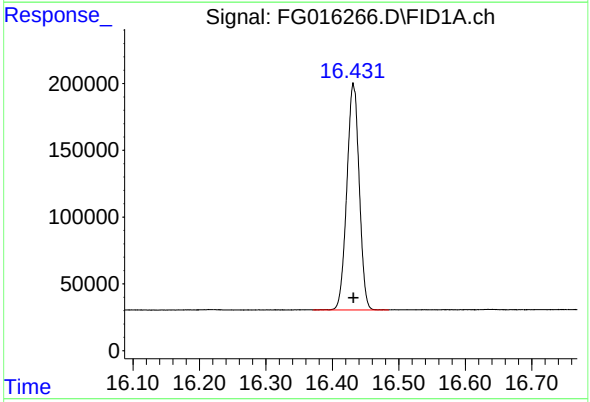
R.T.: 15.198 min
Delta R.T.: 0.000 min
Response: 1995225
Conc: 20.80 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



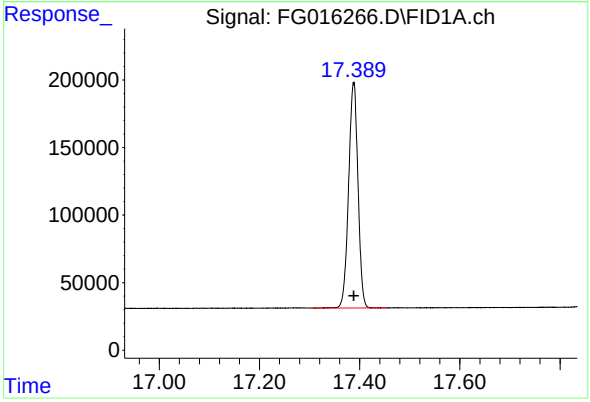
#10 N-TETRACOSANE

R.T.: 15.403 min
Delta R.T.: 0.000 min
Response: 2278488
Conc: 20.83 ug/ml



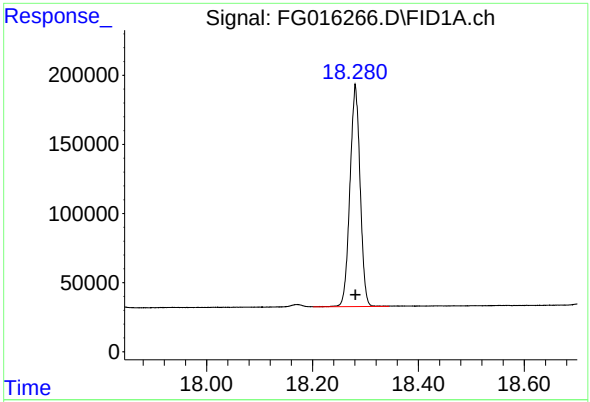
#11 N-HEXACOSANE

R.T.: 16.432 min
Delta R.T.: 0.000 min
Response: 2194457
Conc: 20.83 ug/ml



#12 N-OCTACOSANE

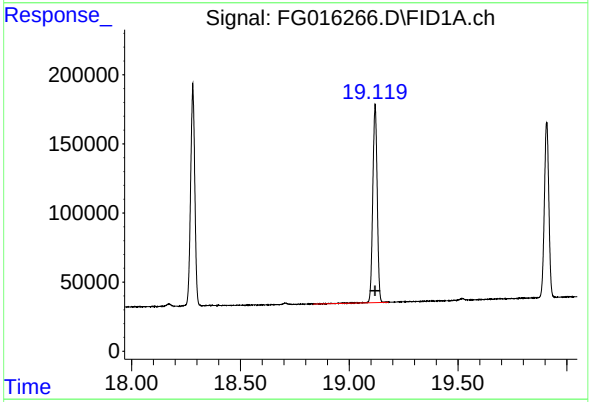
R.T.: 17.388 min
Delta R.T.: 0.000 min
Response: 2169947
Conc: 20.83 ug/ml



#13 N-TRIACONTANE

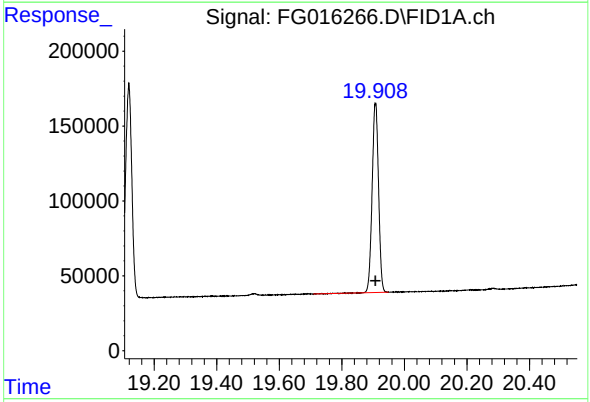
R.T.: 18.281 min
Delta R.T.: 0.000 min
Response: 2139871
Conc: 20.92 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



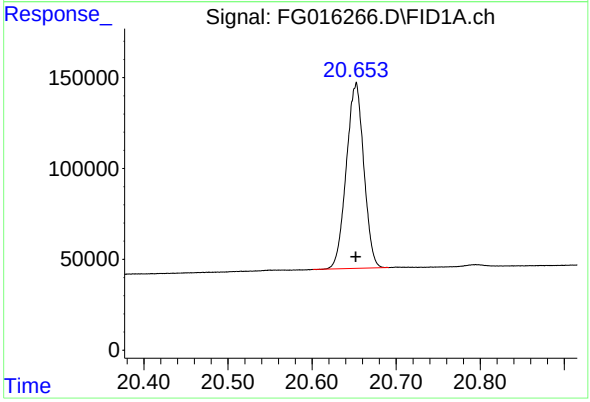
#14 N-DOTRIACONTANE

R.T.: 19.119 min
Delta R.T.: 0.000 min
Response: 2026483
Conc: 20.93 ug/ml



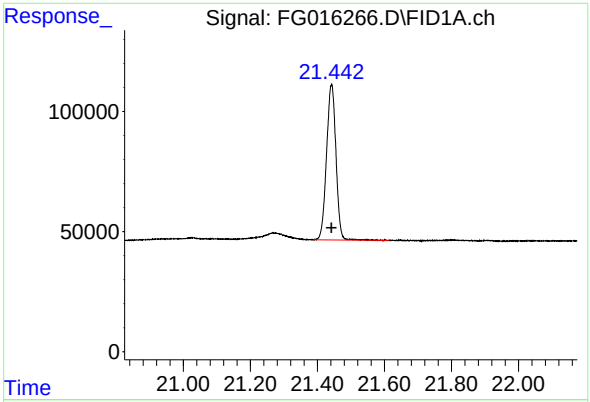
#15 N-TETRATRIACONTANE

R.T.: 19.908 min
Delta R.T.: 0.000 min
Response: 1802309
Conc: 20.60 ug/ml



#16 N-HEXATRIACONTANE

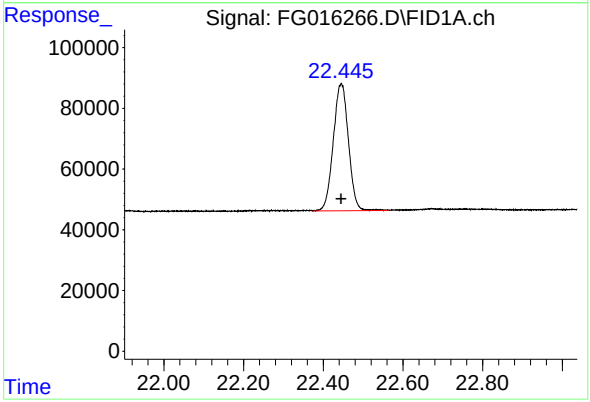
R.T.: 20.652 min
Delta R.T.: 0.000 min
Response: 1470221
Conc: 20.13 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.442 min
Delta R.T.: 0.000 min
Response: 1262549
Conc: 20.01 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.445 min
Delta R.T.: 0.000 min
Response: 1106680
Conc: 19.74 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016266.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 11:34
Sample : 20 TRPH STD
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.123	2.083	2.185	BB	216409	2250251	94.38%	6.096%
2	4.671	4.628	4.703	BB	233350	2293684	96.20%	6.214%
3	6.852	6.817	6.897	BB	233496	2313347	97.02%	6.267%
4	8.693	8.653	8.739	BB	228547	2336813	98.01%	6.331%
5	10.311	10.270	10.361	BB	212848	2309608	96.87%	6.257%
6	11.765	11.723	11.817	BB	211549	2344818	98.34%	6.352%
7	13.086	13.040	13.138	BB	206960	2384319	100.00%	6.459%
8	14.294	14.257	14.344	BB	192340	2300336	96.48%	6.232%
9	15.199	15.161	15.254	BB	146774	1990073	83.47%	5.391%
10	15.403	15.359	15.450	BB	184693	2273035	95.33%	6.158%
11	16.432	16.385	16.485	BB	169092	2186806	91.72%	5.924%
12	17.388	17.318	17.442	BB	166298	2166344	90.86%	5.869%
13	18.281	18.219	18.332	BB	160412	2127450	89.23%	5.764%
14	19.119	19.063	19.168	BB	143501	2012759	84.42%	5.453%
15	19.908	19.858	19.949	BB	126100	1800636	75.52%	4.878%
16	20.652	20.600	20.692	BV	102298	1478657	62.02%	4.006%
17	21.442	21.368	21.522	BB	64664	1249767	52.42%	3.386%
18	22.445	22.367	22.554	BB	41890	1093330	45.86%	2.962%
			Sum of corrected areas:			36912033		

FG070925.M Wed Jul 09 12:52:30 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016267.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 12:04
Operator : YP\AJ
Sample : 10 TRPH STD
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
10 TRPH STD

Integration File: autoint1.e
Quant Time: Jul 09 12:14:22 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:14:13 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...	15.198	1073359	10.868 ug/ml
	Target Compounds			
1)	N-OCTANE	2.124	1201761	10.776 ug/ml
2)	N-DECANE	4.670	1227865	10.820 ug/ml
3)	N-DODECANE	6.851	1238160	10.828 ug/ml
4)	N-TETRADECANE	8.692	1270412	10.973 ug/ml
5)	N-HEXADECANE	10.310	1238623	10.862 ug/ml
6)	N-OCTADECANE	11.764	1257535	10.850 ug/ml
7)	N-EICOSANE	13.085	1283180	10.867 ug/ml
8)	N-DOCOSANE	14.292	1233639	10.841 ug/ml
10)	N-TETRACOSANE	15.403	1225880	10.878 ug/ml
11)	N-HEXACOSANE	16.431	1180144	10.876 ug/ml
12)	N-OCTACOSANE	17.387	1164005	10.857 ug/ml
13)	N-TRIACONTANE	18.281	1140440	10.837 ug/ml
14)	N-DOTRIACONTANE	19.118	1073316	10.793 ug/ml
15)	N-TETRATRIACONTANE	19.907	946293	10.598 ug/ml
16)	N-HEXATRIACONTANE	20.651	757419	10.276 ug/ml
17)	N-OCTATRIACONTANE	21.440	642497	10.136 ug/ml
18)	N-TETRACONTANE	22.442	558180	9.967 ug/ml

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

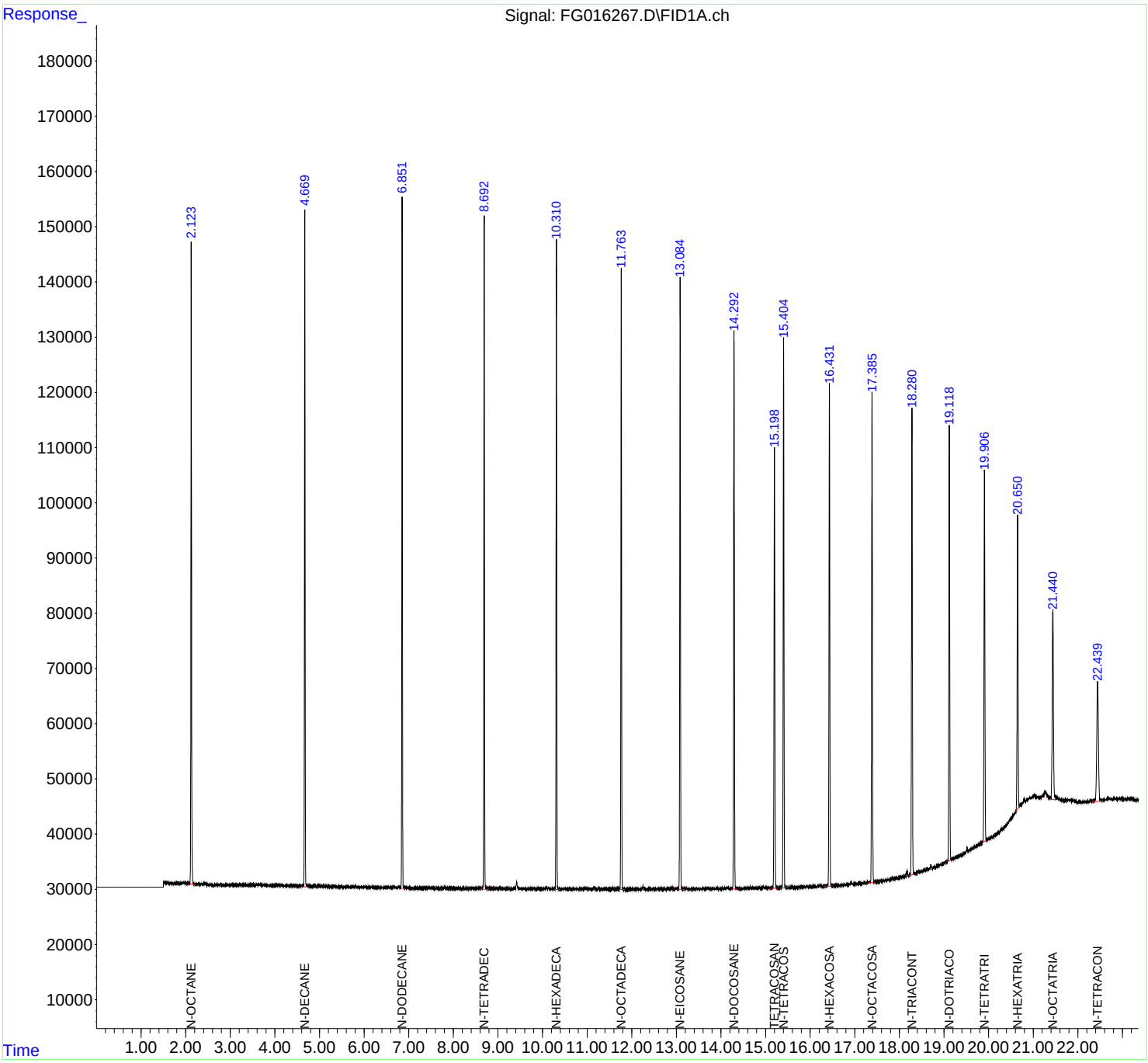
Quantitation Report (QT Reviewed)

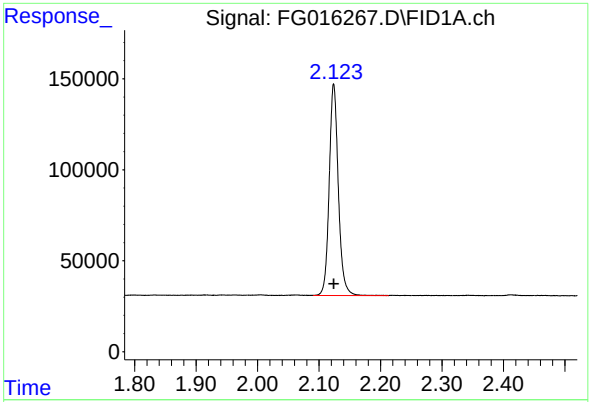
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016267.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 12:04
Operator : YP\AJ
Sample : 10 TRPH STD
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
10 TRPH STD

Integration File: autoint1.e
Quant Time: Jul 09 12:14:22 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:14:13 2025
Response via : Initial Calibration
Integrator: ChemStation

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

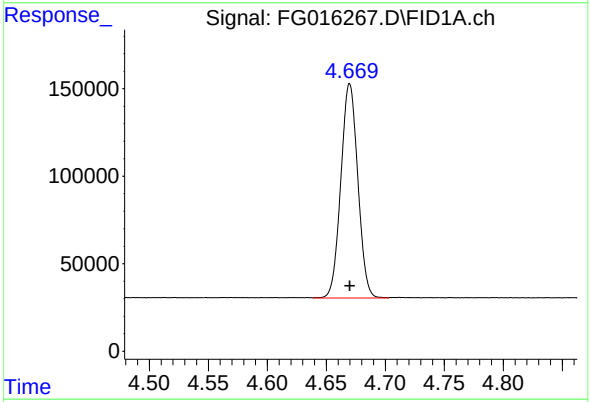




#1 N-OCTANE

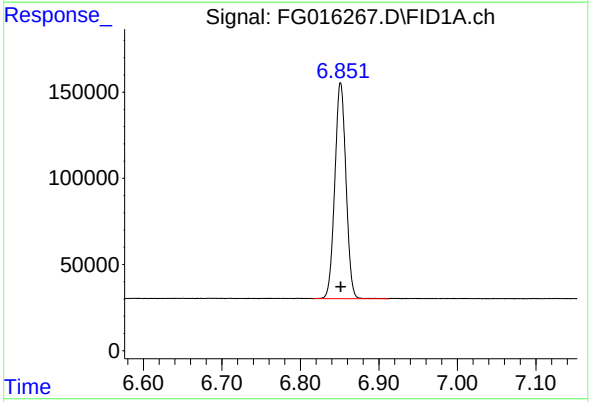
R.T.: 2.124 min
Delta R.T.: 0.000 min
Response: 1201761
Conc: 10.78 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



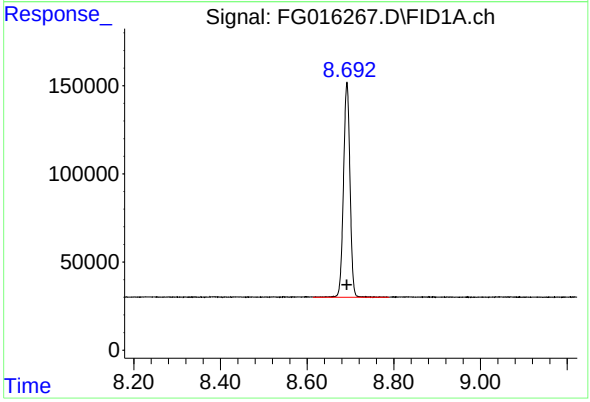
#2 N-DECANE

R.T.: 4.670 min
Delta R.T.: 0.000 min
Response: 1227865
Conc: 10.82 ug/ml



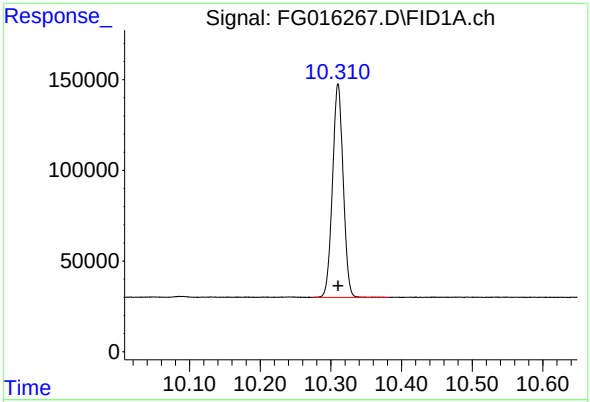
#3 N-DODECANE

R.T.: 6.851 min
Delta R.T.: 0.000 min
Response: 1238160
Conc: 10.83 ug/ml



#4 N-TETRADECANE

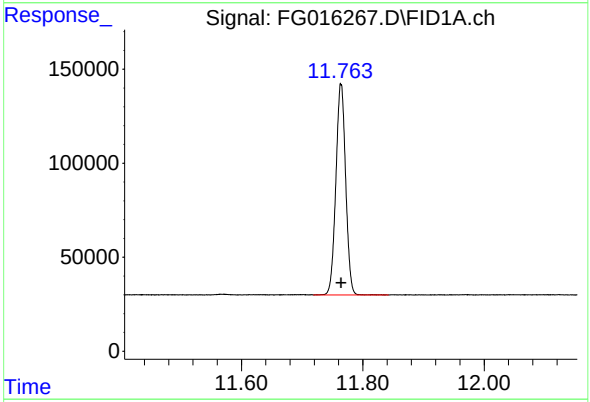
R.T.: 8.692 min
Delta R.T.: 0.000 min
Response: 1270412
Conc: 10.97 ug/ml



#5 N-HEXADECANE

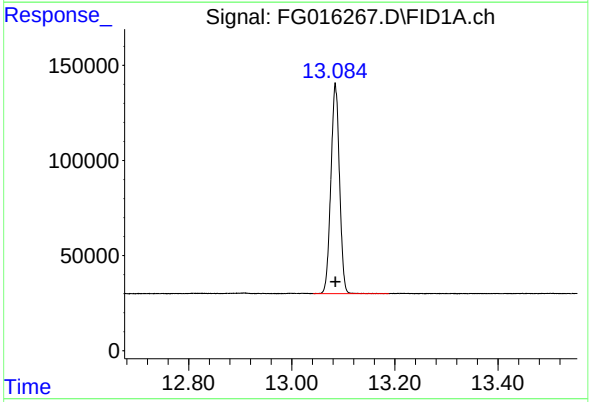
R.T.: 10.310 min
Delta R.T.: 0.000 min
Response: 1238623
Conc: 10.86 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



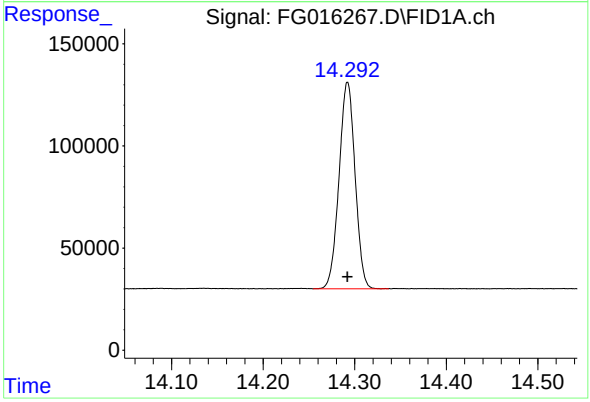
#6 N-OCTADECANE

R.T.: 11.764 min
Delta R.T.: 0.000 min
Response: 1257535
Conc: 10.85 ug/ml



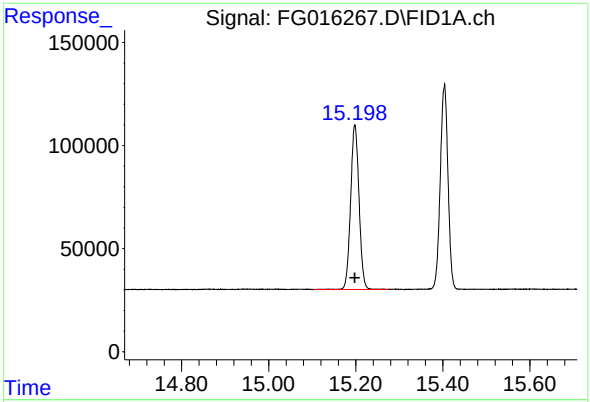
#7 N-EICOSANE

R.T.: 13.085 min
Delta R.T.: 0.000 min
Response: 1283180
Conc: 10.87 ug/ml



#8 N-DOCOSANE

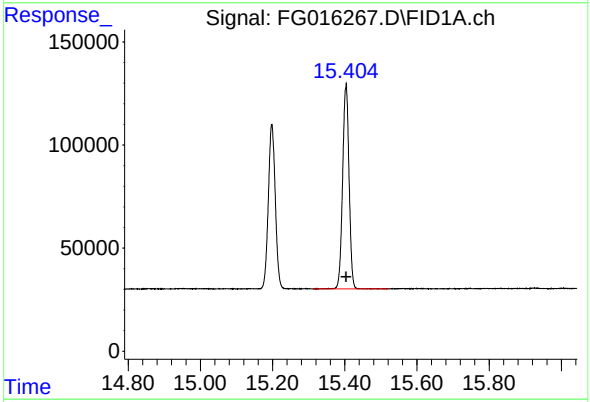
R.T.: 14.292 min
Delta R.T.: 0.000 min
Response: 1233639
Conc: 10.84 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

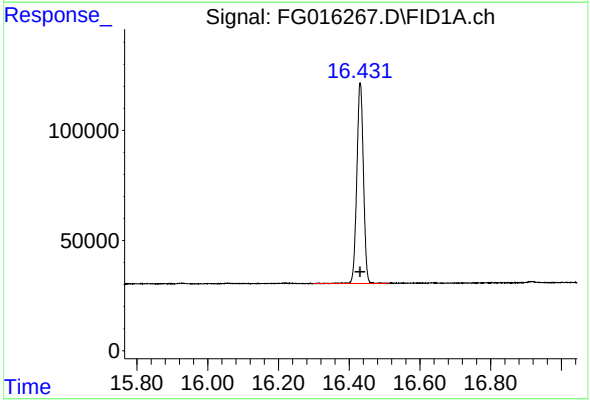
R.T.: 15.198 min
Delta R.T.: 0.000 min
Response: 1073359
Conc: 10.87 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



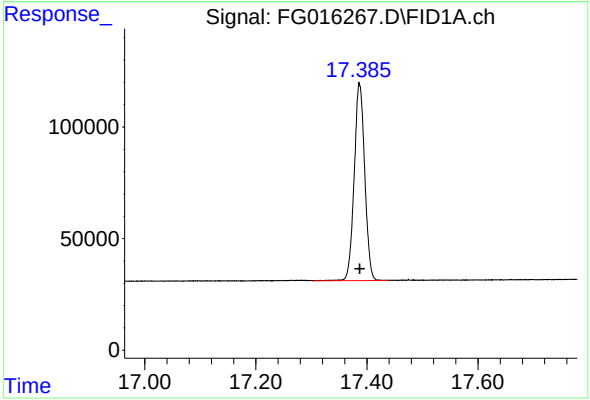
#10 N-TETRACOSANE

R.T.: 15.403 min
Delta R.T.: 0.000 min
Response: 1225880
Conc: 10.88 ug/ml



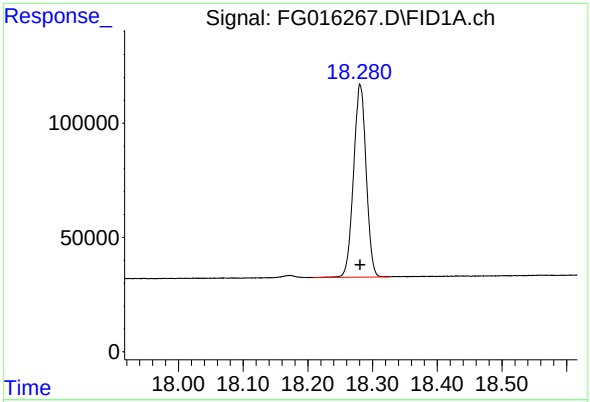
#11 N-HEXACOSANE

R.T.: 16.431 min
Delta R.T.: 0.000 min
Response: 1180144
Conc: 10.88 ug/ml



#12 N-OCTACOSANE

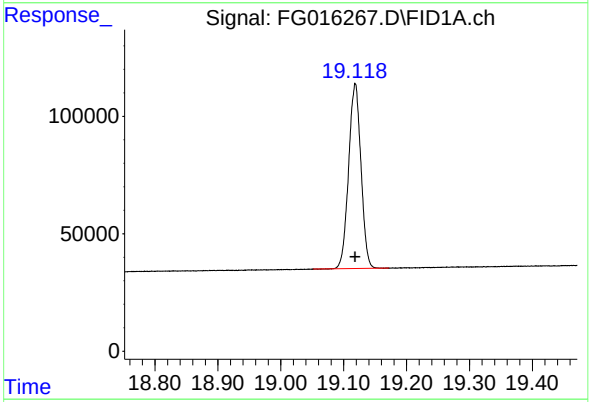
R.T.: 17.387 min
Delta R.T.: 0.000 min
Response: 1164005
Conc: 10.86 ug/ml



#13 N-TRIACONTANE

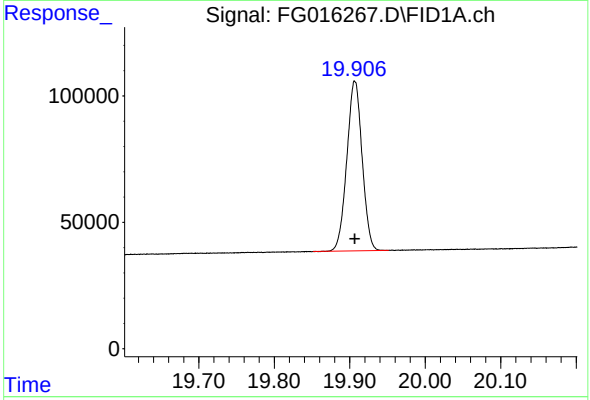
R.T.: 18.281 min
Delta R.T.: 0.000 min
Response: 1140440
Conc: 10.84 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



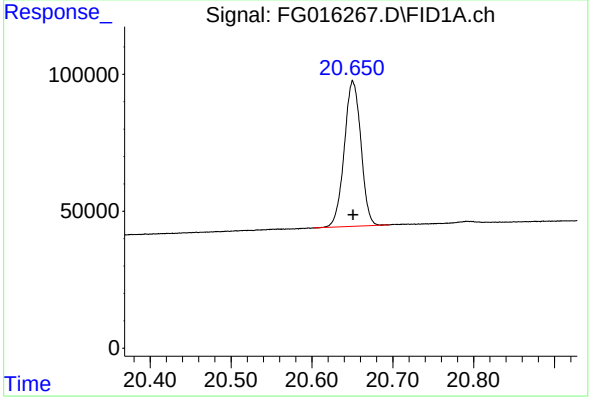
#14 N-DOTRIACONTANE

R.T.: 19.118 min
Delta R.T.: 0.000 min
Response: 1073316
Conc: 10.79 ug/ml



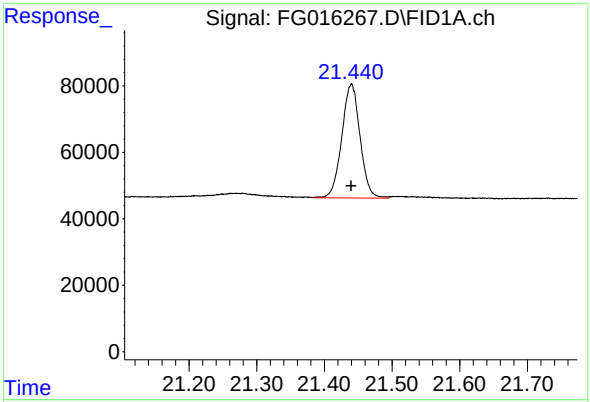
#15 N-TETRATRIACONTANE

R.T.: 19.907 min
Delta R.T.: 0.000 min
Response: 946293
Conc: 10.60 ug/ml



#16 N-HEXATRIACONTANE

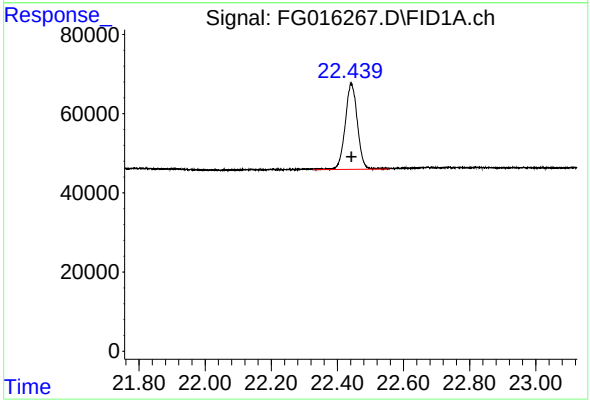
R.T.: 20.651 min
Delta R.T.: 0.000 min
Response: 757419
Conc: 10.28 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.440 min
Delta R.T.: 0.000 min
Response: 642497
Conc: 10.14 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.442 min
Delta R.T.: 0.000 min
Response: 558180
Conc: 9.97 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016267.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 12:04
Sample : 10 TRPH STD
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.124	2.084	2.190	BB	116277	1196846	93.76%	6.109%
2	4.670	4.630	4.717	BB	122448	1222050	95.73%	6.237%
3	6.851	6.816	6.890	BB	125149	1232265	96.53%	6.289%
4	8.692	8.655	8.739	BB	121709	1251223	98.02%	6.386%
5	10.310	10.270	10.356	BB	117684	1233959	96.67%	6.298%
6	11.764	11.723	11.803	BB	111634	1253935	98.23%	6.400%
7	13.085	13.045	13.135	BB	110237	1276504	100.00%	6.515%
8	14.292	14.255	14.329	BB	101174	1232526	96.55%	6.291%
9	15.198	15.152	15.242	BB	79673	1065086	83.44%	5.436%
10	15.404	15.362	15.451	BB	98544	1217635	95.39%	6.215%
11	16.431	16.384	16.473	BB	90799	1171680	91.79%	5.980%
12	17.387	17.337	17.425	BB	87534	1156788	90.62%	5.904%
13	18.281	18.227	18.326	BB	83873	1136308	89.02%	5.800%
14	19.119	19.069	19.162	BB	78594	1074197	84.15%	5.483%
15	19.907	19.842	19.948	BB	67019	946073	74.11%	4.829%
16	20.651	20.600	20.687	BV	53270	758962	59.46%	3.874%
17	21.440	21.380	21.496	BB	34069	625072	48.97%	3.190%
18	22.441	22.370	22.520	BB	21295	541338	42.41%	2.763%
			Sum of corrected areas:			19592447		

FG070925.M Wed Jul 09 12:51:51 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016268.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 12:34
Operator : YP\AJ
Sample : 5 TRPH STD
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
5 TRPH STD

Integration File: autoint1.e
Quant Time: Jul 09 12:45:51 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:45:41 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...	15.198	524416	5.245 ug/ml
	Target Compounds			
1)	N-OCTANE	2.125	592672	5.248 ug/ml
2)	N-DECANE	4.670	609750	5.294 ug/ml
3)	N-DODECANE	6.851	611660	5.276 ug/ml
4)	N-TETRADECANE	8.691	635255	5.382 ug/ml
5)	N-HEXADECANE	10.310	610961	5.282 ug/ml
6)	N-OCTADECANE	11.764	616548	5.253 ug/ml
7)	N-EICOSANE	13.084	629250	5.260 ug/ml
8)	N-DOCOSANE	14.291	605205	5.252 ug/ml
10)	N-TETRACOSANE	15.403	602389	5.272 ug/ml
11)	N-HEXACOSANE	16.431	580761	5.278 ug/ml
12)	N-OCTACOSANE	17.387	574471	5.283 ug/ml
13)	N-TRIACONTANE	18.281	566811	5.304 ug/ml
14)	N-DOTRIACONTANE	19.119	539011	5.330 ug/ml
15)	N-TETRATRIACONTANE	19.906	488951	5.374 ug/ml
16)	N-HEXATRIACONTANE	20.651	408608	5.426 ug/ml
17)	N-OCTATRIACONTANE	21.439	359344	5.521 ug/ml
18)	N-TETRACONTANE	22.445	320801	5.566 ug/ml

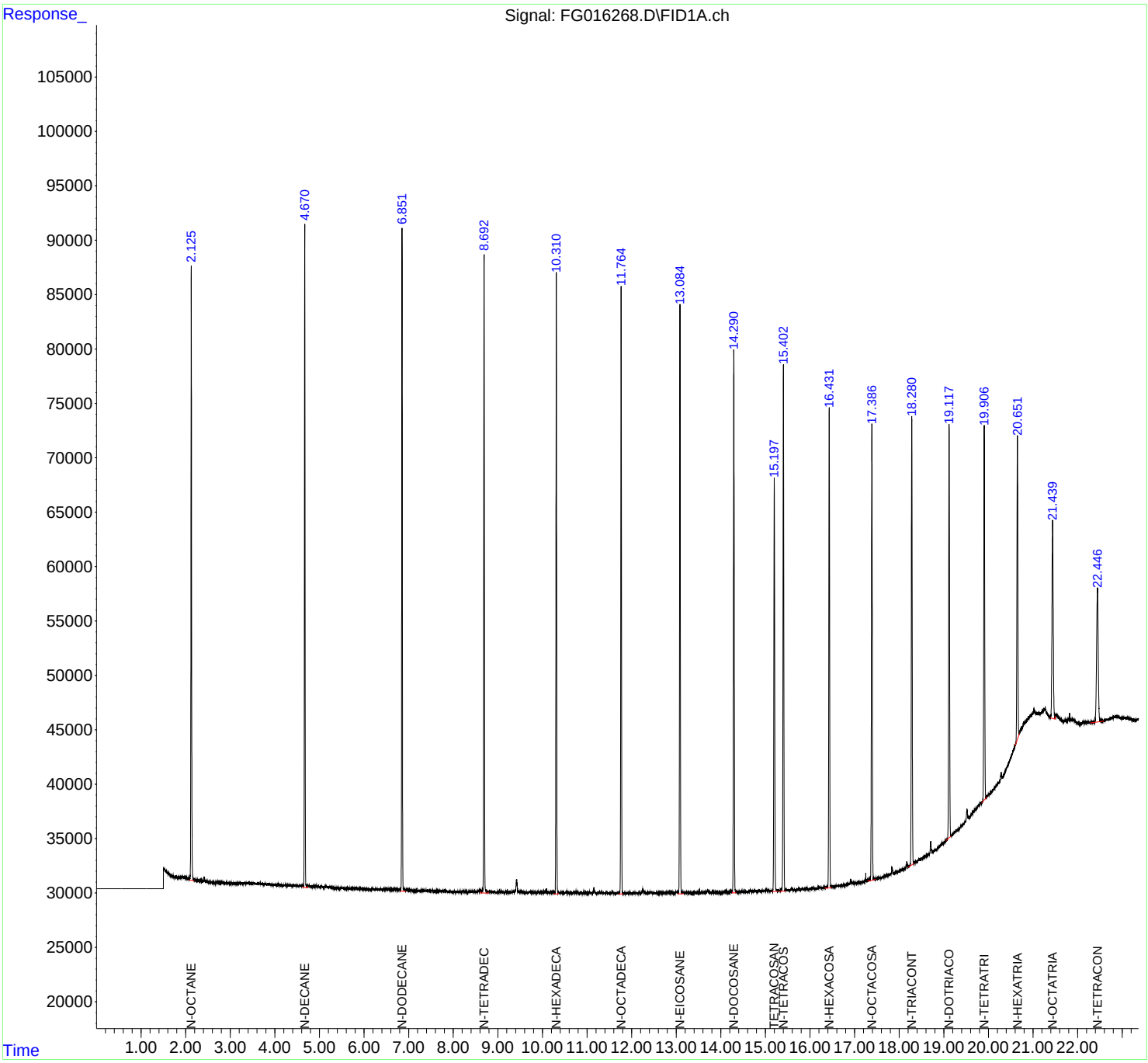
(f)=RT Delta > 1/2 Window (m)=manual int.

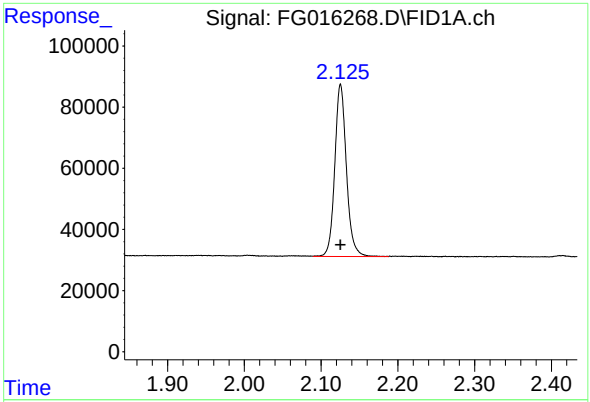
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016268.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 12:34
Operator : YP\AJ
Sample : 5 TRPH STD
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
5 TRPH STD

Integration File: autoint1.e
Quant Time: Jul 09 12:45:51 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:45:41 2025
Response via : Initial Calibration
Integrator: ChemStation

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

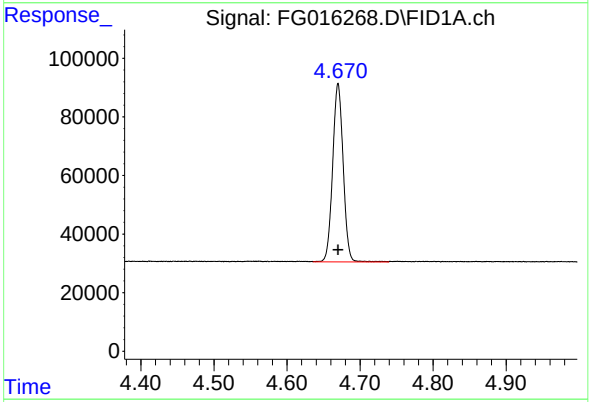




#1 N-OCTANE

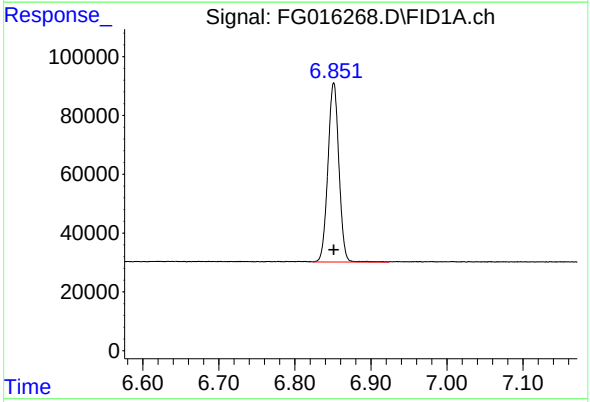
R.T.: 2.125 min
Delta R.T.: 0.000 min
Response: 592672
Conc: 5.25 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



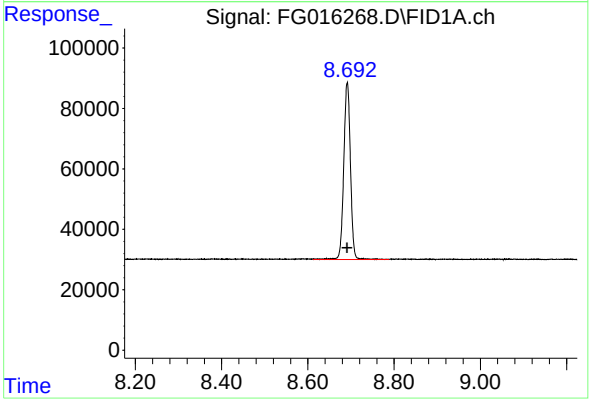
#2 N-DECANE

R.T.: 4.670 min
Delta R.T.: 0.000 min
Response: 609750
Conc: 5.29 ug/ml



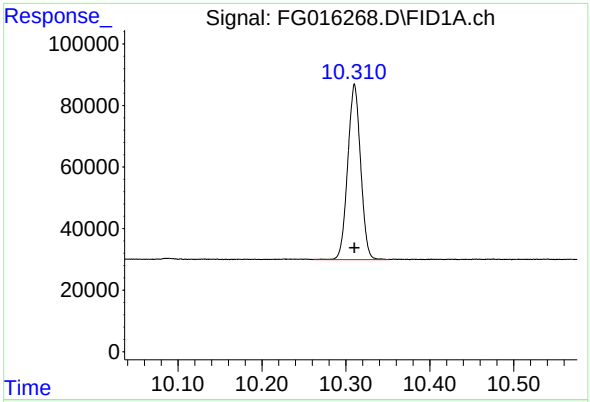
#3 N-DODECANE

R.T.: 6.851 min
Delta R.T.: 0.000 min
Response: 611660
Conc: 5.28 ug/ml



#4 N-TETRADECANE

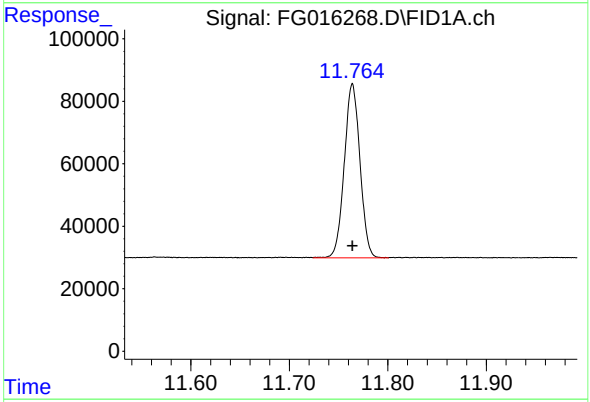
R.T.: 8.691 min
Delta R.T.: 0.000 min
Response: 635255
Conc: 5.38 ug/ml



#5 N-HEXADECANE

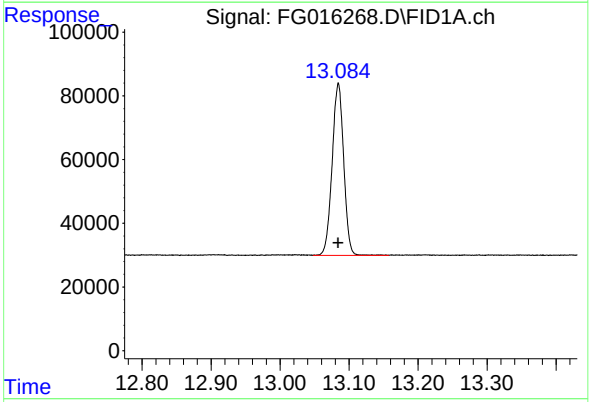
R.T.: 10.310 min
Delta R.T.: 0.000 min
Response: 610961
Conc: 5.28 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



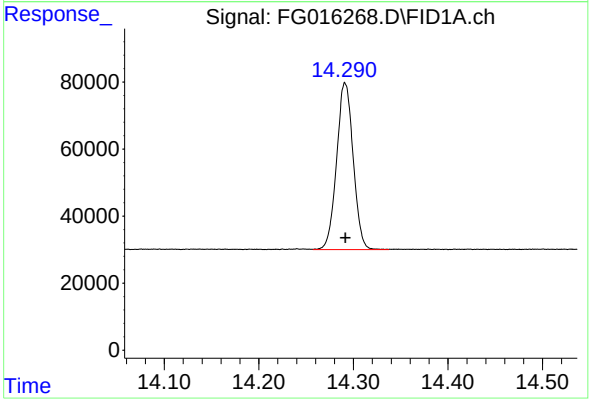
#6 N-OCTADECANE

R.T.: 11.764 min
Delta R.T.: 0.000 min
Response: 616548
Conc: 5.25 ug/ml



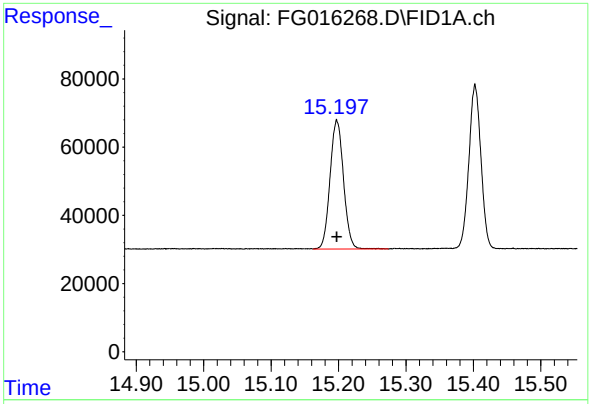
#7 N-EICOSANE

R.T.: 13.084 min
Delta R.T.: 0.000 min
Response: 629250
Conc: 5.26 ug/ml



#8 N-DOCOSANE

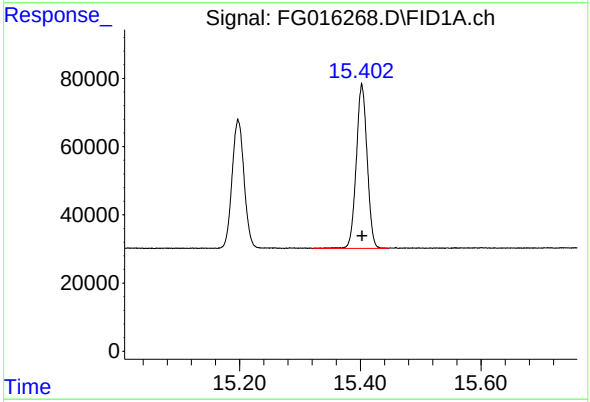
R.T.: 14.291 min
Delta R.T.: 0.000 min
Response: 605205
Conc: 5.25 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

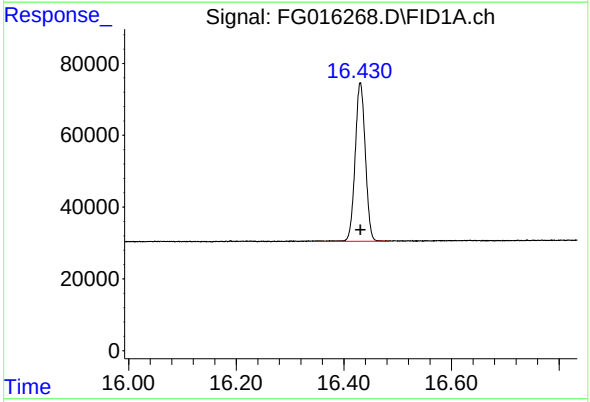
R.T.: 15.198 min
Delta R.T.: 0.000 min
Response: 524416
Conc: 5.24 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



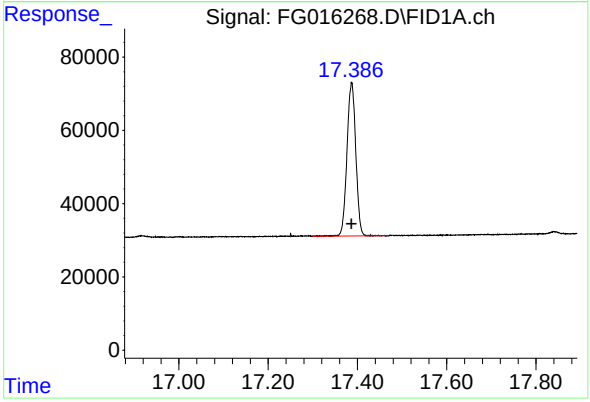
#10 N-TETRACOSANE

R.T.: 15.403 min
Delta R.T.: 0.000 min
Response: 602389
Conc: 5.27 ug/ml



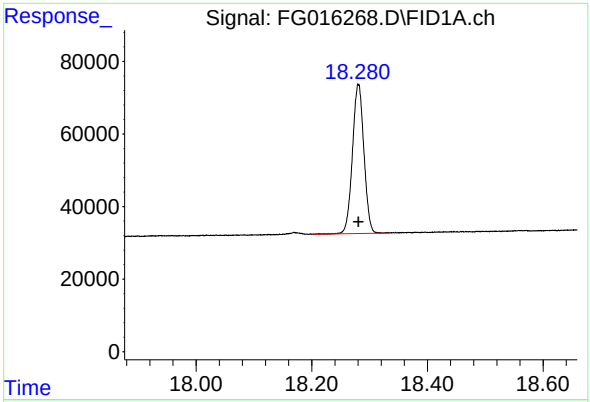
#11 N-HEXACOSANE

R.T.: 16.431 min
Delta R.T.: 0.000 min
Response: 580761
Conc: 5.28 ug/ml



#12 N-OCTACOSANE

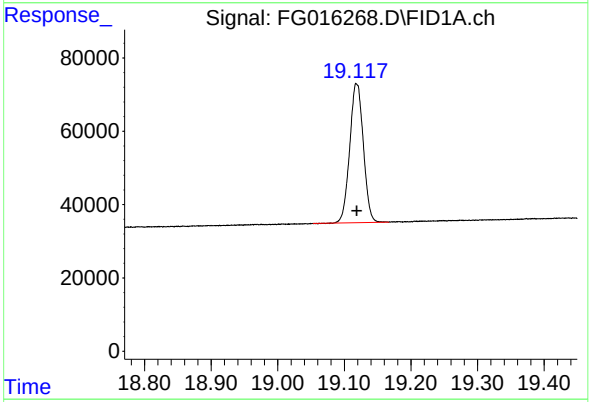
R.T.: 17.387 min
Delta R.T.: 0.000 min
Response: 574471
Conc: 5.28 ug/ml



#13 N-TRIACONTANE

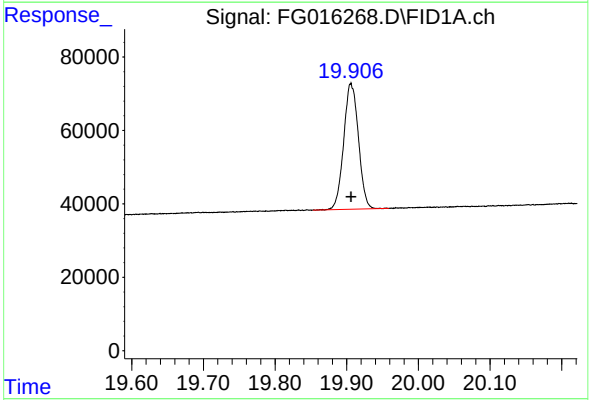
R.T.: 18.281 min
Delta R.T.: 0.000 min
Response: 566811
Conc: 5.30 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



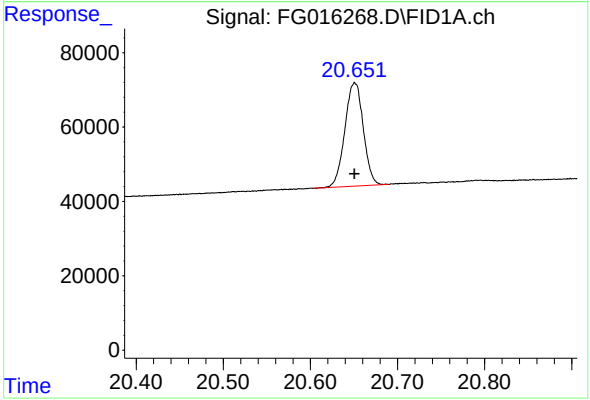
#14 N-DOTRIACONTANE

R.T.: 19.119 min
Delta R.T.: 0.000 min
Response: 539011
Conc: 5.33 ug/ml



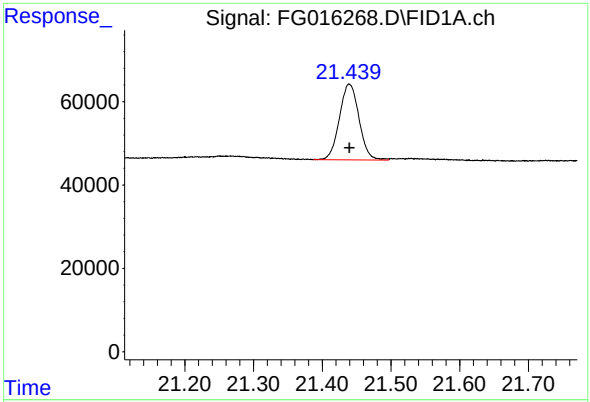
#15 N-TETRATRIACONTANE

R.T.: 19.906 min
Delta R.T.: 0.000 min
Response: 488951
Conc: 5.37 ug/ml



#16 N-HEXATRIACONTANE

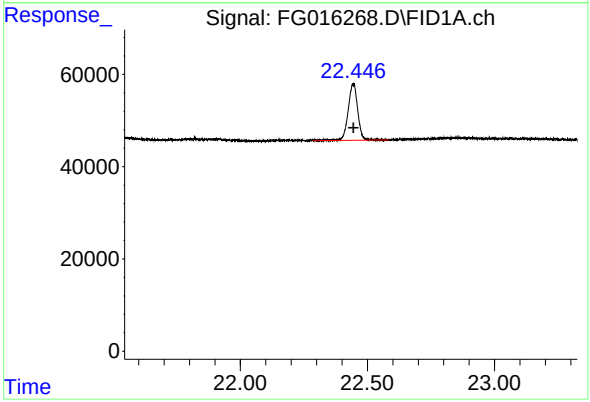
R.T.: 20.651 min
Delta R.T.: 0.000 min
Response: 408608
Conc: 5.43 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.439 min
Delta R.T.: 0.000 min
Response: 359344
Conc: 5.52 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.445 min
Delta R.T.: 0.000 min
Response: 320801
Conc: 5.57 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016268.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 12:34
Sample : 5 TRPH STD
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.125	2.085	2.184	BB	56336	588969	94.37%	6.022%
2	4.670	4.634	4.716	BB	60943	602422	96.53%	6.159%
3	6.851	6.824	6.886	BB	60872	604847	96.92%	6.184%
4	8.691	8.649	8.738	BB	58344	618559	99.11%	6.324%
5	10.310	10.270	10.349	BB	56988	605877	97.08%	6.194%
6	11.764	11.722	11.797	BB	55713	613150	98.25%	6.269%
7	13.085	13.041	13.127	BB	54099	624092	100.00%	6.381%
8	14.291	14.223	14.334	BB	49698	603319	96.67%	6.168%
9	15.198	15.162	15.240	BB	37580	519085	83.17%	5.307%
10	15.403	15.370	15.447	BB	48119	596151	95.52%	6.095%
11	16.431	16.385	16.474	BB	44039	572096	91.67%	5.849%
12	17.387	17.343	17.437	BB	41719	569147	91.20%	5.819%
13	18.281	18.231	18.325	BB	40861	564066	90.38%	5.767%
14	19.118	19.069	19.166	BB	37809	540450	86.60%	5.526%
15	19.906	19.851	19.951	BB	34458	490050	78.52%	5.010%
16	20.651	20.600	20.689	BV	27787	407589	65.31%	4.167%
17	21.439	21.380	21.491	BB	18035	348976	55.92%	3.568%
18	22.446	22.274	22.514	BV	12192	312176	50.02%	3.192%
			Sum of corrected areas:			9781019		

FG070925.M Wed Jul 09 12:52:05 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016269.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 13:04
Operator : YP\AJ
Sample : FG070925ICV
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
FG070925ICV

Integration File: autoint1.e
Quant Time: Jul 09 13:17:24 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.201	4821262	48.219 ug/ml
	Target Compounds			
1)	N-OCTANE	2.123	5319853	47.111 ug/ml
2)	N-DECANE	4.672	5441176	47.243 ug/ml
3)	N-DODECANE	6.854	5503513	47.468 ug/ml
4)	N-TETRADECANE	8.695	5554254	47.057 ug/ml
5)	N-HEXADECANE	10.314	5523804	47.757 ug/ml
6)	N-OCTADECANE	11.768	5625909	47.929 ug/ml
7)	N-EICOSANE	13.089	5742018	47.997 ug/ml
8)	N-DOCOSANE	14.295	5556394	48.216 ug/ml
10)	N-TETRACOSANE	15.406	5504955	48.182 ug/ml
11)	N-HEXACOSANE	16.435	5298642	48.152 ug/ml
12)	N-OCTACOSANE	17.391	5242933	48.212 ug/ml
13)	N-TRIACONTANE	18.285	5135626	48.059 ug/ml
14)	N-DOTRIACONTANE	19.122	4824505	47.710 ug/ml
15)	N-TETRATRIACONTANE	19.910	4244625	46.651 ug/ml
16)	N-HEXATRIACONTANE	20.653	3386630	44.969 ug/ml
17)	N-OCTATRIACONTANE	21.442	2764288	42.474 ug/ml
18)	N-TETRACONTANE	22.445	2379471	41.285 ug/ml

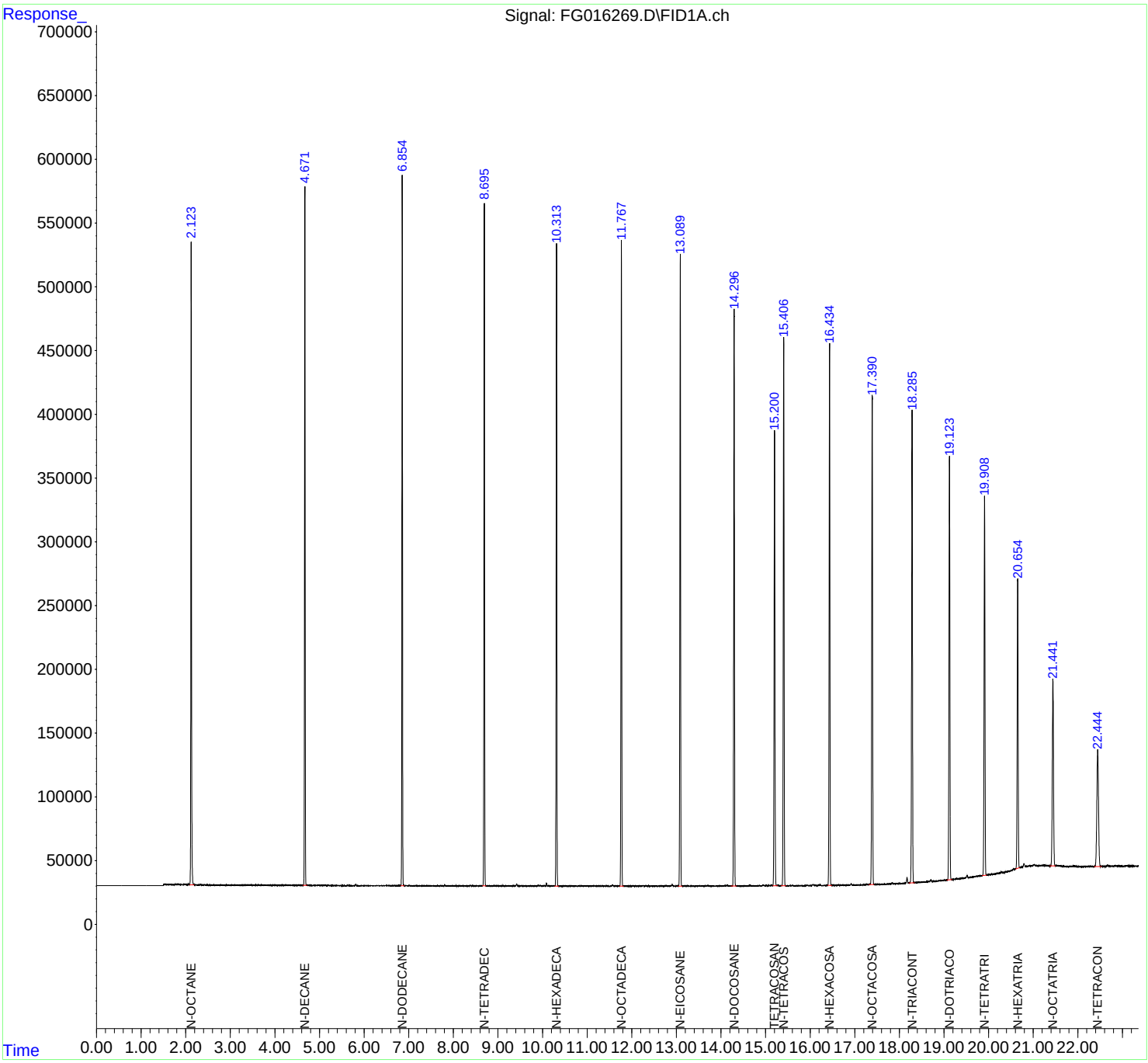
(f)=RT Delta > 1/2 Window (m)=manual int.

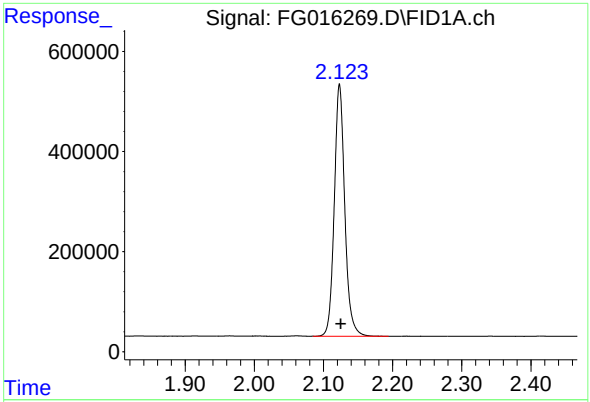
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016269.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 13:04
Operator : YP\AJ
Sample : FG070925ICV
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
FG070925ICV

Integration File: autoint1.e
Quant Time: Jul 09 13:17:24 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 2025
Response via : Initial Calibration
Integrator: ChemStation

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

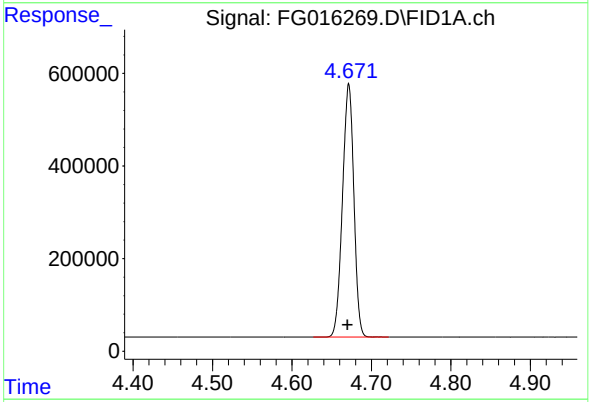




#1 N-OCTANE

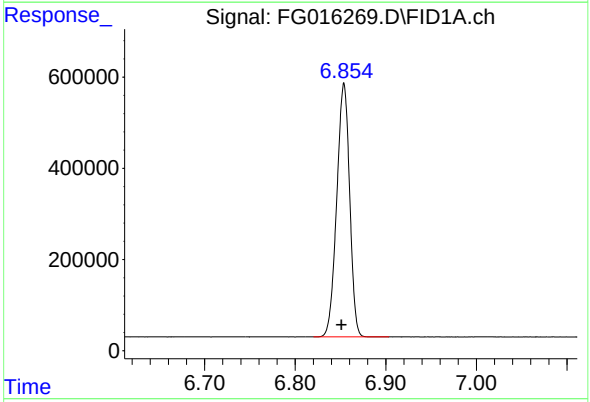
R.T.: 2.123 min
Delta R.T.: -0.002 min
Response: 5319853
Conc: 47.11 ug/ml

Instrument :
FID_G
ClientSampleId :
FG070925ICV



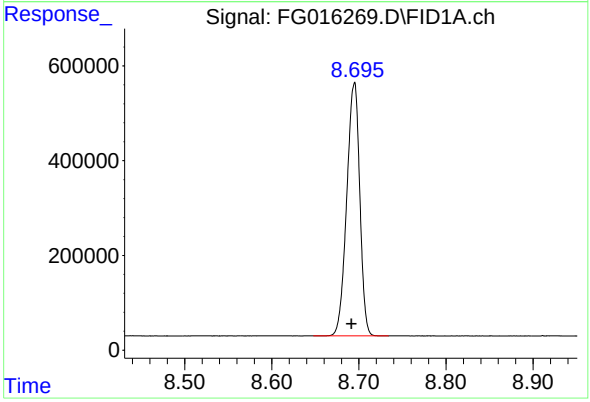
#2 N-DECANE

R.T.: 4.672 min
Delta R.T.: 0.002 min
Response: 5441176
Conc: 47.24 ug/ml



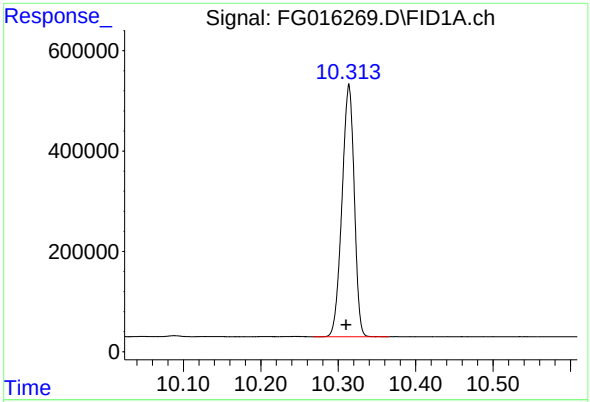
#3 N-DODECANE

R.T.: 6.854 min
Delta R.T.: 0.003 min
Response: 5503513
Conc: 47.47 ug/ml



#4 N-TETRADECANE

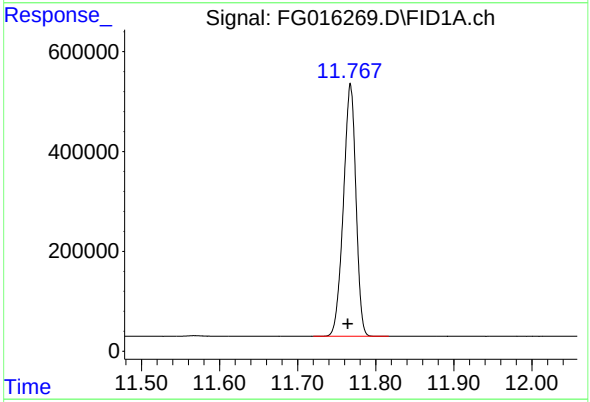
R.T.: 8.695 min
Delta R.T.: 0.003 min
Response: 5554254
Conc: 47.06 ug/ml



#5 N-HEXADECANE

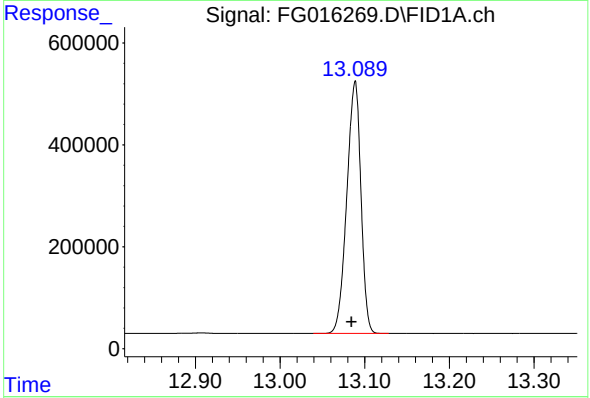
R.T.: 10.314 min
Delta R.T.: 0.004 min
Response: 5523804
Conc: 47.76 ug/ml

Instrument :
FID_G
ClientSampleId :
FG070925ICV



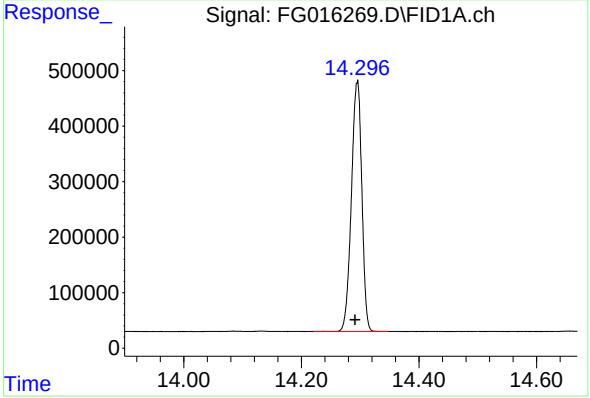
#6 N-OCTADECANE

R.T.: 11.768 min
Delta R.T.: 0.004 min
Response: 5625909
Conc: 47.93 ug/ml



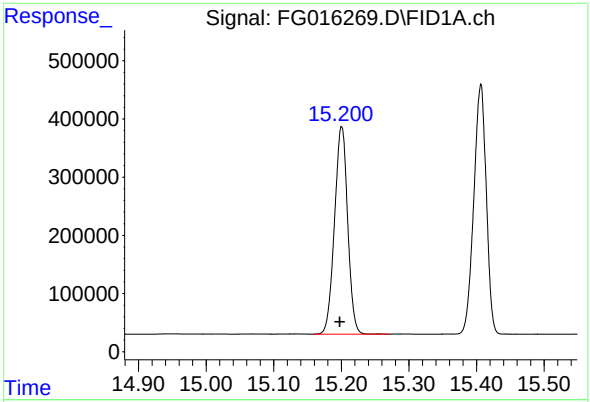
#7 N-EICOSANE

R.T.: 13.089 min
Delta R.T.: 0.004 min
Response: 5742018
Conc: 48.00 ug/ml



#8 N-DOCOSANE

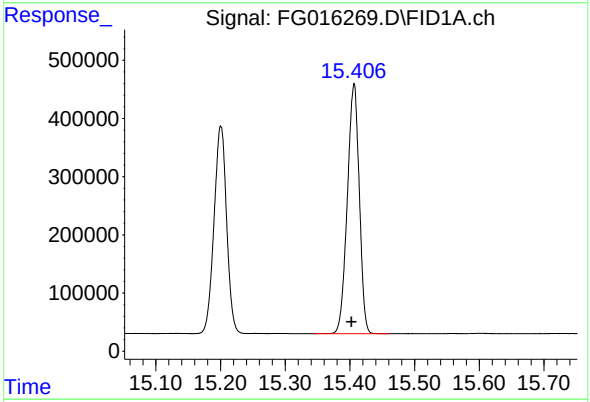
R.T.: 14.295 min
Delta R.T.: 0.004 min
Response: 5556394
Conc: 48.22 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

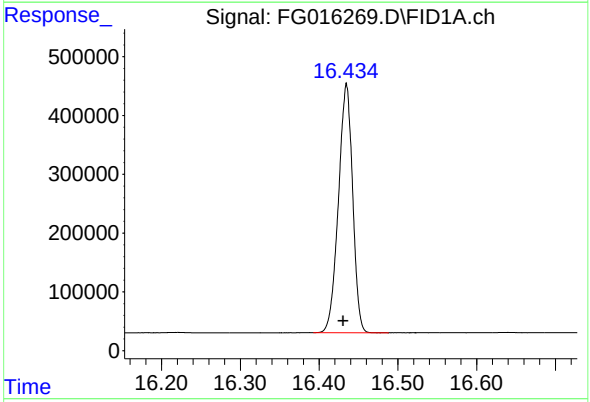
R.T.: 15.201 min
Delta R.T.: 0.003 min
Response: 4821262
Conc: 48.22 ug/ml

Instrument :
FID_G
ClientSampleId :
FG070925ICV



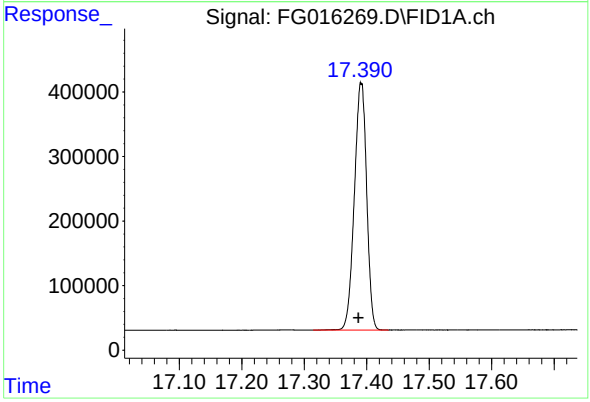
#10 N-TETRACOSANE

R.T.: 15.406 min
Delta R.T.: 0.004 min
Response: 5504955
Conc: 48.18 ug/ml



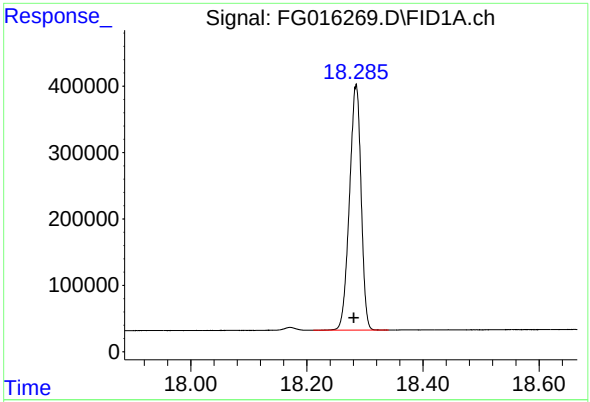
#11 N-HEXACOSANE

R.T.: 16.435 min
Delta R.T.: 0.004 min
Response: 5298642
Conc: 48.15 ug/ml



#12 N-OCTACOSANE

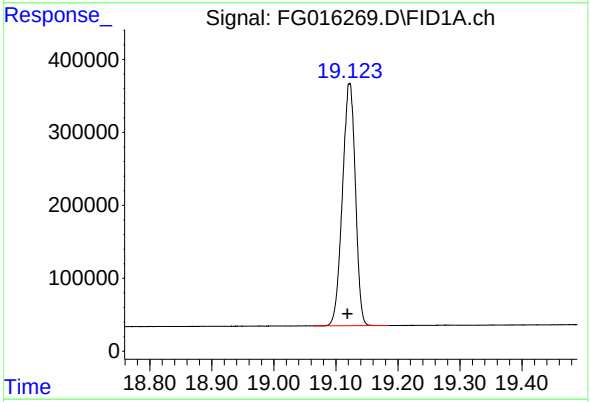
R.T.: 17.391 min
Delta R.T.: 0.004 min
Response: 5242933
Conc: 48.21 ug/ml



#13 N-TRIACONTANE

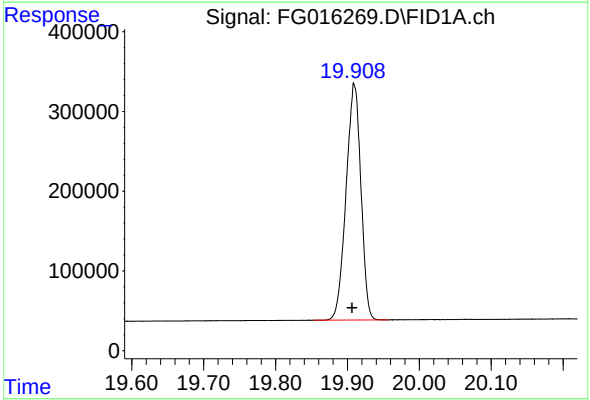
R.T.: 18.285 min
Delta R.T.: 0.004 min
Response: 5135626
Conc: 48.06 ug/ml

Instrument :
FID_G
ClientSampleId :
FG070925ICV



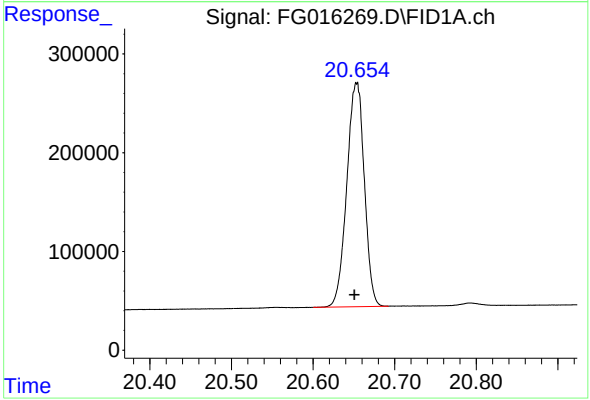
#14 N-DOTRIACONTANE

R.T.: 19.122 min
Delta R.T.: 0.004 min
Response: 4824505
Conc: 47.71 ug/ml



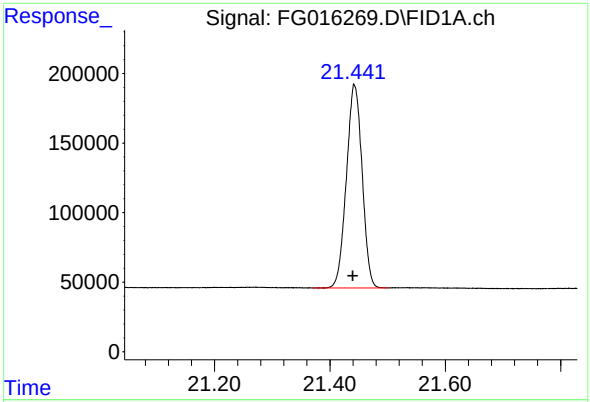
#15 N-TETRATRIACONTANE

R.T.: 19.910 min
Delta R.T.: 0.003 min
Response: 4244625
Conc: 46.65 ug/ml



#16 N-HEXATRIACONTANE

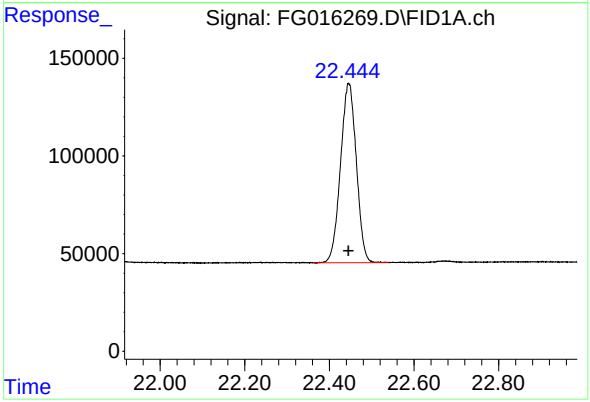
R.T.: 20.653 min
Delta R.T.: 0.003 min
Response: 3386630
Conc: 44.97 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.442 min
Delta R.T.: 0.003 min
Response: 2764288
Conc: 42.47 ug/ml

Instrument :
FID_G
ClientSampleId :
FG070925ICV



#18 N-TETRACONTANE

R.T.: 22.445 min
Delta R.T.: 0.000 min
Response: 2379471
Conc: 41.29 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070925\
Data File : FG016269.D
Signal(s) : FID1A.ch
Acq On : 09 Jul 2025 13:04
Sample : FG070925ICV
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.123	2.085	2.194	BB	503992	5319853	92.65%	6.054%
2	4.672	4.627	4.722	BB	547077	5441176	94.76%	6.192%
3	6.854	6.820	6.903	BB	557081	5503513	95.85%	6.263%
4	8.695	8.648	8.734	BB	534500	5554254	96.73%	6.321%
5	10.314	10.268	10.365	BB	503427	5523804	96.20%	6.286%
6	11.768	11.720	11.817	BB	505639	5625909	97.98%	6.403%
7	13.089	13.039	13.128	BB	496984	5742018	100.00%	6.535%
8	14.295	14.220	14.348	BB	448830	5556394	96.77%	6.323%
9	15.201	15.158	15.270	BB	355647	4821262	83.96%	5.487%
10	15.407	15.343	15.460	BB	430336	5504955	95.87%	6.265%
11	16.435	16.393	16.488	BB	422924	5298642	92.28%	6.030%
12	17.391	17.314	17.435	BB	381328	5242933	91.31%	5.967%
13	18.285	18.211	18.341	BB	370847	5135626	89.44%	5.845%
14	19.122	19.063	19.185	BB	331526	4824505	84.02%	5.491%
15	19.910	19.853	19.958	BB	293903	4244625	73.92%	4.831%
16	20.653	20.600	20.693	BB	225738	3386630	58.98%	3.854%
17	21.442	21.371	21.502	BB	145879	2764288	48.14%	3.146%
18	22.445	22.362	22.540	BB	91624	2379471	41.44%	2.708%
			Sum of corrected areas:			87869857		

FG070925.M Wed Jul 09 14:42:10 2025

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

TPH GC CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Alliane Contract: PARS02

ProjectID: Con Edison - East River Site 2

Lab Code: ACE SDG No.: Q2592

DataFile: FG016329.D Analyst Name: YP\AJ Analyst Date: 07-18-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
850	88196784	103761	103531	0.222

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016329.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 09:24
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025

Integration File: autoint1.e
Quant Time: Jul 18 11:31:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.207	5008719	50.094 ug/ml
	Target Compounds			
1)	N-OCTANE	2.120	4993123	44.217 ug/ml
2)	N-DECANE	4.670	5345593	46.413 ug/ml
3)	N-DODECANE	6.854	5466474	47.149 ug/ml
4)	N-TETRADECANE	8.696	5570268	47.192 ug/ml
5)	N-HEXADECANE	10.316	5648246	48.833 ug/ml
6)	N-OCTADECANE	11.770	5812904	49.522 ug/ml
7)	N-EICOSANE	13.092	5909763	49.399 ug/ml
8)	N-DOCOSANE	14.300	5700225	49.464 ug/ml
10)	N-TETRACOSANE	15.412	5721499	50.077 ug/ml
11)	N-HEXACOSANE	16.442	5569725	50.616 ug/ml
12)	N-OCTACOSANE	17.399	5452560	50.139 ug/ml
13)	N-TRIACONTANE	18.293	5530703	51.756 ug/ml
14)	N-DOTRIACONTANE	19.130	5383602	53.239 ug/ml
15)	N-TETRATRIACONTANE	19.920	4886621	53.707 ug/ml
16)	N-HEXATRIACONTANE	20.663	4277354	56.797 ug/ml
17)	N-OCTATRIACONTANE	21.457	3498078	53.748 ug/mlm
18)	N-TETRACONTANE	22.464	3430046	59.513 ug/mlm

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016329.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 09:24
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

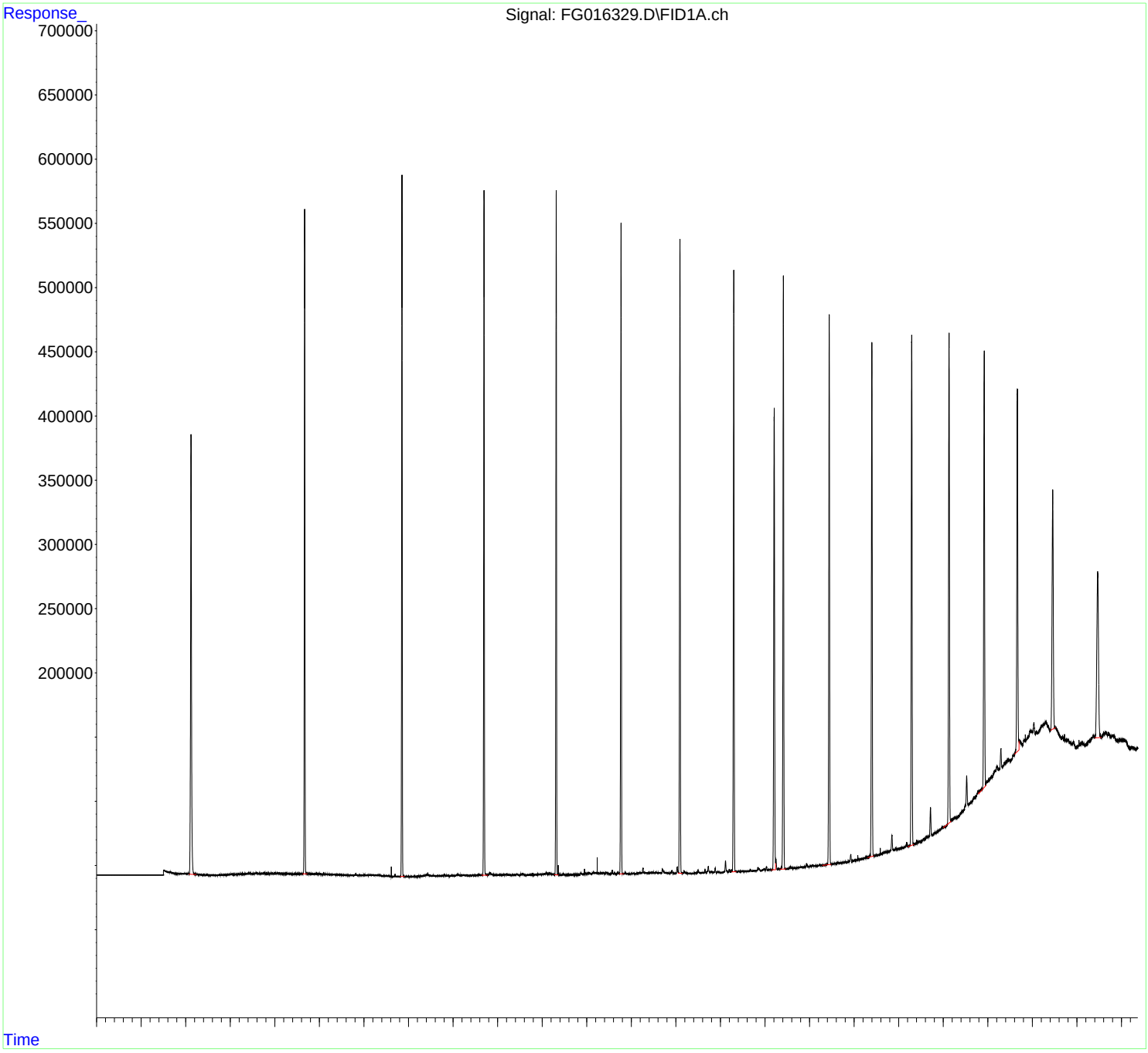
Integration File: autoint1.e
Quant Time: Jul 18 11:31:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 2025
Response via : Initial Calibration
Integrator: ChemStation

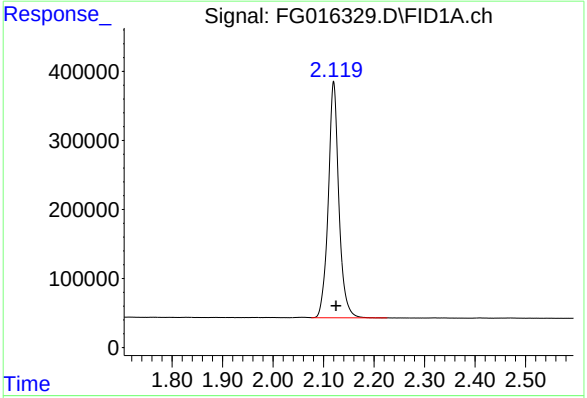
Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025





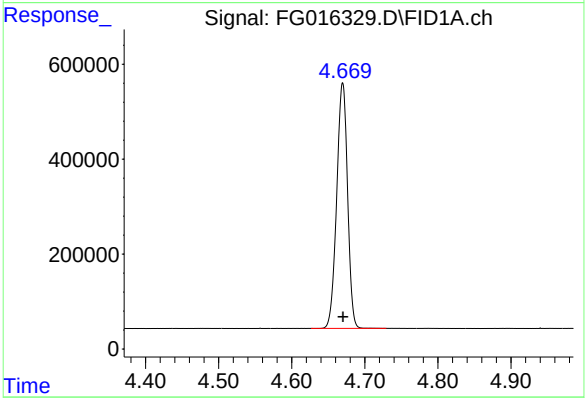
#1 N-OCTANE

R.T.: 2.120 min
Delta R.T.: -0.005 min
Response: 4993123
Conc: 44.22 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

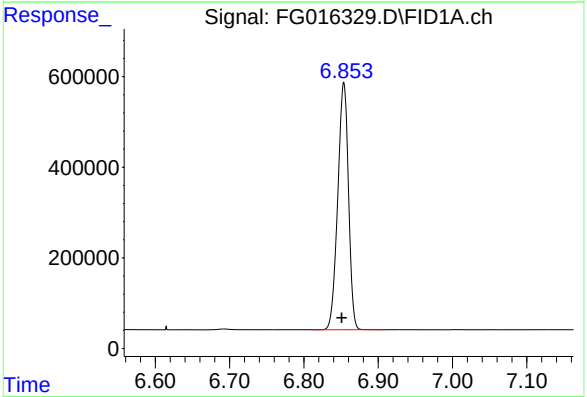
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025



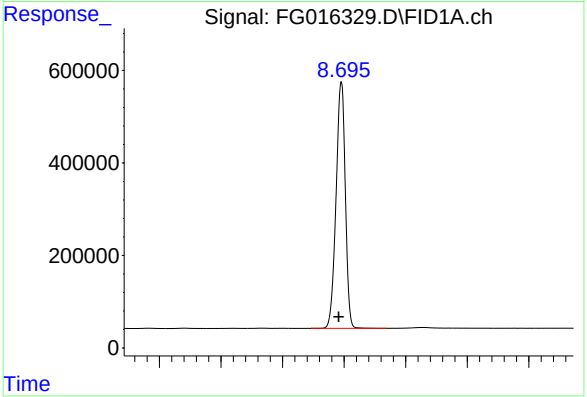
#2 N-DECANE

R.T.: 4.670 min
Delta R.T.: 0.000 min
Response: 5345593
Conc: 46.41 ug/ml



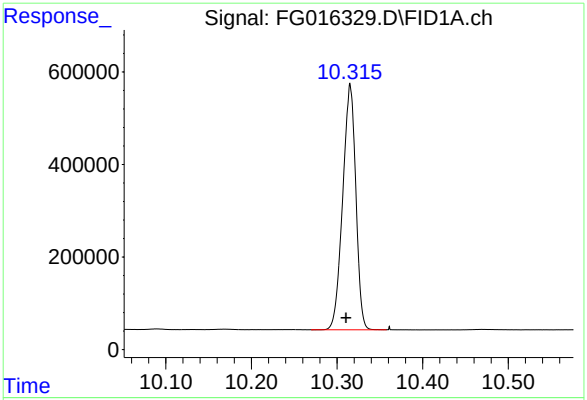
#3 N-DODECANE

R.T.: 6.854 min
Delta R.T.: 0.003 min
Response: 5466474
Conc: 47.15 ug/ml



#4 N-TETRADECANE

R.T.: 8.696 min
Delta R.T.: 0.004 min
Response: 5570268
Conc: 47.19 ug/ml



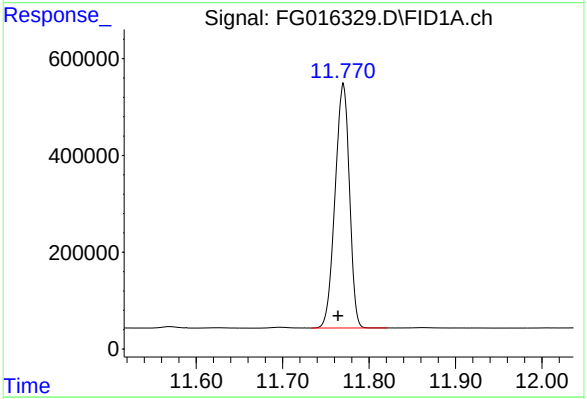
#5 N-HEXADECANE

R.T.: 10.316 min
Delta R.T.: 0.005 min
Response: 5648246
Conc: 48.83 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

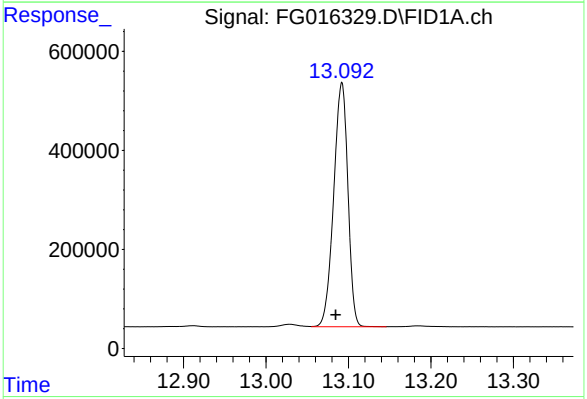
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025



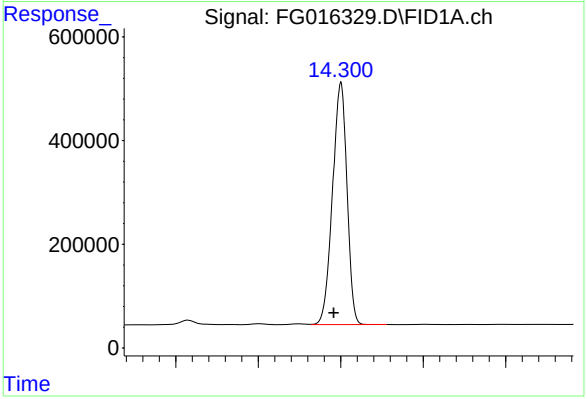
#6 N-OCTADECANE

R.T.: 11.770 min
Delta R.T.: 0.006 min
Response: 5812904
Conc: 49.52 ug/ml



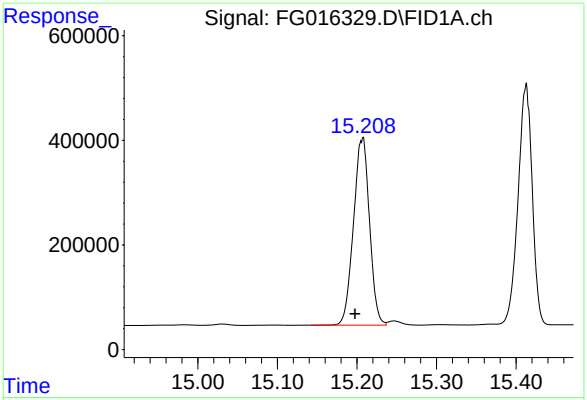
#7 N-EICOSANE

R.T.: 13.092 min
Delta R.T.: 0.008 min
Response: 5909763
Conc: 49.40 ug/ml



#8 N-DOCOSANE

R.T.: 14.300 min
Delta R.T.: 0.009 min
Response: 5700225
Conc: 49.46 ug/ml



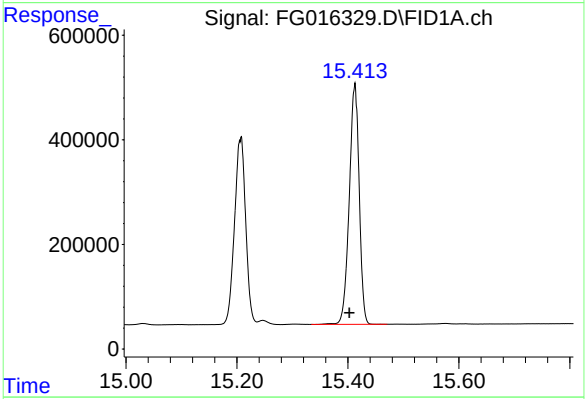
#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.207 min
Delta R.T.: 0.010 min
Response: 5008719
Conc: 50.09 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

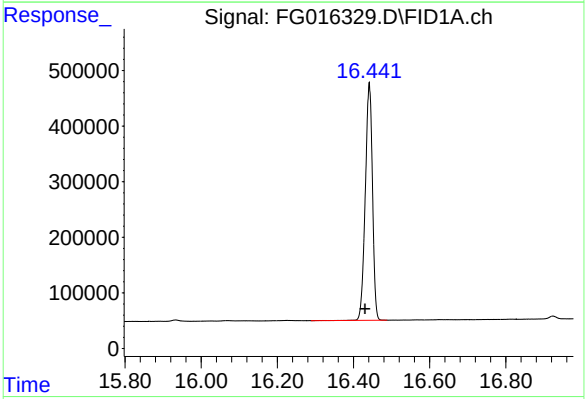
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025



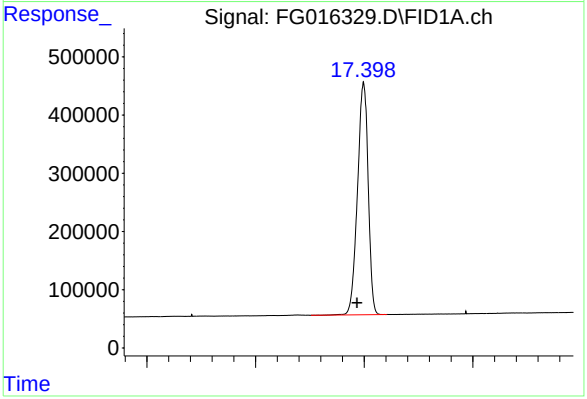
#10 N-TETRACOSANE

R.T.: 15.412 min
Delta R.T.: 0.010 min
Response: 5721499
Conc: 50.08 ug/ml



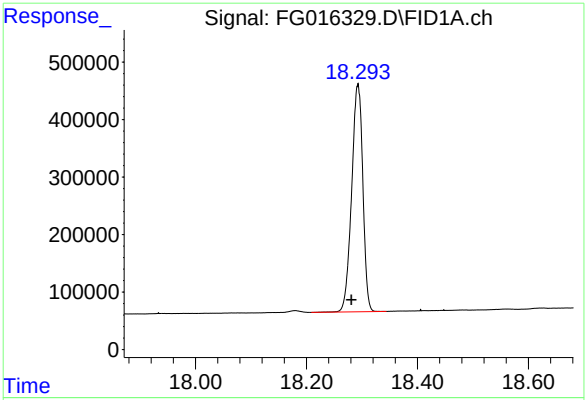
#11 N-HEXACOSANE

R.T.: 16.442 min
Delta R.T.: 0.011 min
Response: 5569725
Conc: 50.62 ug/ml



#12 N-OCTACOSANE

R.T.: 17.399 min
Delta R.T.: 0.012 min
Response: 5452560
Conc: 50.14 ug/ml



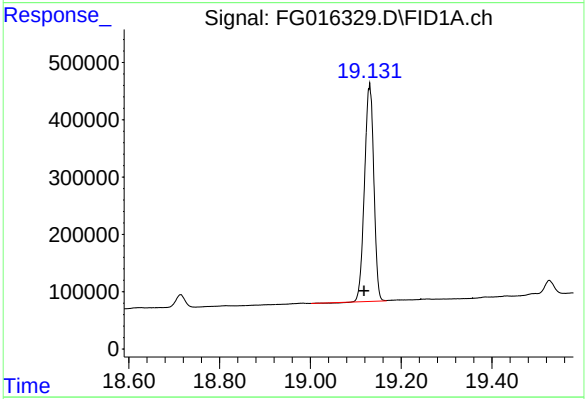
#13 N-TRIACONTANE

R.T.: 18.293 min
Delta R.T.: 0.012 min
Response: 5530703
Conc: 51.76 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

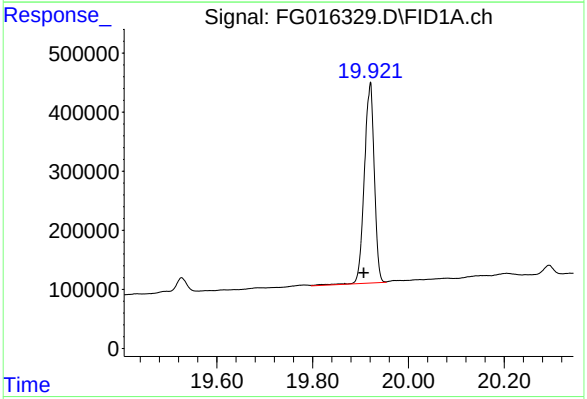
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025



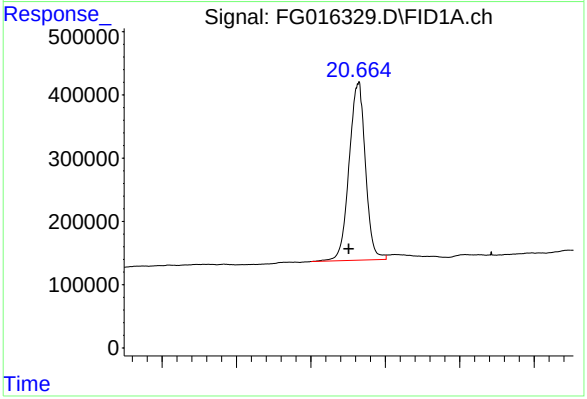
#14 N-DOTRIACONTANE

R.T.: 19.130 min
Delta R.T.: 0.012 min
Response: 5383602
Conc: 53.24 ug/ml



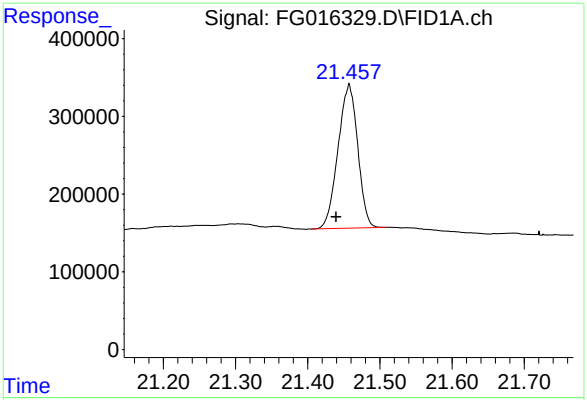
#15 N-TETRATRIACONTANE

R.T.: 19.920 min
Delta R.T.: 0.014 min
Response: 4886621
Conc: 53.71 ug/ml



#16 N-HEXATRIACONTANE

R.T.: 20.663 min
Delta R.T.: 0.013 min
Response: 4277354
Conc: 56.80 ug/ml



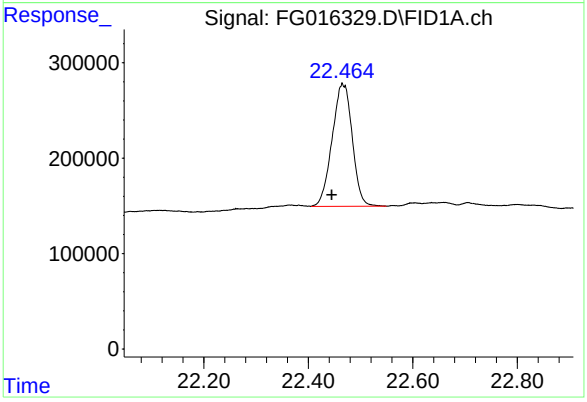
#17 N-OCTATRIACONTANE

R.T.: 21.457 min
Delta R.T.: 0.018 min
Response: 3498078
Conc: 53.75 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025



#18 N-TETRACONTANE

R.T.: 22.464 min
Delta R.T.: 0.020 min
Response: 3430046
Conc: 59.51 ug/ml m

Instrument :
FID_G
LabSampleId :
50 PPM TRPH STD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG07182
Data File : FG016329.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 09:24
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.120	2.076	2.224	VB	342479	4993123	84.49%	5.309%
2	4.670	4.627	4.729	BB	517464	5345593	90.45%	5.684%
3	6.854	6.810	6.911	BB	545618	5466474	92.50%	5.813%
4	8.696	8.647	8.768	BB	532355	5570268	94.26%	5.923%
5	10.316	10.270	10.358	BV	528350	5648246	95.57%	6.006%
6	11.770	11.733	11.820	BB	506287	5812904	98.36%	6.181%
7	13.092	13.055	13.146	VV	493936	5909763	100.00%	6.284%
8	14.300	14.264	14.355	VB	467722	5700225	96.45%	6.061%
9	15.207	15.143	15.237	BV	359004	5008719	84.75%	5.326%
10	15.412	15.334	15.469	BB	459568	5721499	96.81%	6.084%
11	16.442	16.289	16.486	BB	427962	5569725	94.25%	5.923%
12	17.399	17.303	17.440	BV	399447	5452560	92.26%	5.798%
13	18.293	18.209	18.344	PV	394345	5530703	93.59%	5.881%
14	19.130	19.002	19.167	PV	376866	5383602	91.10%	5.725%
15	19.920	19.797	19.953	VV	339680	4886621	82.69%	5.196%
16	20.663	20.600	20.701	BV	279687	4277354	72.38%	4.548%
17	21.457	21.397	21.654	VV	191737	4233937	71.64%	4.502%
18	22.466	22.405	22.550	VV	129925	3531325	59.75%	3.755%
			Sum of corrected areas:			94042640		

FG070925.M Fri Jul 18 11:43:06 2025

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

TPH GC CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Alliane Contract: PARS02

ProjectID: Con Edison - East River Site 2

Lab Code: ACE SDG No.: Q2592

DataFile: FG016336.D Analyst Name: YP\AJ Analyst Date: 07-18-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
850	85294134	100346	103531	3.076

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016336.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 12:53
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: Jul 19 01:59:18 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.207	4774495	47.752 ug/ml
	Target Compounds			
1)	N-OCTANE	2.120	4880777	43.222 ug/ml
2)	N-DECANE	4.671	5229290	45.403 ug/ml
3)	N-DODECANE	6.855	5346585	46.115 ug/ml
4)	N-TETRADECANE	8.696	5441010	46.097 ug/ml
5)	N-HEXADECANE	10.317	5501843	47.567 ug/ml
6)	N-OCTADECANE	11.771	5639046	48.041 ug/ml
7)	N-EICOSANE	13.092	5695634	47.610 ug/ml
8)	N-DOCOSANE	14.301	5451035	47.302 ug/ml
10)	N-TETRACOSANE	15.413	5453309	47.730 ug/ml
11)	N-HEXACOSANE	16.442	5267070	47.865 ug/ml
12)	N-OCTACOSANE	17.398	5179697	47.630 ug/ml
13)	N-TRIACONTANE	18.293	5298093	49.580 ug/ml
14)	N-DOTRIACONTANE	19.132	5237612	51.796 ug/ml
15)	N-TETRATRIACONTANE	19.921	4605678	50.619 ug/ml
16)	N-HEXATRIACONTANE	20.664	4244515	56.361 ug/ml
17)	N-OCTATRIACONTANE	21.457	3570810	54.866 ug/ml
18)	N-TETRACONTANE	22.466	3252130	56.426 ug/ml

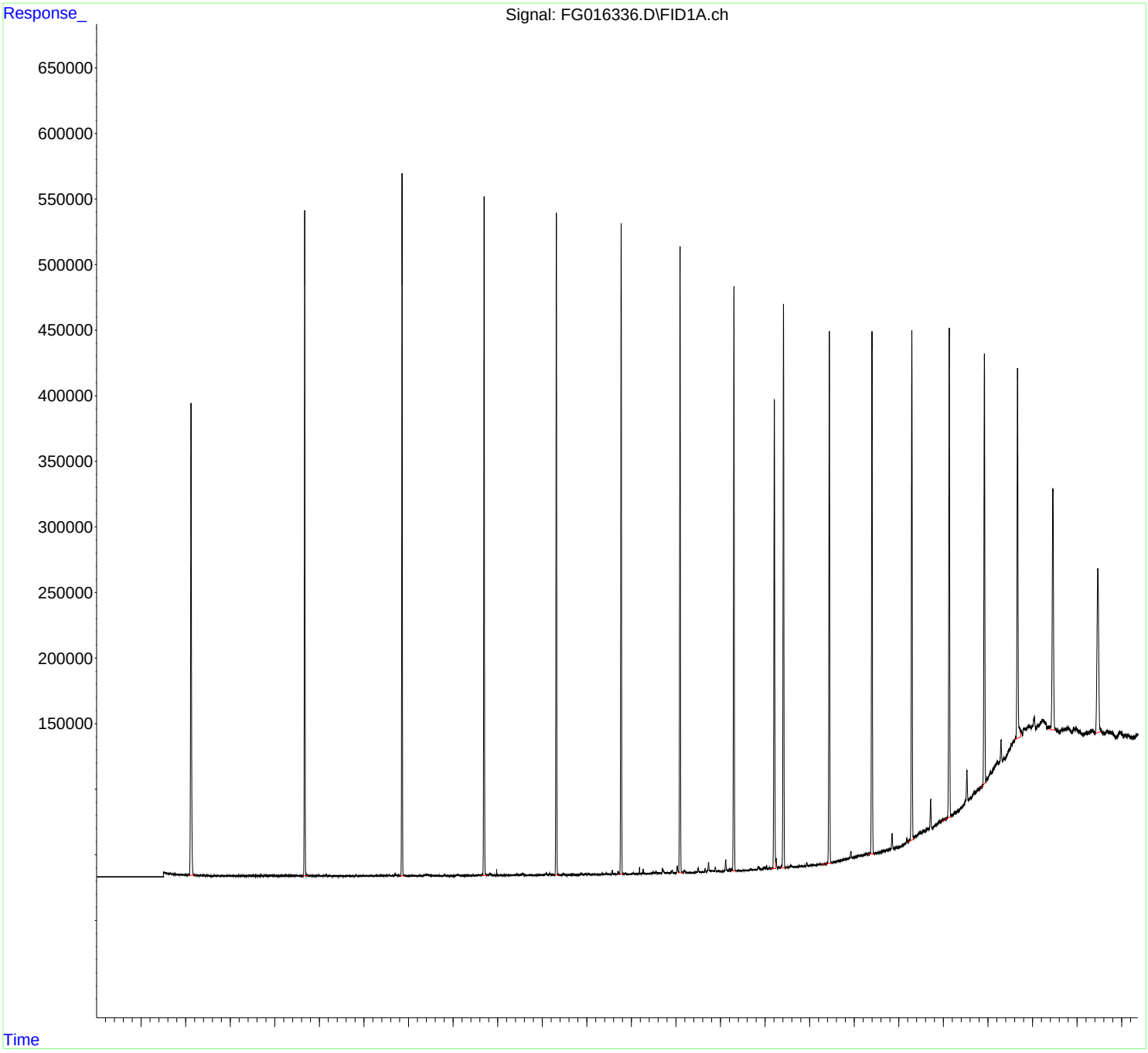
(f)=RT Delta > 1/2 Window (m)=manual int.

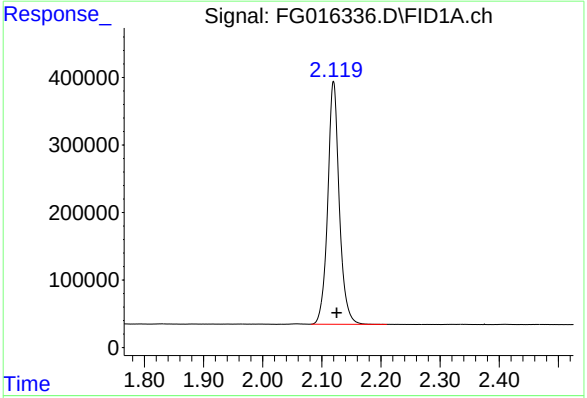
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016336.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 12:53
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Jul 19 01:59:18 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 2025
Response via : Initial Calibration
Integrator: ChemStation

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

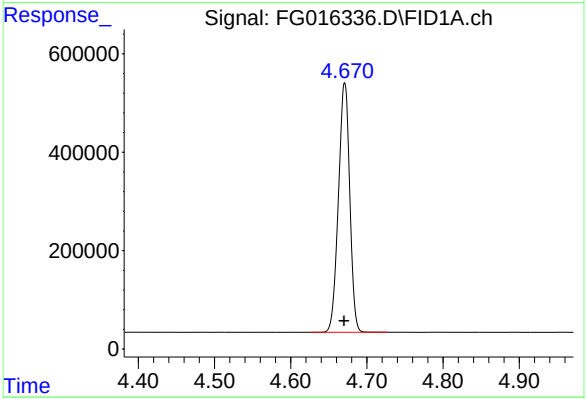




#1 N-OCTANE

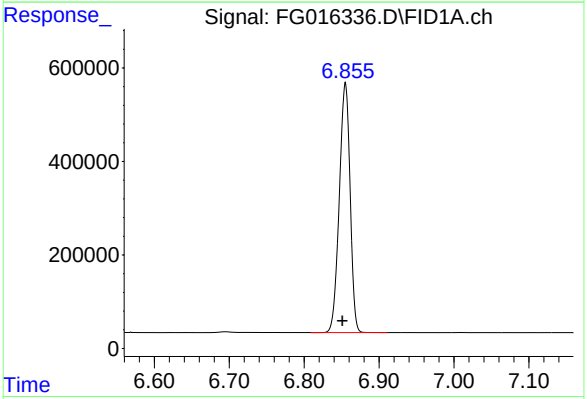
R.T.: 2.120 min
Delta R.T.: -0.005 min
Response: 4880777
Conc: 43.22 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



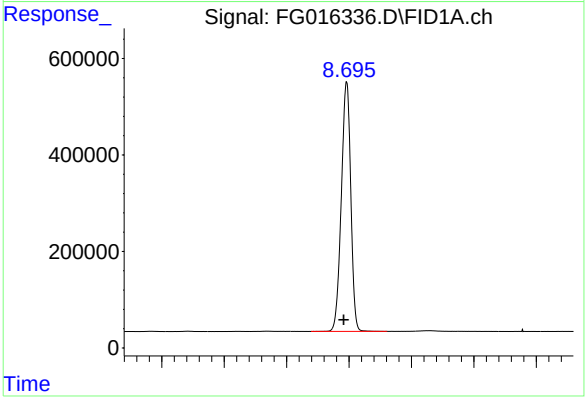
#2 N-DECANE

R.T.: 4.671 min
Delta R.T.: 0.000 min
Response: 5229290
Conc: 45.40 ug/ml



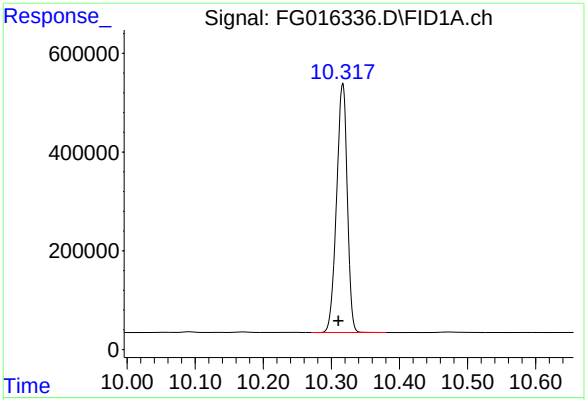
#3 N-DODECANE

R.T.: 6.855 min
Delta R.T.: 0.004 min
Response: 5346585
Conc: 46.11 ug/ml



#4 N-TETRADECANE

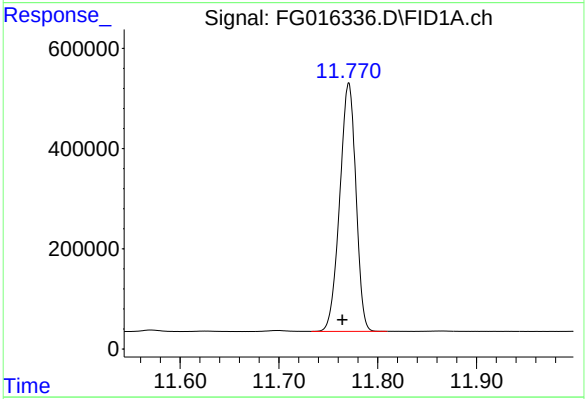
R.T.: 8.696 min
Delta R.T.: 0.005 min
Response: 5441010
Conc: 46.10 ug/ml



#5 N-HEXADECANE

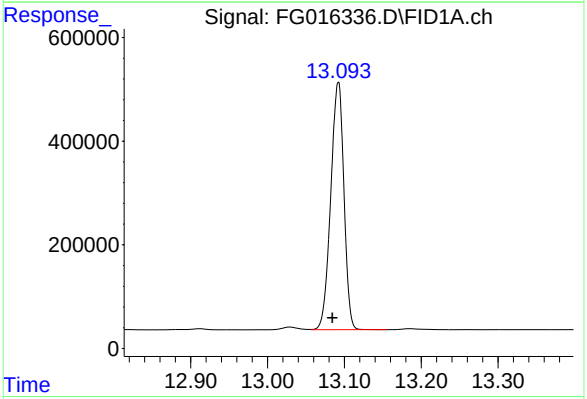
R.T.: 10.317 min
Delta R.T.: 0.006 min
Response: 5501843
Conc: 47.57 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



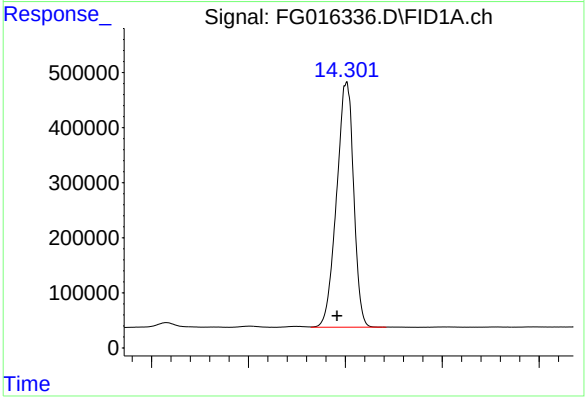
#6 N-OCTADECANE

R.T.: 11.771 min
Delta R.T.: 0.007 min
Response: 5639046
Conc: 48.04 ug/ml



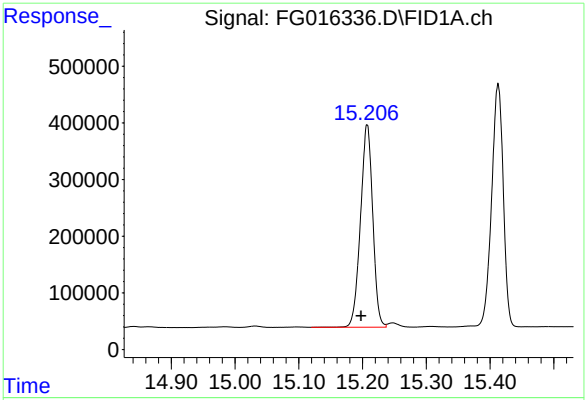
#7 N-EICOSANE

R.T.: 13.092 min
Delta R.T.: 0.008 min
Response: 5695634
Conc: 47.61 ug/ml



#8 N-DOCOSANE

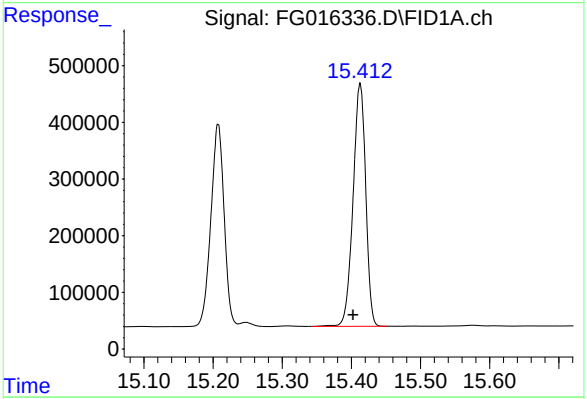
R.T.: 14.301 min
Delta R.T.: 0.010 min
Response: 5451035
Conc: 47.30 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

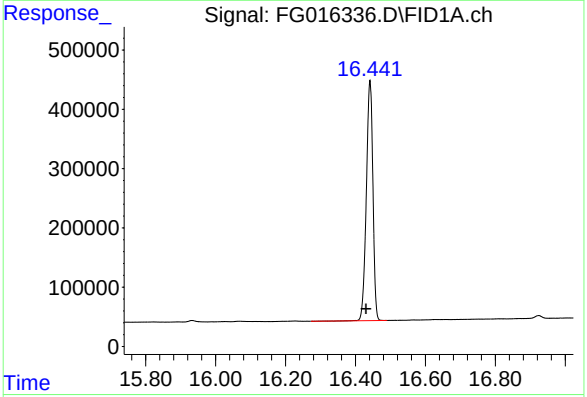
R.T.: 15.207 min
Delta R.T.: 0.010 min
Response: 4774495
Conc: 47.75 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



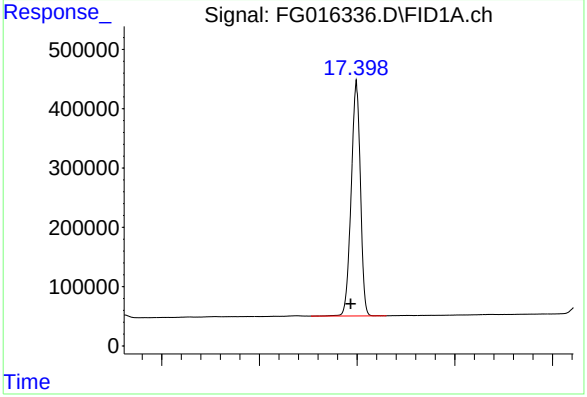
#10 N-TETRACOSANE

R.T.: 15.413 min
Delta R.T.: 0.010 min
Response: 5453309
Conc: 47.73 ug/ml



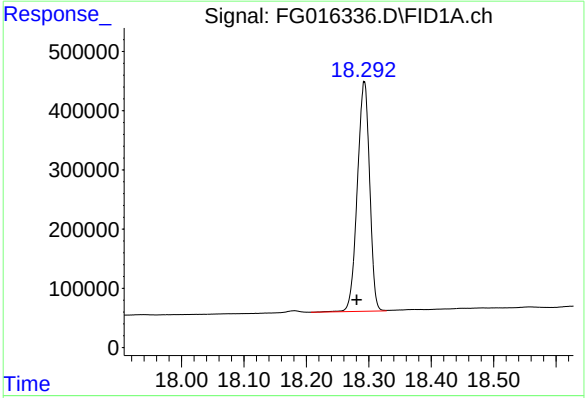
#11 N-HEXACOSANE

R.T.: 16.442 min
Delta R.T.: 0.011 min
Response: 5267070
Conc: 47.87 ug/ml



#12 N-OCTACOSANE

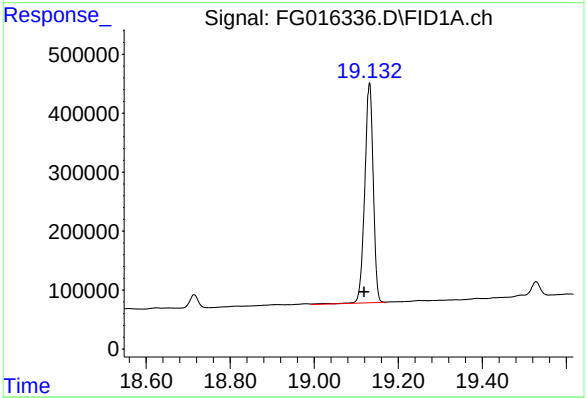
R.T.: 17.398 min
Delta R.T.: 0.012 min
Response: 5179697
Conc: 47.63 ug/ml



#13 N-TRIACONTANE

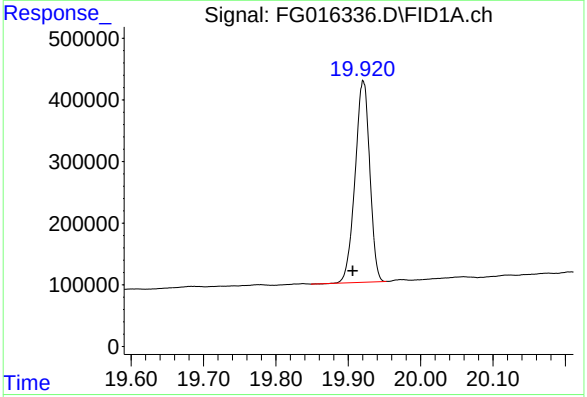
R.T.: 18.293 min
Delta R.T.: 0.012 min
Response: 5298093
Conc: 49.58 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



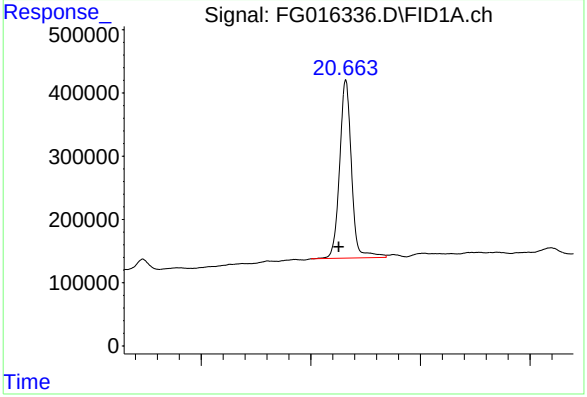
#14 N-DOTRIACONTANE

R.T.: 19.132 min
Delta R.T.: 0.013 min
Response: 5237612
Conc: 51.80 ug/ml



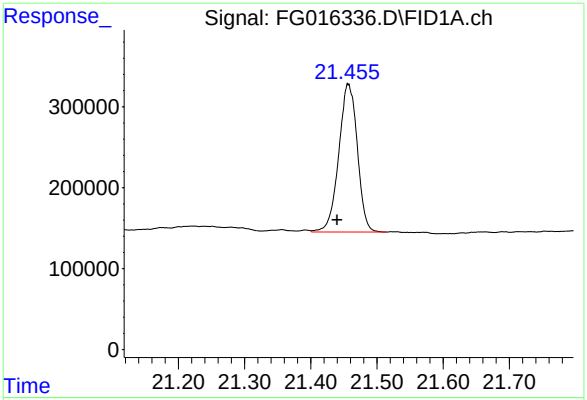
#15 N-TETRATRIACONTANE

R.T.: 19.921 min
Delta R.T.: 0.015 min
Response: 4605678
Conc: 50.62 ug/ml



#16 N-HEXATRIACONTANE

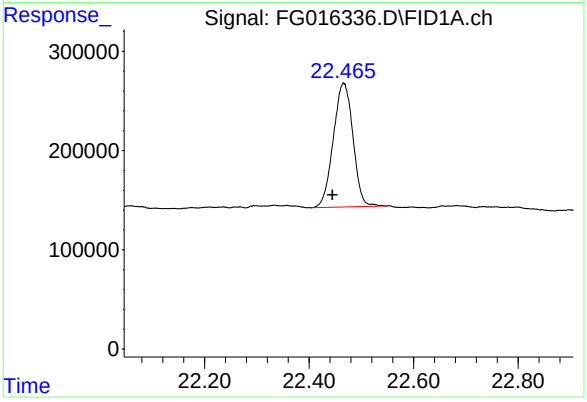
R.T.: 20.664 min
Delta R.T.: 0.013 min
Response: 4244515
Conc: 56.36 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.457 min
Delta R.T.: 0.017 min
Response: 3570810
Conc: 54.87 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



#18 N-TETRACONTANE

R.T.: 22.466 min
Delta R.T.: 0.021 min
Response: 3252130
Conc: 56.43 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016336.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 12:53
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.120	2.082	2.209	BB	359947	4880777	85.69%	5.419%
2	4.671	4.627	4.725	BB	506633	5229290	91.81%	5.806%
3	6.855	6.809	6.910	BB	534874	5346585	93.87%	5.936%
4	8.696	8.640	8.760	BB	517217	5441010	95.53%	6.041%
5	10.317	10.270	10.380	BB	504968	5501843	96.60%	6.109%
6	11.771	11.733	11.809	VB	497010	5639046	99.01%	6.261%
7	13.092	13.057	13.155	VB	477403	5695634	100.00%	6.324%
8	14.301	14.265	14.342	VB	444485	5451035	95.71%	6.052%
9	15.207	15.120	15.237	BV	357205	4774495	83.83%	5.301%
10	15.413	15.342	15.450	BV	429693	5453309	95.75%	6.055%
11	16.442	16.274	16.488	BB	404826	5267070	92.48%	5.848%
12	17.398	17.306	17.460	BV	398334	5179697	90.94%	5.751%
13	18.293	18.208	18.328	PV	387201	5298093	93.02%	5.882%
14	19.132	18.993	19.171	VV	373342	5237612	91.96%	5.815%
15	19.921	19.849	19.952	PV	327242	4605678	80.86%	5.114%
16	20.664	20.601	20.737	BV	282151	4244515	74.52%	4.713%
17	21.457	21.401	21.514	VV	183379	3570810	62.69%	3.965%
18	22.466	22.404	22.547	PV	125021	3252130	57.10%	3.611%
			Sum of corrected areas:			90068630		

FG070925.M Sat Jul 19 05:08:25 2025

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

TPH GC CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Alliane Contract: PARS02

ProjectID: Con Edison - East River Site 2

Lab Code: ACE SDG No.: Q2592

DataFile: FG016342.D Analyst Name: YP\AJ Analyst Date: 07-18-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
850	86883822	102216	103531	1.27

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016342.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 15:51
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: Jul 19 02:01:08 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.212	4769042	47.697 ug/ml
	Target Compounds			
1)	N-OCTANE	2.120	4897603	43.371 ug/ml
2)	N-DECANE	4.673	5253598	45.614 ug/ml
3)	N-DODECANE	6.857	5372344	46.337 ug/ml
4)	N-TETRADECANE	8.699	5475752	46.392 ug/ml
5)	N-HEXADECANE	10.320	5529021	47.802 ug/ml
6)	N-OCTADECANE	11.775	5665186	48.264 ug/ml
7)	N-EICOSANE	13.096	5718873	47.804 ug/ml
8)	N-DOCOSANE	14.305	5456486	47.349 ug/ml
10)	N-TETRACOSANE	15.417	5537420	48.466 ug/ml
11)	N-HEXACOSANE	16.447	5239579	47.615 ug/ml
12)	N-OCTACOSANE	17.403	5209495	47.904 ug/ml
13)	N-TRIACONTANE	18.298	5332718	49.904 ug/ml
14)	N-DOTRIACONTANE	19.137	5292730	52.341 ug/ml
15)	N-TETRATRIACONTANE	19.926	4844121	53.240 ug/ml
16)	N-HEXATRIACONTANE	20.671	4256596	56.521 ug/ml
17)	N-OCTATRIACONTANE	21.465	3939248	60.527 ug/ml
18)	N-TETRACONTANE	22.478	3863052	67.026 ug/ml

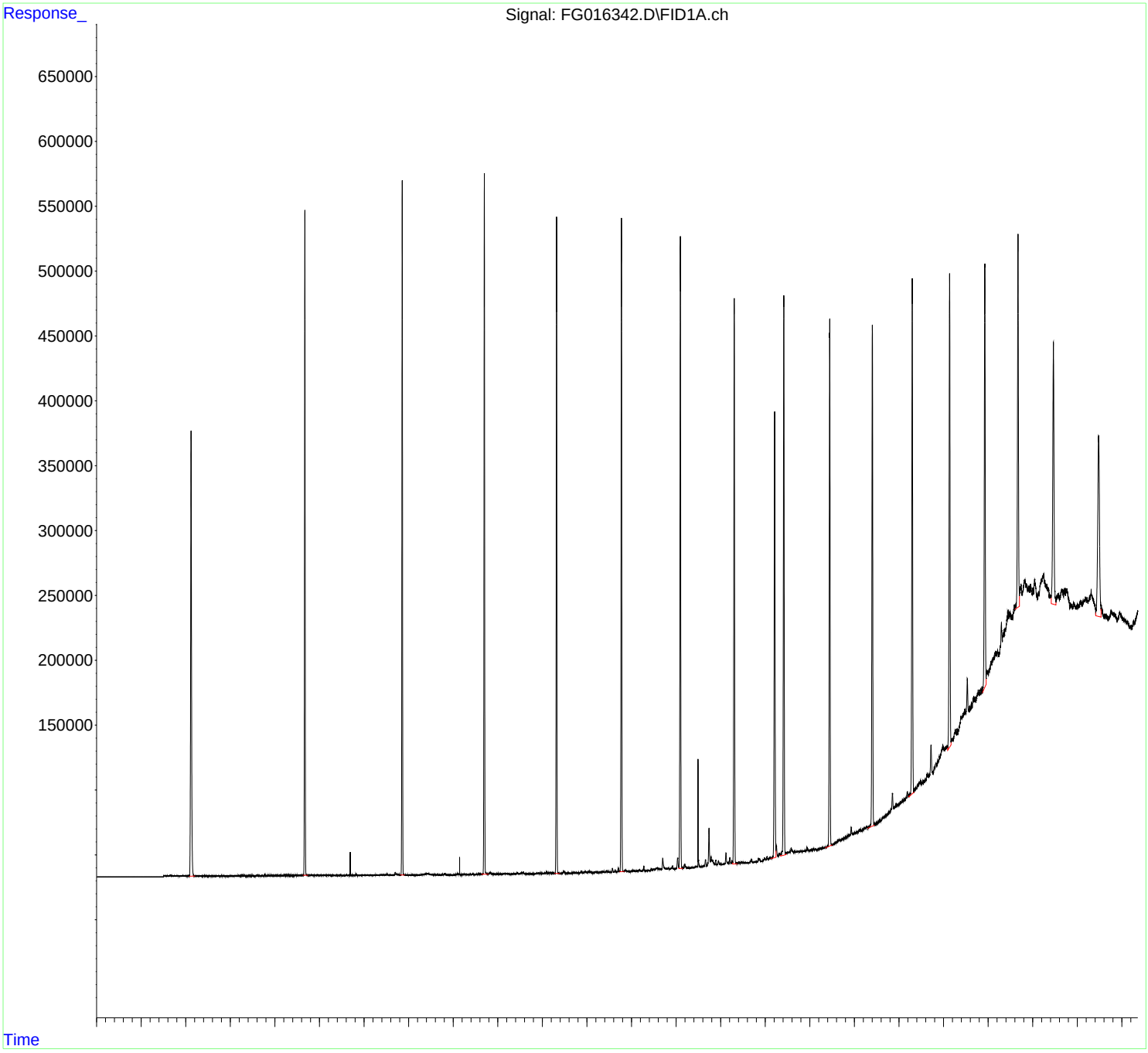
(f)=RT Delta > 1/2 Window (m)=manual int.

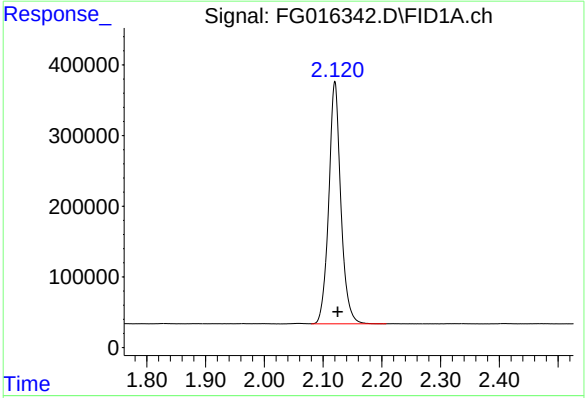
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016342.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 15:51
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Jul 19 02:01:08 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 2025
Response via : Initial Calibration
Integrator: ChemStation

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

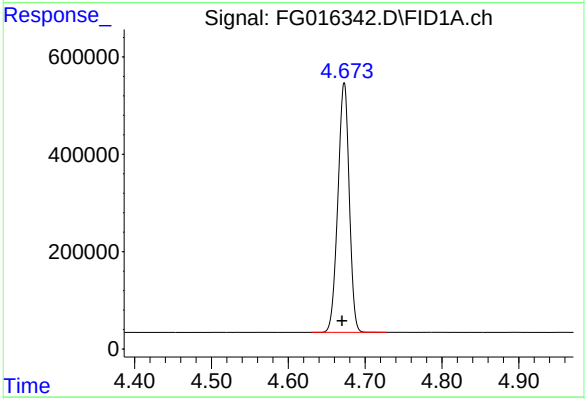




#1 N-OCTANE

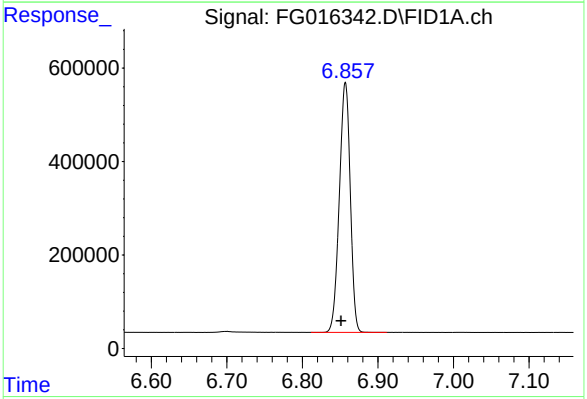
R.T.: 2.120 min
Delta R.T.: -0.005 min
Response: 4897603
Conc: 43.37 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



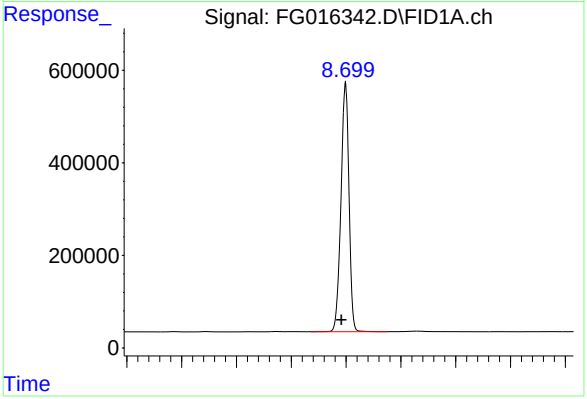
#2 N-DECANE

R.T.: 4.673 min
Delta R.T.: 0.003 min
Response: 5253598
Conc: 45.61 ug/ml



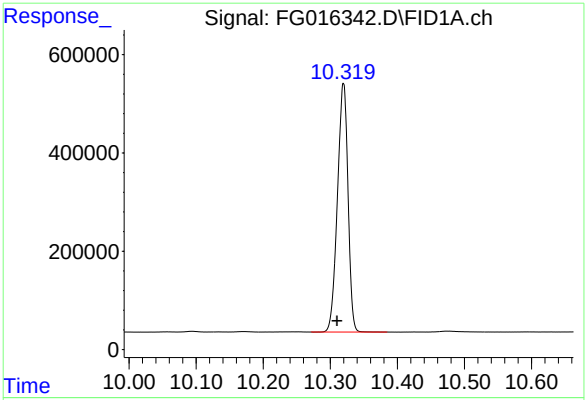
#3 N-DODECANE

R.T.: 6.857 min
Delta R.T.: 0.006 min
Response: 5372344
Conc: 46.34 ug/ml



#4 N-TETRADECANE

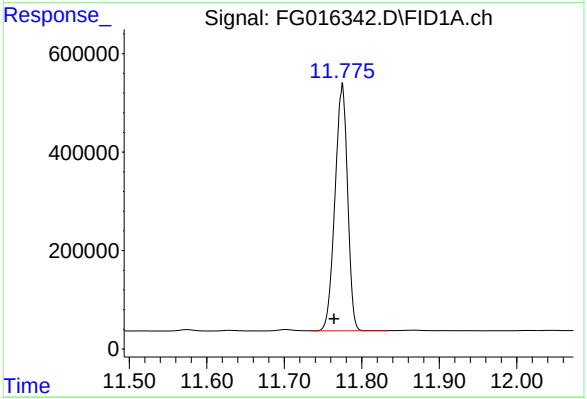
R.T.: 8.699 min
Delta R.T.: 0.007 min
Response: 5475752
Conc: 46.39 ug/ml



#5 N-HEXADECANE

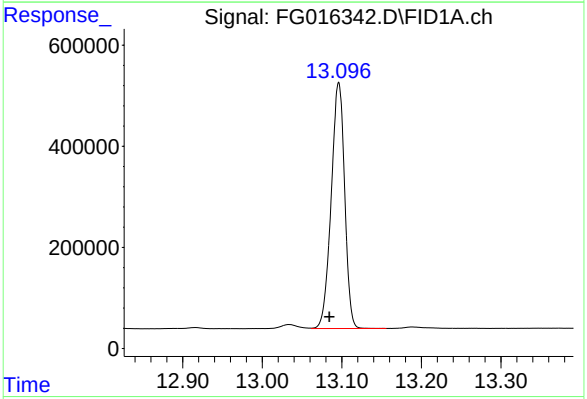
R.T.: 10.320 min
Delta R.T.: 0.009 min
Response: 5529021
Conc: 47.80 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



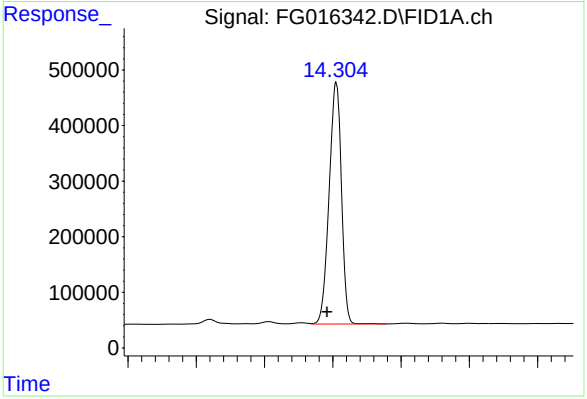
#6 N-OCTADECANE

R.T.: 11.775 min
Delta R.T.: 0.011 min
Response: 5665186
Conc: 48.26 ug/ml



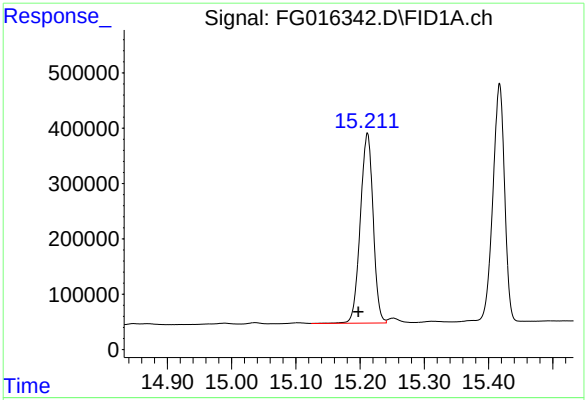
#7 N-EICOSANE

R.T.: 13.096 min
Delta R.T.: 0.012 min
Response: 5718873
Conc: 47.80 ug/ml



#8 N-DOCOSANE

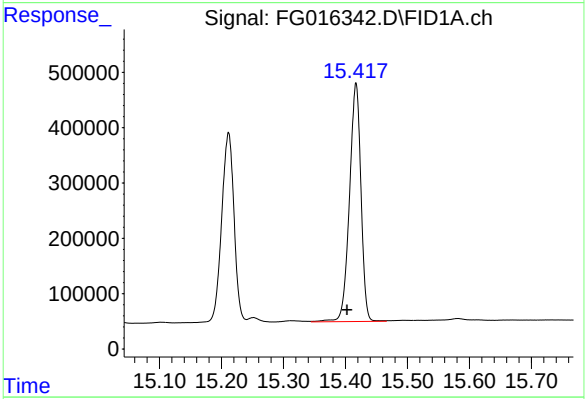
R.T.: 14.305 min
Delta R.T.: 0.014 min
Response: 5456486
Conc: 47.35 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

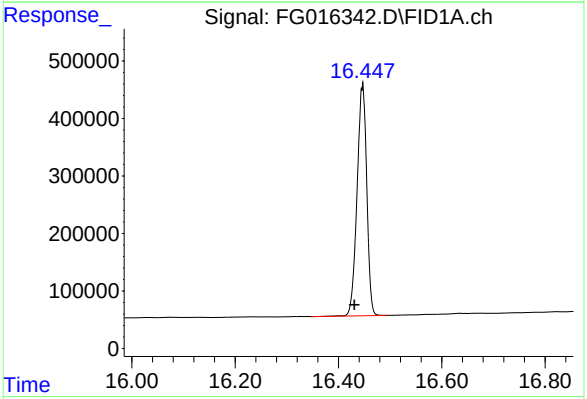
R.T.: 15.212 min
Delta R.T.: 0.014 min
Response: 4769042
Conc: 47.70 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



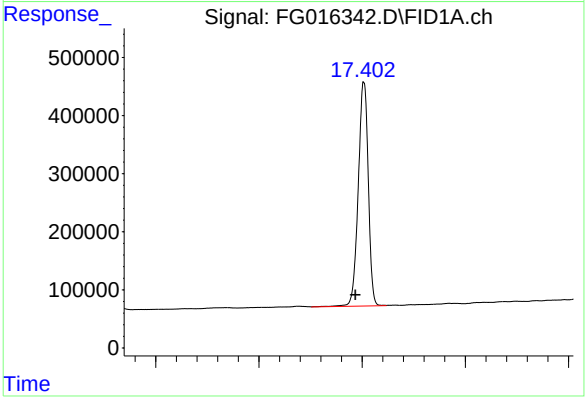
#10 N-TETRACOSANE

R.T.: 15.417 min
Delta R.T.: 0.015 min
Response: 5537420
Conc: 48.47 ug/ml



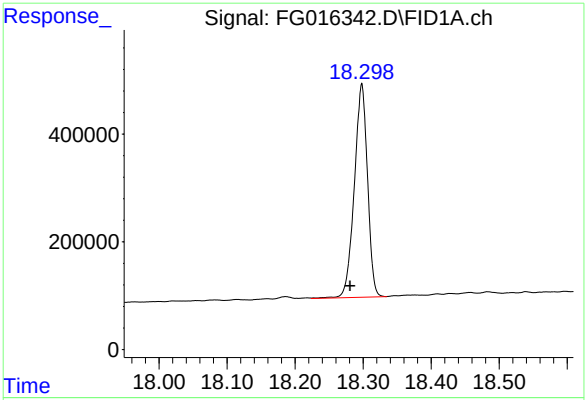
#11 N-HEXACOSANE

R.T.: 16.447 min
Delta R.T.: 0.016 min
Response: 5239579
Conc: 47.62 ug/ml



#12 N-OCTACOSANE

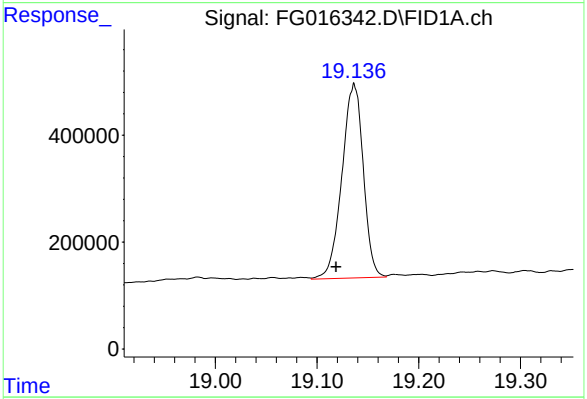
R.T.: 17.403 min
Delta R.T.: 0.016 min
Response: 5209495
Conc: 47.90 ug/ml



#13 N-TRIACONTANE

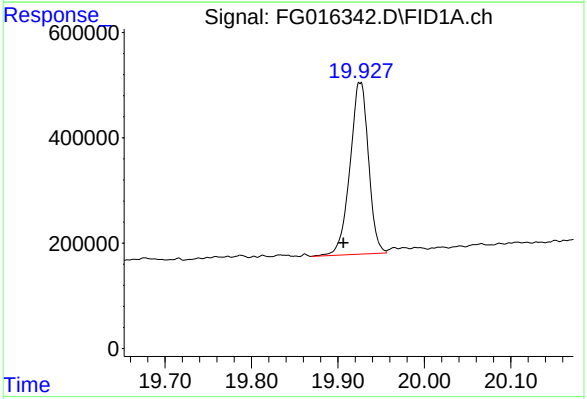
R.T.: 18.298 min
Delta R.T.: 0.017 min
Response: 5332718
Conc: 49.90 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



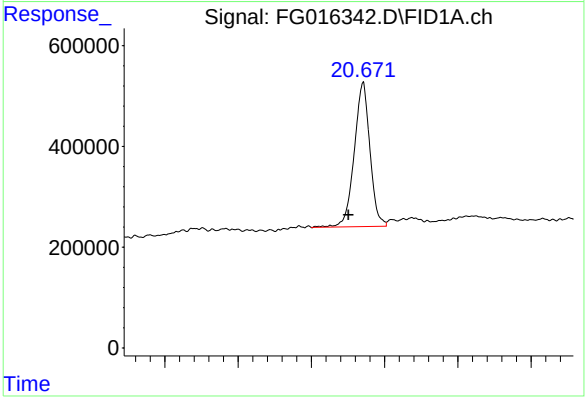
#14 N-DOTRIACONTANE

R.T.: 19.137 min
Delta R.T.: 0.018 min
Response: 5292730
Conc: 52.34 ug/ml



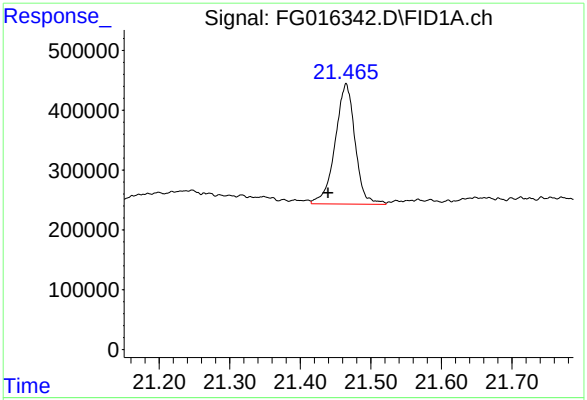
#15 N-TETRATRIACONTANE

R.T.: 19.926 min
Delta R.T.: 0.019 min
Response: 4844121
Conc: 53.24 ug/ml



#16 N-HEXATRIACONTANE

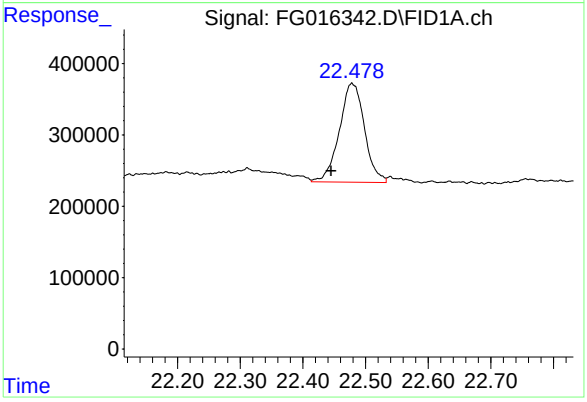
R.T.: 20.671 min
Delta R.T.: 0.020 min
Response: 4256596
Conc: 56.52 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.465 min
Delta R.T.: 0.026 min
Response: 3939248
Conc: 60.53 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



#18 N-TETRACONTANE

R.T.: 22.478 min
Delta R.T.: 0.033 min
Response: 3863052
Conc: 67.03 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016342.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 15:51
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.120	2.080	2.208	VB	343372	4897603	85.64%	5.344%
2	4.673	4.630	4.728	BB	512949	5253598	91.86%	5.732%
3	6.857	6.812	6.911	BB	535149	5372344	93.94%	5.862%
4	8.699	8.637	8.773	BB	539755	5475752	95.75%	5.974%
5	10.320	10.272	10.383	BB	505354	5529021	96.68%	6.033%
6	11.775	11.735	11.832	VB	503696	5665186	99.06%	6.181%
7	13.096	13.062	13.156	VB	487060	5718873	100.00%	6.240%
8	14.305	14.269	14.378	VV	434457	5456486	95.41%	5.953%
9	15.212	15.124	15.241	VV	343494	4769042	83.39%	5.203%
10	15.417	15.345	15.466	VV	431290	5537420	96.83%	6.042%
11	16.447	16.348	16.493	PV	400944	5239579	91.62%	5.717%
12	17.403	17.302	17.447	VV	384645	5209495	91.09%	5.684%
13	18.298	18.224	18.334	VV	397471	5332718	93.25%	5.818%
14	19.137	19.094	19.168	VV	364123	5292730	92.55%	5.775%
15	19.926	19.869	19.956	PV	323669	4844121	84.70%	5.285%
16	20.671	20.600	20.702	BV	287064	4256596	74.43%	4.644%
17	21.465	21.415	21.522	VV	201889	3939248	68.88%	4.298%
18	22.478	22.413	22.533	VV	139481	3863052	67.55%	4.215%
			Sum of corrected areas:			91652865		

FG070925.M Sat Jul 19 05:19:38 2025

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

Analytical Sequence

Client: PARSONS Engineering of New York, Inc. **SDG No.:** Q2592

Project: Con Edison - East River Site 2 **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 **15.201**

CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
PIBLK01	I.BLK01	18 Jul 2025 08:55	FG016328.D	15.207	
50 PPM TRPH STD	50 PPM TRPH STD	18 Jul 2025 09:24	FG016329.D	15.207	
WC-SOIL-20250711	Q2592-01	18 Jul 2025 10:55	FG016332.D	00.000	
PIBLK02	I.BLK02	18 Jul 2025 12:24	FG016335.D	15.204	
50 PPM TRPH STD	50 PPM TRPH STD	18 Jul 2025 12:53	FG016336.D	15.207	
PB168895BL	PB168895BL	18 Jul 2025 13:23	FG016337.D	15.202	
PB168895BS	PB168895BS	18 Jul 2025 13:52	FG016338.D	15.202	
WC-SOIL-20250711MS	Q2592-01MS	18 Jul 2025 14:22	FG016339.D	15.213	
WC-SOIL-20250711MSD	Q2592-01MSD	18 Jul 2025 14:52	FG016340.D	15.218	
PIBLK03	I.BLK03	18 Jul 2025 15:21	FG016341.D	15.208	
50 PPM TRPH STD	50 PPM TRPH STD	18 Jul 2025 15:51	FG016342.D	15.212	

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

QC Limits	Lower Limit	Upper Limits
(± 0.10 minutes)	15.101	15.301

QC SAMPLE DATA

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

Client:	PARSONS Engineering of New York, Inc.	Date Collected:	
Project:	Con Edison - East River Site 2	Date Received:	
Client Sample ID:	PB168895BL	SDG No.:	Q2592
Lab Sample ID:	PB168895BL	Matrix:	SOIL
Analytical Method:	8015D TPH	% Solid:	100 Decanted:
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	TPH GC
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG016337.D	1	07/17/25 08:25	07/18/25 13:23	PB168895

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
PHC	Petroleum Hydrocarbons	2830	U	384	2830	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\FG071825\
Data File : FG016337.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 13:23
Operator : YP\AJ
Sample : PB168895BL
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB168895BL

Integration File: autoint1.e
Quant Time: Jul 19 01:59:40 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.202	1858479	18.587 ug/ml
Target Compounds			

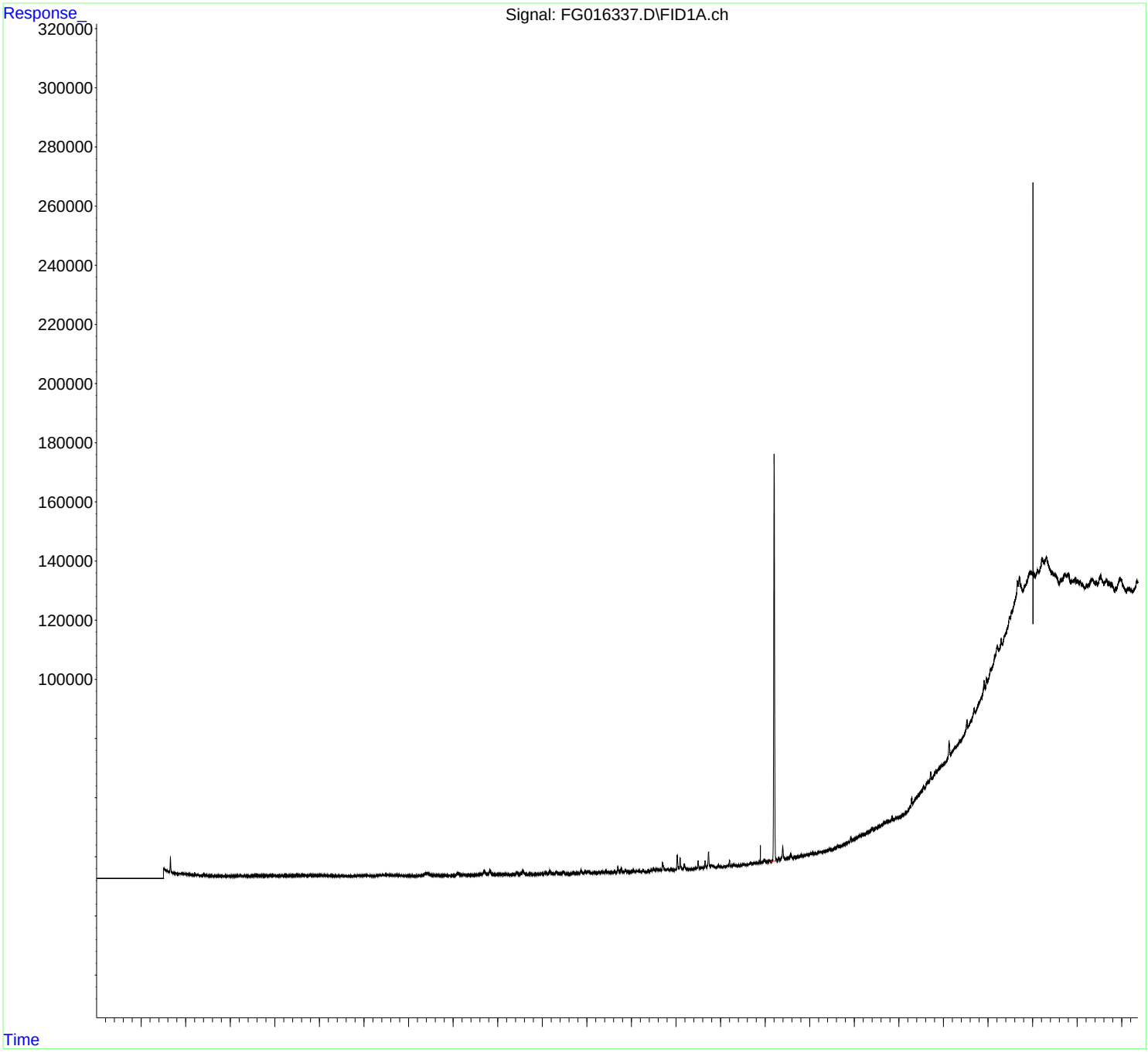
(f)=RT Delta > 1/2 Window (m)=manual int.

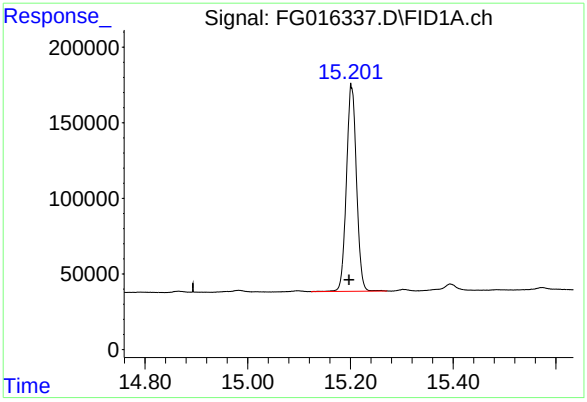
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016337.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 13:23
Operator : YP\AJ
Sample : PB168895BL
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB168895BL

Integration File: autoint1.e
Quant Time: Jul 19 01:59:40 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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.:	15.202 min
Delta R.T.:	0.004 min
Response:	1858479
Conc:	18.59 ug/ml

Instrument :
FID_G
ClientSampleId :
PB168895BL

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016337.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 13:23
Sample : PB168895BL
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.202	15.124	15.270	BB	134551	1858479	100.00%	100.000%
			Sum of corrected areas:			1858479		

FG070925.M Sat Jul 19 05:09:16 2025

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

Report of Analysis

Client:	PARSONS Engineering of New York, Inc.	Date Collected:	07/18/25
Project:	Con Edison - East River Site 2	Date Received:	07/18/25
Client Sample ID:	PIBLK-FG016328.D	SDG No.:	Q2592
Lab Sample ID:	I.BLK-FG016328.D	Matrix:	Water
Analytical Method:	8015D TPH	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	TPH GC
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG016328.D	1		07/18/25	FG071825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
PHC	Petroleum Hydrocarbons	85.0	U	12.0	85.0	ug/L
SURROGATES						
16416-32-3	TETRACOSANE-d50	18.1		29 - 130	91%	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\FG071825\
Data File : FG016328.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 08:55
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: Jul 18 11:31:13 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.207	1810552	18.108 ug/ml
Target Compounds			

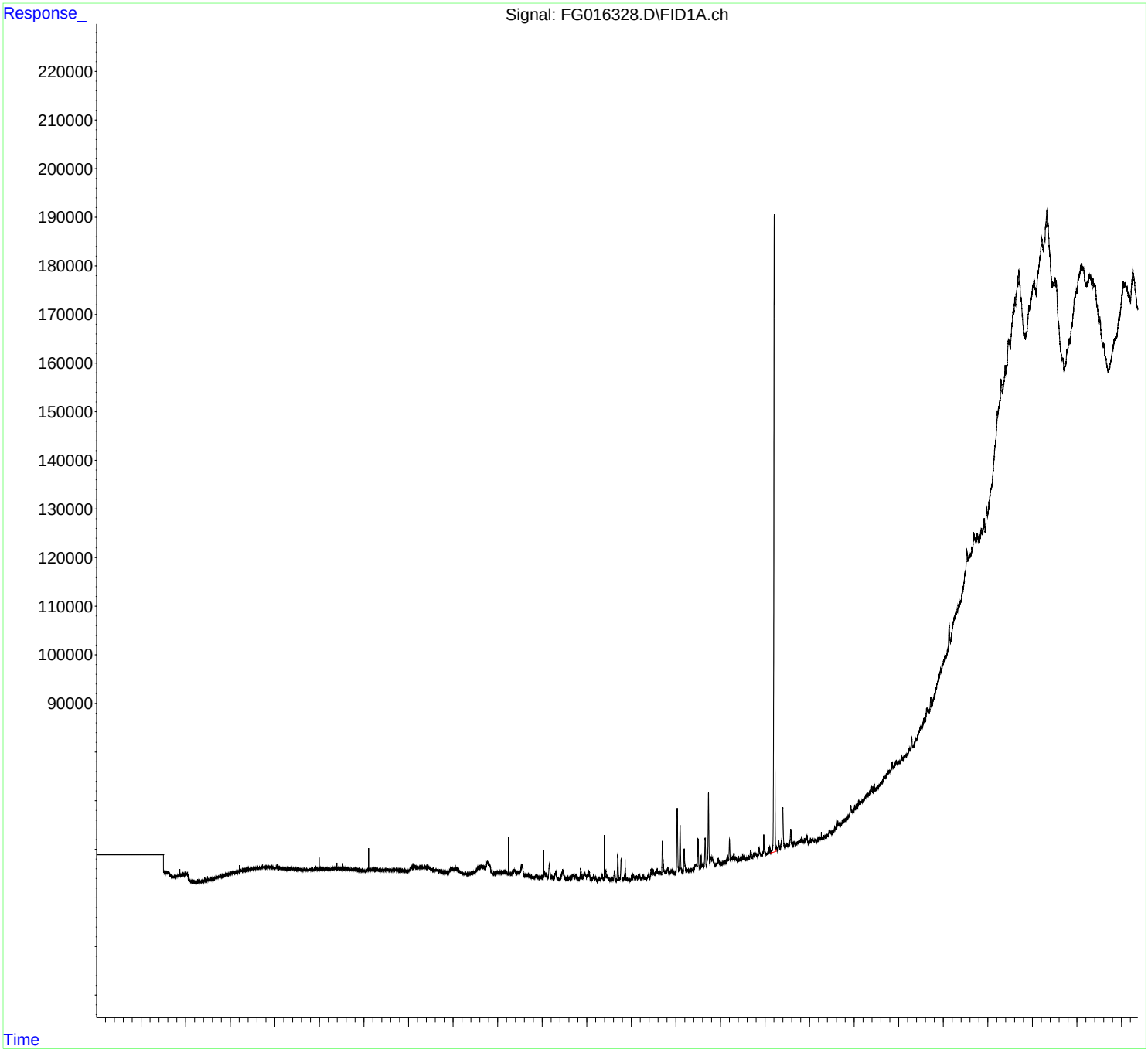
(f)=RT Delta > 1/2 Window (m)=manual int.

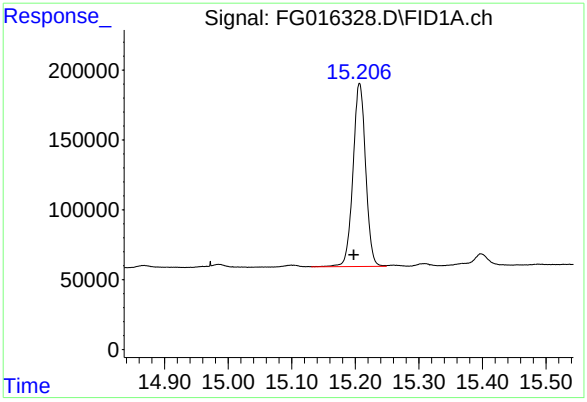
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016328.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 08:55
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Jul 18 11:31:13 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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.:	15.207 min
Delta R.T.:	0.009 min
Response:	1810552
Conc:	18.11 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016328.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 08:55
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.207	15.131	15.249	VV	131225	1810552	100.00%	100.000%

Sum of corrected areas: 1810552

FG070925.M Fri Jul 18 11:41:37 2025

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

Report of Analysis

Client:	PARSONS Engineering of New York, Inc.	Date Collected:	07/18/25
Project:	Con Edison - East River Site 2	Date Received:	07/18/25
Client Sample ID:	PIBLK-FG016335.D	SDG No.:	Q2592
Lab Sample ID:	I.BLK-FG016335.D	Matrix:	Water
Analytical Method:	8015D TPH	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	TPH GC
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG016335.D	1		07/18/25	FG071825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
PHC	Petroleum Hydrocarbons	85.0	U	12.0	85.0	ug/L
SURROGATES						
16416-32-3	TETRACOSANE-d50	18.1		29 - 130	91%	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\FG071825\
Data File : FG016335.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 12:24
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 19 01:58:58 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_G
ClientSampleId :
I.BLK

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.205	1814055	18.143 ug/mlm
Target Compounds			

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016335.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 12:24
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

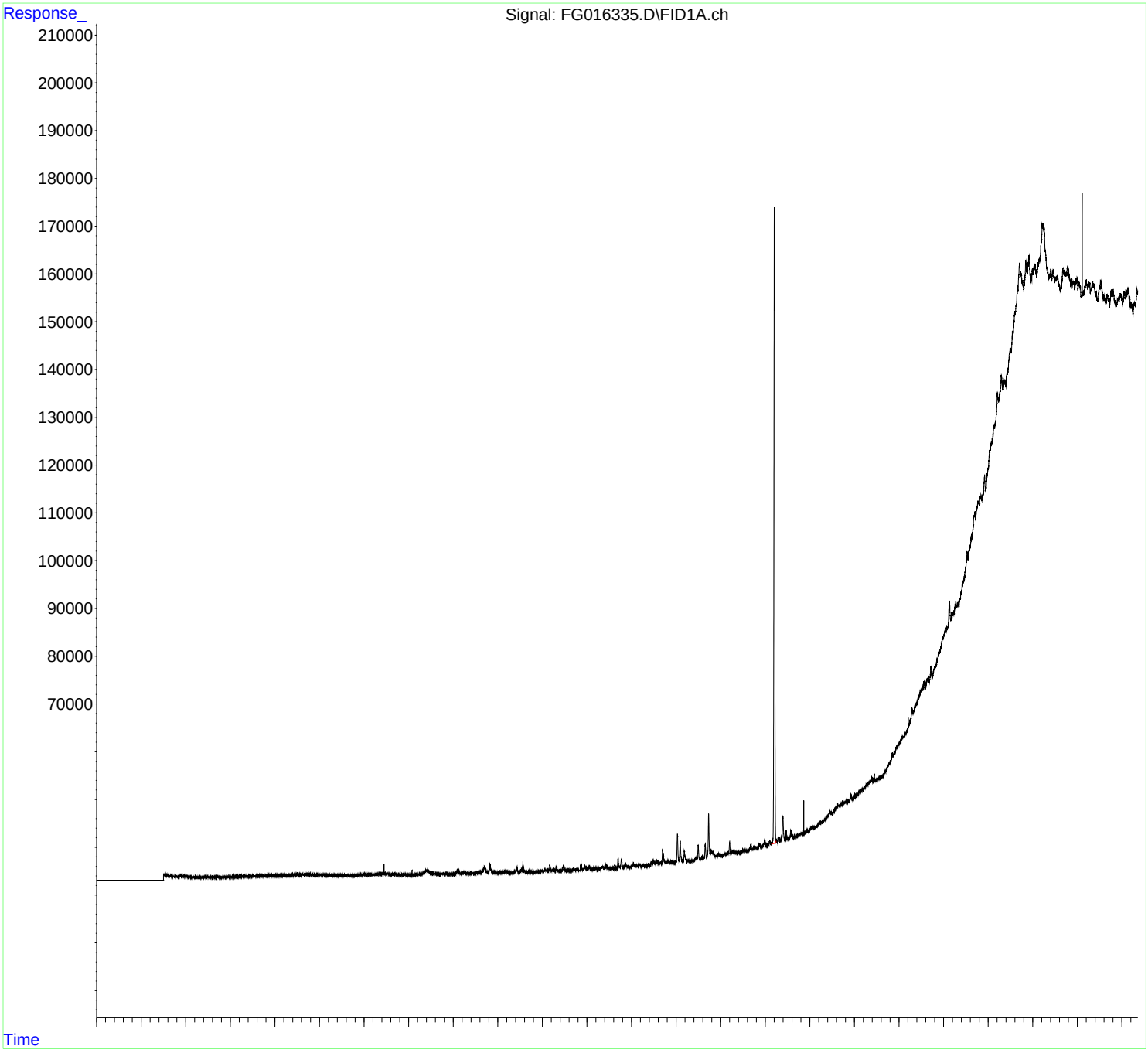
Integration File: autoint1.e
Quant Time: Jul 19 01:58:58 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 2025
Response via : Initial Calibration
Integrator: ChemStation

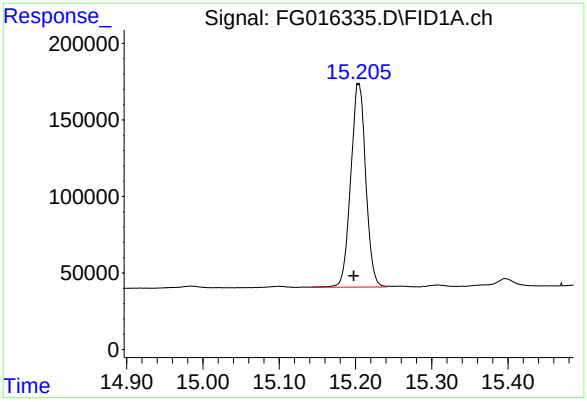
Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_G
ClientSampleId :
I.BLK

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025





#9 TETRACOSANE-d50 (SURROGATE)

R.T.:	15.205 min
Delta R.T.:	0.007 min
Response:	1814055
Conc:	18.14 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025

Instrument :
FID_G
LabSampleId :
I.BLK

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG07182
Data File : FG016335.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 12:24
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.204	15.124	15.283	VB	132585	1829074	100.00%	100.000%
			Sum of corrected areas:			1829074		

FG070925.M Sat Jul 19 05:02:58 2025

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

Report of Analysis

Client:	PARSONS Engineering of New York, Inc.	Date Collected:	07/18/25
Project:	Con Edison - East River Site 2	Date Received:	07/18/25
Client Sample ID:	PIBLK-FG016341.D	SDG No.:	Q2592
Lab Sample ID:	I.BLK-FG016341.D	Matrix:	Water
Analytical Method:	8015D TPH	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	TPH GC
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG016341.D	1		07/18/25	FG071825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
PHC	Petroleum Hydrocarbons	85.0	U	12.0	85.0	ug/L
SURROGATES						
16416-32-3	TETRACOSANE-d50	18.1		29 - 130	91%	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\FG071825\
Data File : FG016341.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 15:21
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: Jul 19 02:00:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.208	1814124	18.144 ug/ml
Target Compounds			

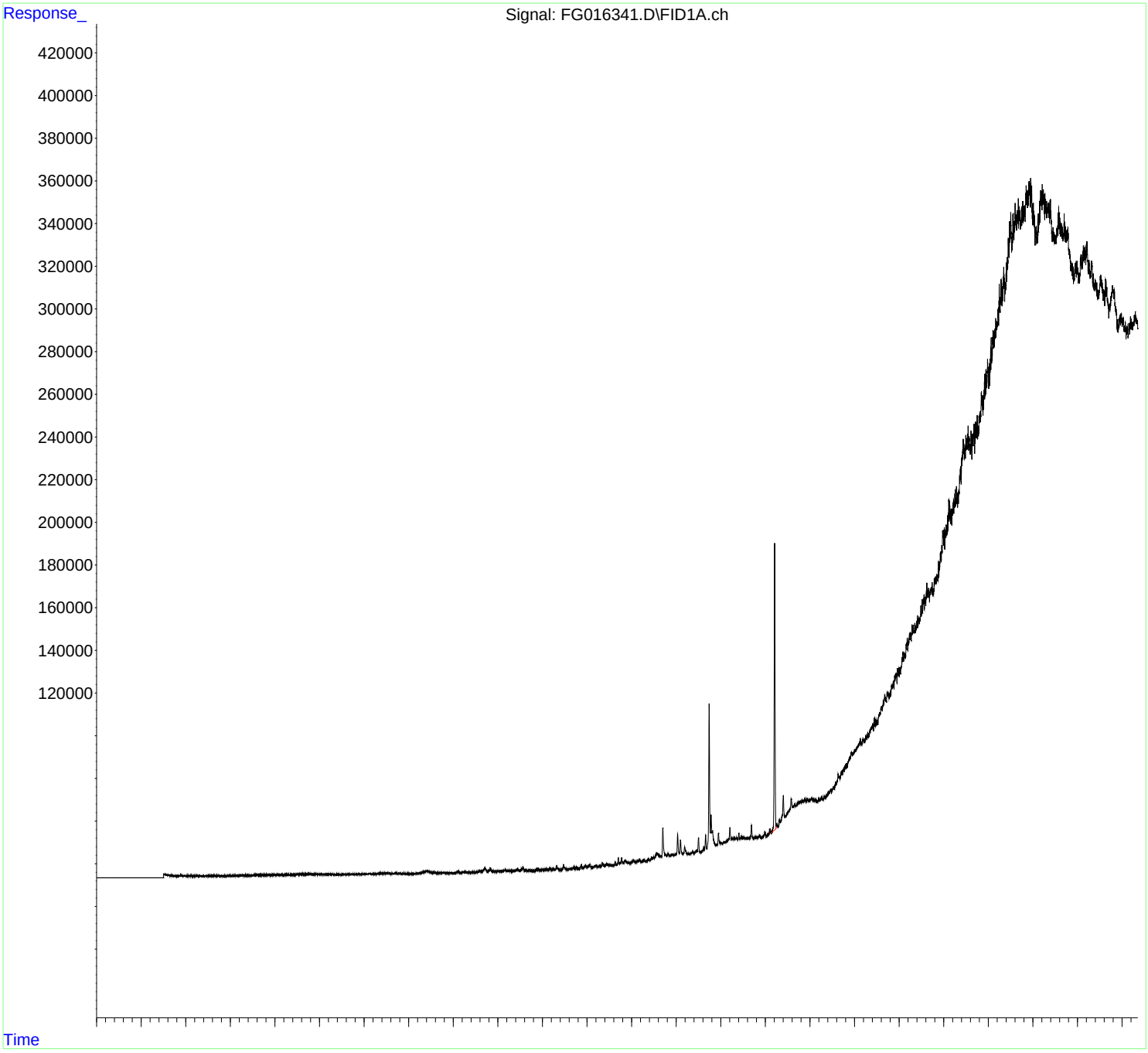
(f)=RT Delta > 1/2 Window (m)=manual int.

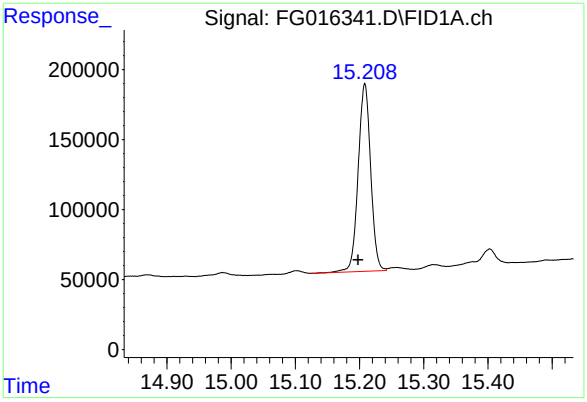
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016341.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 15:21
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Jul 19 02:00:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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.:	15.208 min
Delta R.T.:	0.011 min
Response:	1814124
Conc:	18.14 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016341.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 15:21
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.208	15.125	15.242	PV	134265	1814124	100.00%	100.000%
			Sum of corrected areas:			1814124		

FG070925.M Sat Jul 19 05:13:18 2025

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

Report of Analysis

Client:	PARSONS Engineering of New York, Inc.	Date Collected:	
Project:	Con Edison - East River Site 2	Date Received:	
Client Sample ID:	PB168895BS	SDG No.:	Q2592
Lab Sample ID:	PB168895BS	Matrix:	SOIL
Analytical Method:	8015D TPH	% Solid:	100 Decanted:
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	TPH GC
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG016338.D	1	07/17/25 08:25	07/18/25 13:52	PB168895

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
PHC	Petroleum Hydrocarbons	9610		384	2830	ug/kg
SURROGATES						
16416-32-3	TETRACOSANE-d50	17.1		37 - 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\FG071825\
Data File : FG016338.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 13:52
Operator : YP\AJ
Sample : PB168895BS
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB168895BS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025

Integration File: autoint1.e
Quant Time: Jul 19 01:59:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.202	1705185	17.054 ug/ml
	Target Compounds			
1)	N-OCTANE	2.120	1541234	13.649 ug/ml
2)	N-DECANE	4.669	1839228	15.969 ug/ml
3)	N-DODECANE	6.852	1893054	16.328 ug/ml
4)	N-TETRADECANE	8.693	1952993	16.546 ug/ml
5)	N-HEXADECANE	10.313	1948406	16.845 ug/ml
6)	N-OCTADECANE	11.767	2004029	17.073 ug/ml
7)	N-EICOSANE	13.088	2084438	17.424 ug/ml
8)	N-DOCOSANE	14.297	1975026	17.138 ug/ml
10)	N-TETRACOSANE	15.409	2013264	17.621 ug/ml
11)	N-HEXACOSANE	16.437	1876724	17.055 ug/ml
12)	N-OCTACOSANE	17.395	1853659	17.045 ug/ml
13)	N-TRIACONTANE	18.289	1837765	17.198 ug/ml
14)	N-DOTRIACONTANE	19.127	1735679	17.164 ug/mlm
15)	N-TETRATRIACONTANE	19.916	1542300	16.951 ug/mlm
16)	N-HEXATRIACONTANE	20.661	1412667	18.758 ug/ml
17)	N-OCTATRIACONTANE	21.453	1309156	20.115 ug/ml
18)	N-TETRACONTANE	22.460	1154022	20.023 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016338.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 13:52
Operator : YP\AJ
Sample : PB168895BS
Misc :
ALS Vial : 26 Sample Multiplier: 1

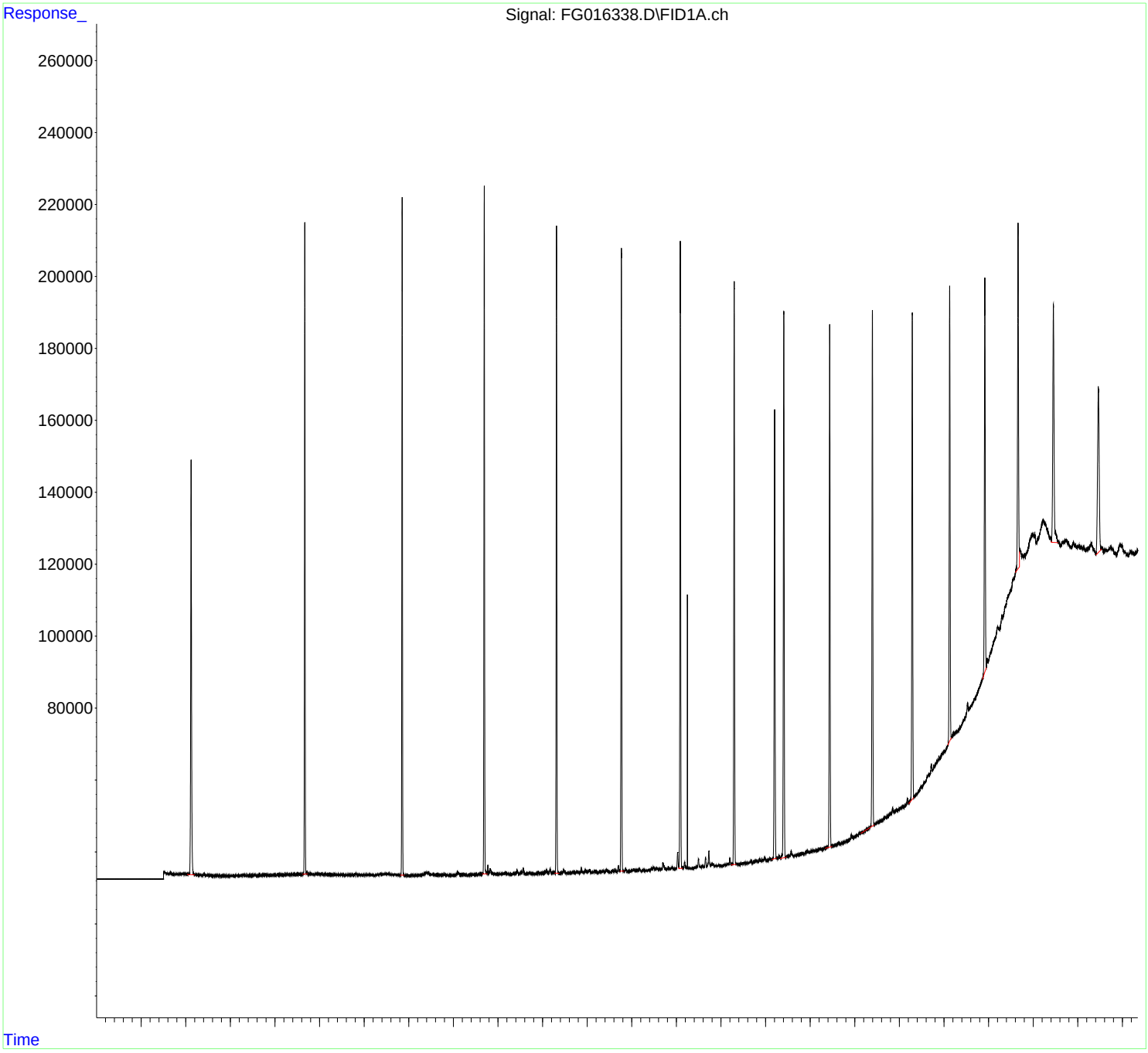
Integration File: autoint1.e
Quant Time: Jul 19 01:59:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 2025
Response via : Initial Calibration
Integrator: ChemStation

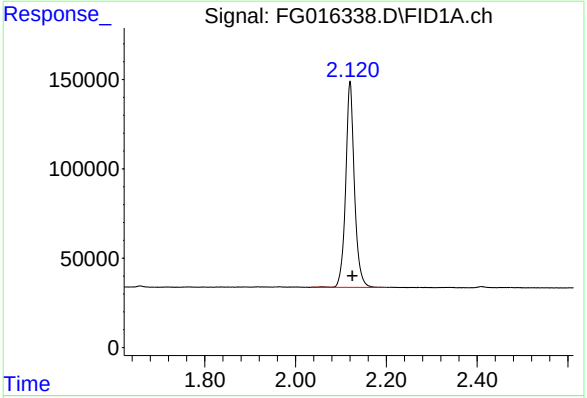
Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_G
ClientSampleId :
PB168895BS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025





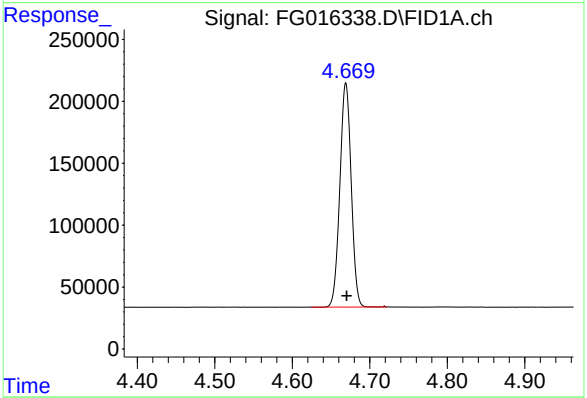
#1 N-OCTANE

R.T.: 2.120 min
Delta R.T.: -0.005 min
Response: 1541234
Conc: 13.65 ug/ml

Instrument :
FID_G
ClientSampleId :
PB168895BS

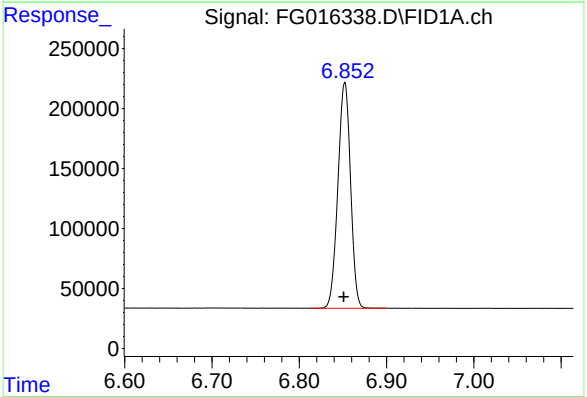
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025



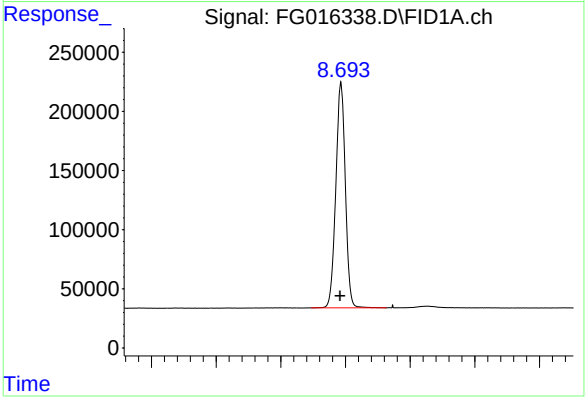
#2 N-DECANE

R.T.: 4.669 min
Delta R.T.: 0.000 min
Response: 1839228
Conc: 15.97 ug/ml



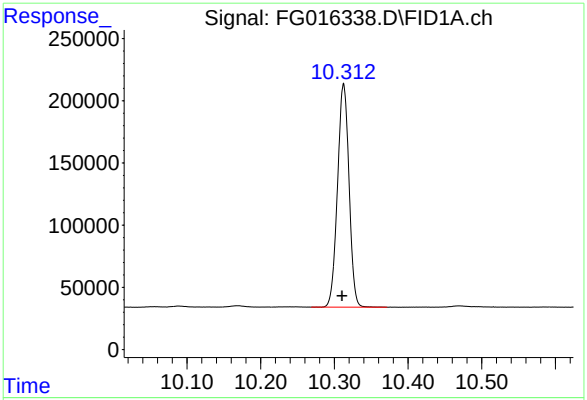
#3 N-DODECANE

R.T.: 6.852 min
Delta R.T.: 0.001 min
Response: 1893054
Conc: 16.33 ug/ml



#4 N-TETRADECANE

R.T.: 8.693 min
Delta R.T.: 0.001 min
Response: 1952993
Conc: 16.55 ug/ml



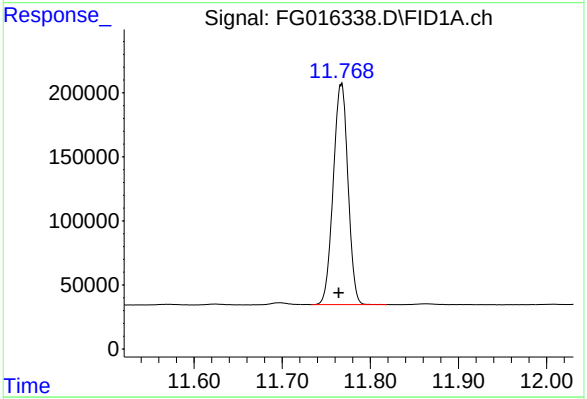
#5 N-HEXADECANE

R.T.: 10.313 min
Delta R.T.: 0.002 min
Response: 1948406
Conc: 16.85 ug/ml

Instrument :
FID_G
ClientSampleId :
PB168895BS

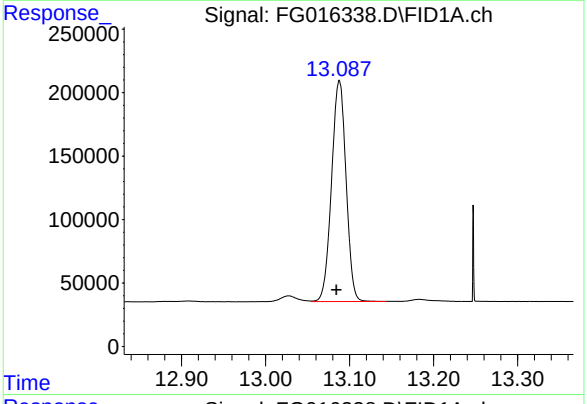
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025



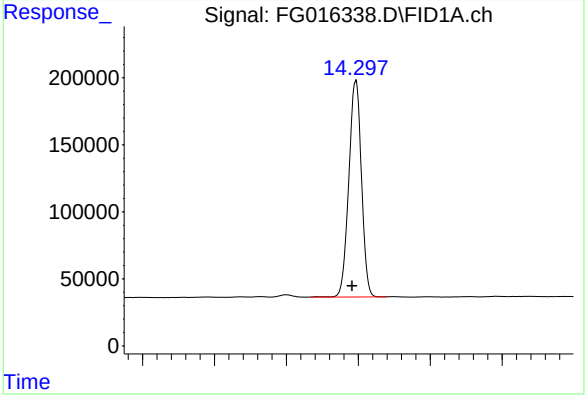
#6 N-OCTADECANE

R.T.: 11.767 min
Delta R.T.: 0.003 min
Response: 2004029
Conc: 17.07 ug/ml



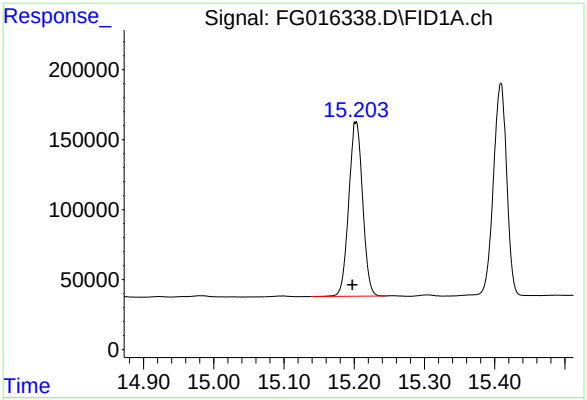
#7 N-EICOSANE

R.T.: 13.088 min
Delta R.T.: 0.004 min
Response: 2084438
Conc: 17.42 ug/ml



#8 N-DOCOSANE

R.T.: 14.297 min
Delta R.T.: 0.005 min
Response: 1975026
Conc: 17.14 ug/ml



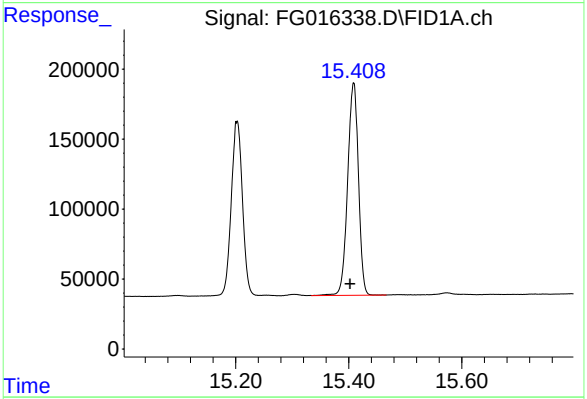
#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.202 min
Delta R.T.: 0.005 min
Response: 1705185
Conc: 17.05 ug/ml

Instrument :
FID_G
ClientSampleId :
PB168895BS

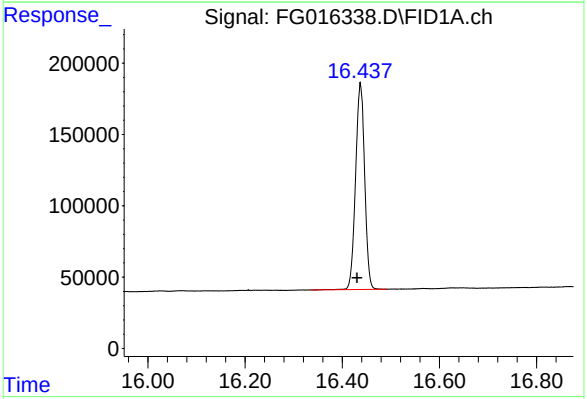
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025



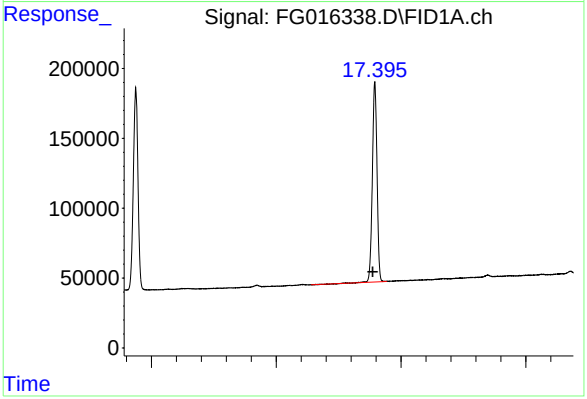
#10 N-TETRACOSANE

R.T.: 15.409 min
Delta R.T.: 0.006 min
Response: 2013264
Conc: 17.62 ug/ml



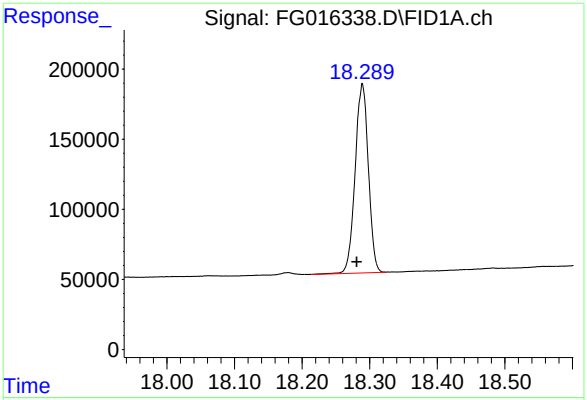
#11 N-HEXACOSANE

R.T.: 16.437 min
Delta R.T.: 0.007 min
Response: 1876724
Conc: 17.05 ug/ml



#12 N-OCTACOSANE

R.T.: 17.395 min
Delta R.T.: 0.008 min
Response: 1853659
Conc: 17.05 ug/ml



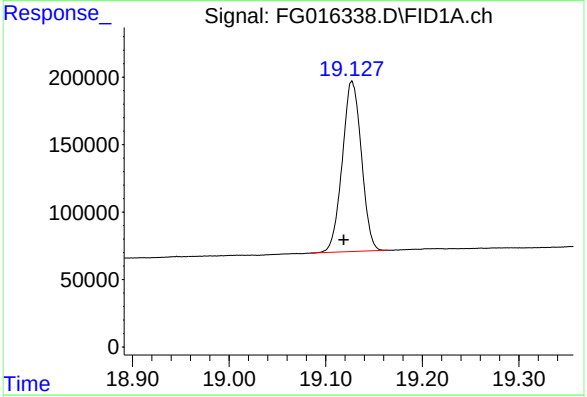
#13 N-TRIACONTANE

R.T.: 18.289 min
Delta R.T.: 0.009 min
Response: 1837765
Conc: 17.20 ug/ml

Instrument :
FID_G
ClientSampleId :
PB168895BS

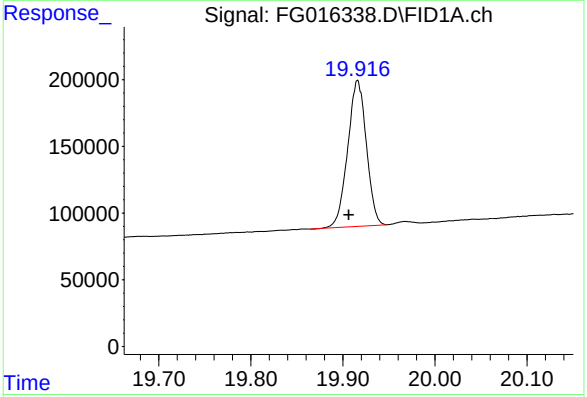
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025



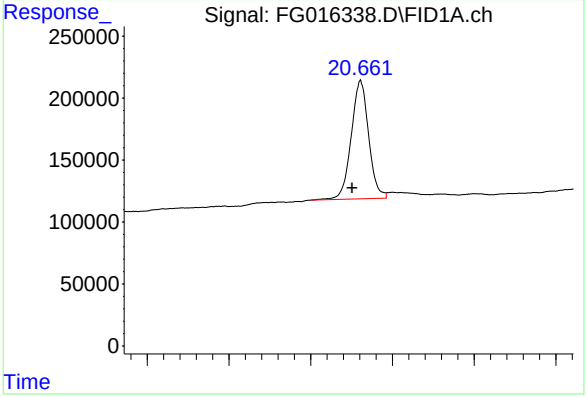
#14 N-DOTRIACONTANE

R.T.: 19.127 min
Delta R.T.: 0.008 min
Response: 1735679
Conc: 17.16 ug/ml m



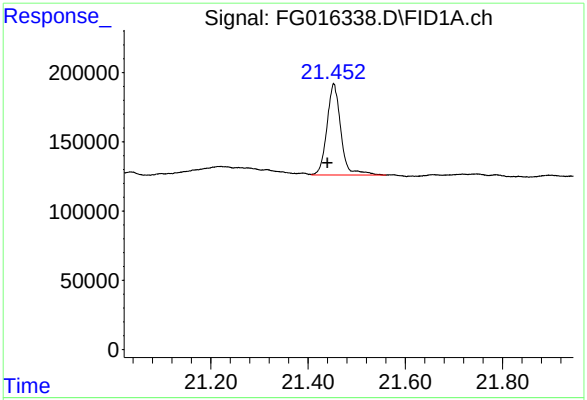
#15 N-TETRATRIACONTANE

R.T.: 19.916 min
Delta R.T.: 0.010 min
Response: 1542300
Conc: 16.95 ug/ml m



#16 N-HEXATRIACONTANE

R.T.: 20.661 min
Delta R.T.: 0.010 min
Response: 1412667
Conc: 18.76 ug/ml



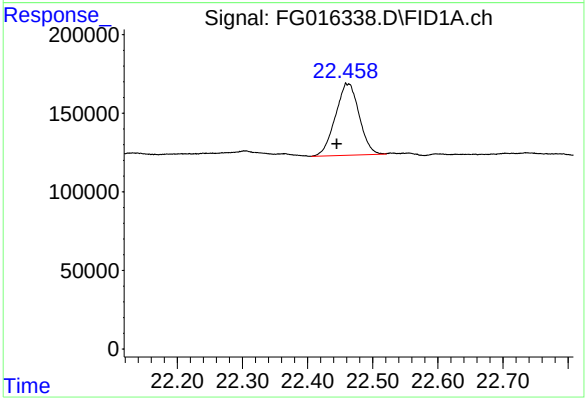
#17 N-OCTATRIACONTANE

R.T.: 21.453 min
Delta R.T.: 0.013 min
Response: 1309156
Conc: 20.12 ug/ml

Instrument :
FID_G
ClientSampleId :
PB168895BS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025



#18 N-TETRACONTANE

R.T.: 22.460 min
Delta R.T.: 0.015 min
Response: 1154022
Conc: 20.02 ug/ml

Instrument :
FID_G
ClientSampleId :
PB168895BS

rteres

Area Percent Report

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG07182
Data File : FG016338.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 13:52
Sample : PB168895BS
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.120	2.035	2.200	BB	115384	1541234	73.94%	4.878%
2	4.669	4.625	4.721	BB	181140	1839228	88.24%	5.821%
3	6.852	6.814	6.900	BB	188145	1893054	90.82%	5.992%
4	8.693	8.647	8.763	BB	190724	1952993	93.69%	6.181%
5	10.313	10.269	10.370	BB	179970	1948406	93.47%	6.167%
6	11.767	11.733	11.818	BB	171121	2004029	96.14%	6.343%
7	13.088	13.055	13.144	VB	174263	2084438	100.00%	6.598%
8	14.297	14.235	14.339	BB	161056	1975026	94.75%	6.251%
9	15.202	15.139	15.245	BV	124705	1705185	81.81%	5.397%
10	15.409	15.334	15.466	BB	151951	2013264	96.59%	6.372%
11	16.437	16.336	16.490	BB	144996	1876724	90.03%	5.940%
12	17.395	17.140	17.440	BB	143228	1853659	88.93%	5.867%
13	18.289	18.214	18.325	BV	135012	1837765	88.17%	5.817%
14	19.127	18.738	19.169	PV	126518	1744995	83.72%	5.523%
15	19.916	19.620	19.949	BV	109305	1448455	69.49%	4.585%
16	20.661	20.601	20.692	BV	95669	1412667	67.77%	4.471%
17	21.453	21.407	21.561	VV	66164	1309156	62.81%	4.144%
18	22.460	22.406	22.521	PV	45744	1154022	55.36%	3.653%
			Sum of corrected areas:			31594299		

FG070925.M Sat Jul 19 05:12:27 2025

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

Report of Analysis

Client:	PARSONS Engineering of New York, Inc.	Date Collected:	07/11/25
Project:	Con Edison - East River Site 2	Date Received:	07/11/25
Client Sample ID:	WC-SOIL-20250711MS	SDG No.:	Q2592
Lab Sample ID:	Q2592-01MS	Matrix:	SOIL
Analytical Method:	8015D TPH	% Solid:	76.7 Decanted:
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	TPH GC
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG016339.D	1	07/17/25 08:25	07/18/25 14:22	PB168895

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
PHC	Petroleum Hydrocarbons	458000	E	500	3690	ug/kg
SURROGATES						
16416-32-3	TETRACOSANE-d50	20.2		37 - 130	101%	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\FG071825\
Data File : FG016339.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 14:22
Operator : YP\AJ
Sample : Q2592-01MS
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 19 05:43:39 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/22/2025
Supervised By :mohammad ahmed 07/23/2025

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	15.213	1451326	14.515 ug/mlm
	Target Compounds			
1)	N-OCTANE	2.116	1068257	9.460 ug/ml
2)	N-DECANE	4.668	1635891	14.204 ug/ml
3)	N-DODECANE	6.851	1901051	16.397 ug/ml
4)	N-TETRADECANE	8.693	2006184	16.997 ug/ml
5)	N-HEXADECANE	10.313	2001209	17.302 ug/ml
6)	N-OCTADECANE	11.770	2104139	17.926 ug/ml
7)	N-EICOSANE	13.095	2329122	19.469 ug/mlm
8)	N-DOCOSANE	14.303	2190672	19.010 ug/mlm
10)	N-TETRACOSANE	15.416	4494603	39.339 ug/mlm
11)	N-HEXACOSANE	16.452	1988004	18.066 ug/mlm
12)	N-OCTACOSANE	17.410	3713536	34.148 ug/mlm
13)	N-TRIACONTANE	18.309	3017222	28.235 ug/mlm
14)	N-DOTRIACONTANE	19.150	3404926	33.672 ug/ml
15)	N-TETRATRIACONTANE	19.941	2280585	25.065 ug/ml
16)	N-HEXATRIACONTANE	20.691	1907661	25.331 ug/mlm
17)	N-OCTATRIACONTANE	21.486	1730529	26.590 ug/mlm
18)	N-TETRACONTANE	22.506	1994449	34.605 ug/mlm

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016339.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 14:22
Operator : YP\AJ
Sample : Q2592-01MS
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 19 05:43:39 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/22/2025
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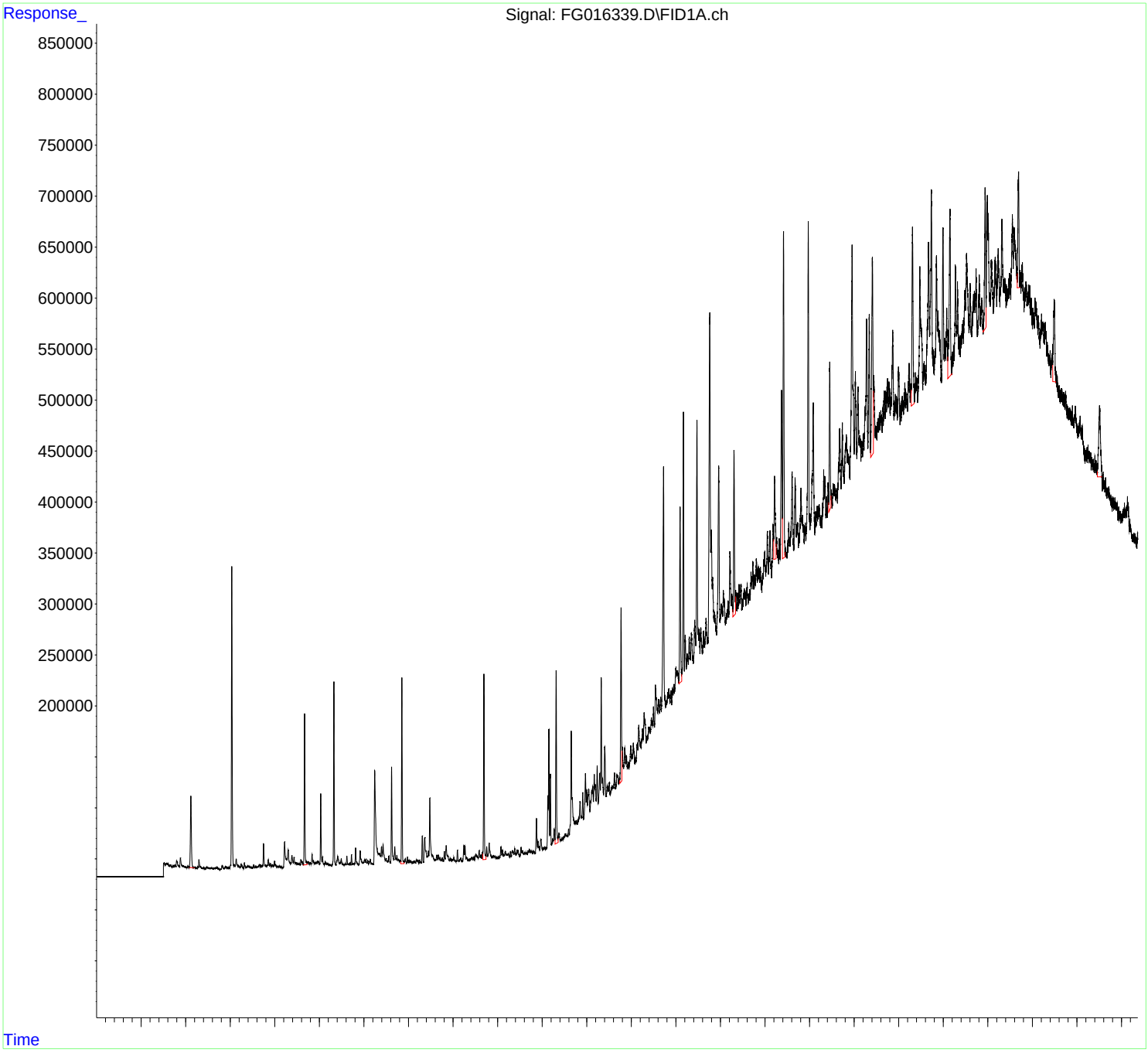
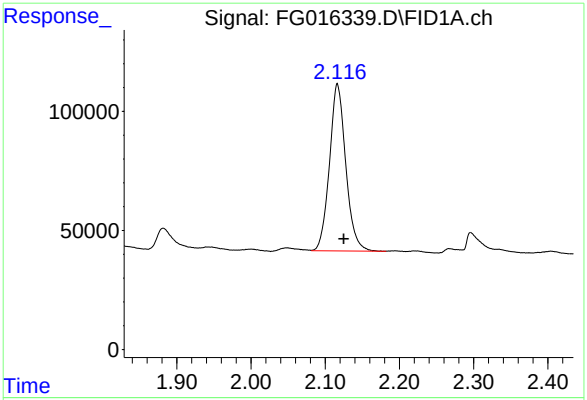




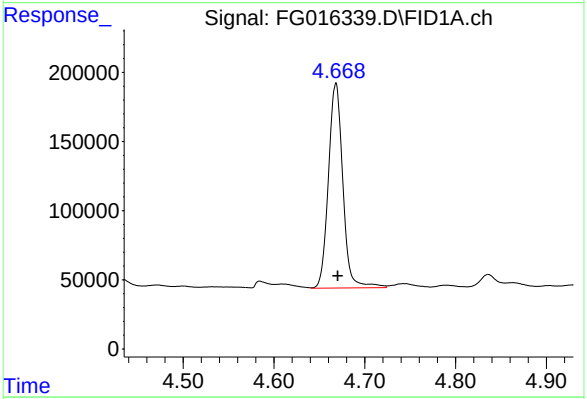
#1 N-OCTANE

R.T.: 2.116 min
Delta R.T.: -0.009 min
Response: 1068257
Conc: 9.46 ug/ml

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MS

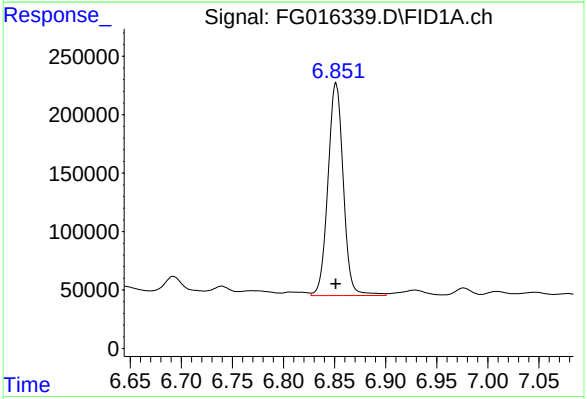
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/22/2025
Supervised By :mohammad ahmed 07/23/2025



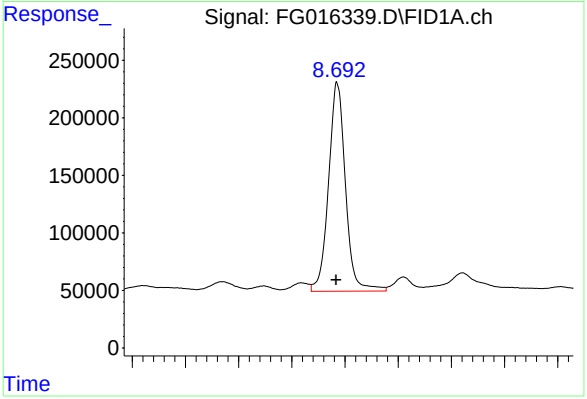
#2 N-DECANE

R.T.: 4.668 min
Delta R.T.: -0.002 min
Response: 1635891
Conc: 14.20 ug/ml



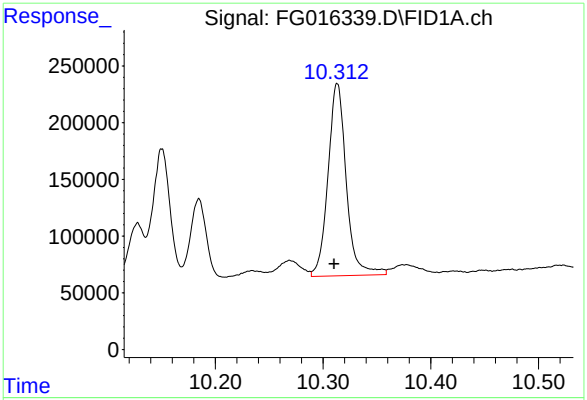
#3 N-DODECANE

R.T.: 6.851 min
Delta R.T.: 0.000 min
Response: 1901051
Conc: 16.40 ug/ml



#4 N-TETRADECANE

R.T.: 8.693 min
Delta R.T.: 0.001 min
Response: 2006184
Conc: 17.00 ug/ml



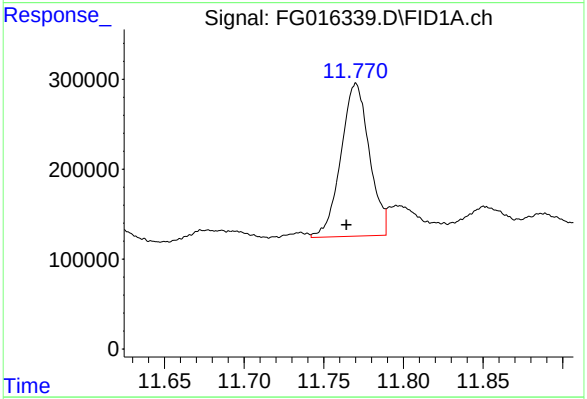
#5 N-HEXADECANE

R.T.: 10.313 min
Delta R.T.: 0.003 min
Response: 2001209
Conc: 17.30 ug/ml

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MS

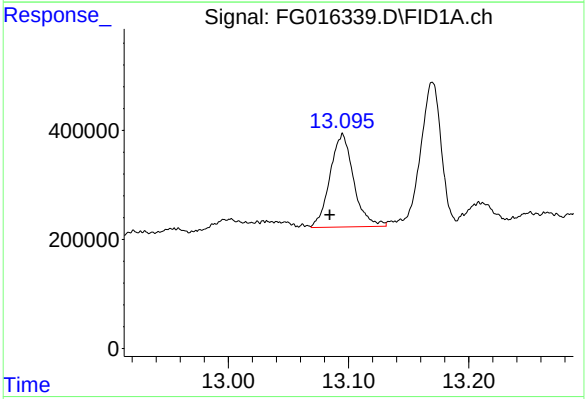
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/22/2025
Supervised By :mohammad ahmed 07/23/2025



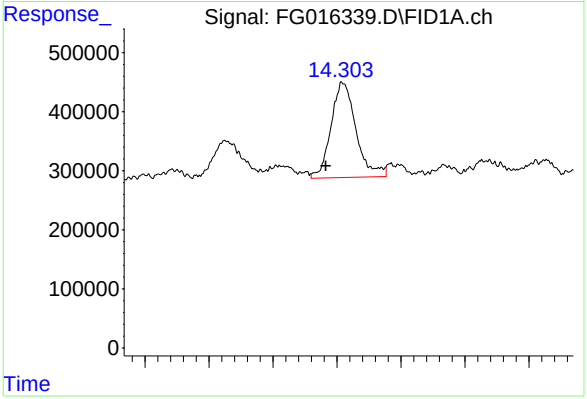
#6 N-OCTADECANE

R.T.: 11.770 min
Delta R.T.: 0.006 min
Response: 2104139
Conc: 17.93 ug/ml



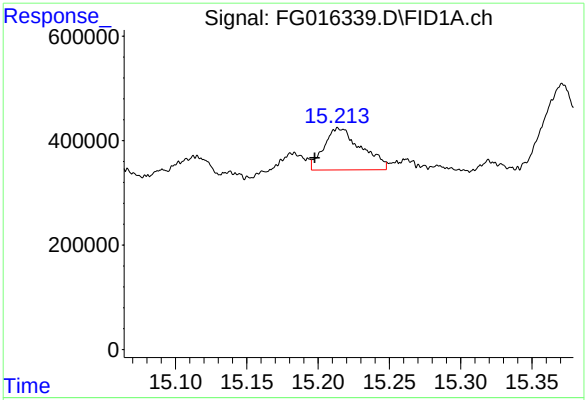
#7 N-EICOSANE

R.T.: 13.095 min
Delta R.T.: 0.010 min
Response: 2329122
Conc: 19.47 ug/ml m



#8 N-DOCOSANE

R.T.: 14.303 min
Delta R.T.: 0.012 min
Response: 2190672
Conc: 19.01 ug/ml m



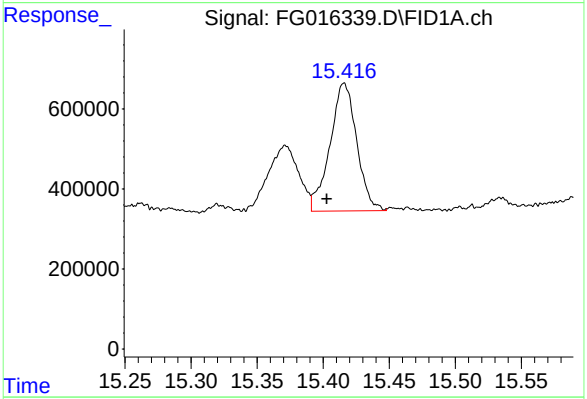
#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.213 min
Delta R.T.: 0.016 min
Response: 1451326
Conc: 14.52 ug/ml

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MS

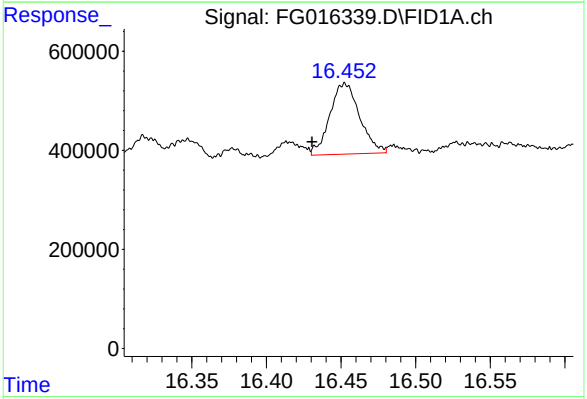
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/22/2025
Supervised By :mohammad ahmed 07/23/2025



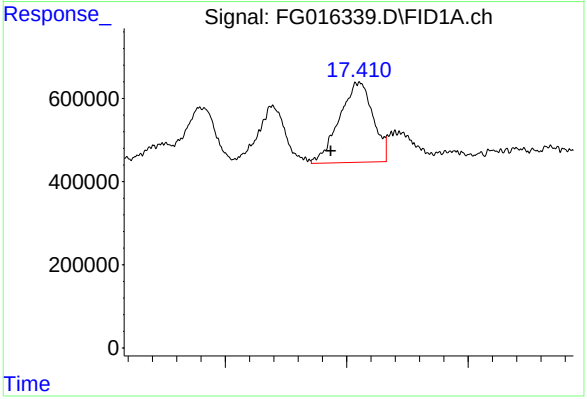
#10 N-TETRACOSANE

R.T.: 15.416 min
Delta R.T.: 0.013 min
Response: 4494603
Conc: 39.34 ug/ml m



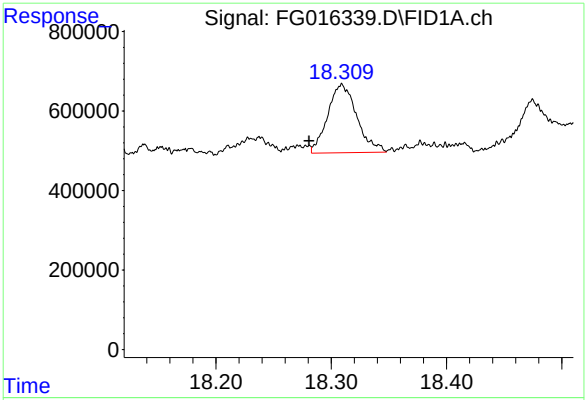
#11 N-HEXACOSANE

R.T.: 16.452 min
Delta R.T.: 0.022 min
Response: 1988004
Conc: 18.07 ug/ml m



#12 N-OCTACOSANE

R.T.: 17.410 min
Delta R.T.: 0.023 min
Response: 3713536
Conc: 34.15 ug/ml m



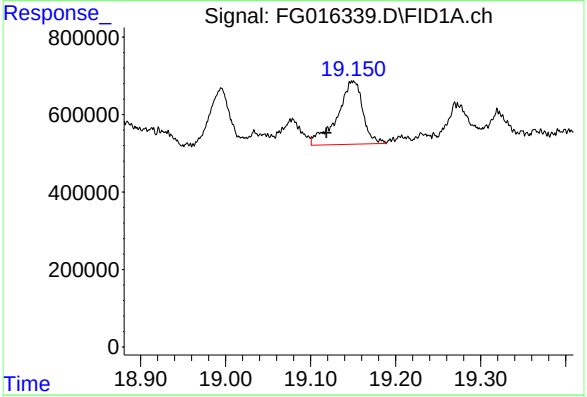
#13 N-TRIACONTANE

R.T.: 18.309 min
Delta R.T.: 0.028 min
Response: 3017222
Conc: 28.24 ug/ml

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MS

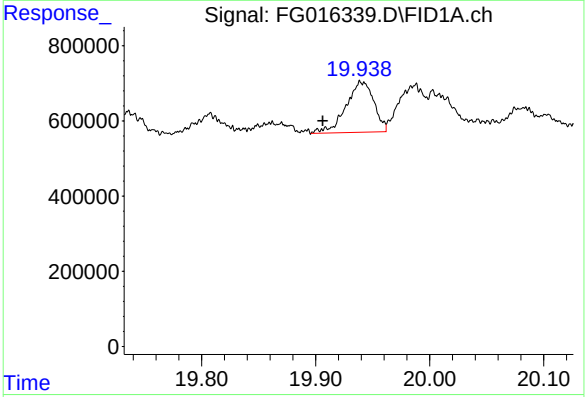
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/22/2025
Supervised By :mohammad ahmed 07/23/2025



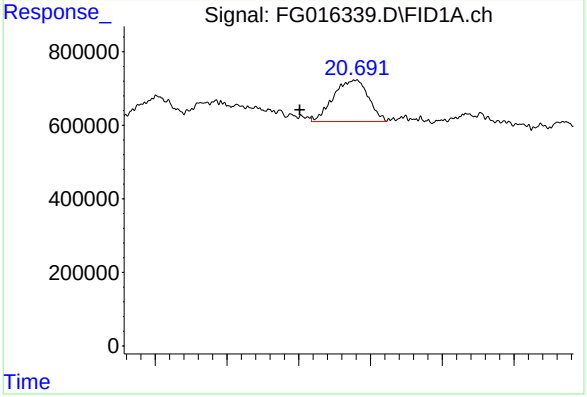
#14 N-DOTRIACONTANE

R.T.: 19.150 min
Delta R.T.: 0.032 min
Response: 3404926
Conc: 33.67 ug/ml



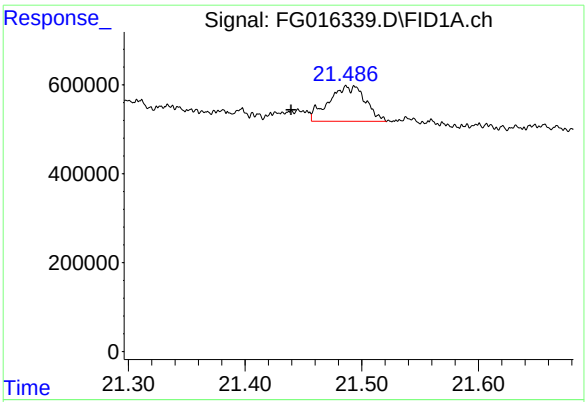
#15 N-TETRATRIACONTANE

R.T.: 19.941 min
Delta R.T.: 0.034 min
Response: 2280585
Conc: 25.06 ug/ml



#16 N-HEXATRIACONTANE

R.T.: 20.691 min
Delta R.T.: 0.040 min
Response: 1907661
Conc: 25.33 ug/ml m



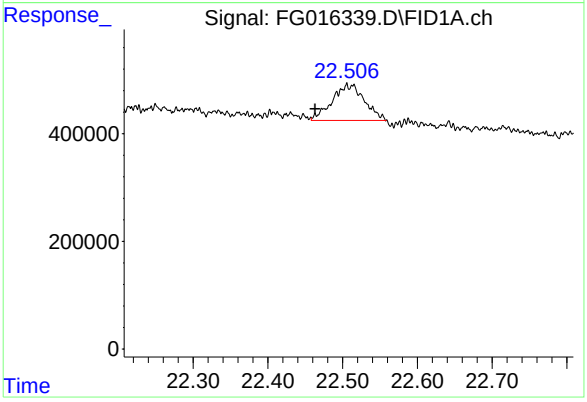
#17 N-OCTATRIACONTANE

R.T.: 21.486 min
Delta R.T.: 0.047 min
Response: 1730529
Conc: 26.59 ug/ml

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/22/2025
Supervised By :mohammad ahmed 07/23/2025



#18 N-TETRACONTANE

R.T.: 22.506 min
Delta R.T.: 0.043 min
Response: 1994449
Conc: 34.60 ug/ml m

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MS

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/22/2025
Supervised By :mohammad ahmed 07/23/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG07182
Data File : FG016339.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 14:22
Sample : Q2592-01MS
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.048	2.018	2.081	BV	1303	23577	0.14%	0.002%
2	2.116	2.081	2.182	VV	70632	1090150	6.45%	0.100%
3	2.195	2.182	2.209	VV	692	9360	0.06%	0.001%
4	2.220	2.209	2.253	VV	773	10915	0.06%	0.001%
5	2.267	2.253	2.284	PV	1889	23667	0.14%	0.002%
6	2.296	2.284	2.380	VV	8719	145380	0.86%	0.013%
7	2.404	2.380	2.436	VV	1105	17785	0.11%	0.002%
8	2.474	2.436	2.499	PV	1780	39446	0.23%	0.004%
9	2.506	2.499	2.528	VV	1283	16285	0.10%	0.001%
10	2.541	2.528	2.548	VV	763	7496	0.04%	0.001%
11	2.563	2.548	2.579	VV	1223	19362	0.11%	0.002%
12	2.588	2.579	2.610	VV	1051	12812	0.08%	0.001%
13	2.649	2.610	2.665	VV	947	24950	0.15%	0.002%
14	2.668	2.665	2.681	VV	972	8708	0.05%	0.001%
15	2.701	2.681	2.723	VV	2311	35659	0.21%	0.003%
16	2.730	2.723	2.784	VV	671	8431	0.05%	0.001%
17	2.820	2.784	2.866	PV	3603	78661	0.47%	0.007%
18	2.890	2.866	2.910	VV	2665	45286	0.27%	0.004%
19	2.928	2.910	2.955	VV	1793	39248	0.23%	0.004%
20	2.969	2.955	2.990	VV	1642	26601	0.16%	0.002%
21	3.035	2.990	3.079	VV	296754	3520345	20.83%	0.321%
22	3.094	3.079	3.110	VV	4113	66700	0.39%	0.006%
23	3.133	3.110	3.176	VV	9291	195229	1.16%	0.018%
24	3.187	3.176	3.213	VV	2892	51327	0.30%	0.005%
25	3.218	3.213	3.224	VV	1741	10650	0.06%	0.001%
26	3.247	3.224	3.300	VV	4061	101759	0.60%	0.009%
27	3.316	3.300	3.344	VV	5904	78757	0.47%	0.007%
28	3.348	3.344	3.365	VV	1635	18215	0.11%	0.002%
29	3.392	3.365	3.414	VV	2587	57340	0.34%	0.005%
30	3.424	3.414	3.446	VV	2040	30797	0.18%	0.003%
31	3.451	3.446	3.463	VV	1356	12245	0.07%	0.001%
32	3.473	3.463	3.493	VV	1119	14687	0.09%	0.001%
33	3.523	3.493	3.544	VV	3663	53335	0.32%	0.005%
34	3.566	3.544	3.590	VV	2327	40258	0.24%	0.004%
35	3.608	3.590	3.615	VV	1626	20441	0.12%	0.002%
36	3.651	3.615	3.670	VV	3669	79303	0.47%	0.007%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/22/2025
Supervised By :mohammad ahmed 07/23/2025

rteres

37	3.683	3.670	3.710	VV	2698	52206	0.31%	0.005%
38	3.748	3.710	3.780	VV	23944	324737	[illegible]	
39	3.793	3.780	3.810	VV	2864	40942	[illegible]	
40	3.826	3.810	3.832	VV	2656	28182	[illegible]	
41	3.852	3.832	3.880	VV	8224	138153	[illegible]	
42	3.897	3.880	3.915	VV	4317	62965	[illegible]	
43	3.925	3.915	3.934	VV	2192	23619	0.14%	0.002%
44	3.944	3.934	3.961	VV	2808	36612	0.22%	0.003%
45	3.992	3.961	4.069	VV	6415	160932	0.95%	0.015%
46	4.098	4.069	4.117	VV	1529	33038	0.20%	0.003%
47	4.119	4.117	4.124	VV	1645	3859	0.02%	0.000%
48	4.132	4.124	4.180	VV	780	12453	0.07%	0.001%
49	4.218	4.180	4.266	PV	25367	525756	3.11%	0.048%
50	4.299	4.266	4.353	VV	16949	468345	2.77%	0.043%
51	4.384	4.353	4.415	VV	11691	259471	1.54%	0.024%
52	4.431	4.415	4.458	VV	9549	159390	0.94%	0.015%
53	4.472	4.458	4.490	VV	4499	78219	0.46%	0.007%
54	4.500	4.490	4.519	VV	3725	57641	0.34%	0.005%
55	4.532	4.519	4.575	VV	3218	96324	0.57%	0.009%
56	4.585	4.575	4.600	VV	7169	80721	0.48%	0.007%
57	4.609	4.600	4.641	VV	5055	95015	0.56%	0.009%
58	4.668	4.641	4.724	VV	150783	1740448	10.30%	0.159%
59	4.743	4.724	4.773	VV	5122	115271	0.68%	0.011%
60	4.790	4.773	4.813	VV	3966	79026	0.47%	0.007%
61	4.836	4.813	4.855	VV	11597	176880	1.05%	0.016%
62	4.863	4.855	4.890	VV	5662	92206	0.55%	0.008%
63	4.903	4.890	4.912	VV	3539	44013	0.26%	0.004%
64	4.928	4.912	4.941	VV	3876	61081	0.36%	0.006%
65	4.960	4.941	4.975	VV	5441	89430	0.53%	0.008%
66	4.980	4.975	5.000	VV	4473	51667	0.31%	0.005%
67	5.031	5.000	5.057	VV	71600	767351	4.54%	0.070%
68	5.071	5.057	5.107	VV	9297	142809	0.84%	0.013%
69	5.135	5.107	5.160	VV	3735	90728	0.54%	0.008%
70	5.186	5.160	5.216	VV	2452	66976	0.40%	0.006%
71	5.219	5.216	5.271	VV	1595	32416	0.19%	0.003%
72	5.326	5.271	5.367	VV	180394	1796017	10.63%	0.164%
73	5.413	5.367	5.453	VV	9386	243943	1.44%	0.022%
74	5.492	5.453	5.514	VV	6817	129197	0.76%	0.012%
75	5.524	5.514	5.549	VV	1449	23886	0.14%	0.002%
76	5.564	5.549	5.568	VV	1083	11502	0.07%	0.001%
77	5.582	5.568	5.598	VV	1738	24774	0.15%	0.002%
78	5.617	5.598	5.646	VV	9597	116697	0.69%	0.011%
79	5.659	5.646	5.676	VV	1860	24502	0.14%	0.002%
80	5.691	5.676	5.706	VV	2638	27830	0.16%	0.003%
81	5.720	5.706	5.745	VV	10580	108737	0.64%	0.010%
82	5.760	5.745	5.770	VV	1771	21932	0.13%	0.002%
83	5.777	5.770	5.790	VV	1991	20844	0.12%	0.002%
84	5.813	5.790	5.878	VV	17226	239803	1.42%	0.022%
85	5.917	5.878	5.977	VV	13816	275416	1.63%	0.025%
86	6.013	5.977	6.031	VV	5090	110084	0.65%	0.010%
87	6.046	6.031	6.065	VV	5734	74782	0.44%	0.007%
88	6.083	6.065	6.103	VV	3996	61059	0.36%	0.006%
89	6.144	6.103	6.161	VV	5095	101437	0.60%	0.009%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/22/2025
Supervised By :mohammad ahmed 07/23/2025

rteres

90	6.175	6.161	6.212	VV	1394	23818	0.14%	0.002%
91	6.243	6.212	6.313	PV	92026	2005218	11	
92	6.318	6.313	6.336	VV	11261	146348	0	
93	6.348	6.336	6.374	VV	10697	215087	1	
94	6.393	6.374	6.409	VV	16792	246344	1	
95	6.430	6.409	6.480	VV	19415	433492	2	
96	6.494	6.480	6.532	VV	5647	113062	0.67%	0.010%
97	6.561	6.532	6.595	VV	7848	143450	0.85%	0.013%
98	6.621	6.595	6.670	VV	95327	1094577	6.48%	0.100%
99	6.692	6.670	6.723	VV	16757	270595	1.60%	0.025%
100	6.740	6.723	6.756	VV	8367	115017	0.68%	0.011%
101	6.769	6.756	6.798	VV	4358	90369	0.53%	0.008%
102	6.807	6.798	6.827	VV	3162	48927	0.29%	0.004%
103	6.851	6.827	6.900	VV	182186	1903544	11.26%	0.174%
104	6.929	6.900	6.956	VV	4694	84108	0.50%	0.008%
105	6.976	6.956	6.993	VV	6422	67944	0.40%	0.006%
106	7.009	6.993	7.030	VV	3363	46698	0.28%	0.004%
107	7.046	7.030	7.064	VV	2568	38083	0.23%	0.003%
108	7.078	7.064	7.093	VV	1459	14955	0.09%	0.001%
109	7.111	7.093	7.128	PV	2000	27029	0.16%	0.002%
110	7.139	7.128	7.156	VV	1871	18551	0.11%	0.002%
111	7.176	7.156	7.190	VV	3129	42420	0.25%	0.004%
112	7.205	7.190	7.228	VV	3050	44939	0.27%	0.004%
113	7.249	7.228	7.283	VV	3160	40124	0.24%	0.004%
114	7.309	7.283	7.336	VV	26705	271904	1.61%	0.025%
115	7.365	7.336	7.414	VV	24725	600492	3.55%	0.055%
116	7.422	7.414	7.431	VV	6396	62393	0.37%	0.006%
117	7.445	7.431	7.459	VV	11182	146059	0.86%	0.013%
118	7.478	7.459	7.523	VV	63683	946589	5.60%	0.086%
119	7.527	7.523	7.590	VV	7574	194831	1.15%	0.018%
120	7.599	7.590	7.610	VV	2492	28248	0.17%	0.003%
121	7.634	7.610	7.651	VV	7004	110216	0.65%	0.010%
122	7.671	7.651	7.688	VV	6872	102403	0.61%	0.009%
123	7.702	7.688	7.730	VV	4292	77803	0.46%	0.007%
124	7.756	7.730	7.776	VV	4148	70299	0.42%	0.006%
125	7.805	7.776	7.820	VV	10462	127282	0.75%	0.012%
126	7.846	7.820	7.922	VV	16191	400937	2.37%	0.037%
127	7.940	7.922	7.963	VV	3406	54307	0.32%	0.005%
128	7.980	7.963	7.989	VV	1983	23752	0.14%	0.002%
129	8.017	7.989	8.076	VV	4324	87466	0.52%	0.008%
130	8.098	8.076	8.132	VV	11381	133194	0.79%	0.012%
131	8.154	8.132	8.158	VV	2103	22064	0.13%	0.002%
132	8.170	8.158	8.209	VV	3325	44248	0.26%	0.004%
133	8.242	8.209	8.256	PV	15405	195394	1.16%	0.018%
134	8.269	8.256	8.287	VV	14489	166588	0.99%	0.015%
135	8.302	8.287	8.335	VV	3538	59493	0.35%	0.005%
136	8.347	8.335	8.361	VV	1364	13168	0.08%	0.001%
137	8.382	8.361	8.395	VV	1884	24079	0.14%	0.002%
138	8.421	8.395	8.442	VV	3192	62671	0.37%	0.006%
139	8.466	8.442	8.482	VV	2866	41434	0.25%	0.004%
140	8.511	8.482	8.561	VV	5510	165364	0.98%	0.015%
141	8.585	8.561	8.608	VV	8601	147918	0.88%	0.014%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/22/2025
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rteres

142	8.624	8.608	8.640	VV	5006	63099	0.37%	0.006%
143	8.659	8.640	8.668	VV	7490	85965		
144	8.693	8.668	8.739	VV	180727	2007297	11	
145	8.755	8.739	8.774	VV	12300	146478		
146	8.811	8.774	8.885	VV	15540	378568		
147	8.903	8.885	8.924	VV	3300	52705		
148	8.940	8.924	8.965	VV	2454	39072	0.23%	0.004%
149	8.976	8.965	8.992	VV	1023	8968	0.05%	0.001%
150	9.006	8.992	9.025	PV	1217	14152	0.08%	0.001%
151	9.075	9.025	9.094	VV	11051	165381	0.98%	0.015%
152	9.109	9.094	9.125	VV	7735	88409	0.52%	0.008%
153	9.137	9.125	9.154	VV	3298	44387	0.26%	0.004%
154	9.170	9.154	9.203	VV	5916	115983	0.69%	0.011%
155	9.210	9.203	9.219	VV	3047	26683	0.16%	0.002%
156	9.238	9.219	9.267	VV	3632	66459	0.39%	0.006%
157	9.287	9.267	9.309	PV	5585	64241	0.38%	0.006%
158	9.329	9.309	9.333	VV	5832	59272	0.35%	0.005%
159	9.336	9.333	9.362	VV	5753	77429	0.46%	0.007%
160	9.384	9.362	9.412	VV	8298	135528	0.80%	0.012%
161	9.437	9.412	9.450	VV	6390	99056	0.59%	0.009%
162	9.462	9.450	9.488	VV	6027	74821	0.44%	0.007%
163	9.525	9.488	9.543	PV	8781	117570	0.70%	0.011%
164	9.556	9.543	9.586	VV	5147	89610	0.53%	0.008%
165	9.602	9.586	9.614	VV	2722	33671	0.20%	0.003%
166	9.617	9.614	9.634	VV	2181	22271	0.13%	0.002%
167	9.642	9.634	9.663	VV	2425	29290	0.17%	0.003%
168	9.683	9.663	9.695	VV	3806	50187	0.30%	0.005%
169	9.714	9.695	9.734	VV	4649	83746	0.50%	0.008%
170	9.740	9.734	9.751	VV	2851	28146	0.17%	0.003%
171	9.760	9.751	9.781	VV	2974	36287	0.21%	0.003%
172	9.800	9.781	9.840	VV	2987	53549	0.32%	0.005%
173	9.872	9.840	9.892	PV	34132	432268	2.56%	0.039%
174	9.905	9.892	9.944	VV	11091	188369	1.11%	0.017%
175	9.971	9.944	10.016	VV	11941	236076	1.40%	0.022%
176	10.028	10.016	10.035	VV	1806	16306	0.10%	0.001%
177	10.054	10.035	10.075	VV	2572	40037	0.24%	0.004%
178	10.090	10.075	10.101	PV	1651	17765	0.11%	0.002%
179	10.128	10.101	10.135	VV	51556	503963	2.98%	0.046%
180	10.150	10.135	10.169	VV	115624	1312924	7.77%	0.120%
181	10.185	10.169	10.210	VV	71269	737633	4.36%	0.067%
182	10.234	10.210	10.249	VV	6606	100912	0.60%	0.009%
183	10.269	10.249	10.290	VV	14706	224879	1.33%	0.021%
184	10.313	10.290	10.359	VV	169296	1998863	11.83%	0.183%
185	10.377	10.359	10.408	VV	8294	145043	0.86%	0.013%
186	10.421	10.408	10.434	VV	1679	17097	0.10%	0.002%
187	10.447	10.434	10.458	PV	1575	13636	0.08%	0.001%
188	10.475	10.458	10.480	VV	1690	15189	0.09%	0.001%
189	10.523	10.480	10.545	VV	3956	82933	0.49%	0.008%
190	10.552	10.545	10.563	VV	1894	12820	0.08%	0.001%
191	10.593	10.563	10.610	VV	6277	72838	0.43%	0.007%
192	10.653	10.610	10.670	VV	99237	1293945	7.66%	0.118%
193	10.673	10.670	10.721	VV	35127	574394	3.40%	0.052%
194	10.732	10.721	10.744	VV	8219	110042	0.65%	0.010%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MS

Manual IntegrationsAPPROVED

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					rteres			
195	10.760	10.744	10.784	VV	9564	189737	1.12%	0.017%
196	10.850	10.784	10.870	VV	25588	629753		
197	10.881	10.870	10.892	VV	10312	130861		
198	10.911	10.892	10.934	VV	32755	446031		
199	10.971	10.934	10.988	VV	49902	845334		
200	11.000	10.988	11.015	VV	32784	423846		
201	11.043	11.015	11.072	VV	32321	785275	4.65%	0.072%
202	11.089	11.072	11.094	VV	19424	199509	1.18%	0.018%
203	11.113	11.094	11.122	VV	27992	410783	2.43%	0.038%
204	11.135	11.122	11.151	VV	32273	456110	2.70%	0.042%
205	11.169	11.151	11.183	VV	43015	598960	3.54%	0.055%
206	11.191	11.183	11.212	VV	31595	442035	2.62%	0.040%
207	11.234	11.212	11.257	VV	49312	758847	4.49%	0.069%
208	11.291	11.257	11.306	VV	39550	764922	4.53%	0.070%
209	11.325	11.306	11.343	VV	132412	1596445	9.45%	0.146%
210	11.352	11.343	11.378	VV	33855	543132	3.21%	0.050%
211	11.402	11.378	11.433	VV	62945	1218667	7.21%	0.111%
212	11.460	11.433	11.469	VV	22963	399956	2.37%	0.037%
213	11.472	11.469	11.488	VV	22381	220972	1.31%	0.020%
214	11.504	11.488	11.526	VV	24611	448369	2.65%	0.041%
215	11.558	11.526	11.569	VV	18920	415164	2.46%	0.038%
216	11.578	11.569	11.586	VV	19635	184805	1.09%	0.017%
217	11.593	11.586	11.603	VV	17693	169437	1.00%	0.015%
218	11.622	11.603	11.654	VV	30366	646171	3.82%	0.059%
219	11.677	11.654	11.716	VV	27486	845240	5.00%	0.077%
220	11.735	11.716	11.742	VV	23040	322898	1.91%	0.029%
221	11.770	11.742	11.790	VV	188372	2612516	15.46%	0.239%
222	11.797	11.790	11.828	VV	50560	920966	5.45%	0.084%
223	11.851	11.828	11.875	VV	47725	1090003	6.45%	0.100%
224	11.887	11.875	11.913	VV	39062	781124	4.62%	0.071%
225	11.931	11.913	11.948	VV	32098	615023	3.64%	0.056%
226	11.987	11.948	12.008	VV	46499	1296613	7.67%	0.118%
227	12.016	12.008	12.026	VV	37487	393229	2.33%	0.036%
228	12.045	12.026	12.080	VV	47550	1202581	7.12%	0.110%
229	12.097	12.080	12.111	VV	31868	546829	3.24%	0.050%
230	12.134	12.111	12.145	VV	42542	791847	4.69%	0.072%
231	12.168	12.145	12.217	VV	61257	2025266	11.98%	0.185%
232	12.254	12.217	12.268	VV	55067	1417134	8.39%	0.129%
233	12.288	12.268	12.301	VV	69660	1206620	7.14%	0.110%
234	12.307	12.301	12.334	VV	62355	1044281	6.18%	0.095%
235	12.342	12.334	12.347	VV	44111	334652	1.98%	0.031%
236	12.369	12.347	12.375	VV	44863	711065	4.21%	0.065%
237	12.392	12.375	12.409	VV	52747	1019078	6.03%	0.093%
238	12.414	12.409	12.427	VV	51978	528286	3.13%	0.048%
239	12.451	12.427	12.462	VV	59617	1130958	6.69%	0.103%
240	12.474	12.462	12.479	VV	55254	553235	3.27%	0.051%
241	12.497	12.479	12.521	VV	69053	1472017	8.71%	0.134%
242	12.542	12.521	12.560	VV	89002	1706372	10.10%	0.156%
243	12.562	12.560	12.592	VV	76208	1275625	7.55%	0.116%
244	12.611	12.592	12.638	VV	73209	1858964	11.00%	0.170%
245	12.662	12.638	12.675	VV	74348	1467003	8.68%	0.134%
246	12.723	12.675	12.774	VV	297593	7379414	43.66%	0.674%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MS

Manual IntegrationsAPPROVED

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					rteres			
247	12.820	12.774	12.829	VV	73107	2250914	13.32%	0.206%
248	12.843	12.829	12.868	VV	77130	1624272	9	
249	12.890	12.868	12.907	VV	73670	1571070	9	
250	12.921	12.907	12.925	VV	74935	755251	4	
251	12.930	12.925	12.940	VV	73170	609608	3	
252	12.958	12.940	12.968	VV	76744	1250880	7	
253	13.002	12.968	13.022	VV	92802	2702755	15.99%	0.247%
254	13.025	13.022	13.069	VV	88364	2343766	13.87%	0.214%
255	13.095	13.069	13.131	VV	247472	5125718	30.33%	0.468%
256	13.170	13.131	13.190	VV	338587	5883096	34.81%	0.537%
257	13.209	13.190	13.234	VV	115115	2647062	15.66%	0.242%
258	13.251	13.234	13.259	VV	98883	1432988	8.48%	0.131%
259	13.265	13.259	13.278	VV	97365	1063113	6.29%	0.097%
260	13.301	13.278	13.323	VV	114029	2687409	15.90%	0.245%
261	13.348	13.323	13.395	VV	116654	4262060	25.22%	0.389%
262	13.422	13.395	13.447	VV	126590	3397631	20.10%	0.310%
263	13.473	13.447	13.513	VV	321739	6623454	39.19%	0.605%
264	13.526	13.513	13.540	VV	114991	1741205	10.30%	0.159%
265	13.561	13.540	13.600	VV	113717	3612845	21.38%	0.330%
266	13.618	13.600	13.637	VV	108311	2238572	13.25%	0.204%
267	13.678	13.637	13.710	VV	120821	4564173	27.01%	0.417%
268	13.715	13.710	13.723	VV	101558	778824	4.61%	0.071%
269	13.760	13.723	13.784	VV	416425	9406563	55.66%	0.859%
270	13.798	13.784	13.814	VV	203855	3330591	19.71%	0.304%
271	13.825	13.814	13.855	VV	156992	3339608	19.76%	0.305%
272	13.858	13.855	13.862	VV	118338	492281	2.91%	0.045%
273	13.869	13.862	13.881	VV	121018	1355311	8.02%	0.124%
274	13.889	13.881	13.913	VV	112668	2041773	12.08%	0.186%
275	13.961	13.913	13.990	VV	261178	7399288	43.78%	0.676%
276	14.020	13.990	14.026	VV	124473	2568682	15.20%	0.235%
277	14.033	14.026	14.047	VV	121849	1467924	8.69%	0.134%
278	14.065	14.047	14.111	VV	137113	4652250	27.53%	0.425%
279	14.116	14.111	14.123	VV	107450	723804	4.28%	0.066%
280	14.149	14.123	14.156	VV	115474	2194089	12.98%	0.200%
281	14.171	14.156	14.192	VV	123569	2474277	14.64%	0.226%
282	14.213	14.192	14.243	VV	170328	4274805	25.29%	0.390%
283	14.254	14.243	14.270	VV	124974	2014149	11.92%	0.184%
284	14.305	14.270	14.337	VV	264363	6430461	38.05%	0.587%
285	14.342	14.337	14.362	VV	127604	1803215	10.67%	0.165%
286	14.366	14.362	14.370	VV	112619	503431	2.98%	0.046%
287	14.384	14.370	14.397	VV	124611	1918008	11.35%	0.175%
288	14.414	14.397	14.439	VV	131473	3100463	18.35%	0.283%
289	14.463	14.439	14.476	VV	131115	2675582	15.83%	0.244%
290	14.487	14.476	14.495	VV	116355	1211766	7.17%	0.111%
291	14.535	14.495	14.544	VV	124414	3415708	20.21%	0.312%
292	14.551	14.544	14.568	VV	120472	1690768	10.00%	0.154%
293	14.571	14.568	14.578	VV	114187	662850	3.92%	0.061%
294	14.601	14.578	14.622	VV	125898	3117007	18.44%	0.285%
295	14.632	14.622	14.639	VV	114966	1112398	6.58%	0.102%
296	14.653	14.639	14.663	VV	119932	1662687	9.84%	0.152%
297	14.686	14.663	14.695	VV	134998	2327850	13.77%	0.213%
298	14.700	14.695	14.710	VV	129363	1135107	6.72%	0.104%
299	14.728	14.710	14.748	VV	144469	3048106	18.04%	0.278%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MS

Manual IntegrationsAPPROVED

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rteres

300	14.753	14.748	14.759	VV	128920	822033	4.86%	0.075%
301	14.762	14.759	14.784	VV	130021	1933918	11	
302	14.806	14.784	14.832	VV	145046	3788194	22	
303	14.846	14.832	14.859	VV	136203	2149127	12	
304	14.869	14.859	14.883	VV	131698	1851207	10	
305	14.899	14.883	14.912	VV	133257	2171265	12	
306	14.922	14.912	14.930	VV	120971	1287075	7.62%	0.118%
307	14.949	14.930	14.958	VV	126791	1976735	11.70%	0.180%
308	14.972	14.958	14.976	VV	138525	1474330	8.72%	0.135%
309	14.995	14.976	15.017	VV	147880	3338185	19.75%	0.305%
310	15.053	15.017	15.077	VV	165004	5067396	29.98%	0.463%
311	15.114	15.077	15.132	VV	159963	4736533	28.03%	0.432%
312	15.138	15.132	15.153	VV	132892	1583788	9.37%	0.145%
313	15.182	15.153	15.196	VV	165625	3773888	22.33%	0.345%
314	15.214	15.196	15.257	VV	214614	6378061	37.74%	0.582%
315	15.262	15.257	15.278	VV	152371	1832024	10.84%	0.167%
316	15.284	15.278	15.306	VV	139132	2289793	13.55%	0.209%
317	15.320	15.306	15.339	VV	150157	2676871	15.84%	0.244%
318	15.371	15.339	15.391	VV	294004	6711659	39.71%	0.613%
319	15.416	15.391	15.447	VV	447697	8800541	52.07%	0.804%
320	15.452	15.447	15.482	VV	135633	2754208	16.30%	0.251%
321	15.487	15.482	15.494	VV	130704	924886	5.47%	0.084%
322	15.503	15.494	15.508	VV	136940	1108051	6.56%	0.101%
323	15.534	15.508	15.559	VV	156369	4365031	25.83%	0.399%
324	15.609	15.559	15.646	VV	203647	8292829	49.07%	0.757%
325	15.676	15.646	15.710	VV	197162	6176002	36.54%	0.564%
326	15.720	15.710	15.726	VV	150894	1442773	8.54%	0.132%
327	15.734	15.726	15.756	VV	152665	2559214	15.14%	0.234%
328	15.806	15.756	15.830	VV	185241	6884225	40.73%	0.629%
329	15.840	15.830	15.855	VV	157818	2242717	13.27%	0.205%
330	15.864	15.855	15.880	VV	147145	2105809	12.46%	0.192%
331	15.904	15.880	15.920	VV	147019	3331633	19.71%	0.304%
332	15.971	15.920	16.009	VV	441613	11536204	68.26%	1.053%
333	16.014	16.009	16.024	VV	152347	1249123	7.39%	0.114%
334	16.056	16.024	16.059	VV	190461	3504894	20.74%	0.320%
335	16.083	16.059	16.113	VV	257412	6425299	38.02%	0.587%
336	16.136	16.113	16.146	VV	151054	2744358	16.24%	0.251%
337	16.167	16.146	16.179	VV	156346	2886824	17.08%	0.264%
338	16.192	16.179	16.198	VV	156582	1722569	10.19%	0.157%
339	16.218	16.198	16.232	VV	156143	3078208	18.21%	0.281%
340	16.236	16.232	16.241	VV	145820	779069	4.61%	0.071%
341	16.247	16.241	16.258	VV	141862	1385968	8.20%	0.127%
342	16.268	16.258	16.277	VV	144111	1596635	9.45%	0.146%
343	16.318	16.277	16.332	VV	185867	5237692	30.99%	0.478%
344	16.347	16.332	16.364	VV	179422	3197131	18.92%	0.292%
345	16.377	16.364	16.397	VV	158731	2919930	17.28%	0.267%
346	16.414	16.397	16.430	VV	171221	3165051	18.73%	0.289%
347	16.453	16.430	16.479	VV	288928	6247397	36.97%	0.570%
348	16.485	16.479	16.503	VV	163041	2187905	12.95%	0.200%
349	16.507	16.503	16.512	VV	150602	793537	4.70%	0.072%
350	16.527	16.512	16.534	VV	167020	2100070	12.43%	0.192%
351	16.539	16.534	16.556	VV	165109	2184502	12.93%	0.199%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/22/2025
Supervised By :mohammad ahmed 07/23/2025

rteres

352	16.563	16.556	16.595	VV	165218	3625400	21.45%	0.331%
353	16.606	16.595	16.620	VV	160345	2331094	13	
354	16.622	16.620	16.626	VV	155595	635553	3	
355	16.652	16.626	16.657	VV	185729	3109081	18	
356	16.678	16.657	16.708	VV	217475	5734632	33	
357	16.735	16.708	16.758	VV	220158	5679286	33	
358	16.764	16.758	16.779	VV	169187	2068509	12.24%	0.189%
359	16.826	16.779	16.846	VV	202744	7728500	45.73%	0.706%
360	16.851	16.846	16.881	VV	191741	3855611	22.81%	0.352%
361	16.884	16.881	16.902	VV	183528	2116224	12.52%	0.193%
362	16.954	16.902	17.007	VV	386691	15702758	92.91%	1.434%
363	17.029	17.007	17.061	VV	262985	6986269	41.34%	0.638%
364	17.088	17.061	17.108	VV	245364	6070080	35.92%	0.554%
365	17.127	17.108	17.140	VV	197418	3635886	21.51%	0.332%
366	17.145	17.140	17.154	VV	192298	1577285	9.33%	0.144%
367	17.174	17.154	17.191	VV	189773	4104851	24.29%	0.375%
368	17.202	17.191	17.222	VV	191460	3533772	20.91%	0.323%
369	17.251	17.222	17.259	VV	222750	4503282	26.65%	0.411%
370	17.279	17.259	17.307	VV	306131	7255504	42.93%	0.662%
371	17.339	17.307	17.370	VV	307527	8650484	51.18%	0.790%
372	17.411	17.370	17.430	VV	363876	9744704	57.66%	0.890%
373	17.440	17.430	17.472	VV	245621	5453179	32.27%	0.498%
374	17.489	17.472	17.505	VV	195455	3754735	22.22%	0.343%
375	17.519	17.505	17.529	VV	194927	2812700	16.64%	0.257%
376	17.532	17.529	17.559	VV	200102	3508677	20.76%	0.320%
377	17.568	17.559	17.582	VV	206537	2755136	16.30%	0.252%
378	17.599	17.582	17.630	VV	205377	5623281	33.27%	0.513%
379	17.651	17.630	17.656	VV	209231	3204694	18.96%	0.293%
380	17.679	17.656	17.694	VV	222900	4746633	28.09%	0.433%
381	17.695	17.694	17.698	VV	205696	502275	2.97%	0.046%
382	17.706	17.698	17.727	VV	222736	3764464	22.27%	0.344%
383	17.749	17.727	17.764	VV	231171	4773582	28.24%	0.436%
384	17.781	17.764	17.794	VV	230079	3997305	23.65%	0.365%
385	17.799	17.794	17.810	VV	222935	2100127	12.43%	0.192%
386	17.867	17.810	17.893	VV	276071	11280504	66.75%	1.030%
387	17.899	17.893	17.908	VV	204090	1746493	10.33%	0.159%
388	17.911	17.908	17.917	VV	200287	1100805	6.51%	0.101%
389	17.925	17.917	17.942	VV	214002	3014140	17.83%	0.275%
390	17.950	17.942	17.955	VV	208013	1671620	9.89%	0.153%
391	17.959	17.955	17.970	VV	208278	1678704	9.93%	0.153%
392	17.994	17.970	17.998	VV	233259	3557470	21.05%	0.325%
393	18.005	17.998	18.035	VV	232847	4672163	27.64%	0.427%
394	18.046	18.035	18.057	VV	197718	2510826	14.86%	0.229%
395	18.080	18.057	18.106	VV	207468	5836994	34.54%	0.533%
396	18.138	18.106	18.145	VV	217782	4630244	27.40%	0.423%
397	18.152	18.145	18.162	VV	212085	2165105	12.81%	0.198%
398	18.178	18.162	18.200	VV	206823	4594696	27.19%	0.420%
399	18.229	18.200	18.235	VV	229509	4393759	26.00%	0.401%
400	18.238	18.235	18.257	VV	233304	2884187	17.07%	0.263%
401	18.309	18.257	18.348	VV	366696	13778026	81.52%	1.258%
402	18.365	18.348	18.370	VV	211418	2617025	15.48%	0.239%
403	18.378	18.370	18.397	VV	219620	3455326	20.44%	0.315%
404	18.399	18.397	18.425	VV	214365	3518222	20.82%	0.321%

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Manual IntegrationsAPPROVED

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rteres

405	18.475	18.425	18.502	VV	319946	11523837	68.19%	1.052%
406	18.510	18.502	18.541	VV	259452	5504996	32	
407	18.564	18.541	18.569	VV	224168	3608890	21	
408	18.573	18.569	18.606	VV	225603	4725581	27	
409	18.668	18.606	18.697	VV	335661	14433821	85	
410	18.733	18.697	18.767	VV	388469	12451642	73	
411	18.777	18.767	18.800	VV	228451	4371155	25.86%	0.399%
412	18.811	18.800	18.814	VV	228484	1884371	11.15%	0.172%
413	18.848	18.814	18.867	VV	320492	8530129	50.47%	0.779%
414	18.880	18.867	18.909	VV	264030	6281186	37.17%	0.574%
415	18.914	18.909	18.950	VV	243624	5527526	32.71%	0.505%
416	18.955	18.950	18.961	VV	203374	1322930	7.83%	0.121%
417	18.995	18.961	19.026	VV	345523	10148412	60.05%	0.927%
418	19.034	19.026	19.039	VV	233498	1789638	10.59%	0.163%
419	19.045	19.039	19.059	VV	224705	2653325	15.70%	0.242%
420	19.079	19.059	19.101	VV	263951	5921346	35.04%	0.541%
421	19.150	19.101	19.189	VV	358238	13735985	81.27%	1.254%
422	19.207	19.189	19.220	VV	217230	3832128	22.67%	0.350%
423	19.231	19.220	19.249	VV	220779	3780473	22.37%	0.345%
424	19.270	19.249	19.301	VV	291652	7882773	46.64%	0.720%
425	19.320	19.301	19.346	VV	279139	6637796	39.28%	0.606%
426	19.349	19.346	19.357	VV	223940	1541144	9.12%	0.141%
427	19.363	19.357	19.381	VV	227623	3080501	18.23%	0.281%
428	19.399	19.381	19.415	VV	226593	4575556	27.07%	0.418%
429	19.422	19.415	19.429	VV	236810	1810343	10.71%	0.165%
430	19.484	19.429	19.501	VV	267764	10518820	62.24%	0.960%
431	19.524	19.501	19.576	VV	302229	12057079	71.34%	1.101%
432	19.602	19.576	19.639	VV	271278	9111104	53.91%	0.832%
433	19.667	19.639	19.674	VV	247733	4973233	29.43%	0.454%
434	19.680	19.674	19.719	VV	258215	6890541	40.77%	0.629%
435	19.736	19.719	19.774	VV	280842	8082314	47.82%	0.738%
436	19.807	19.774	19.841	VV	273450	9700589	57.40%	0.886%
437	19.862	19.841	19.886	VV	249847	6484691	38.37%	0.592%
438	19.892	19.886	19.897	VV	224059	1479169	8.75%	0.135%
439	19.940	19.897	19.962	VV	353280	10676859	63.17%	0.975%
440	19.987	19.962	19.999	VV	342877	6853806	40.55%	0.626%
441	20.003	19.999	20.061	VV	328242	9993484	59.13%	0.912%
442	20.083	20.061	20.096	VV	279541	5634973	33.34%	0.515%
443	20.103	20.096	20.122	VV	259520	3912580	23.15%	0.357%
444	20.128	20.122	20.135	VV	240600	1798580	10.64%	0.164%
445	20.166	20.135	20.201	VV	280274	10146438	60.04%	0.926%
446	20.233	20.201	20.271	VV	287917	10928198	64.66%	0.998%
447	20.321	20.271	20.378	VV	313572	16900700	100.00%	1.543%
448	20.383	20.378	20.408	VV	249925	4286941	25.37%	0.391%
449	20.416	20.408	20.436	VV	244069	4009705	23.73%	0.366%
450	20.439	20.436	20.443	VV	237428	1063743	6.29%	0.097%
451	20.454	20.443	20.462	VV	239704	2731777	16.16%	0.249%
452	20.474	20.462	20.485	VV	245009	3354290	19.85%	0.306%
453	20.490	20.485	20.515	VV	255770	4408074	26.08%	0.402%
454	20.552	20.515	20.570	VV	311314	9129904	54.02%	0.834%
455	20.592	20.570	20.604	VV	297079	5793027	34.28%	0.529%
456	20.607	20.604	20.661	VV	285040	9051702	53.56%	0.826%

Instrument :
FID_G
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WC-SOIL-20250711MS

Manual IntegrationsAPPROVED

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rteres

457	20.690	20.661	20.717	VV	348625	9903202	58.60%	0.904%
458	20.724	20.717	20.744	VV	249775	3788853	22	
459	20.767	20.744	20.773	VV	254672	4284159	25	
460	20.777	20.773	20.816	VV	257814	5970493	35	
461	20.819	20.816	20.824	VV	226159	1154962	6	
462	20.835	20.824	20.842	VV	230495	2344171	13	
463	20.863	20.842	20.877	VV	236806	4834314	28.60%	0.441%
464	20.894	20.877	20.937	VV	225751	7903145	46.76%	0.722%
465	20.942	20.937	20.950	VV	231092	1673436	9.90%	0.153%
466	20.962	20.950	20.989	VV	213859	4810488	28.46%	0.439%
467	20.995	20.989	21.002	VV	205836	1501942	8.89%	0.137%
468	21.016	21.002	21.031	VV	204690	3455879	20.45%	0.316%
469	21.036	21.031	21.046	VV	192988	1785743	10.57%	0.163%
470	21.060	21.046	21.078	VV	212733	3855529	22.81%	0.352%
471	21.082	21.078	21.089	VV	209134	1375994	8.14%	0.126%
472	21.093	21.089	21.111	VV	202799	2523549	14.93%	0.230%
473	21.114	21.111	21.127	VV	192660	1816291	10.75%	0.166%
474	21.134	21.127	21.161	VV	195106	3695635	21.87%	0.337%
475	21.196	21.161	21.202	VV	186800	4368225	25.85%	0.399%
476	21.205	21.202	21.246	VV	193450	4735863	28.02%	0.432%
477	21.251	21.246	21.256	VV	182550	1075573	6.36%	0.098%
478	21.262	21.256	21.274	VV	174834	1892764	11.20%	0.173%
479	21.288	21.274	21.304	VV	182809	3124108	18.49%	0.285%
480	21.309	21.304	21.371	VV	170166	6183890	36.59%	0.565%
481	21.381	21.371	21.389	VV	148992	1598983	9.46%	0.146%
482	21.397	21.389	21.416	VV	152387	2259222	13.37%	0.206%
483	21.446	21.416	21.457	VV	148217	3505463	20.74%	0.320%
484	21.461	21.457	21.467	VV	155427	895107	5.30%	0.082%
485	21.495	21.467	21.526	VV	198659	5770751	34.15%	0.527%
486	21.539	21.526	21.554	VV	126189	2036333	12.05%	0.186%
487	21.560	21.554	21.583	VV	121057	1956323	11.58%	0.179%
488	21.600	21.583	21.625	VV	112627	2630877	15.57%	0.240%
489	21.632	21.625	21.641	VV	107019	956193	5.66%	0.087%
490	21.657	21.641	21.662	VV	108954	1353419	8.01%	0.124%
491	21.667	21.662	21.677	VV	105232	876739	5.19%	0.080%
492	21.692	21.677	21.733	VV	101849	3181372	18.82%	0.290%
493	21.746	21.733	21.749	VV	101069	947430	5.61%	0.087%
494	21.753	21.749	21.809	VV	97182	3048656	18.04%	0.278%

Sum of corrected areas: 1095216535

FG070925.M Sat Jul 19 05:36:07 2025

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

Report of Analysis

Client:	PARSONS Engineering of New York, Inc.	Date Collected:	07/11/25
Project:	Con Edison - East River Site 2	Date Received:	07/11/25
Client Sample ID:	WC-SOIL-20250711MSD	SDG No.:	Q2592
Lab Sample ID:	Q2592-01MSD	Matrix:	SOIL
Analytical Method:	8015D TPH	% Solid:	76.7 Decanted:
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	TPH GC
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG016340.D	1	07/17/25 08:25	07/18/25 14:52	PB168895

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
PHC	Petroleum Hydrocarbons	450000	E	500	3690	ug/kg
SURROGATES						
16416-32-3	TETRACOSANE-d50	14.5		37 - 130	72%	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\FG071825\
Data File : FG016340.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 14:52
Operator : YP\AJ
Sample : Q2592-01MSD
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/22/2025
Supervised By :mohammad ahmed 07/23/2025

Integration File: autoint1.e
Quant Time: Jul 21 08:30:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.218	1445638	14.458 ug/mlm
	Target Compounds			
1)	N-OCTANE	2.117	1069182	9.468 ug/ml
2)	N-DECANE	4.670	1695057	14.717 ug/ml
3)	N-DODECANE	6.854	1902669	16.411 ug/ml
4)	N-TETRADECANE	8.696	2113988	17.910 ug/ml
5)	N-HEXADECANE	10.317	1994312	17.242 ug/ml
6)	N-OCTADECANE	11.773	2122478	18.082 ug/ml
7)	N-EICOSANE	13.097	2247651	18.788 ug/mlm
8)	N-DOCOSANE	14.309	1993049	17.295 ug/mlm
10)	N-TETRACOSANE	15.421	4818697	42.176 ug/ml
11)	N-HEXACOSANE	16.455	1904836	17.310 ug/mlm
12)	N-OCTACOSANE	17.413	3512634	32.301 ug/ml
13)	N-TRIACONTANE	18.311	3039081	28.440 ug/mlm
14)	N-DOTRIACONTANE	19.151	2829229	27.979 ug/mlm
15)	N-TETRATRIACONTANE	19.943	2719273	29.886 ug/mlm
16)	N-HEXATRIACONTANE	20.692	1911926	25.387 ug/mlm
17)	N-OCTATRIACONTANE	21.494	1671860	25.688 ug/mlm
18)	N-TETRACONTANE	22.527	2220055	38.519 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016340.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 14:52
Operator : YP\AJ
Sample : Q2592-01MSD
Misc :
ALS Vial : 28 Sample Multiplier: 1

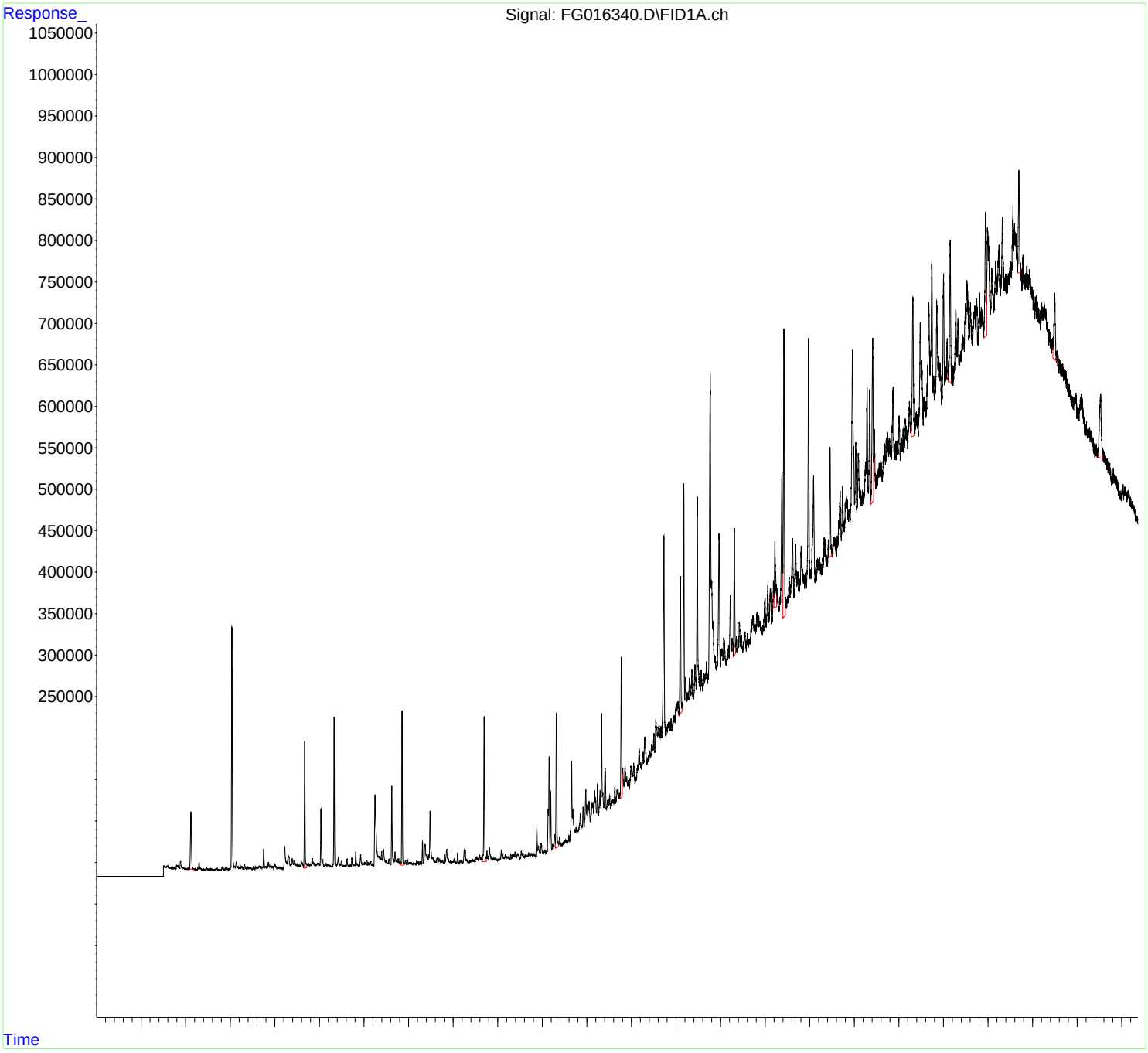
Integration File: autoint1.e
Quant Time: Jul 21 08:30:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 2025
Response via : Initial Calibration
Integrator: ChemStation

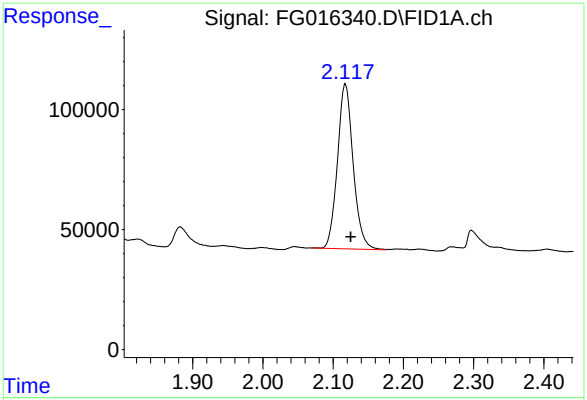
Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/22/2025
Supervised By :mohammad ahmed 07/23/2025





#1 N-OCTANE

R.T.: 2.117 min
Delta R.T.: -0.008 min
Response: 1069182
Conc: 9.47 ug/ml

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MSD

Manual Integrations APPROVED

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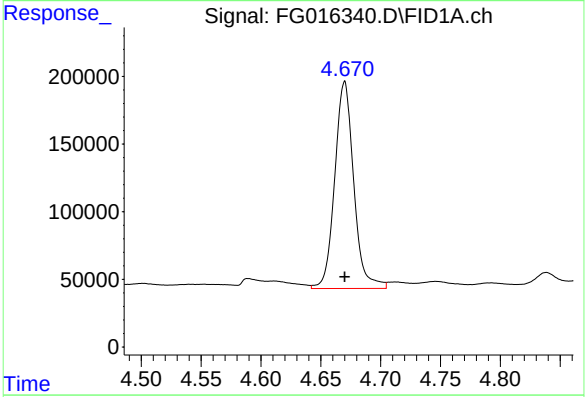
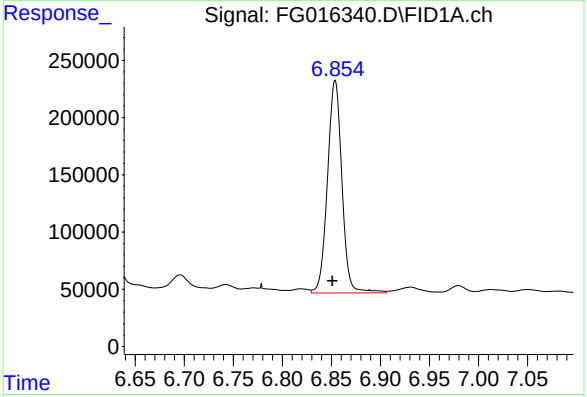


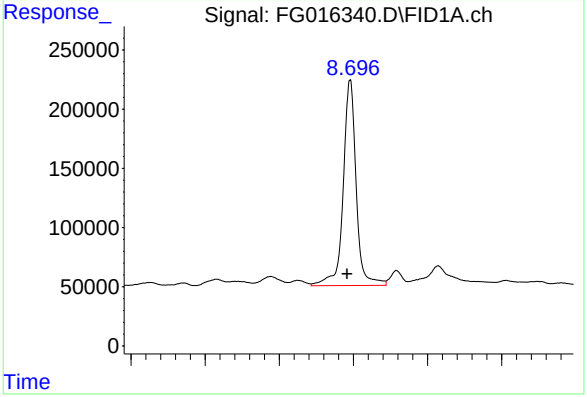
#2 N-DECANE

R.T.: 4.670 min
Delta R.T.: 0.000 min
Response: 1695057
Conc: 14.72 ug/ml



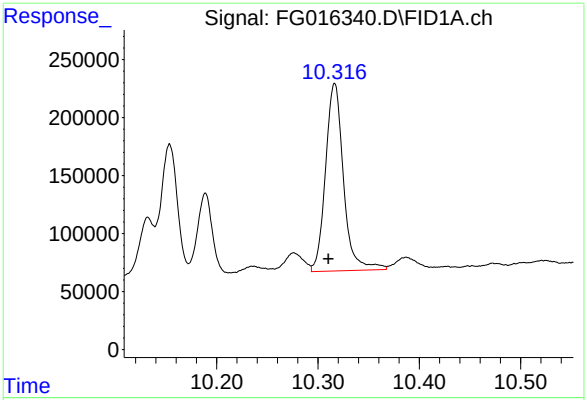
#3 N-DODECANE

R.T.: 6.854 min
Delta R.T.: 0.003 min
Response: 1902669
Conc: 16.41 ug/ml



#4 N-TETRADECANE

R.T.: 8.696 min
Delta R.T.: 0.004 min
Response: 2113988
Conc: 17.91 ug/ml



#5 N-HEXADECANE

R.T.: 10.317 min
Delta R.T.: 0.006 min
Response: 1994312
Conc: 17.24 ug/ml

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MSD

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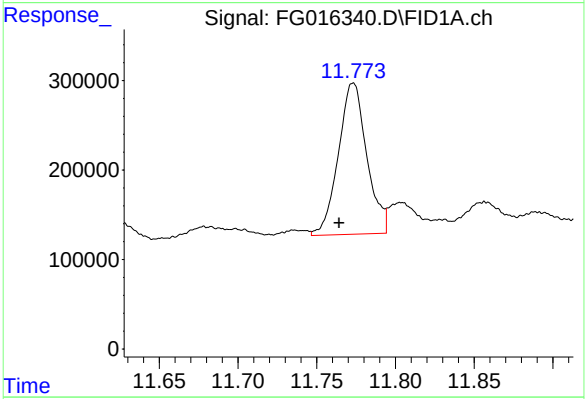
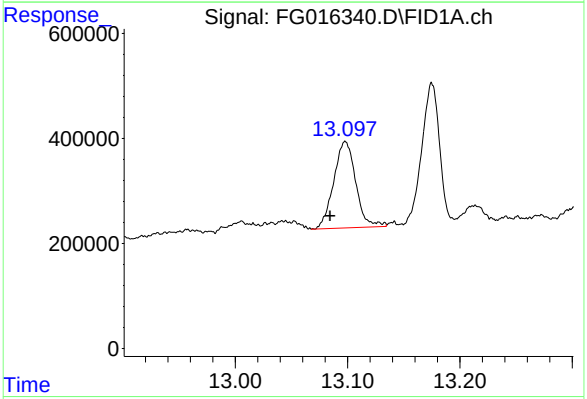


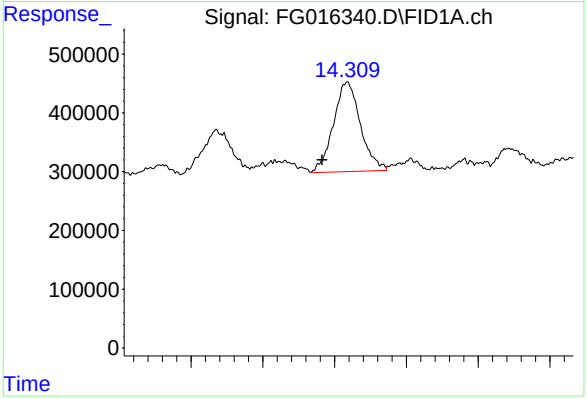
#6 N-OCTADECANE

R.T.: 11.773 min
Delta R.T.: 0.009 min
Response: 2122478
Conc: 18.08 ug/ml



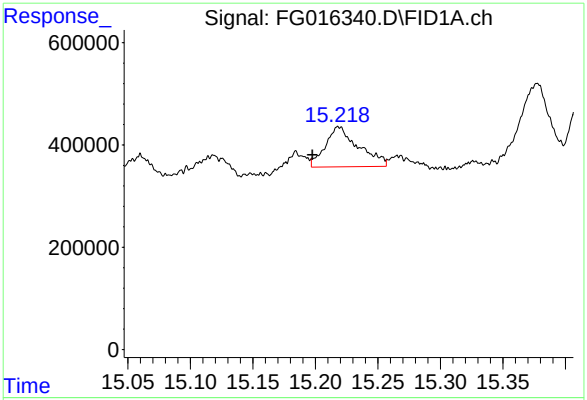
#7 N-EICOSANE

R.T.: 13.097 min
Delta R.T.: 0.013 min
Response: 2247651
Conc: 18.79 ug/ml m



#8 N-DOCOSANE

R.T.: 14.309 min
Delta R.T.: 0.018 min
Response: 1993049
Conc: 17.29 ug/ml m



#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.218 min
Delta R.T.: 0.020 min
Response: 1445638
Conc: 14.46 ug/ml

Instrument :
FID_G
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WC-SOIL-20250711MSD

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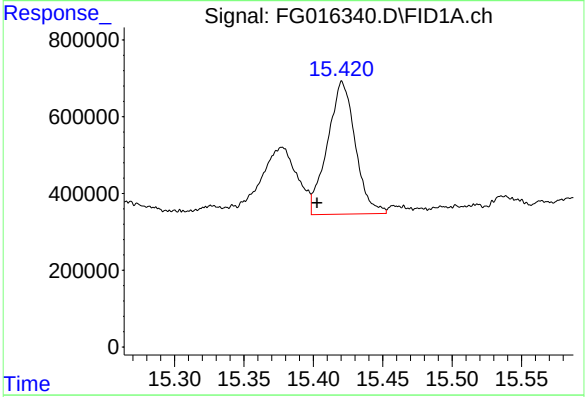
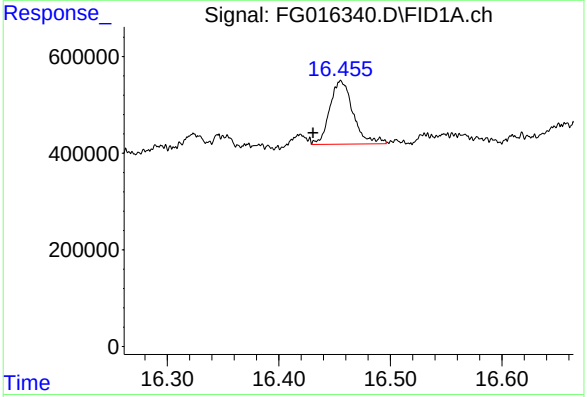


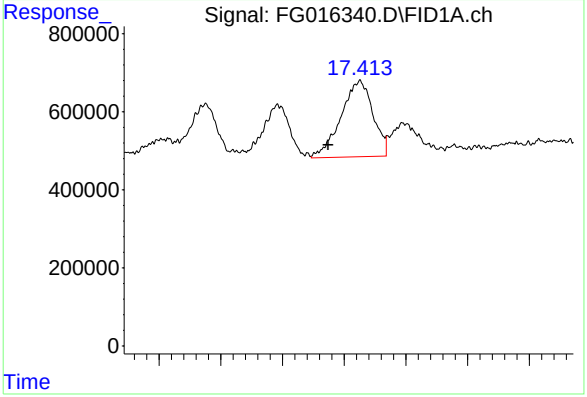
#10 N-TETRACOSANE

R.T.: 15.421 min
Delta R.T.: 0.018 min
Response: 4818697
Conc: 42.18 ug/ml



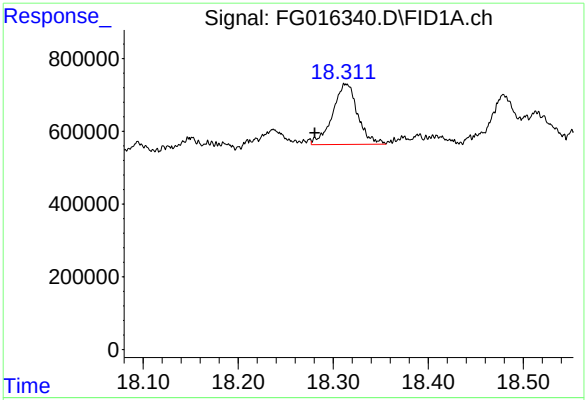
#11 N-HEXACOSANE

R.T.: 16.455 min
Delta R.T.: 0.025 min
Response: 1904836
Conc: 17.31 ug/ml m



#12 N-OCTACOSANE

R.T.: 17.413 min
Delta R.T.: 0.026 min
Response: 3512634
Conc: 32.30 ug/ml



#13 N-TRIACONTANE

R.T.: 18.311 min
Delta R.T.: 0.030 min
Response: 3039081
Conc: 28.44 ug/ml

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MSD

Manual Integrations
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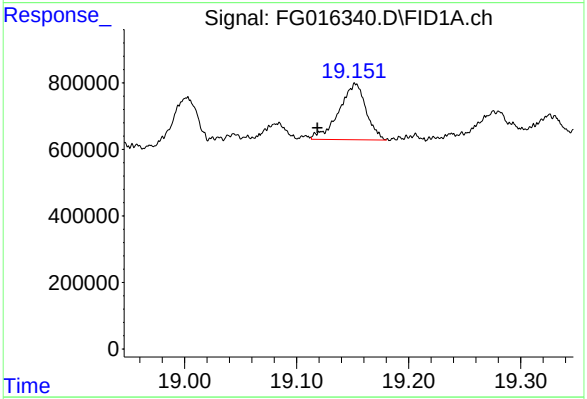
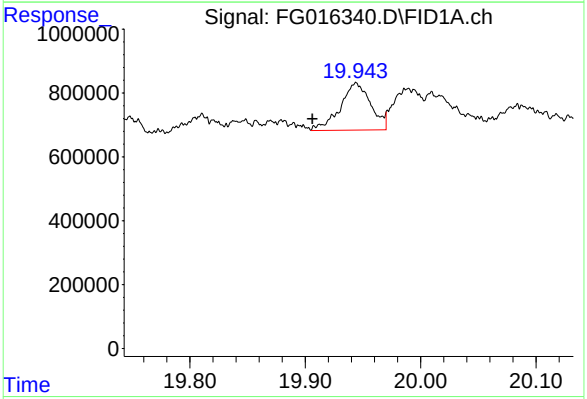


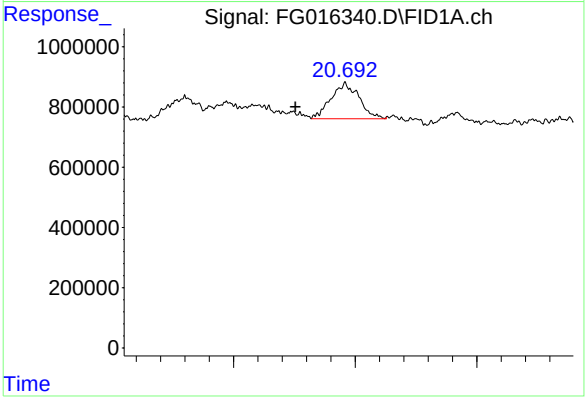
#14 N-DOTRIACONTANE

R.T.: 19.151 min
Delta R.T.: 0.033 min
Response: 2829229
Conc: 27.98 ug/ml m



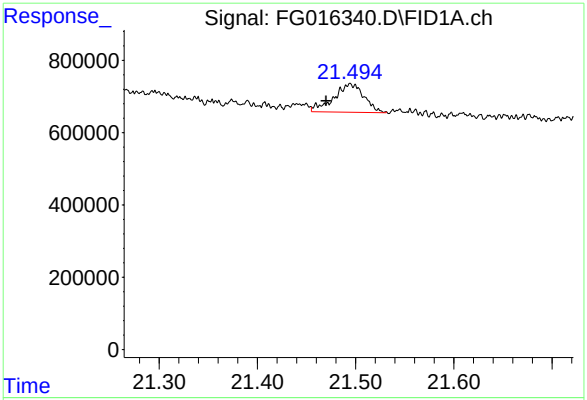
#15 N-TETRATRIACONTANE

R.T.: 19.943 min
Delta R.T.: 0.037 min
Response: 2719273
Conc: 29.89 ug/ml m



#16 N-HEXATRIACONTANE

R.T.: 20.692 min
Delta R.T.: 0.041 min
Response: 1911926
Conc: 25.39 ug/ml m



#17 N-OCTATRIACONTANE

R.T.: 21.494 min
Delta R.T.: 0.024 min
Response: 1671860
Conc: 25.69 ug/ml

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MSD

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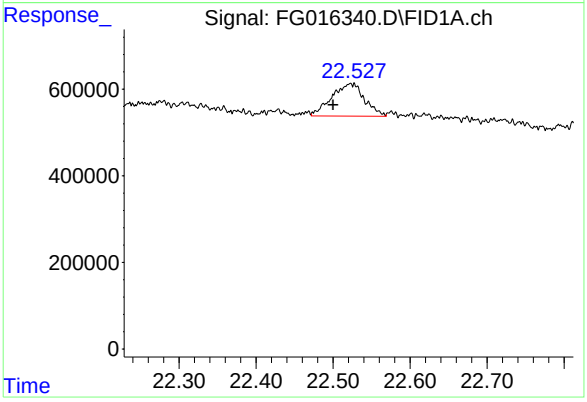

#18 N-TETRACONTANE

R.T.: 22.527 min
Delta R.T.: 0.027 min
Response: 2220055
Conc: 38.52 ug/ml

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MSD

rteres

Area Percent Report

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Supervised By :mohammad ahmed 07/23/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG07182
Data File : FG016340.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 14:52
Sample : Q2592-01MSD
Misc :
ALS Vial : 28 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.045	2.018	2.064	BV	1158	14298	0.09%	0.001%
2	2.074	2.064	2.083	VV	766	8148	0.05%	0.001%
3	2.117	2.083	2.183	VV	69419	1095674	6.70%	0.102%
4	2.191	2.183	2.213	VV	705	10539	0.06%	0.001%
5	2.223	2.213	2.250	VV	705	9653	0.06%	0.001%
6	2.269	2.250	2.285	PV	1852	24653	0.15%	0.002%
7	2.297	2.285	2.380	VV	8824	148691	0.91%	0.014%
8	2.405	2.380	2.433	VV	1146	18092	0.11%	0.002%
9	2.471	2.433	2.503	PV	2017	43371	0.27%	0.004%
10	2.530	2.503	2.550	VV	1230	27614	0.17%	0.003%
11	2.566	2.550	2.581	VV	1410	21587	0.13%	0.002%
12	2.590	2.581	2.610	VV	1179	13943	0.09%	0.001%
13	2.624	2.610	2.639	VV	675	8601	0.05%	0.001%
14	2.663	2.639	2.680	VV	1417	24977	0.15%	0.002%
15	2.701	2.680	2.787	VV	2257	49148	0.30%	0.005%
16	2.819	2.787	2.868	PV	3579	79531	0.49%	0.007%
17	2.891	2.868	2.910	VV	2416	41177	0.25%	0.004%
18	2.926	2.910	2.955	VV	1811	39484	0.24%	0.004%
19	2.971	2.955	2.989	VV	1628	26162	0.16%	0.002%
20	3.036	2.989	3.084	VV	292571	3538737	21.63%	0.329%
21	3.096	3.084	3.113	VV	4373	66837	0.41%	0.006%
22	3.135	3.113	3.180	VV	9553	205083	1.25%	0.019%
23	3.188	3.180	3.208	VV	2974	41487	0.25%	0.004%
24	3.246	3.208	3.307	VV	4034	126410	0.77%	0.012%
25	3.320	3.307	3.365	VV	6173	95966	0.59%	0.009%
26	3.393	3.365	3.415	VV	2561	57729	0.35%	0.005%
27	3.425	3.415	3.444	VV	2239	30754	0.19%	0.003%
28	3.452	3.444	3.463	VV	1534	15697	0.10%	0.001%
29	3.473	3.463	3.492	VV	1284	16303	0.10%	0.002%
30	3.525	3.492	3.547	VV	3999	60001	0.37%	0.006%
31	3.568	3.547	3.588	VV	2320	39131	0.24%	0.004%
32	3.610	3.588	3.615	VV	1587	20397	0.12%	0.002%
33	3.651	3.615	3.674	VV	3936	93313	0.57%	0.009%
34	3.685	3.674	3.710	VV	2675	48345	0.30%	0.004%
35	3.749	3.710	3.782	VV	24210	330599	2.02%	0.031%
36	3.794	3.782	3.815	VV	3044	46203	0.28%	0.004%

Instrument :
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					rteres			
37	3.853	3.815	3.886	VV	7957	171622	1.05%	0.016%
38	3.900	3.886	3.935	VV	3385	86946		
39	3.946	3.935	3.965	VV	3108	42715		
40	3.996	3.965	4.063	VV	5813	156216		
41	4.101	4.063	4.131	VV	1621	46886		
42	4.135	4.131	4.176	VV	861	10897		
43	4.222	4.176	4.274	PV	25731	544540	3.33%	0.051%
44	4.302	4.274	4.314	VV	14551	266742	1.63%	0.025%
45	4.318	4.314	4.355	VV	13889	182703	1.12%	0.017%
46	4.386	4.355	4.417	VV	11646	260859	1.59%	0.024%
47	4.433	4.417	4.460	VV	9534	161711	0.99%	0.015%
48	4.471	4.460	4.490	VV	4658	75329	0.46%	0.007%
49	4.502	4.490	4.522	VV	4102	66294	0.41%	0.006%
50	4.541	4.522	4.546	VV	3298	44637	0.27%	0.004%
51	4.552	4.546	4.579	VV	3395	61732	0.38%	0.006%
52	4.590	4.579	4.606	VV	7455	92520	0.57%	0.009%
53	4.611	4.606	4.642	VV	5667	89532	0.55%	0.008%
54	4.670	4.642	4.705	VV	153919	1696107	10.37%	0.158%
55	4.713	4.705	4.728	VV	4778	61843	0.38%	0.006%
56	4.746	4.728	4.774	VV	5199	109837	0.67%	0.010%
57	4.792	4.774	4.815	VV	4002	81137	0.50%	0.008%
58	4.838	4.815	4.858	VV	11693	177693	1.09%	0.017%
59	4.868	4.858	4.893	VV	5747	97961	0.60%	0.009%
60	4.906	4.893	4.918	VV	3670	50775	0.31%	0.005%
61	4.928	4.918	4.940	VV	3744	46339	0.28%	0.004%
62	4.959	4.940	4.970	VV	5103	79539	0.49%	0.007%
63	4.983	4.970	5.003	VV	5140	88885	0.54%	0.008%
64	5.034	5.003	5.059	VV	70526	778559	4.76%	0.072%
65	5.073	5.059	5.110	VV	9705	149046	0.91%	0.014%
66	5.143	5.110	5.164	VV	4466	97151	0.59%	0.009%
67	5.188	5.164	5.210	VV	3104	69224	0.42%	0.006%
68	5.221	5.210	5.274	VV	1943	50888	0.31%	0.005%
69	5.330	5.274	5.371	VV	180844	1788404	10.93%	0.166%
70	5.387	5.371	5.393	VV	2957	28942	0.18%	0.003%
71	5.423	5.393	5.458	VV	11775	214407	1.31%	0.020%
72	5.465	5.458	5.473	VV	2648	22911	0.14%	0.002%
73	5.494	5.473	5.517	VV	6760	104416	0.64%	0.010%
74	5.526	5.517	5.546	VV	1581	21554	0.13%	0.002%
75	5.562	5.546	5.575	VV	1205	17574	0.11%	0.002%
76	5.592	5.575	5.602	VV	1985	22806	0.14%	0.002%
77	5.619	5.602	5.649	VV	9213	115080	0.70%	0.011%
78	5.661	5.649	5.679	VV	1752	22495	0.14%	0.002%
79	5.694	5.679	5.710	VV	2377	26392	0.16%	0.002%
80	5.727	5.710	5.751	VV	10443	109068	0.67%	0.010%
81	5.766	5.751	5.769	VV	1592	15804	0.10%	0.001%
82	5.779	5.769	5.793	VV	1801	22291	0.14%	0.002%
83	5.816	5.793	5.881	VV	17760	243759	1.49%	0.023%
84	5.926	5.881	5.960	VV	14346	238541	1.46%	0.022%
85	5.969	5.960	5.981	VV	2287	27188	0.17%	0.003%
86	6.015	5.981	6.035	VV	4472	101058	0.62%	0.009%
87	6.050	6.035	6.070	VV	6304	78934	0.48%	0.007%
88	6.086	6.070	6.105	VV	4031	55695	0.34%	0.005%
89	6.129	6.105	6.135	VV	3544	49023	0.30%	0.005%

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					rteres			
90	6.148	6.135	6.165	VV	5255	62863	0.38%	0.006%
91	6.181	6.165	6.215	VV	2071	34288		
92	6.247	6.215	6.315	VV	85975	1987894	12	
93	6.323	6.315	6.341	VV	11443	170928	1	
94	6.352	6.341	6.378	VV	11047	215355	1	
95	6.396	6.378	6.418	VV	17333	268103	1	
96	6.439	6.418	6.483	VV	19546	405554	2.48%	0.038%
97	6.496	6.483	6.531	VV	5654	111655	0.68%	0.010%
98	6.562	6.531	6.599	VV	7929	158274	0.97%	0.015%
99	6.624	6.599	6.671	VV	95757	1099654	6.72%	0.102%
100	6.696	6.671	6.728	VV	15993	282819	1.73%	0.026%
101	6.742	6.728	6.758	VV	7625	103827	0.63%	0.010%
102	6.771	6.758	6.808	VV	4609	107194	0.66%	0.010%
103	6.819	6.808	6.829	VV	3705	40668	0.25%	0.004%
104	6.854	6.829	6.906	VV	185914	1903182	11.63%	0.177%
105	6.931	6.906	6.958	VV	4962	82248	0.50%	0.008%
106	6.979	6.958	6.997	VV	6278	68808	0.42%	0.006%
107	7.012	6.997	7.034	VV	2819	44291	0.27%	0.004%
108	7.050	7.034	7.069	VV	2763	39283	0.24%	0.004%
109	7.081	7.069	7.099	VV	1326	14758	0.09%	0.001%
110	7.115	7.099	7.134	VV	1986	28545	0.17%	0.003%
111	7.143	7.134	7.163	VV	1781	17727	0.11%	0.002%
112	7.182	7.163	7.200	PV	3747	51981	0.32%	0.005%
113	7.214	7.200	7.234	VV	3113	40965	0.25%	0.004%
114	7.252	7.234	7.267	VV	3579	35197	0.22%	0.003%
115	7.277	7.267	7.289	VV	1133	11449	0.07%	0.001%
116	7.313	7.289	7.339	VV	27693	281971	1.72%	0.026%
117	7.373	7.339	7.429	VV	23598	659131	4.03%	0.061%
118	7.431	7.429	7.437	VV	6750	30591	0.19%	0.003%
119	7.452	7.437	7.462	VV	11414	140072	0.86%	0.013%
120	7.482	7.462	7.525	VV	63923	952215	5.82%	0.089%
121	7.530	7.525	7.591	VV	7856	209137	1.28%	0.019%
122	7.604	7.591	7.613	VV	2766	34746	0.21%	0.003%
123	7.637	7.613	7.656	VV	7231	119002	0.73%	0.011%
124	7.675	7.656	7.691	VV	6933	98788	0.60%	0.009%
125	7.704	7.691	7.729	VV	4420	76517	0.47%	0.007%
126	7.758	7.729	7.780	VV	4627	84172	0.51%	0.008%
127	7.807	7.780	7.825	VV	10464	135023	0.83%	0.013%
128	7.855	7.825	7.925	VV	17089	412246	2.52%	0.038%
129	7.946	7.925	7.971	VV	3369	60465	0.37%	0.006%
130	7.982	7.971	7.999	VV	2142	27049	0.17%	0.003%
131	8.020	7.999	8.066	VV	4993	84415	0.52%	0.008%
132	8.070	8.066	8.076	VV	827	4447	0.03%	0.000%
133	8.101	8.076	8.132	VV	11765	140195	0.86%	0.013%
134	8.175	8.132	8.210	PV	3221	69688	0.43%	0.006%
135	8.248	8.210	8.260	PV	15568	200475	1.23%	0.019%
136	8.273	8.260	8.292	VV	15484	172919	1.06%	0.016%
137	8.307	8.292	8.337	VV	3536	63999	0.39%	0.006%
138	8.349	8.337	8.367	VV	1305	17168	0.10%	0.002%
139	8.384	8.367	8.396	VV	1838	24298	0.15%	0.002%
140	8.426	8.396	8.447	VV	3615	70990	0.43%	0.007%
141	8.471	8.447	8.489	VV	2938	45766	0.28%	0.004%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/22/2025
Supervised By :mohammad ahmed 07/23/2025

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142	8.516	8.489	8.534	VV	5973	107495	0.66%	0.010%
143	8.540	8.534	8.566	VV	4248	69416		
144	8.589	8.566	8.612	VV	8041	144755		
145	8.625	8.612	8.643	VV	4670	63443		
146	8.696	8.643	8.744	VV	173423	2114446	12	
147	8.758	8.744	8.774	VV	12530	136991		
148	8.814	8.774	8.893	VV	16363	420317	2.57%	0.039%
149	8.906	8.893	8.934	VV	3632	63829	0.39%	0.006%
150	8.948	8.934	8.968	VV	2590	37986	0.23%	0.004%
151	8.981	8.968	8.995	VV	1282	12846	0.08%	0.001%
152	9.011	8.995	9.026	PV	1606	14687	0.09%	0.001%
153	9.081	9.026	9.100	VV	11894	184461	1.13%	0.017%
154	9.112	9.100	9.129	VV	7839	91483	0.56%	0.009%
155	9.141	9.129	9.152	VV	3568	40801	0.25%	0.004%
156	9.171	9.152	9.205	VV	6252	131279	0.80%	0.012%
157	9.218	9.205	9.223	VV	3166	30917	0.19%	0.003%
158	9.241	9.223	9.274	VV	3674	77338	0.47%	0.007%
159	9.291	9.274	9.309	VV	5700	65636	0.40%	0.006%
160	9.332	9.309	9.343	VV	5969	84810	0.52%	0.008%
161	9.347	9.343	9.368	VV	5646	67387	0.41%	0.006%
162	9.388	9.368	9.417	VV	8912	139281	0.85%	0.013%
163	9.440	9.417	9.455	VV	5811	94693	0.58%	0.009%
164	9.467	9.455	9.495	VV	5898	76019	0.46%	0.007%
165	9.529	9.495	9.547	PV	9068	128771	0.79%	0.012%
166	9.562	9.547	9.591	VV	5713	94497	0.58%	0.009%
167	9.624	9.591	9.644	VV	3190	63756	0.39%	0.006%
168	9.655	9.644	9.670	VV	2190	25884	0.16%	0.002%
169	9.688	9.670	9.699	VV	4249	50833	0.31%	0.005%
170	9.715	9.699	9.739	VV	4488	85749	0.52%	0.008%
171	9.745	9.739	9.759	VV	2984	31261	0.19%	0.003%
172	9.769	9.759	9.786	VV	2767	31748	0.19%	0.003%
173	9.802	9.786	9.822	VV	3030	37899	0.23%	0.004%
174	9.827	9.822	9.845	VV	1506	11263	0.07%	0.001%
175	9.878	9.845	9.896	PV	34279	426582	2.61%	0.040%
176	9.910	9.896	9.947	VV	10692	196363	1.20%	0.018%
177	9.976	9.947	10.019	VV	12838	233170	1.43%	0.022%
178	10.034	10.019	10.042	VV	1561	14930	0.09%	0.001%
179	10.056	10.042	10.081	VV	2632	34081	0.21%	0.003%
180	10.132	10.081	10.140	PV	51035	507212	3.10%	0.047%
181	10.154	10.140	10.172	VV	113841	1287701	7.87%	0.120%
182	10.189	10.172	10.213	VV	70446	719689	4.40%	0.067%
183	10.236	10.213	10.257	VV	5869	98103	0.60%	0.009%
184	10.276	10.257	10.294	VV	16774	220754	1.35%	0.021%
185	10.317	10.294	10.353	VV	161818	1961007	11.98%	0.182%
186	10.357	10.353	10.368	VV	4930	34506	0.21%	0.003%
187	10.387	10.368	10.417	VV	10158	148930	0.91%	0.014%
188	10.428	10.417	10.440	VV	1258	10067	0.06%	0.001%
189	10.448	10.440	10.458	PV	1246	7036	0.04%	0.001%
190	10.472	10.458	10.488	VV	2822	27445	0.17%	0.003%
191	10.503	10.488	10.507	VV	2506	20176	0.12%	0.002%
192	10.521	10.507	10.540	VV	3767	52176	0.32%	0.005%
193	10.557	10.540	10.570	VV	1199	16625	0.10%	0.002%
194	10.596	10.570	10.612	PV	6244	69768	0.43%	0.006%

Instrument :
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ClientSampleId :
WC-SOIL-20250711MSD

Manual IntegrationsAPPROVED

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					rteres			
195	10.658	10.612	10.674	PV	94981	1198280	7.32%	0.111%
196	10.686	10.674	10.730	VV	34245	672443		
197	10.739	10.730	10.753	VV	8459	97533		
198	10.768	10.753	10.785	VV	8484	130323		
199	10.801	10.785	10.807	VV	5873	64710		
200	10.811	10.807	10.817	VV	5345	30315		
201	10.855	10.817	10.877	VV	22721	455704	2.79%	0.042%
202	10.882	10.877	10.892	VV	8028	63843	0.39%	0.006%
203	10.916	10.892	10.938	VV	28723	383174	2.34%	0.036%
204	10.976	10.938	10.992	VV	46968	756499	4.62%	0.070%
205	11.004	10.992	11.020	VV	27969	365628	2.23%	0.034%
206	11.050	11.020	11.077	VV	30518	663554	4.06%	0.062%
207	11.116	11.077	11.127	VV	25546	489664	2.99%	0.046%
208	11.138	11.127	11.154	VV	25365	336852	2.06%	0.031%
209	11.175	11.154	11.189	VV	38528	542517	3.32%	0.050%
210	11.194	11.189	11.217	VV	28630	348462	2.13%	0.032%
211	11.239	11.217	11.261	VV	43863	592461	3.62%	0.055%
212	11.296	11.261	11.311	VV	34121	599590	3.66%	0.056%
213	11.330	11.311	11.349	VV	125507	1431311	8.75%	0.133%
214	11.356	11.349	11.380	VV	28961	398735	2.44%	0.037%
215	11.408	11.380	11.439	VV	55910	1009167	6.17%	0.094%
216	11.465	11.439	11.471	VV	14705	219917	1.34%	0.020%
217	11.477	11.471	11.492	VV	15813	154385	0.94%	0.014%
218	11.510	11.492	11.531	VV	18335	274497	1.68%	0.026%
219	11.590	11.531	11.606	VV	11669	372550	2.28%	0.035%
220	11.627	11.606	11.648	VV	25084	357330	2.18%	0.033%
221	11.678	11.648	11.696	VV	19975	391954	2.40%	0.036%
222	11.698	11.696	11.723	VV	16556	191958	1.17%	0.018%
223	11.736	11.723	11.747	VV	13138	163375	1.00%	0.015%
224	11.773	11.747	11.795	VV	175735	2325549	14.21%	0.216%
225	11.804	11.795	11.824	VV	40884	566572	3.46%	0.053%
226	11.830	11.824	11.836	VV	20545	149276	0.91%	0.014%
227	11.857	11.836	11.877	VV	40025	740623	4.53%	0.069%
228	11.889	11.877	11.919	VV	27519	562292	3.44%	0.052%
229	11.935	11.919	11.953	VV	20976	358030	2.19%	0.033%
230	11.990	11.953	12.015	VV	34558	927034	5.67%	0.086%
231	12.020	12.015	12.032	VV	25886	245414	1.50%	0.023%
232	12.049	12.032	12.079	VV	37261	744398	4.55%	0.069%
233	12.097	12.079	12.109	VV	18905	289084	1.77%	0.027%
234	12.142	12.109	12.151	VV	30193	626126	3.83%	0.058%
235	12.173	12.151	12.210	VV	48773	1274216	7.79%	0.119%
236	12.217	12.210	12.223	VV	26971	198920	1.22%	0.019%
237	12.261	12.223	12.272	VV	42549	967275	5.91%	0.090%
238	12.298	12.272	12.347	VV	58881	1835254	11.22%	0.171%
239	12.403	12.347	12.421	VV	35725	1405370	8.59%	0.131%
240	12.426	12.421	12.434	VV	33244	250184	1.53%	0.023%
241	12.453	12.434	12.472	VV	44310	896817	5.48%	0.083%
242	12.476	12.472	12.484	VV	40720	278067	1.70%	0.026%
243	12.503	12.484	12.523	VV	55708	1026272	6.27%	0.095%
244	12.547	12.523	12.562	VV	69862	1273658	7.78%	0.118%
245	12.564	12.562	12.569	VV	60880	239546	1.46%	0.022%
246	12.572	12.569	12.583	VV	61007	475470	2.91%	0.044%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MSD

Manual IntegrationsAPPROVED

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rteres

247	12.585	12.583	12.590	VV	53021	227533	1.39%	0.021%
248	12.620	12.590	12.643	VV	59829	1686718	10	
249	12.657	12.643	12.678	VV	58183	1070805	6	
250	12.729	12.678	12.775	VV	285259	6361245	38	
251	12.796	12.775	12.805	VV	51201	847116	5	
252	12.821	12.805	12.827	VV	54664	677032	4	
253	12.829	12.827	12.834	VV	55470	229081	1.40%	0.021%
254	12.849	12.834	12.870	VV	56933	1142320	6.98%	0.106%
255	12.890	12.870	12.910	VV	58195	1178127	7.20%	0.110%
256	12.957	12.910	12.972	VV	58626	1963133	12.00%	0.183%
257	12.978	12.972	12.982	VV	54649	327835	2.00%	0.030%
258	13.006	12.982	13.023	VV	73469	1597905	9.77%	0.149%
259	13.042	13.023	13.071	VV	70580	1918230	11.72%	0.178%
260	13.098	13.071	13.136	VV	221607	4438603	27.13%	0.413%
261	13.141	13.136	13.150	VV	66393	555607	3.40%	0.052%
262	13.175	13.150	13.196	VV	328188	4622226	28.25%	0.430%
263	13.213	13.196	13.234	VV	95756	1818470	11.11%	0.169%
264	13.241	13.234	13.248	VV	73827	592645	3.62%	0.055%
265	13.252	13.248	13.258	VV	73220	419982	2.57%	0.039%
266	13.272	13.258	13.287	VV	75398	1227175	7.50%	0.114%
267	13.303	13.287	13.320	VV	89779	1601091	9.79%	0.149%
268	13.324	13.320	13.330	VV	73191	435311	2.66%	0.040%
269	13.357	13.330	13.386	VV	100109	2650819	16.20%	0.247%
270	13.424	13.386	13.436	VV	100407	2394350	14.63%	0.223%
271	13.443	13.436	13.451	VV	84678	731114	4.47%	0.068%
272	13.478	13.451	13.520	VV	301553	5852159	35.77%	0.544%
273	13.531	13.520	13.544	VV	83429	1125812	6.88%	0.105%
274	13.562	13.544	13.594	VV	90193	2343177	14.32%	0.218%
275	13.629	13.594	13.643	VV	82031	2149686	13.14%	0.200%
276	13.653	13.643	13.659	VV	81900	736233	4.50%	0.068%
277	13.686	13.659	13.713	VV	95914	2649269	16.19%	0.246%
278	13.719	13.713	13.726	VV	78255	604334	3.69%	0.056%
279	13.768	13.726	13.792	VV	438568	9810315	59.96%	0.913%
280	13.802	13.792	13.824	VV	186926	3119035	19.06%	0.290%
281	13.832	13.824	13.866	VV	138840	2843131	17.38%	0.264%
282	13.882	13.866	13.912	VV	94885	2391284	14.61%	0.222%
283	13.967	13.912	13.999	VV	239593	6843276	41.82%	0.637%
284	14.017	13.999	14.024	VV	97210	1318105	8.06%	0.123%
285	14.030	14.024	14.055	VV	97562	1712514	10.47%	0.159%
286	14.072	14.055	14.133	VV	107491	4236334	25.89%	0.394%
287	14.151	14.133	14.158	VV	87082	1240082	7.58%	0.115%
288	14.179	14.158	14.194	VV	95381	1895663	11.59%	0.176%
289	14.218	14.194	14.241	VV	154974	3312366	20.24%	0.308%
290	14.259	14.241	14.284	VV	101616	2369082	14.48%	0.220%
291	14.309	14.284	14.338	VV	232221	4587207	28.03%	0.427%
292	14.353	14.338	14.377	VV	100847	2082580	12.73%	0.194%
293	14.390	14.377	14.399	VV	98190	1170925	7.16%	0.109%
294	14.421	14.399	14.446	VV	114784	2795803	17.09%	0.260%
295	14.466	14.446	14.487	VV	96601	2229957	13.63%	0.207%
296	14.492	14.487	14.497	VV	83025	486161	2.97%	0.045%
297	14.548	14.497	14.577	VV	97526	4132416	25.26%	0.384%
298	14.601	14.577	14.608	VV	94206	1565422	9.57%	0.146%
299	14.612	14.608	14.630	VV	93041	1150239	7.03%	0.107%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711MSD

rteres

Manual IntegrationsAPPROVED

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300	14.647	14.630	14.663	VV	85091	1645907	10.06%	0.153%
301	14.686	14.663	14.693	VV	95973	1601330	9	
302	14.711	14.693	14.715	VV	107617	1356080	8	
303	14.725	14.715	14.756	VV	110683	2485589	15	
304	14.761	14.756	14.784	VV	95225	1532079	9	
305	14.818	14.784	14.828	VV	110977	2627607	16	
306	14.834	14.828	14.843	VV	99305	871441	5.33%	0.081%
307	14.846	14.843	14.850	VV	100493	440558	2.69%	0.041%
308	14.857	14.850	14.882	VV	104146	1836461	11.22%	0.171%
309	14.887	14.882	14.909	VV	97641	1475329	9.02%	0.137%
310	14.913	14.909	14.921	VV	89376	635567	3.88%	0.059%
311	14.926	14.921	14.939	VV	85845	888235	5.43%	0.083%
312	14.943	14.939	14.949	VV	87328	520193	3.18%	0.048%
313	14.998	14.949	15.019	VV	117809	4163760	25.45%	0.387%
314	15.023	15.019	15.029	VV	91547	538636	3.29%	0.050%
315	15.060	15.029	15.085	VV	133871	3615152	22.09%	0.336%
316	15.119	15.085	15.140	VV	127602	3578642	21.87%	0.333%
317	15.149	15.140	15.153	VV	91138	678700	4.15%	0.063%
318	15.184	15.153	15.196	VV	134121	2773468	16.95%	0.258%
319	15.219	15.196	15.259	VV	178768	5252733	32.10%	0.489%
320	15.266	15.259	15.308	VV	119732	3143706	19.21%	0.292%
321	15.327	15.308	15.335	VV	106848	1653292	10.10%	0.154%
322	15.378	15.335	15.399	VV	258262	6465412	39.51%	0.601%
323	15.421	15.399	15.453	VV	427641	7488913	45.77%	0.697%
324	15.458	15.453	15.472	VV	103113	1157366	7.07%	0.108%
325	15.476	15.472	15.483	VV	94691	598038	3.65%	0.056%
326	15.493	15.483	15.498	VV	98526	869449	5.31%	0.081%
327	15.518	15.498	15.526	VV	104592	1696298	10.37%	0.158%
328	15.537	15.526	15.557	VV	123723	2118057	12.94%	0.197%
329	15.564	15.557	15.573	VV	111662	1007156	6.16%	0.094%
330	15.612	15.573	15.644	VV	167648	5579100	34.10%	0.519%
331	15.680	15.644	15.710	VV	157443	5017390	30.66%	0.467%
332	15.733	15.710	15.759	VV	124005	3303805	20.19%	0.307%
333	15.807	15.759	15.844	VV	151309	6120679	37.41%	0.569%
334	15.848	15.844	15.860	VV	118272	1133250	6.93%	0.105%
335	15.865	15.860	15.872	VV	114419	777063	4.75%	0.072%
336	15.876	15.872	15.886	VV	111563	904357	5.53%	0.084%
337	15.907	15.886	15.923	VV	114638	2330191	14.24%	0.217%
338	15.975	15.923	16.011	VV	395842	9622499	58.81%	0.895%
339	16.020	16.011	16.028	VV	114635	1138043	6.96%	0.106%
340	16.062	16.028	16.068	VV	159396	3122058	19.08%	0.290%
341	16.085	16.068	16.119	VV	223281	4995696	30.53%	0.465%
342	16.138	16.119	16.154	VV	112896	2208414	13.50%	0.205%
343	16.173	16.154	16.185	VV	122120	2078448	12.70%	0.193%
344	16.189	16.185	16.198	VV	117508	918227	5.61%	0.085%
345	16.203	16.198	16.217	VV	121134	1335942	8.16%	0.124%
346	16.220	16.217	16.246	VV	120438	1949075	11.91%	0.181%
347	16.255	16.246	16.272	VV	112428	1641776	10.03%	0.153%
348	16.294	16.272	16.301	VV	118330	1947998	11.91%	0.181%
349	16.323	16.301	16.340	VV	142046	2964204	18.12%	0.276%
350	16.345	16.340	16.366	VV	138043	1986467	12.14%	0.185%
351	16.372	16.366	16.376	VV	117519	684876	4.19%	0.064%

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WC-SOIL-20250711MSD

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rteres

352	16.384	16.376	16.396	VV	113934	1351405	8.26%	0.126%
353	16.419	16.396	16.434	VV	136475	2735513	16	
354	16.456	16.434	16.499	VV	246332	6343403	38	
355	16.506	16.499	16.520	VV	121515	1456479	8	
356	16.531	16.520	16.540	VV	131881	1572202	9	
357	16.549	16.540	16.554	VV	130737	1032701	6	
358	16.556	16.554	16.600	VV	130611	3429443	20.96%	0.319%
359	16.610	16.600	16.632	VV	127594	2305754	14.09%	0.214%
360	16.682	16.632	16.708	VV	184703	6869649	41.98%	0.639%
361	16.740	16.708	16.765	VV	185706	5221518	31.91%	0.486%
362	16.770	16.765	16.775	VV	141337	835674	5.11%	0.078%
363	16.832	16.775	16.871	VV	171209	8998206	54.99%	0.837%
364	16.881	16.871	16.903	VV	152429	2784415	17.02%	0.259%
365	16.959	16.903	17.009	VV	342919	13837341	84.57%	1.287%
366	17.032	17.009	17.063	VV	228431	5900603	36.06%	0.549%
367	17.090	17.063	17.115	VV	213870	5731367	35.03%	0.533%
368	17.126	17.115	17.165	VV	171369	4732126	28.92%	0.440%
369	17.179	17.165	17.190	VV	163747	2334857	14.27%	0.217%
370	17.201	17.190	17.206	VV	159356	1567168	9.58%	0.146%
371	17.211	17.206	17.215	VV	161432	869980	5.32%	0.081%
372	17.225	17.215	17.230	VV	161268	1427978	8.73%	0.133%
373	17.258	17.230	17.262	VV	195459	3474084	21.23%	0.323%
374	17.288	17.262	17.321	VV	285110	7436510	45.45%	0.692%
375	17.346	17.321	17.373	VV	280303	6487115	39.65%	0.603%
376	17.413	17.373	17.434	VV	339914	8659283	52.92%	0.806%
377	17.448	17.434	17.482	VV	227909	5557463	33.96%	0.517%
378	17.489	17.482	17.504	VV	172705	2167804	13.25%	0.202%
379	17.508	17.504	17.519	VV	162678	1471713	8.99%	0.137%
380	17.540	17.519	17.552	VV	175812	3404240	20.81%	0.317%
381	17.558	17.552	17.564	VV	183143	1225139	7.49%	0.114%
382	17.576	17.564	17.588	VV	178565	2532861	15.48%	0.236%
383	17.594	17.588	17.625	VV	184046	3935684	24.05%	0.366%
384	17.631	17.625	17.636	VV	171914	1151265	7.04%	0.107%
385	17.648	17.636	17.656	VV	189677	2128916	13.01%	0.198%
386	17.679	17.656	17.703	VV	202072	5224074	31.93%	0.486%
387	17.720	17.703	17.732	VV	207584	3392229	20.73%	0.316%
388	17.753	17.732	17.770	VV	213502	4541811	27.76%	0.422%
389	17.783	17.770	17.804	VV	204808	3920194	23.96%	0.365%
390	17.809	17.804	17.814	VV	192093	1127091	6.89%	0.105%
391	17.819	17.814	17.837	VV	187359	2567569	15.69%	0.239%
392	17.870	17.837	17.899	VV	264053	8010800	48.96%	0.745%
393	17.901	17.899	17.905	VV	184236	635170	3.88%	0.059%
394	17.920	17.905	17.938	VV	193357	3731668	22.81%	0.347%
395	17.946	17.938	17.950	VV	190513	1295298	7.92%	0.120%
396	17.955	17.950	17.972	VV	193982	2513516	15.36%	0.234%
397	17.977	17.972	17.981	VV	183565	995907	6.09%	0.093%
398	18.010	17.981	18.034	VV	221309	6226798	38.06%	0.579%
399	18.050	18.034	18.055	VV	187179	2245245	13.72%	0.209%
400	18.061	18.055	18.070	VV	191872	1691296	10.34%	0.157%
401	18.076	18.070	18.083	VV	189212	1475004	9.01%	0.137%
402	18.094	18.083	18.117	VV	204104	3840495	23.47%	0.357%
403	18.151	18.117	18.163	VV	212690	5354763	32.73%	0.498%
404	18.168	18.163	18.182	VV	202744	2231002	13.63%	0.208%

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ClientSampleId :
WC-SOIL-20250711MSD

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rteres

405	18.185	18.182	18.203	VV	195266	2316967	14.16%	0.216%
406	18.237	18.203	18.272	VV	231739	8589570	52	
407	18.313	18.272	18.355	VV	353129	12440868	76	
408	18.374	18.355	18.381	VV	202763	3072757	18	
409	18.390	18.381	18.400	VV	208420	2341025	14	
410	18.409	18.400	18.436	VV	208822	4238004	25	
411	18.479	18.436	18.498	VV	317740	9218918	56.34%	0.858%
412	18.513	18.498	18.545	VV	269487	6811280	41.63%	0.634%
413	18.559	18.545	18.570	VV	223370	3210384	19.62%	0.299%
414	18.577	18.570	18.587	VV	223669	2092503	12.79%	0.195%
415	18.596	18.587	18.607	VV	217754	2591377	15.84%	0.241%
416	18.612	18.607	18.617	VV	214900	1246167	7.62%	0.116%
417	18.672	18.617	18.703	VV	332262	13743209	83.99%	1.278%
418	18.741	18.703	18.770	VV	378451	11867996	72.53%	1.104%
419	18.783	18.770	18.801	VV	240246	4123080	25.20%	0.384%
420	18.819	18.801	18.828	VV	235062	3634113	22.21%	0.338%
421	18.849	18.828	18.880	VV	327344	8706866	53.21%	0.810%
422	18.894	18.880	18.918	VV	259312	5621027	34.35%	0.523%
423	18.925	18.918	18.955	VV	250832	5148765	31.47%	0.479%
424	18.958	18.955	18.964	VV	212553	1033338	6.32%	0.096%
425	19.002	18.964	19.027	VV	350774	10144081	62.00%	0.944%
426	19.031	19.027	19.035	VV	229729	1046019	6.39%	0.097%
427	19.044	19.035	19.051	VV	240691	2303814	14.08%	0.214%
428	19.056	19.051	19.063	VV	235185	1609974	9.84%	0.150%
429	19.084	19.063	19.101	VV	270611	5740477	35.08%	0.534%
430	19.108	19.101	19.112	VV	233211	1495114	9.14%	0.139%
431	19.153	19.112	19.183	VV	384689	12190585	74.50%	1.134%
432	19.206	19.183	19.216	VV	236409	4358057	26.63%	0.405%
433	19.223	19.216	19.231	VV	224193	2073922	12.67%	0.193%
434	19.238	19.231	19.245	VV	235562	1957152	11.96%	0.182%
435	19.276	19.245	19.306	VV	301108	9650577	58.98%	0.898%
436	19.326	19.306	19.344	VV	288701	6066970	37.08%	0.564%
437	19.349	19.344	19.356	VV	243345	1596876	9.76%	0.149%
438	19.361	19.356	19.367	VV	240251	1610882	9.84%	0.150%
439	19.378	19.367	19.384	VV	243482	2525127	15.43%	0.235%
440	19.390	19.384	19.400	VV	246965	2166421	13.24%	0.202%
441	19.432	19.400	19.440	VV	264780	6106538	37.32%	0.568%
442	19.447	19.440	19.469	VV	260370	4360916	26.65%	0.406%
443	19.491	19.469	19.505	VV	299784	5968080	36.47%	0.555%
444	19.527	19.505	19.570	VV	324884	11629070	71.07%	1.082%
445	19.584	19.570	19.591	VV	271219	3239067	19.80%	0.301%
446	19.607	19.591	19.626	VV	295651	5778816	35.32%	0.538%
447	19.631	19.626	19.650	VV	263175	3618230	22.11%	0.337%
448	19.676	19.650	19.680	VV	282910	4716710	28.83%	0.439%
449	19.690	19.680	19.695	VV	281729	2542308	15.54%	0.236%
450	19.702	19.695	19.718	VV	287599	3850937	23.54%	0.358%
451	19.739	19.718	19.768	VV	295856	8259552	50.48%	0.768%
452	19.773	19.768	19.781	VV	252743	1964344	12.01%	0.183%
453	19.811	19.781	19.830	VV	300842	7978808	48.76%	0.742%
454	19.839	19.830	19.844	VV	275198	2216835	13.55%	0.206%
455	19.848	19.844	19.855	VV	278906	1765550	10.79%	0.164%
456	19.858	19.855	19.863	VV	276574	1343332	8.21%	0.125%

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rteres

457	19.870	19.863	19.876	VV	275906	2154591	13.17%	0.200%
458	19.880	19.876	19.905	VV	273274	4587119	28	
459	19.944	19.905	19.969	VV	392803	11898848	72	
460	19.989	19.969	20.003	VV	370312	7114386	43	
461	20.009	20.003	20.057	VV	361601	10088243	61	
462	20.084	20.057	20.113	VV	319601	9892381	60	
463	20.118	20.113	20.124	VV	287890	1914315	11.70%	0.178%
464	20.129	20.124	20.135	VV	280849	1714380	10.48%	0.159%
465	20.169	20.135	20.201	VV	324617	11888671	72.66%	1.106%
466	20.205	20.201	20.211	VV	300633	1655271	10.12%	0.154%
467	20.246	20.211	20.276	VV	339249	12175019	74.41%	1.133%
468	20.321	20.276	20.363	VV	370609	16362451	100.00%	1.522%
469	20.367	20.363	20.380	VV	292659	2881653	17.61%	0.268%
470	20.386	20.380	20.390	VV	296629	1859300	11.36%	0.173%
471	20.395	20.390	20.410	VV	300824	3516915	21.49%	0.327%
472	20.420	20.410	20.430	VV	295796	3431983	20.97%	0.319%
473	20.454	20.430	20.475	VV	299148	7668794	46.87%	0.713%
474	20.494	20.475	20.500	VV	309247	4465142	27.29%	0.415%
475	20.504	20.500	20.529	VV	306186	5241134	32.03%	0.488%
476	20.560	20.529	20.576	VV	372843	9602690	58.69%	0.893%
477	20.595	20.576	20.607	VV	352477	6233857	38.10%	0.580%
478	20.616	20.607	20.644	VV	339331	7309560	44.67%	0.680%
479	20.648	20.644	20.664	VV	315907	3626113	22.16%	0.337%
480	20.692	20.664	20.724	VV	413764	12464470	76.18%	1.159%
481	20.732	20.724	20.742	VV	301160	3126574	19.11%	0.291%
482	20.746	20.742	20.760	VV	290113	2965062	18.12%	0.276%
483	20.784	20.760	20.804	VV	308071	7661585	46.82%	0.713%
484	20.814	20.804	20.825	VV	279377	3449839	21.08%	0.321%
485	20.832	20.825	20.837	VV	281291	2025005	12.38%	0.188%
486	20.846	20.837	20.860	VV	284091	3736349	22.83%	0.348%
487	20.869	20.860	20.875	VV	291480	2451825	14.98%	0.228%
488	20.876	20.875	20.893	VV	289148	3034254	18.54%	0.282%
489	20.902	20.893	20.915	VV	274512	3507194	21.43%	0.326%
490	20.927	20.915	20.963	VV	285015	7878524	48.15%	0.733%
491	20.968	20.963	20.985	VV	262988	3348799	20.47%	0.312%
492	20.988	20.985	21.001	VV	253583	2530447	15.46%	0.235%
493	21.005	21.001	21.011	VV	256377	1419965	8.68%	0.132%
494	21.027	21.011	21.035	VV	254533	3612391	22.08%	0.336%
495	21.039	21.035	21.053	VV	236512	2459180	15.03%	0.229%
496	21.061	21.053	21.073	VV	247196	2925430	17.88%	0.272%
497	21.079	21.073	21.084	VV	245508	1512033	9.24%	0.141%
498	21.090	21.084	21.094	VV	246265	1335626	8.16%	0.124%
499	21.099	21.094	21.125	VV	243452	4397824	26.88%	0.409%
500	21.133	21.125	21.137	VV	231141	1616018	9.88%	0.150%
501	21.141	21.137	21.150	VV	228425	1646889	10.07%	0.153%
502	21.161	21.150	21.164	VV	220149	1911170	11.68%	0.178%
503	21.168	21.164	21.185	VV	225917	2680608	16.38%	0.249%
504	21.196	21.185	21.202	VV	227322	2153932	13.16%	0.200%
505	21.206	21.202	21.222	VV	231810	2733161	16.70%	0.254%
506	21.227	21.222	21.238	VV	226090	2078356	12.70%	0.193%
507	21.258	21.238	21.290	VV	229875	6837774	41.79%	0.636%
508	21.294	21.290	21.315	VV	220054	3248144	19.85%	0.302%
509	21.319	21.315	21.334	VV	205821	2270596	13.88%	0.211%

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rteres

510	21.337	21.334	21.347	VV	202965	1539423	9.41%	0.143%
511	21.354	21.347	21.365	VV	194877	2085379	12	
512	21.374	21.365	21.383	VV	195608	1965790	12	
513	21.390	21.383	21.405	VV	192154	2350653	14	
514	21.408	21.405	21.419	VV	187550	1589347	9	
515	21.441	21.419	21.457	VV	179311	3942152	24	
516	21.494	21.457	21.534	VV	235213	8806940	53.82%	0.819%
517	21.545	21.534	21.551	VV	161063	1570530	9.60%	0.146%
518	21.555	21.551	21.584	VV	162854	2969677	18.15%	0.276%
519	21.588	21.584	21.594	VV	148486	849592	5.19%	0.079%
520	21.597	21.594	21.623	VV	151667	2530318	15.46%	0.235%
521	21.627	21.623	21.631	VV	143263	668474	4.09%	0.062%
522	21.636	21.631	21.649	VV	140030	1459462	8.92%	0.136%
523	21.652	21.649	21.673	VV	141185	1976942	12.08%	0.184%
524	21.677	21.673	21.700	VV	142254	2139357	13.07%	0.199%
525	21.716	21.700	21.730	VV	133521	2238138	13.68%	0.208%
526	21.745	21.730	21.769	VV	130931	2836514	17.34%	0.264%
527	21.774	21.769	21.788	VV	119496	1290134	7.88%	0.120%
528	21.794	21.788	21.810	VV	111876	1419302	8.67%	0.132%
529	21.813	21.810	21.835	VV	109771	1604508	9.81%	0.149%
530	21.839	21.835	21.874	VV	104069	2195979	13.42%	0.204%
531	21.875	21.874	21.885	VV	95071	628842	3.84%	0.058%
532	21.898	21.885	21.917	VV	94675	1676934	10.25%	0.156%
533	21.922	21.917	21.930	VV	89203	636543	3.89%	0.059%
534	21.932	21.930	21.938	VV	91354	436204	2.67%	0.041%
535	21.941	21.938	21.946	VV	85929	413798	2.53%	0.038%
536	21.957	21.946	21.962	VV	91722	837450	5.12%	0.078%
537	21.964	21.962	21.969	VV	92083	353659	2.16%	0.033%
538	21.972	21.969	22.005	VV	95003	1712013	10.46%	0.159%
539	22.009	22.005	22.033	VV	76421	1181084	7.22%	0.110%
540	22.038	22.033	22.043	VV	70356	412616	2.52%	0.038%
541	22.070	22.043	22.100	VV	82932	2607603	15.94%	0.243%
542	22.105	22.100	22.141	VV	83139	1781096	10.89%	0.166%
543	22.148	22.141	22.179	VV	59043	1108441	6.77%	0.103%
544	22.185	22.179	22.203	VV	48733	611873	3.74%	0.057%
545	22.209	22.203	22.230	VV	53251	657695	4.02%	0.061%
546	22.235	22.230	22.243	VV	37053	265203	1.62%	0.025%
547	22.252	22.243	22.270	VV	38737	561215	3.43%	0.052%
548	22.280	22.270	22.298	VV	41292	591001	3.61%	0.055%
549	22.304	22.298	22.325	VV	36577	495461	3.03%	0.046%
550	22.329	22.325	22.355	VV	33189	420286	2.57%	0.039%
551	22.358	22.355	22.370	VV	26438	146844	0.90%	0.014%
552	22.384	22.370	22.388	VV	18761	140159	0.86%	0.013%
553	22.391	22.388	22.396	VV	12966	42264	0.26%	0.004%
554	22.419	22.396	22.425	VV	13000	147186	0.90%	0.014%
555	22.429	22.425	22.450	VV	16211	118414	0.72%	0.011%
556	22.468	22.450	22.472	PV	6288	42751	0.26%	0.004%

Sum of corrected areas: 1075006980

FG070925.M Sat Jul 19 05:32:49 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
50 PPM TRPH STD		FG016329.D	FG071825	N-OCTATRIACONTANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FG016329.D	FG071825	N-TETRACONTANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01		FG016331.D	FG071825	TETRACOSANE-d50 (SURROGA	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
I.BLK		FG016335.D	FG071825	TETRACOSANE-d50 (SURROGA	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
PB168895BS		FG016338.D	FG071825	N-DOTRIACONTANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
PB168895BS		FG016338.D	FG071825	N-TETRATRIACONTANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MS		FG016339.D	FG071825	N-DOCOSANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MS		FG016339.D	FG071825	N-EICOSANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MS		FG016339.D	FG071825	N-HEXACOSANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MS		FG016339.D	FG071825	N-HEXATRIACONTANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MS		FG016339.D	FG071825	N-OCTACOSANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MS		FG016339.D	FG071825	N-OCTATRIACONTANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MS		FG016339.D	FG071825	N-TETRACONTANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MS		FG016339.D	FG071825	N-TETRACOSANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MS		FG016339.D	FG071825	N-TRIACONTANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MS		FG016339.D	FG071825	TETRACOSANE-d50 (SURROGA	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MSD		FG016340.D	FG071825	N-DOCOSANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MSD		FG016340.D	FG071825	N-DOTRIACONTANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MSD		FG016340.D	FG071825	N-EICOSANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MSD		FG016340.D	FG071825	N-HEXACOSANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MSD		FG016340.D	FG071825	N-HEXATRIACONTANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MSD		FG016340.D	FG071825	N-OCTATRIACONTANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly

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Manual Integration Report

Q2592-01MSD		FG016340.D	FG071825	N-TETRATRIACONTANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MSD		FG016340.D	FG071825	N-TRIACONTANE	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly
Q2592-01MSD		FG016340.D	FG071825	TETRACOSANE-d50 (SURROGA	mohammad	7/23/2025 1:32:45 AM	Peak Integrated by Software incorrectly

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Fax : 908 789 8922

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG070925

Review By	yogesh	Review On	7/9/2025 12:27:07 PM		
Supervise By	mohammad	Supervise On	7/11/2025 1:37:09 AM		
SubDirectory	FG070925	HP Acquire Method		HP Processing Method	FG070925

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	FG016262.D	09 Jul 2025 09:03	YP\AJ	Ok
2	I.BLK	FG016263.D	09 Jul 2025 09:32	YP\AJ	Ok
3	100 TRPH STD	FG016264.D	09 Jul 2025 10:02	YP\AJ	Ok
4	50 TRPH STD	FG016265.D	09 Jul 2025 11:05	YP\AJ	Ok
5	20 TRPH STD	FG016266.D	09 Jul 2025 11:34	YP\AJ	Ok
6	10 TRPH STD	FG016267.D	09 Jul 2025 12:04	YP\AJ	Ok
7	5 TRPH STD	FG016268.D	09 Jul 2025 12:34	YP\AJ	Ok
8	FG070925ICV	FG016269.D	09 Jul 2025 13:04	YP\AJ	Ok

M : Manual Integration

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Fax : 908 789 8922

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG071825

Review By	yogesh	Review On	7/18/2025 10:25:55 AM		
Supervise By	mohammad	Supervise On	7/23/2025 1:32:45 AM		
SubDirectory	FG071825	HP Acquire Method		HP Processing Method	FG070925

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	FG016327.D	18 Jul 2025 08:09	YP\AJ	Ok
2	I.BLK	FG016328.D	18 Jul 2025 08:55	YP\AJ	Ok
3	50 PPM TRPH STD	FG016329.D	18 Jul 2025 09:24	YP\AJ	Ok,M
4	RT MARKER	FG016330.D	18 Jul 2025 09:56	YP\AJ	Ok
5	Q2592-01	FG016331.D	18 Jul 2025 10:26	YP\AJ	Dilution
6	Q2592-01	FG016332.D	18 Jul 2025 10:55	YP\AJ	Ok
7	Q2618-01	FG016333.D	18 Jul 2025 11:24	YP\AJ	Dilution
8	Q2618-01	FG016334.D	18 Jul 2025 11:54	YP\AJ	Ok
9	I.BLK	FG016335.D	18 Jul 2025 12:24	YP\AJ	Ok,M
10	50 PPM TRPH STD	FG016336.D	18 Jul 2025 12:53	YP\AJ	Ok
11	PB168895BL	FG016337.D	18 Jul 2025 13:23	YP\AJ	Ok
12	PB168895BS	FG016338.D	18 Jul 2025 13:52	YP\AJ	Ok,M
13	Q2592-01MS	FG016339.D	18 Jul 2025 14:22	YP\AJ	Ok,M
14	Q2592-01MSD	FG016340.D	18 Jul 2025 14:52	YP\AJ	Ok,M
15	I.BLK	FG016341.D	18 Jul 2025 15:21	YP\AJ	Ok
16	50 PPM TRPH STD	FG016342.D	18 Jul 2025 15:51	YP\AJ	Ok

M : Manual Integration

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Fax : 908 789 8922

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG070925

Review By	yogesh	Review On	7/9/2025 12:27:07 PM		
Supervise By	mohammad	Supervise On	7/11/2025 1:37:09 AM		
SubDirectory	FG070925	HP Acquire Method		HP Processing Method	FG070925

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		FG016262.D	09 Jul 2025 09:03		YP\AJ	Ok
2	I.BLK		FG016263.D	09 Jul 2025 09:32		YP\AJ	Ok
3	100 TRPH STD		FG016264.D	09 Jul 2025 10:02		YP\AJ	Ok
4	50 TRPH STD		FG016265.D	09 Jul 2025 11:05		YP\AJ	Ok
5	20 TRPH STD		FG016266.D	09 Jul 2025 11:34		YP\AJ	Ok
6	10 TRPH STD		FG016267.D	09 Jul 2025 12:04		YP\AJ	Ok
7	5 TRPH STD		FG016268.D	09 Jul 2025 12:34		YP\AJ	Ok
8	FG070925ICV		FG016269.D	09 Jul 2025 13:04		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 # FG071825

Review By	yogesh	Review On	7/18/2025 10:25:55 AM		
Supervise By	mohammad	Supervise On	7/23/2025 1:32:45 AM		
SubDirectory	FG071825	HP Acquire Method		HP Processing Method	FG070925

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		FG016327.D	18 Jul 2025 08:09		YP\AJ	Ok
2	I.BLK		FG016328.D	18 Jul 2025 08:55		YP\AJ	Ok
3	50 PPM TRPH STD		FG016329.D	18 Jul 2025 09:24		YP\AJ	Ok,M
4	RT MARKER		FG016330.D	18 Jul 2025 09:56		YP\AJ	Ok
5	Q2592-01		FG016331.D	18 Jul 2025 10:26	Need 25X	YP\AJ	Dilution
6	Q2592-01		FG016332.D	18 Jul 2025 10:55		YP\AJ	Ok
7	Q2618-01		FG016333.D	18 Jul 2025 11:24	Need 5X	YP\AJ	Dilution
8	Q2618-01		FG016334.D	18 Jul 2025 11:54		YP\AJ	Ok
9	I.BLK		FG016335.D	18 Jul 2025 12:24		YP\AJ	Ok,M
10	50 PPM TRPH STD		FG016336.D	18 Jul 2025 12:53		YP\AJ	Ok
11	PB168895BL		FG016337.D	18 Jul 2025 13:23		YP\AJ	Ok
12	PB168895BS		FG016338.D	18 Jul 2025 13:52		YP\AJ	Ok,M
13	Q2592-01MS		FG016339.D	18 Jul 2025 14:22		YP\AJ	Ok,M
14	Q2592-01MSD		FG016340.D	18 Jul 2025 14:52		YP\AJ	Ok,M
15	I.BLK		FG016341.D	18 Jul 2025 15:21		YP\AJ	Ok
16	50 PPM TRPH STD		FG016342.D	18 Jul 2025 15:51		YP\AJ	Ok

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 7/16/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 07/15/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:25
Out Date: 07/16/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC: LB136481

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
Q2592-01	WC-SOIL-20250711	1	1.15	10.84	11.99	9.46	76.7	
Q2605-01	V908	2	1.13	10.70	11.83	11.13	93.5	
Q2605-02	VB16135	3	1.14	10.66	11.8	11.09	93.3	
Q2605-03	VB15061	4	1.18	10.55	11.73	10.99	93.0	
Q2605-04	V897	5	1.17	10.79	11.96	11.76	98.1	
Q2607-01	VNJ-257-1	6	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2607-02	VNJ-257-2	7	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2607-03	ETGI-359-1	8	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2607-04	ETGI-359-2	9	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2608-04	60271	10	1.14	10.65	11.79	9.61	79.5	
Q2609-01	710-ABC	11	1.18	10.37	11.55	11.5	99.5	
Q2609-03	710-C	12	1.13	10.29	11.42	11.37	99.5	
Q2609-05	709-AB	13	1.16	10.26	11.42	11.39	99.7	
Q2609-07	709-A	14	1.14	10.28	11.42	11.4	99.8	
Q2610-01	2010	15	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2610-02	2011	16	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2610-03	2012	17	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2610-04	2013	18	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2610-05	2014	19	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2611-01	EO-02-071525	20	1.16	10.17	11.33	10.83	95.1	
Q2611-02	EO-02-071525-E2	21	1.14	10.39	11.53	10.68	91.8	
Q2612-01	OR-02-071525	22	1.18	10.49	11.67	10.1	85.0	
Q2612-02	OR-02-071525-E2	23	1.12	10.61	11.73	9.89	82.7	
Q2614-01	HR-MCN-COMP-01	24	1.15	10.70	11.85	9.61	79.1	
Q2614-02	HR-MCN-VOC-01	25	1.15	10.29	11.44	9.14	77.6	
Q2614-03	HR-MCN-01	26	1.11	10.71	11.82	9.35	76.9	
Q2614-04	HR-MCN-02	27	1.19	10.40	11.59	8.94	74.5	
Q2614-05	HR-MCN-03	28	1.14	10.58	11.72	9.89	82.7	

Alliance TECHNICAL GROUP

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 7/16/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 07/15/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:25
Out Date: 07/16/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC: LB136481

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

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

Q2592-TPH GC

WORKLIST(Hardcopy Internal Chain)

JD 136481

WorkList Name : %1-071525 **WorkList ID :** 190721 **Department :** Wet-Chemistry **Date :** 07-15-2025 08:40:15

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2592-01	WC-SOIL-20250711	Solid	Percent Solids	Cool 4 deg C	PARS02	D51	07/11/2025	Chemtech -SO
Q2605-01	V908	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2605-02	VB16135	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2605-03	VB15061	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2605-04	V897	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2607-01	VNJ-257-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2607-02	VNJ-257-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2607-03	ETGI-359-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2607-04	ETGI-359-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2608-04	60271	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2609-01	710-ABC	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2609-03	710-C	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2609-05	709-ABC	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2609-07	709-C	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2610-01	2010	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2610-02	2011	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2610-03	2012	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2610-04	2013	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2610-05	2014	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2611-01	EO-02-071525	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2611-02	EO-02-071525-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	07/15/2025	Chemtech -SO

Date/Time 07-15-25 1515

Raw Sample Received by: JR WC

Raw Sample Relinquished by: SM

Date/Time 07-15-25 1730

Raw Sample Received by: SM

Raw Sample Relinquished by: JR WC

WORKLIST(Hardcopy Internal Chain)

VB 136481

WorkList Name : %1-071525 **WorkList ID :** 190721 **Department :** Wet-Chemistry **Date :** 07-15-2025 08:40:15

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2612-01	OR-02-071525	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	07/15/2025	Chemtech -SO
Q2612-02	OR-02-071525-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	07/15/2025	Chemtech -SO
Q2614-01	HR-MCN-COMP-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2614-02	HR-MCN-VOC-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2614-03	HR-MCN-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2614-04	HR-MCN-02	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO
Q2614-05	HR-MCN-03	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/15/2025	Chemtech -SO

Date/Time 07.15.25 15:15

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature] SM

Date/Time 07.15.25 17:30

Raw Sample Received by: [signature] SM

Raw Sample Relinquished by: [signature]

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB168895

SOP ID:	M3541-ASE Extraction-15				
Clean Up SOP #:	N/A			**Extraction Start Date :**	07/17/2025
Matrix :	Solid			**Extraction Start Time :**	08:25
Weigh By:	EH	**Extraction By:**	RJ	**Extraction End Date :**	07/17/2025
Balance check:	RJ	**Filter By:**	RJ	**Extraction End Time :**	11:25
Balance ID:	EX-SC-2	**pH Meter ID:**	N/A	**Concentration By:**	EH
pH Strip Lot#:	N/A	**Hood ID:**	3,7	**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	PP24583
Surrogate	1.0ML	20 PPM	PP24596
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	EP2626
Baked Na2SO4	N/A	EP2625
Methylene Chloride	N/A	E3954
Sand	N/A	E3951
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	**Envap ID:**	NEVAP-02
KD Bath Temperature:	N/A	**Envap Temperature:**	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
7/17/25	RS (BU-lab)	XP. pest/PLB
11:30	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB168895

Analytical Method: M3541-ASE Extraction-15 **Concentration Date:** 07/17/2025

Sample ID	Client Sample ID	Test	g// mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB168895BL	PB168895BL	TPH GC	30.01	N/A	ritesh	Evelyn	1			U2-1
PB168895BS	PB168895BS	TPH GC	30.03	N/A	ritesh	Evelyn	1			2
Q2592-01	WC-SOIL-20250711	TPH GC	30.05	N/A	ritesh	Evelyn	1	E		3
Q2592-01MS	WC-SOIL-20250711MS	TPH GC	30.06	N/A	ritesh	Evelyn	1	E		4
Q2592-01MSD	WC-SOIL-20250711MSD	TPH GC	30.02	N/A	ritesh	Evelyn	1	E		5
Q2618-01	WASTE	TPH GC	30.10	N/A	ritesh	Evelyn	1			6

RS 7/17

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

Q2592-TPH GC

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q2618 **WorkList ID :** 190782 **Department :** Extraction **Date :** 07-17-2025 08:20:12

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2592-01	WC-SOIL-20250711	Solid	TPH GC	Cool 4 deg C	PARS02	D51	07/11/2025	8015D
Q2618-01	WASTE	Solid	TPH GC	Cool 4 deg C	SCIA01	O11	07/16/2025	8015D

Date/Time 07/17/25 8:20
Raw Sample Received by: RJ (CET-Valley)
Raw Sample Relinquished by:

Date/Time 07/17/25 8:30
Raw Sample Received by:
Raw Sample Relinquished by: RJ (CET-Valley)

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

Prep Standard - Chemical Standard Summary

Order ID : Q2592

Test : TPH GC

Prepbatch ID : PB168895,

Sequence ID/Qc Batch ID: FG071825,

Standard ID :
EP2625,EP2626,PP24467,PP24468,PP24469,PP24470,PP24471,PP24472,PP24473,PP24583,PP24596,

Chemical ID :
E3551,E3926,E3930,E3931,E3949,E3951,E3954,P11951,P11952,P13106,P13108,P13477,P13479,P13483,P13484,P13485,P13486,P13938,P13945,

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	EP2625	07/15/2025	12/04/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 07/15/2025

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	EP2626	07/15/2025	01/15/2026	RUPESHKUMAR SHAH	None	None	Riteshkumar Patel 07/15/2025

FROM 8000.00000ml of E3949 + 8000.00000ml of E3954 = 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
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3609	20 PPM DRO SPIKE SOLUTION (RESTEK)	PP24583	05/16/2025	11/16/2025	Rahul Chavli	None	None	Yogesh Patel 05/22/2025

FROM 0.70000ml of P13945 + 1.30000ml of P13938 + 48.00000ml of E3930 = Final Quantity: 50.000 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
147	20 PPM DRO Surrogate Spike Solution	PP24596	05/20/2025	11/20/2025	Abdul Mirza	None	None	Yogesh Patel 05/22/2025

FROM 1.00000ml of P13483 + 1.00000ml of P13484 + 1.00000ml of P13485 + 1.00000ml of P13486 + 196.00000ml of E3931 = Final Quantity: 200.000 ml

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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 #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	12/04/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A0262002	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-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A0262002	02/20/2026	05/02/2025 / RUPESH	03/09/2025 / RUPESH	E3931

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	04/18/2027	07/08/2025 / RITESHKUMAR	07/03/2025 / RUPESH	E3949

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)	25A2756718	12/31/2028	07/09/2025 / RUPESH	04/28/2020 / RUPESH	E3951

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-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25B1862001	03/19/2026	07/14/2025 / RUPESH	06/11/2025 / RUPESH	E3954

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	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

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

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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	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	11/20/2025	05/20/2025 / Abdul	07/24/2024 / yogesh	P13483

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	11/20/2025	05/20/2025 / Abdul	07/24/2024 / yogesh	P13484

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	11/20/2025	05/20/2025 / Abdul	07/24/2024 / yogesh	P13485

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	11/20/2025	05/20/2025 / Abdul	07/24/2024 / yogesh	P13486

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0217113	11/16/2025	05/16/2025 / Rahul	03/07/2025 / yogesh	P13938

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	A0217113	11/16/2025	05/16/2025 / Rahul	03/07/2025 / yogesh	P13945

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.

RG-02-01, Ed. 3

Recd. by RP on 7/24/23 E3551

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

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.: 24H2762008
Manufactured Date: 2024-04-18
Expiration Date:2027-04-18
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected forwater)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 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 %	<0.1 %
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

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

Read on 7/2/25

E3949

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

VWR® BDH® CHEMICALS

Certificate of Analysis

Material	BDH9274-2.5KG
Material Description	BDH SAND STDD OTTAWA W+I 2.5KG
Grade	NOT APPLICABLE
Batch	25A2756718
Reassay Date	12/31/2028
CAS Number	14808-60-7
Molecular Formula	SiO2
Molecular Mass	60.09
Date of Manufacture	12/05/2024
Storage	Room Temperature

Characteristics	Specifications	Measured Values
Appearance	Beige granules.	Beige granules.
Moisture	<= 0.1 %	0.1 %
Particle Size 30-40 mesh	>= 80 %	99 %
CUSTOMER PART # BDH9274-2.5KG		

Received on 7/9/25.

E3951

Internal ID #: 793

Signature	Additional Information
We certify that this batch conforms to the specifications listed above.	Analysis may have been rounded to significant digits in specification limits
This document has been electronically produced and is valid without a signature.	Product meets analytical specifications of the grades listed.
Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA	

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

avantor™ | J.T.Baker

Material No.: 9266-A4
Batch No.: 25B1862001
Manufactured Date: 2024-12-18
Expiration Date:2026-03-19
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.3 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

RS 7/14/25

E3954

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

RESTEK
110 Benner Circle
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

ilac-MRA

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
7.6
07/...

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)

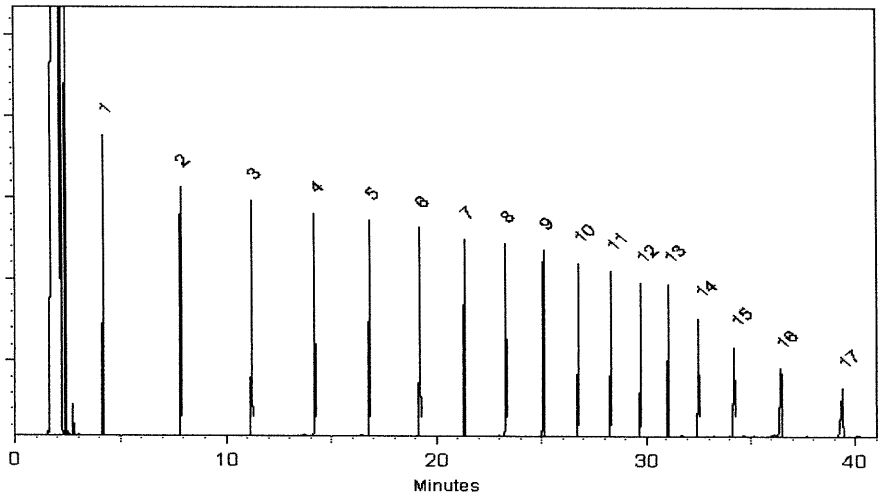
Carrier Gas:
hydrogen-constant pressure 10 psi.

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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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
7.6
07/...

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)

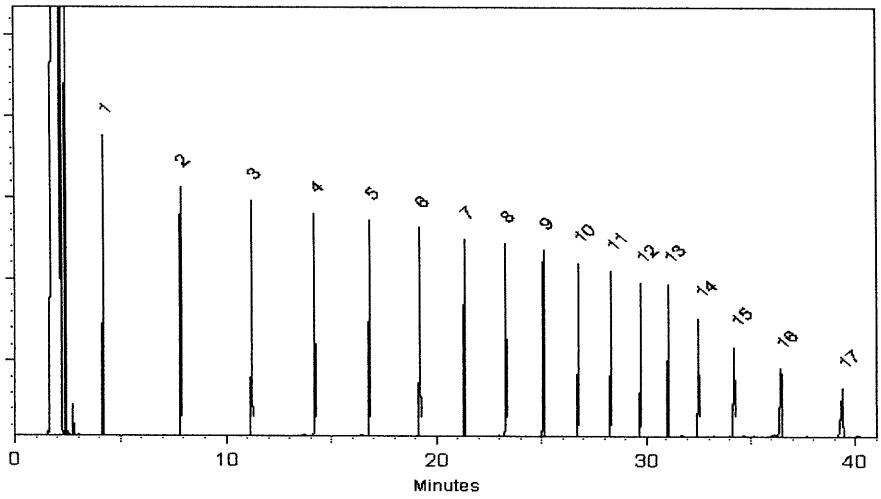
Carrier Gas:
hydrogen-constant pressure 10 psi.

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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CERTIFIED REFERENCE MATERIAL

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

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.)

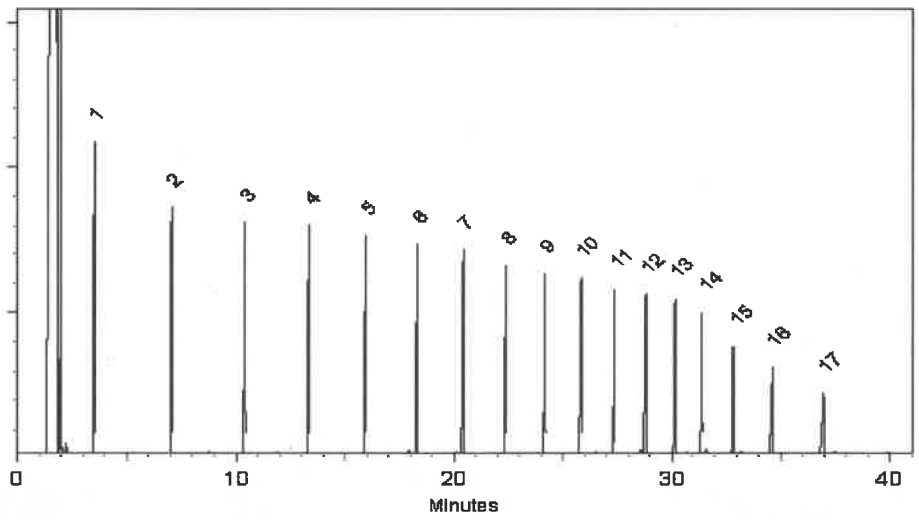
Inj. Temp:
250°C

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.

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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

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

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.)

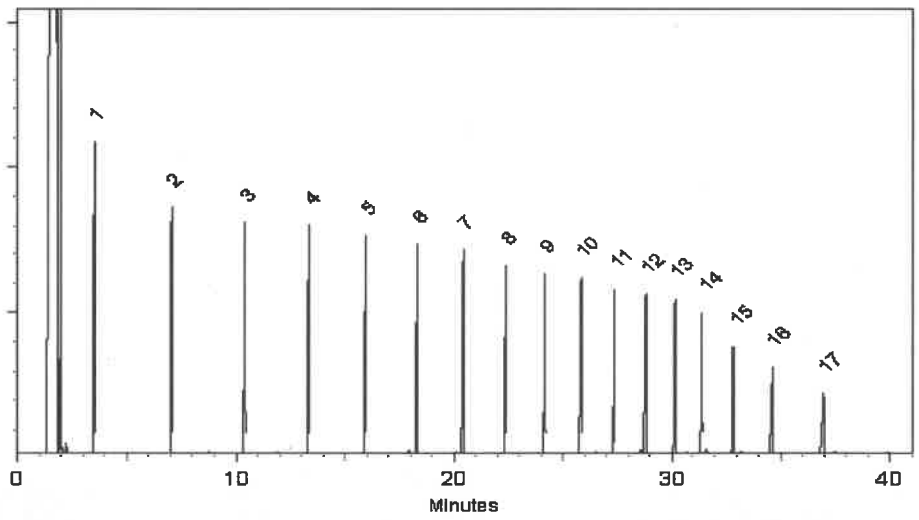
Inj. Temp:
250°C

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.

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 # → Part Number: 10009R
Lot # → Lot Number: 070716
Description: CLP Priority Pollutant Internal Standards GC/MS Calibration - 6 components
Shelf Life → Expiration Date: 070721
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 4000
NIST Test ID#: 822-275872-11 — 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 500.0 — 0.058 Flask Uncertainty

Solvent(s): Methylene chloride — Lot# 78782

Formulated By: Paul Barron — 070716 DATE (Formulator)
Reviewed By: Pedro L. Rentas — 070716 DATE (Reviewer)

Target Compounds → / Actual Concentration / Uncertainty Values / Health & Safety

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)	CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-18468/07287CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	orl-rat 500mg/kg
2. Naphthalene-d8	223	PR-23320/031612NP1	4000	99	0.2	2.02032	2.02084	4001.0	18.2	1146-65-2	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	18.2	15067-26-2	N/A	ipr-rat 600mg/kg
4. Phenanthrene-d10	249	PR-23065/081711PN1	4000	98	0.2	2.04093	2.04138	4000.8	16.4	1517-22-2	N/A	N/A
5. Chrysene-d12	92	I-19260	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	98	0.2	2.04093	2.04156	4001.2	16.4	1520-96-3	N/A	N/A

MSDS Information (Solvent Safety Info. On Attached pg.)

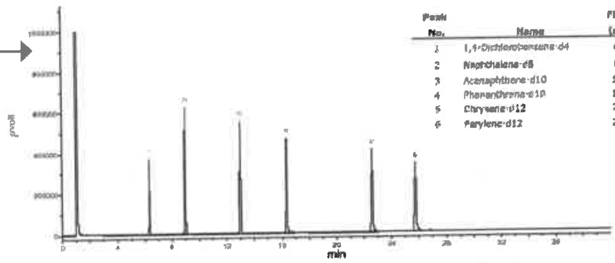
Method of Analysis →

Run 35, "P10009R L070716 (4000µg/mL in MeCl2)"

Run Length: 40.00 min, 23998 points at 10 points/second.
Created: Sat, Jul 9, 2016 at 1:54:53 PM.
Sampled: Sequence "070616-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) =360 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 = eDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 uL, Range = 4

Qualitative / Quantitative →



Peak No.	Name	FID RT (min.)
1	1,4-Dichlorobenzene-d4	6.34
2	Naphthalene-d8	8.96
3	Acenaphthene-d10	12.97
4	Phenanthrene-d10	16.37
5	Chrysene-d12	22.62
6	Perylene-d12	25.75

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").

Absolute Standards, Inc. — P# 10009R L# 070716
Supelco, Inc. — P# 47906 L# A55669

3rd Party Comparison →

Analyte	Sup/Abs Dev (%) (Sup/Abs) X 100-100
1,4-Dichlorobenzene-d4	2.55
Naphthalene-d8	2.43
Acenaphthene-d10	2.74
Phenanthrene-d10	0.05
Chrysene-d12	1.92
Perylene-d12	-1.73
Total	-0.56

Part # **10009R** Lot # 041219 — 1 of 2 — Printed: 5/8/2019, 12:56:50 PM

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

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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

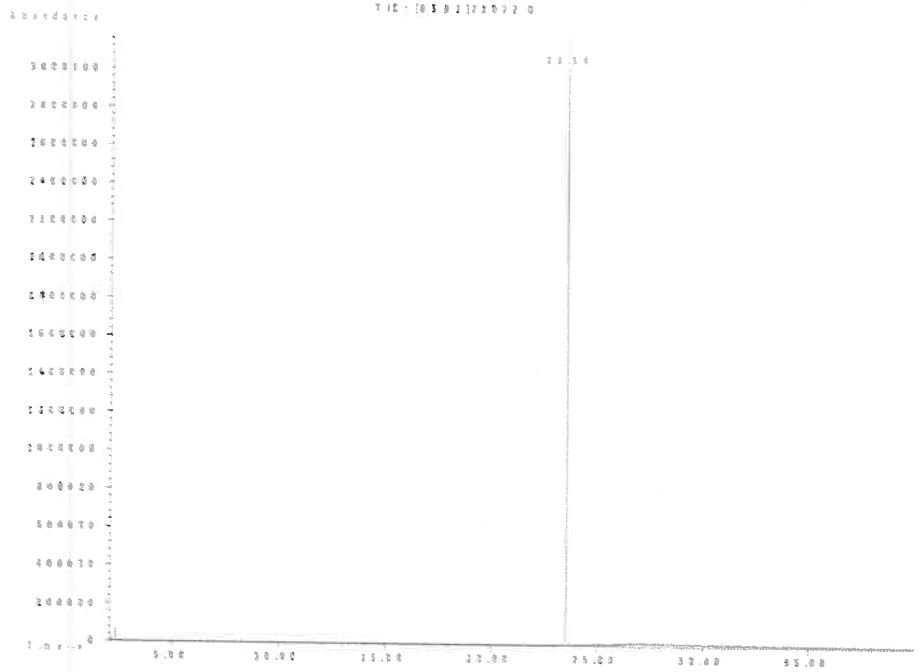
P13477 → P13496 } X.P. 07/24/24

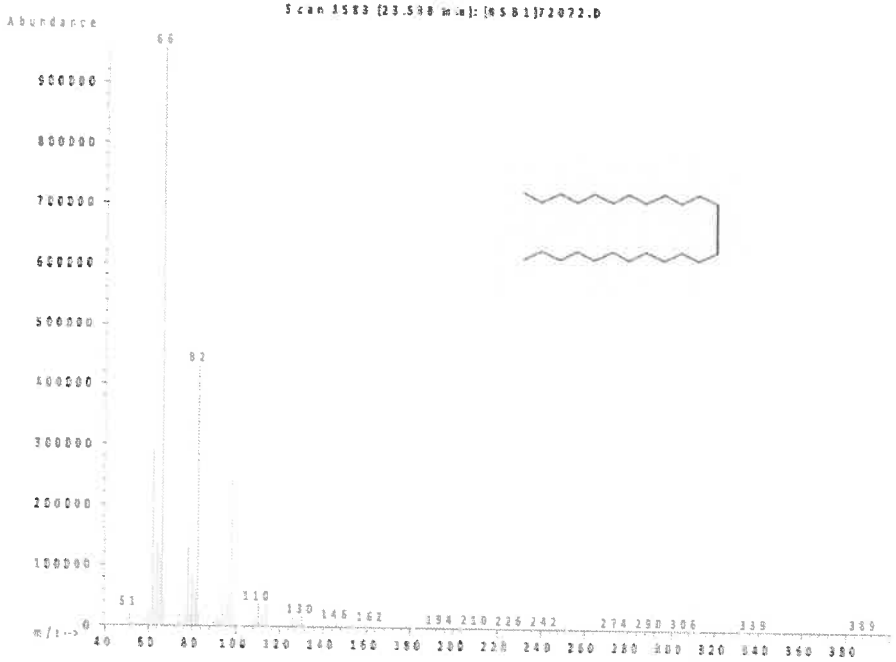
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 200.0 0.058 Flask Uncertainty

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

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

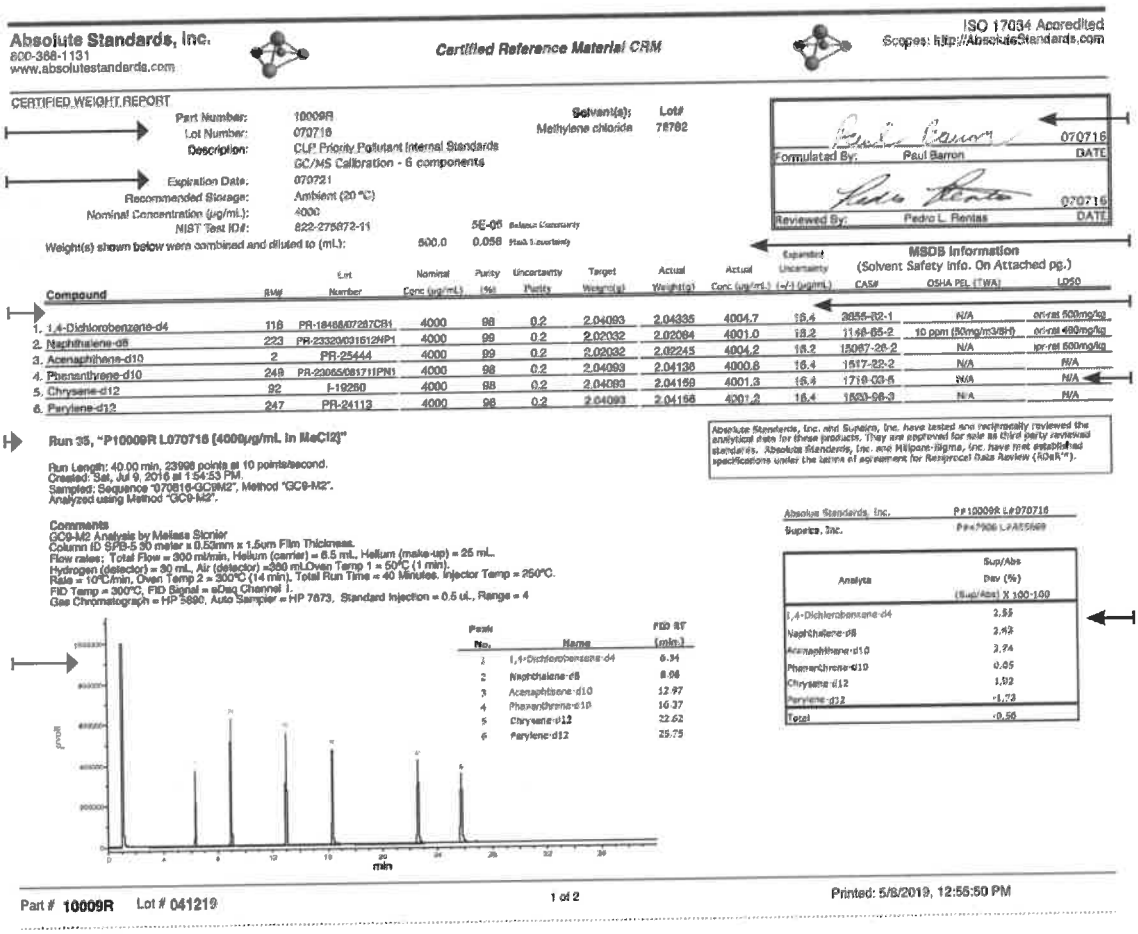
Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

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.
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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

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

Weight(s) shown below were combined and diluted to (mL): 500.0 | 5E-05 Balance Uncertainty | 0.058 Flask Uncertainty

MSDS Information (Solvent Safety Info. On Attached pg.)

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)	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-233203031612NP1	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-230605081711PN1	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 MeCl2)"

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	1.92
Perylene-d12	-1.73
Total	-0.56

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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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

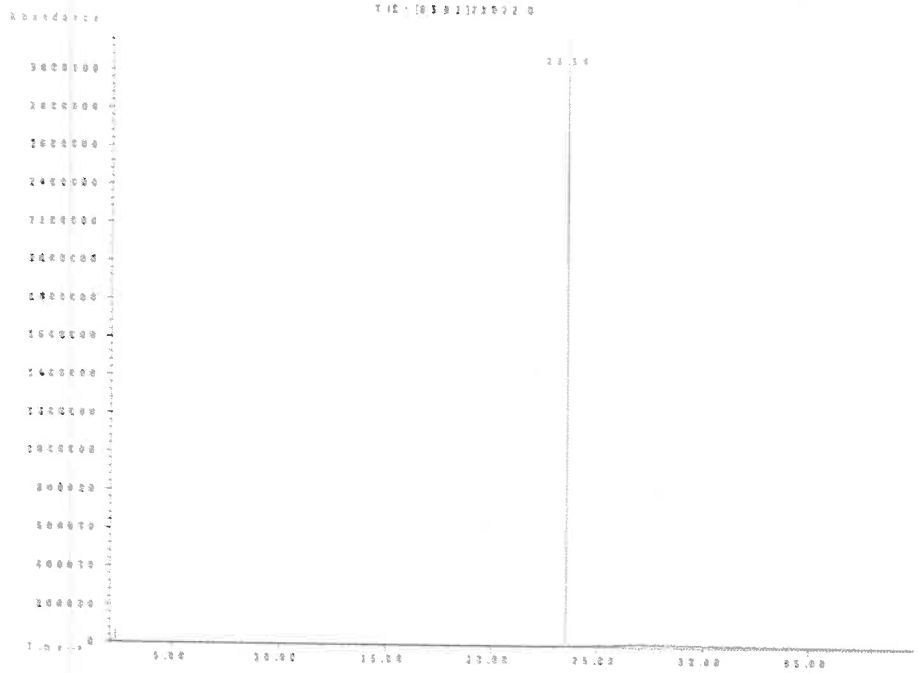
P13477 → P13496 } X.P. 07/24/24

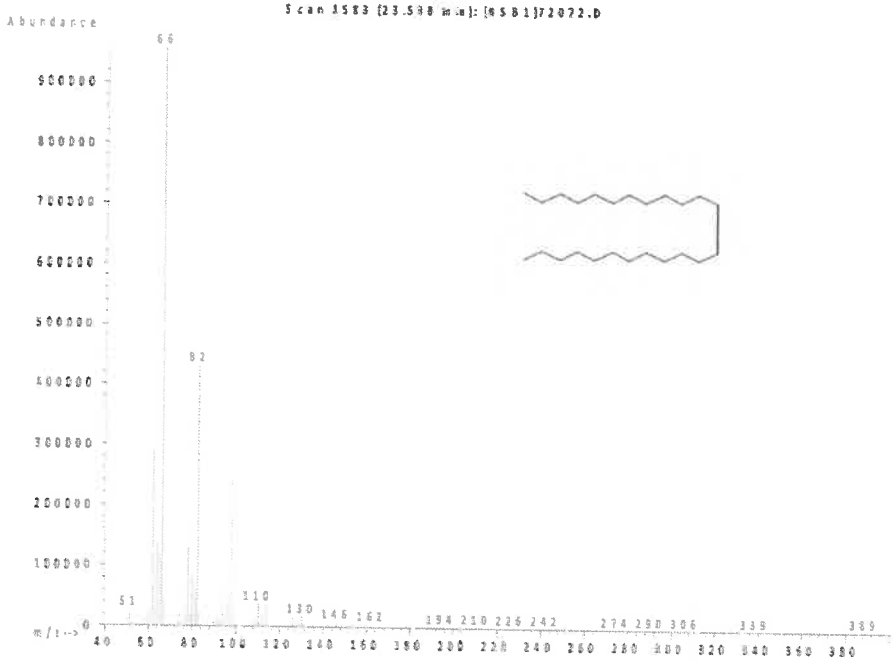
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 200.0 0.058 Flask Uncertainty

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

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)

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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 # / Lot # → Part Number: 10009R
Lot Number: 070716
Description: CLP Priority Pollutant Internal Standards GC/MS Calibration - 6 components
Shelf Life → Expiration Date: 070721
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 4000
NIST Test ID#: 822-275872-11 — 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 500.0 — 0.058 Flask Uncertainty

Solvent(s): Methylene chloride — Lot# 78782

Formulator / Reviewer →
Formulated By: Paul Barron — 070716 DATE
Reviewed By: Pedro L. Rentas — 070716 DATE

Actual Concentration → Uncertainty Values → Health & Safety →

MSDS Information (Solvent Safety Info. On Attached pg.)

Target Compounds →

	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)	CAS#	OSHA PEL (TWA)	LD50
1.	1,4-Dichlorobenzene-d4	118	PR-18468/07287CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	orl-rat 500mg/kg
2.	Naphthalene-d8	223	PR-23320/031612HP1	4000	99	0.2	2.02032	2.02084	4001.0	18.2	1146-65-2	10 ppm (50mg/m3/8H)	orl-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 600mg/kg
4.	Phenanthrene-d10	249	PR-23065/081711PN1	4000	98	0.2	2.04093	2.04138	4000.8	16.4	1517-22-2	N/A	N/A
5.	Chrysene-d12	92	I-19260	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	98	0.2	2.04093	2.04156	4001.2	16.4	1520-96-3	N/A	N/A

Method of Analysis →

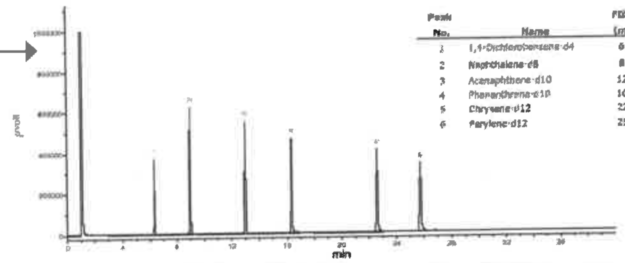
Run 35, "P10009R L070716 (4000µg/mL in MeCl2)"

Run Length: 40.00 min, 23998 points at 10 points/second.
Created: Sat, Jul 9, 2016 at 1:54:53 PM.
Sampled: Sequence "070616-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

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™).

Qualitative Quantitative →



Peak No.	Name	FID RT (min.)
1	1,4-Dichlorobenzene-d4	6.34
2	Naphthalene-d8	8.96
3	Acenaphthene-d10	12.97
4	Phenanthrene-d10	16.37
5	Chrysene-d12	22.62
6	Perylene-d12	25.75

3rd Party Comparison →

Absolute Standards, Inc. — P# 10009R L# 070716
Supelco, Inc. — P# 47906 L# A55669

Analyte	Sup/Abs Dev (%) (Sup/Abs) X 100-100
1,4-Dichlorobenzene-d4	2.55
Naphthalene-d8	2.43
Acenaphthene-d10	2.74
Phenanthrene-d10	0.05
Chrysene-d12	1.92
Perylene-d12	-1.73
Total	-0.56

Part # 10009R Lot # 041219 1 of 2 Printed: 5/8/2019, 12:56:50 PM

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

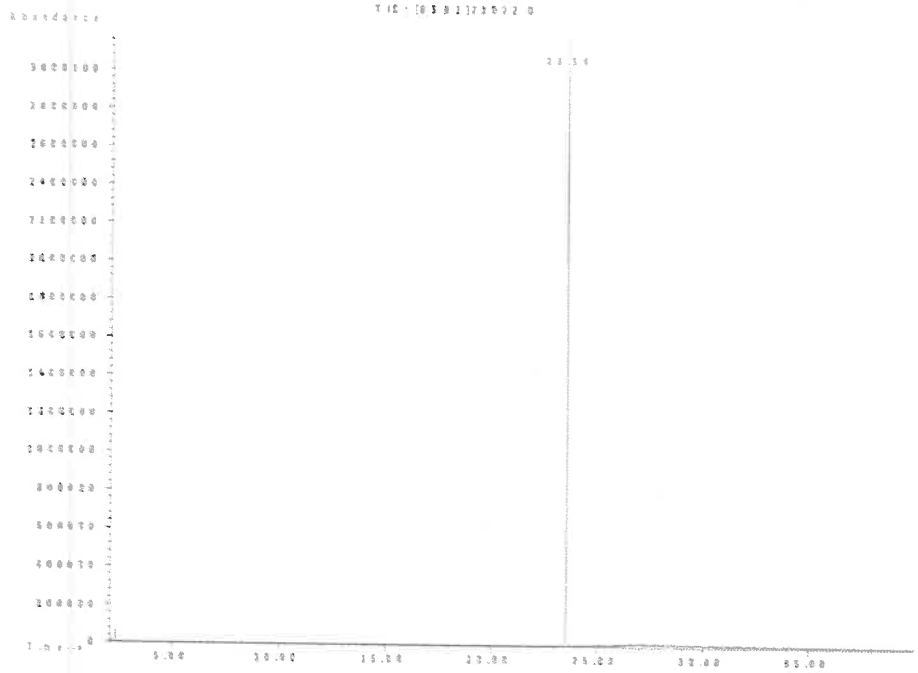
P13477 → P13496 } X.P. 07/24/24

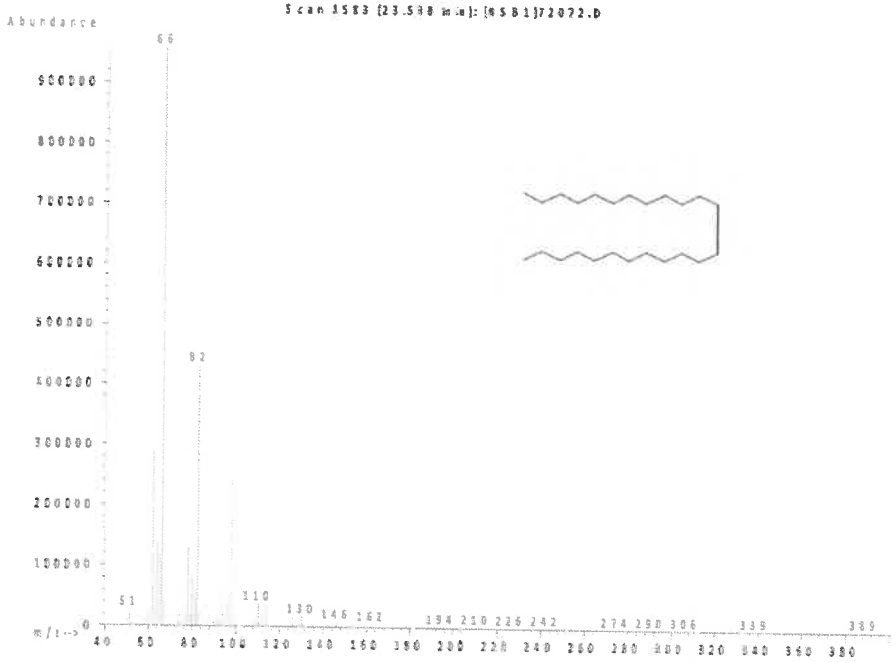
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 200.0 0.058 Flask Uncertainty

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

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
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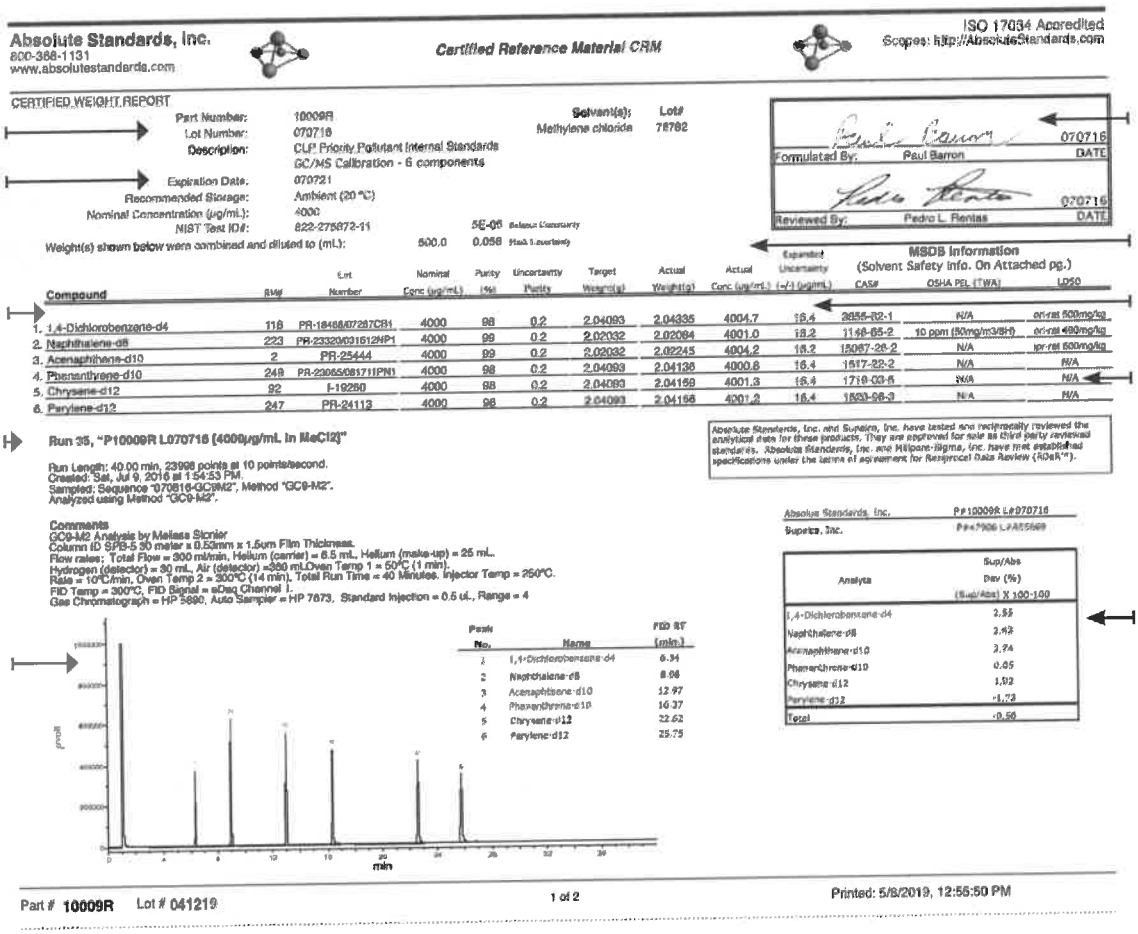
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

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.
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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

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

Weight(s) shown below were combined and diluted to (mL): 500.0 5E-05 Balance Uncertainty 0.056 Flask Uncertainty

MSDS Information (Solvent Safety Info. On Attached pg.)

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)	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-230650/31711PN1	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

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".

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™).

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

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

Part # / Lot # / Shelf Life

Target Compounds

Method of Analysis

Qualitative Quantitative

Formulator Reviewer

Actual Concentration

Uncertainty Values

Health & Safety

3rd Party Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

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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

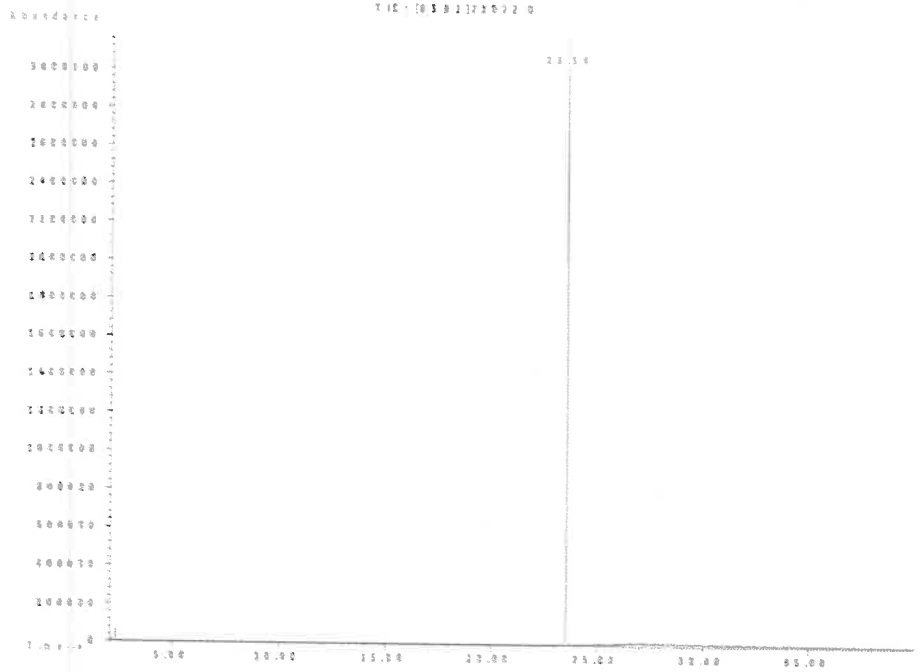
P13477 → P13496 } X.P. 07/24/24

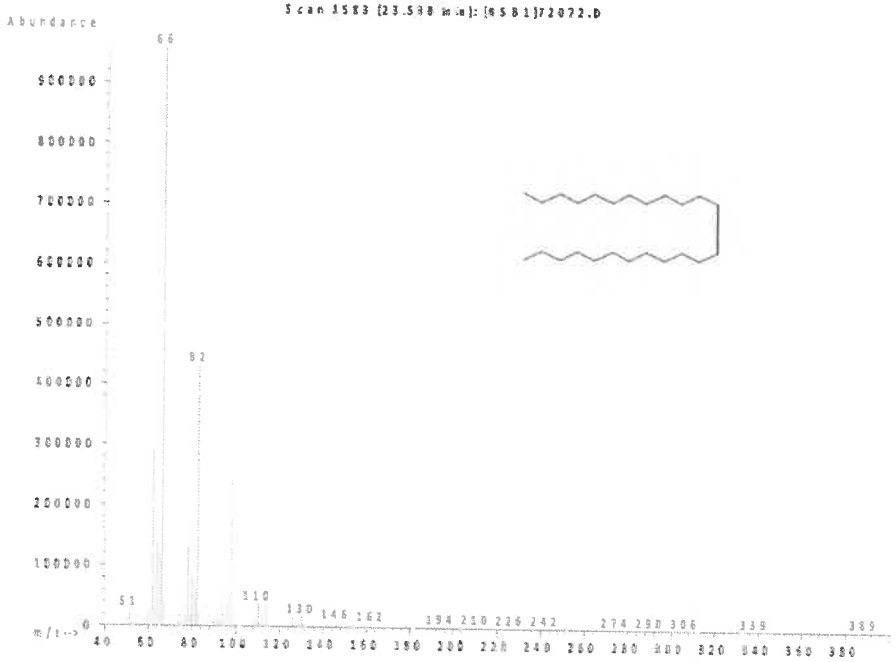
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

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).

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.

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

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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

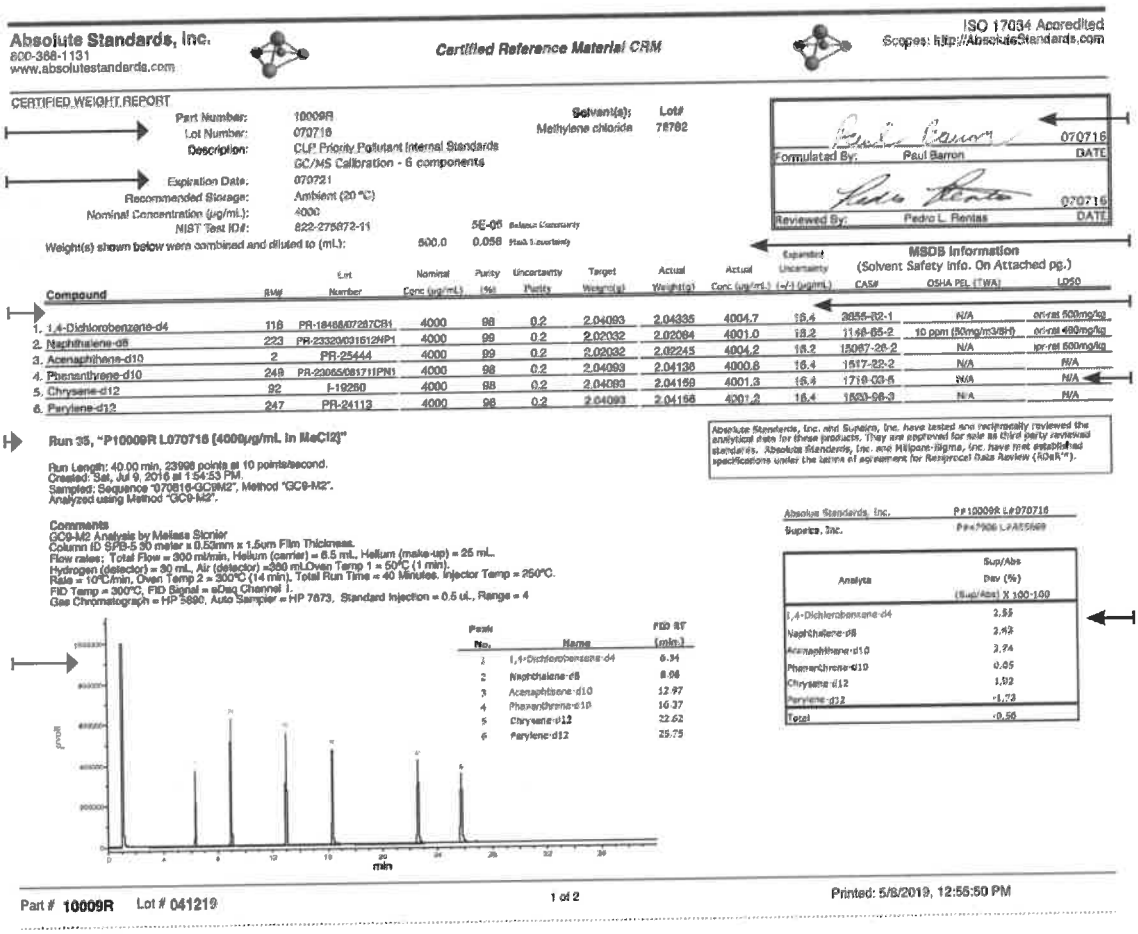
Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

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

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

Weight(s) shown below were combined and diluted to (mL): 500.0 0.058

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-230650/51711PN1	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

Run 35, "P10009R L070716 (4000µg/mL in MeCl2)"

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

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™).

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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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

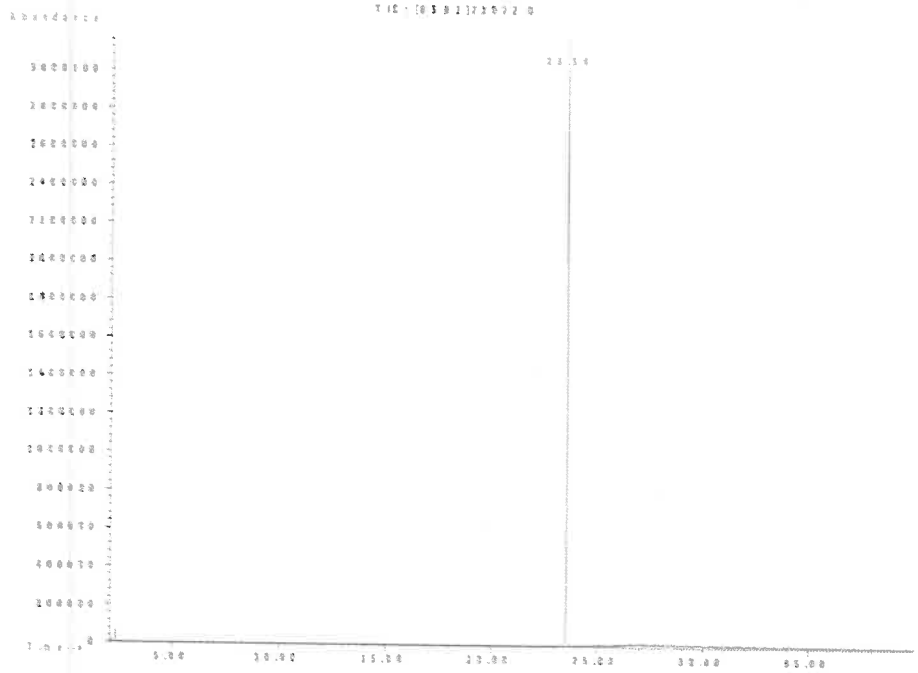
P13477 → P13496 } X.P. 07/24/24

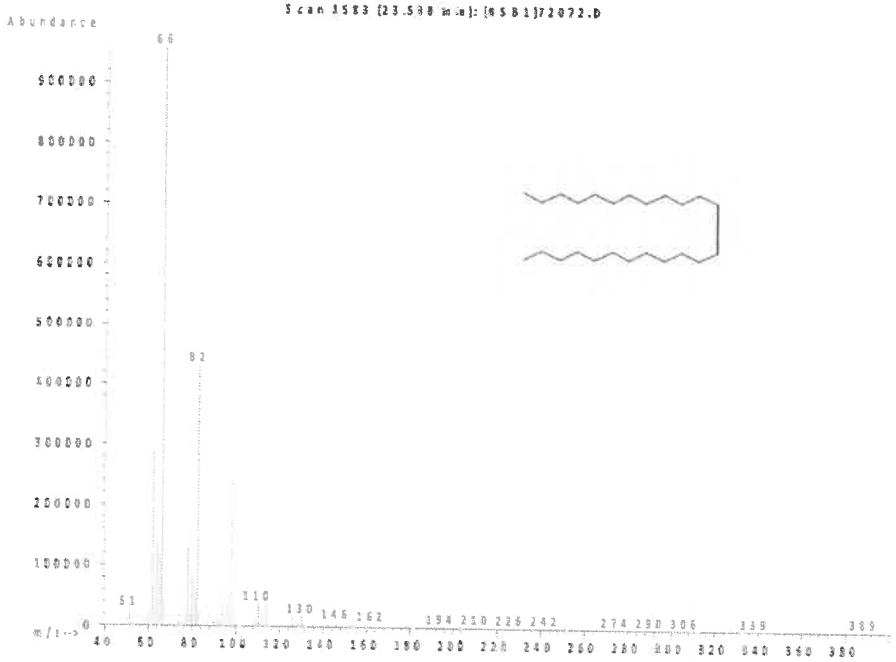
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

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).

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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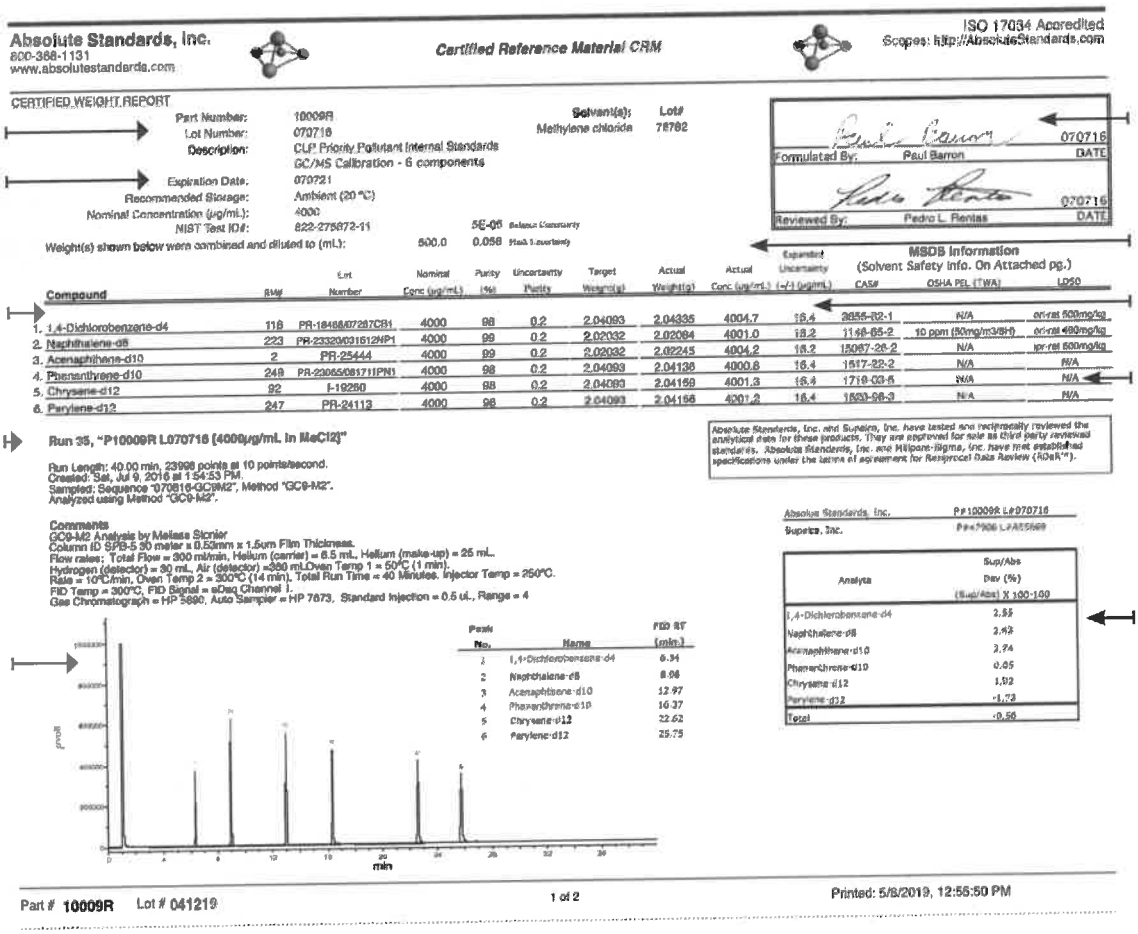
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

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
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

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

Weight(s) shown below were combined and diluted to (mL): 500.0 0.058

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-230650/51711PN1	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

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

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™).

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

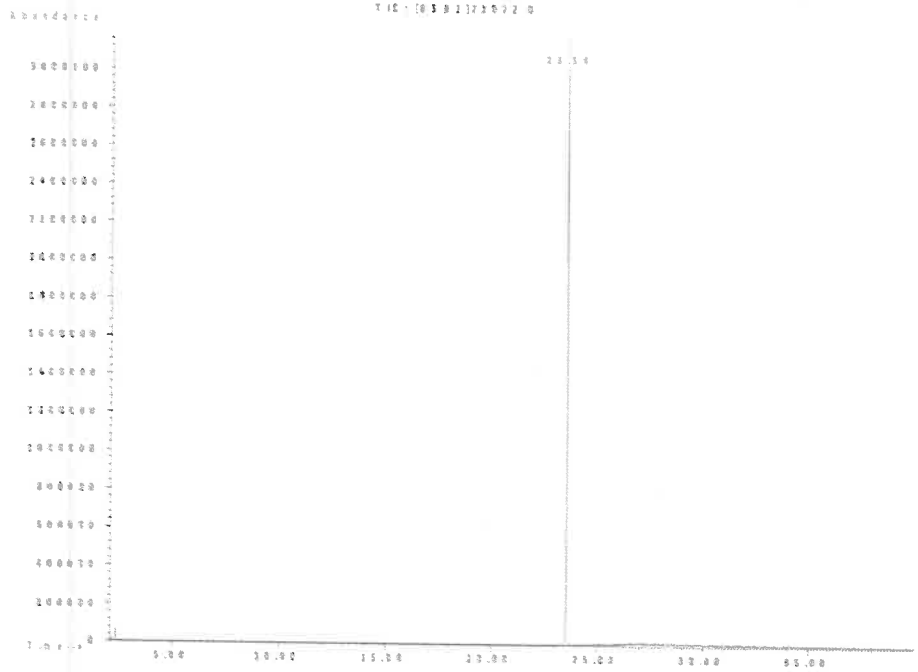
P13477 → P13496 } X.P. 07/24/24

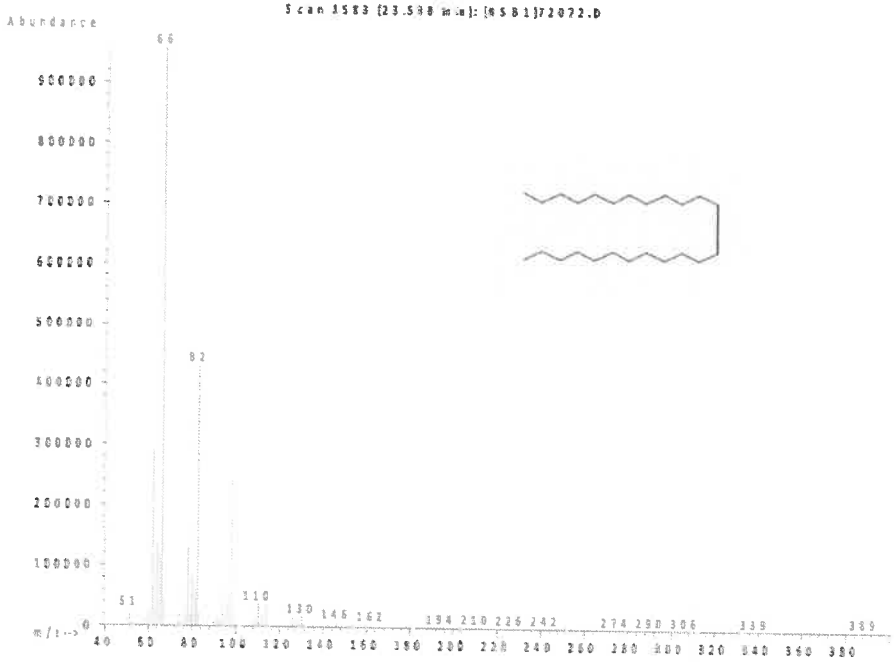
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

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).

RESTEK
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Bellefonte, PA 16823-8812
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Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

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.:** A0217113

P#31937 & P#31946 Y.P. 03/07/25

Description : Florida TRPH Standard

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

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

Expiration Date : October 31, 2031 **Storage:** 25°C nominal

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

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	SHBR0789	99%	502.0 µg/mL	+/- 12.9685
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	501.5 µg/mL	+/- 12.9555
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	502.5 µg/mL	+/- 12.9814
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	500.5 µg/mL	+/- 12.9297
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	500.0 µg/mL	+/- 12.9168
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	500.5 µg/mL	+/- 12.9297
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	500.0 µg/mL	+/- 12.9177
8	n-Docosane (C22)	629-97-0	MKCQ3882	99%	500.5 µg/mL	+/- 12.9297
9	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	500.5 µg/mL	+/- 12.9297
10	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	502.0 µg/mL	+/- 12.9685
11	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	501.0 µg/mL	+/- 12.9426
12	n-Triacontane (C30)	638-68-6	MKCV7007	98%	499.8 µg/mL	+/- 12.9116
13	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	500.0 µg/mL	+/- 12.9168
14	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	501.5 µg/mL	+/- 12.9555
15	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	500.5 µg/mL	+/- 12.9297
16	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	500.2 µg/mL	+/- 12.9209
17	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	503.5 µg/mL	+/- 13.0072

* 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.)

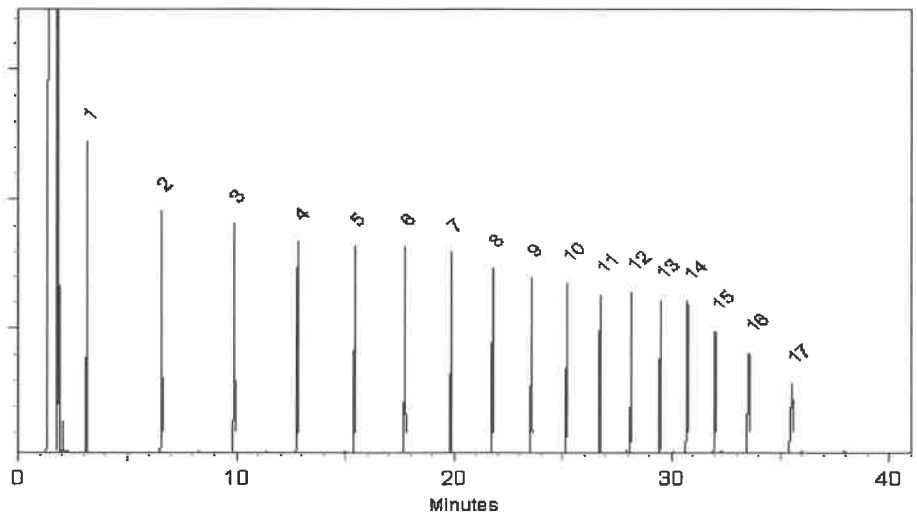
Inj. Temp:
250°C

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.

Josh McCloskey - Operations Technician I

Date Mixed: 26-Sep-2024 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 10-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  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
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

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

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.:** A0217113

P#31937 & P#31946 } Y.P. 03/07/25

Description : Florida TRPH Standard

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

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

Expiration Date : October 31, 2031 **Storage:** 25°C nominal

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

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	SHBR0789	99%	502.0 µg/mL	+/- 12.9685
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	501.5 µg/mL	+/- 12.9555
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	502.5 µg/mL	+/- 12.9814
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	500.5 µg/mL	+/- 12.9297
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	500.0 µg/mL	+/- 12.9168
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	500.5 µg/mL	+/- 12.9297
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	500.0 µg/mL	+/- 12.9177
8	n-Docosane (C22)	629-97-0	MKCQ3882	99%	500.5 µg/mL	+/- 12.9297
9	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	500.5 µg/mL	+/- 12.9297
10	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	502.0 µg/mL	+/- 12.9685
11	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	501.0 µg/mL	+/- 12.9426
12	n-Triacontane (C30)	638-68-6	MKCV7007	98%	499.8 µg/mL	+/- 12.9116
13	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	500.0 µg/mL	+/- 12.9168
14	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	501.5 µg/mL	+/- 12.9555
15	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	500.5 µg/mL	+/- 12.9297
16	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	500.2 µg/mL	+/- 12.9209
17	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	503.5 µg/mL	+/- 13.0072

* 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.)

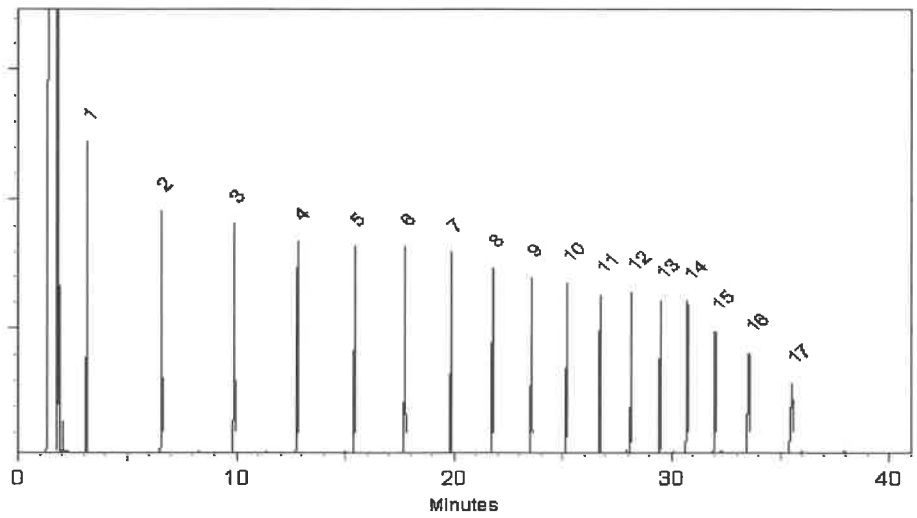
Inj. Temp:
250°C

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.

Josh McCloskey - Operations Technician I

Date Mixed: 26-Sep-2024 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 10-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016331.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 10:26
Operator : YP\AJ
Sample : Q2592-01
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025

Integration File: autoint1.e
Quant Time: Jul 18 11:44:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.220	1615779	16.160 ug/mlm
Target Compounds			

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071825\
Data File : FG016331.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 10:26
Operator : YP\AJ
Sample : Q2592-01
Misc :
ALS Vial : 21 Sample Multiplier: 1

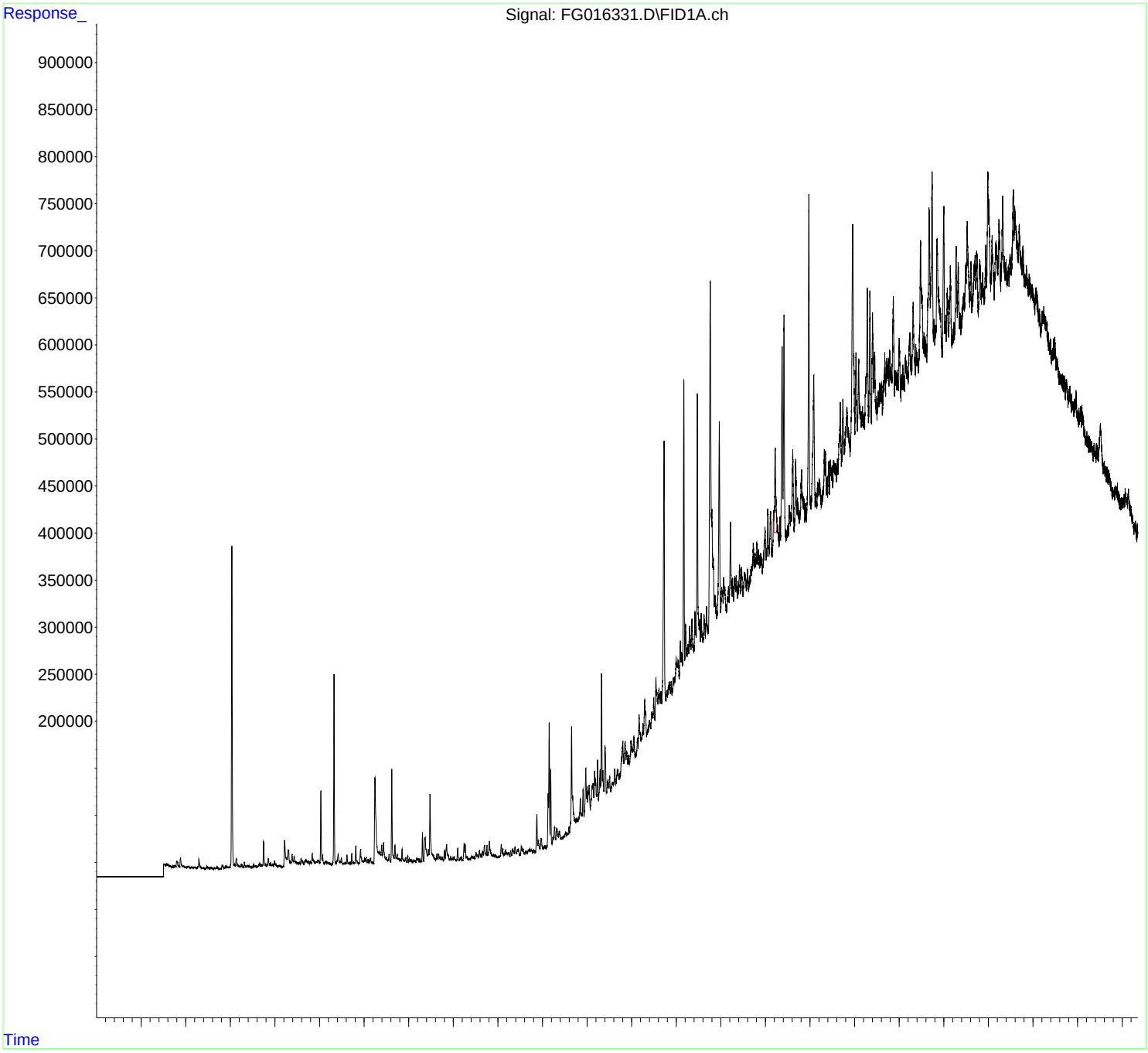
Integration File: autoint1.e
Quant Time: Jul 18 11:44:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 2025
Response via : Initial Calibration
Integrator: ChemStation

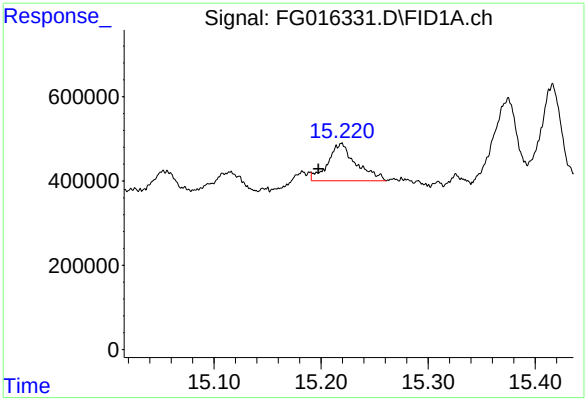
Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025





#9 TETRACOSANE-d50 (SURROGATE)

R.T.:	15.220 min
Delta R.T.:	0.022 min
Response:	1615779
Conc:	16.16 ug/ml

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG07182
Data File : FG016331.D
Signal(s) : FID1A.ch
Acq On : 18 Jul 2025 10:26
Sample : Q2592-01
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.512	1.497	1.540	BV	13333	288909	3.13%	0.087%
2	1.567	1.540	1.585	VV	12420	304936	3.30%	0.092%
3	1.597	1.585	1.626	VV	11447	247106	2.68%	0.074%
4	1.653	1.626	1.697	VV	8693	319127	3.46%	0.096%
5	1.712	1.697	1.735	VV	7505	143893	1.56%	0.043%
6	1.751	1.735	1.776	VV	6467	146054	1.58%	0.044%
7	1.796	1.776	1.860	VV	10130	311777	3.38%	0.094%
8	1.881	1.860	1.928	VV	12270	236262	2.56%	0.071%
9	1.944	1.928	1.975	VB	2136	39240	0.42%	0.012%
10	2.267	2.251	2.279	BV	2121	21407	0.23%	0.006%
11	2.295	2.279	2.372	VB	9820	160691	1.74%	0.048%
12	2.471	2.432	2.498	PV	1480	23460	0.25%	0.007%
13	2.700	2.599	2.748	BB	2252	44445	0.48%	0.013%
14	2.819	2.771	2.864	BB	3703	67359	0.73%	0.020%
15	2.889	2.869	2.910	BV	2075	24468	0.26%	0.007%
16	3.034	2.989	3.077	PV	341145	4032346	43.67%	1.211%
17	3.092	3.077	3.110	VV	2477	37740	0.41%	0.011%
18	3.132	3.110	3.175	VV	7978	120918	1.31%	0.036%
19	3.245	3.212	3.297	BV	2938	57590	0.62%	0.017%
20	3.314	3.297	3.341	PV	5563	55814	0.60%	0.017%
21	3.392	3.364	3.412	BV	1393	21863	0.24%	0.007%
22	3.523	3.490	3.545	BV	3747	47654	0.52%	0.014%
23	3.567	3.545	3.590	VV	2098	29463	0.32%	0.009%
24	3.650	3.590	3.668	VV	3530	84709	0.92%	0.025%
25	3.681	3.668	3.707	VV	2881	46692	0.51%	0.014%
26	3.746	3.707	3.780	VV	26732	348749	3.78%	0.105%
27	3.792	3.780	3.811	VV	2455	35104	0.38%	0.011%
28	3.825	3.811	3.832	VV	2418	24773	0.27%	0.007%
29	3.851	3.832	3.879	VV	8717	138462	1.50%	0.042%
30	3.897	3.879	3.914	VV	4255	58974	0.64%	0.018%
31	3.992	3.960	4.061	VB	5880	125811	1.36%	0.038%
32	4.218	4.169	4.266	BV	28001	580048	6.28%	0.174%
33	4.299	4.266	4.355	VV	17658	515763	5.59%	0.155%
34	4.383	4.355	4.415	VV	12407	265087	2.87%	0.080%
35	4.431	4.415	4.457	VV	10098	162716	1.76%	0.049%
36	4.470	4.457	4.489	VV	4633	77348	0.84%	0.023%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025

rteres

37	4.584	4.575	4.602	VV	7234	84875	0.92%	0.025%
38	4.610	4.602	4.644	VV	4840	79919		
39	4.670	4.644	4.677	VV	4640	59270		
40	4.689	4.677	4.701	VV	5738	72414		
41	4.707	4.701	4.724	VV	4326	48069		
42	4.744	4.724	4.772	VV	4328	89920		
43	4.791	4.772	4.812	VV	3794	64497	0.70%	0.019%
44	4.836	4.812	4.854	VV	12132	164187	1.78%	0.049%
45	4.864	4.854	4.891	VV	4972	78041	0.85%	0.023%
46	4.961	4.943	4.974	VV	4529	68479	0.74%	0.021%
47	4.981	4.974	5.000	VV	3720	40686	0.44%	0.012%
48	5.030	5.000	5.056	VV	78096	820845	8.89%	0.247%
49	5.070	5.056	5.108	VV	9378	114276	1.24%	0.034%
50	5.138	5.108	5.160	PV	2523	40418	0.44%	0.012%
51	5.326	5.255	5.370	BV	201580	1988664	21.54%	0.597%
52	5.418	5.370	5.455	VV	11138	237757	2.57%	0.071%
53	5.491	5.455	5.514	VV	6896	115112	1.25%	0.035%
54	5.616	5.597	5.644	VV	9991	114599	1.24%	0.034%
55	5.692	5.676	5.707	VV	2493	21843	0.24%	0.007%
56	5.722	5.707	5.746	PV	11414	113988	1.23%	0.034%
57	5.813	5.789	5.876	VV	19230	255191	2.76%	0.077%
58	5.922	5.876	5.959	VV	15780	279355	3.03%	0.084%
59	5.965	5.959	5.979	VV	2752	29941	0.32%	0.009%
60	6.010	5.979	6.030	VV	5371	115370	1.25%	0.035%
61	6.045	6.030	6.066	VV	6967	84598	0.92%	0.025%
62	6.083	6.066	6.102	VV	4470	60300	0.65%	0.018%
63	6.144	6.102	6.162	VV	5829	115270	1.25%	0.035%
64	6.243	6.210	6.309	VV	90916	2044008	22.14%	0.614%
65	6.319	6.309	6.337	VV	12095	187240	2.03%	0.056%
66	6.349	6.337	6.377	VV	12083	248087	2.69%	0.075%
67	6.393	6.377	6.412	VV	19261	278170	3.01%	0.084%
68	6.435	6.412	6.480	VV	21872	471990	5.11%	0.142%
69	6.494	6.480	6.527	VV	6344	124705	1.35%	0.037%
70	6.560	6.527	6.595	VV	9454	179558	1.94%	0.054%
71	6.621	6.595	6.670	VV	99918	1171052	12.68%	0.352%
72	6.692	6.670	6.724	VV	19286	310976	3.37%	0.093%
73	6.740	6.724	6.759	VV	9249	131730	1.43%	0.040%
74	6.769	6.759	6.800	VV	4840	98119	1.06%	0.029%
75	6.812	6.800	6.831	VV	3980	57364	0.62%	0.017%
76	6.851	6.831	6.901	VV	14507	220553	2.39%	0.066%
77	6.928	6.901	6.955	VV	5436	92780	1.00%	0.028%
78	6.976	6.955	6.994	VV	7112	77772	0.84%	0.023%
79	7.010	6.994	7.030	VV	3707	55419	0.60%	0.017%
80	7.046	7.030	7.067	VV	3334	50361	0.55%	0.015%
81	7.112	7.091	7.128	VV	2475	35105	0.38%	0.011%
82	7.140	7.128	7.157	VV	2240	23598	0.26%	0.007%
83	7.177	7.157	7.194	PV	4294	56345	0.61%	0.017%
84	7.207	7.194	7.231	VV	3574	49732	0.54%	0.015%
85	7.249	7.231	7.284	VV	3620	41510	0.45%	0.012%
86	7.309	7.284	7.334	VV	30752	299908	3.25%	0.090%
87	7.369	7.334	7.418	VV	25658	684524	7.41%	0.206%
88	7.445	7.418	7.458	VV	12135	199624	2.16%	0.060%
89	7.478	7.458	7.521	VV	71015	996762	10.79%	0.299%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025

rteres

90	7.529	7.521	7.590	VV	6943	163192	1.77%	0.049%
91	7.634	7.609	7.651	VV	6147	81851		
92	7.671	7.651	7.689	VV	6004	74237		
93	7.702	7.689	7.723	VB	2779	35339		
94	7.755	7.735	7.778	BV	3043	35595		
95	7.805	7.778	7.820	PV	10773	113962		
96	7.850	7.820	7.923	VV	16623	393733	4.26%	0.118%
97	7.940	7.923	7.965	VV	3048	46468	0.50%	0.014%
98	8.016	7.987	8.069	VB	3977	66454	0.72%	0.020%
99	8.098	8.070	8.128	BV	13036	149269	1.62%	0.045%
100	8.171	8.128	8.204	PV	3848	78198	0.85%	0.023%
101	8.243	8.204	8.257	PV	17731	234561	2.54%	0.070%
102	8.269	8.257	8.288	VV	16517	181348	1.96%	0.054%
103	8.302	8.288	8.333	VV	3606	51418	0.56%	0.015%
104	8.422	8.393	8.440	VB	2534	39946	0.43%	0.012%
105	8.467	8.451	8.481	BV	2445	20381	0.22%	0.006%
106	8.509	8.481	8.524	PV	5960	92434	1.00%	0.028%
107	8.535	8.524	8.563	VV	3550	66060	0.72%	0.020%
108	8.585	8.563	8.608	VV	8660	138519	1.50%	0.042%
109	8.621	8.608	8.638	VV	4238	53241	0.58%	0.016%
110	8.658	8.638	8.677	VV	7338	107379	1.16%	0.032%
111	8.698	8.677	8.737	VV	13591	262670	2.84%	0.079%
112	8.754	8.737	8.770	VV	13379	147461	1.60%	0.044%
113	8.809	8.770	8.885	VV	17774	449790	4.87%	0.135%
114	8.902	8.885	8.918	VV	3485	48665	0.53%	0.015%
115	9.075	9.020	9.094	PV	13776	198517	2.15%	0.060%
116	9.108	9.094	9.125	VV	8761	100103	1.08%	0.030%
117	9.139	9.125	9.150	VV	3646	43977	0.48%	0.013%
118	9.170	9.150	9.200	VV	7108	135516	1.47%	0.041%
119	9.239	9.200	9.266	VV	4463	116984	1.27%	0.035%
120	9.286	9.266	9.306	VV	5908	69994	0.76%	0.021%
121	9.329	9.306	9.363	VV	7517	165655	1.79%	0.050%
122	9.384	9.363	9.410	VV	9389	150760	1.63%	0.045%
123	9.436	9.410	9.449	VV	6828	110188	1.19%	0.033%
124	9.460	9.449	9.491	VV	7317	94921	1.03%	0.029%
125	9.525	9.491	9.544	PV	9569	139710	1.51%	0.042%
126	9.557	9.544	9.598	VV	6512	120630	1.31%	0.036%
127	9.620	9.598	9.634	VV	3408	50640	0.55%	0.015%
128	9.641	9.634	9.661	VV	2788	35846	0.39%	0.011%
129	9.682	9.661	9.697	VV	4305	66126	0.72%	0.020%
130	9.711	9.697	9.734	VV	4955	85244	0.92%	0.026%
131	9.761	9.734	9.782	VV	3194	72307	0.78%	0.022%
132	9.798	9.782	9.839	VV	3311	55893	0.61%	0.017%
133	9.874	9.839	9.892	PV	39732	495531	5.37%	0.149%
134	9.905	9.892	9.939	VV	11771	198246	2.15%	0.060%
135	9.971	9.939	10.016	VV	12627	262067	2.84%	0.079%
136	10.028	10.016	10.036	VV	1977	17364	0.19%	0.005%
137	10.051	10.036	10.076	VV	3395	41247	0.45%	0.012%
138	10.128	10.076	10.136	PV	56719	581140	6.29%	0.175%
139	10.151	10.136	10.169	VV	131141	1476707	15.99%	0.444%
140	10.184	10.169	10.212	VV	80105	826766	8.95%	0.248%
141	10.234	10.212	10.249	VV	6787	108176	1.17%	0.033%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025

rteres

142	10.270	10.249	10.296	VV	16942	272142	2.95%	0.082%
143	10.319	10.296	10.345	VV	14229	274541	2	
144	10.353	10.345	10.360	VV	5423	44982	0	
145	10.376	10.360	10.411	VV	9586	157433	1	
146	10.424	10.411	10.434	VV	1426	14040	0	
147	10.445	10.434	10.456	VV	1350	9320	0	
148	10.472	10.456	10.481	PV	1622	10960	0.12%	0.003%
149	10.519	10.481	10.537	VV	4029	75966	0.82%	0.023%
150	10.549	10.537	10.562	VV	1816	15520	0.17%	0.005%
151	10.592	10.562	10.608	PV	6518	66781	0.72%	0.020%
152	10.653	10.608	10.669	VV	110648	1359485	14.72%	0.408%
153	10.675	10.669	10.719	VV	35999	620467	6.72%	0.186%
154	10.730	10.719	10.746	VV	8322	117377	1.27%	0.035%
155	10.763	10.746	10.787	VV	7498	140128	1.52%	0.042%
156	10.849	10.787	10.872	VV	24363	527504	5.71%	0.158%
157	10.881	10.872	10.892	VV	7335	77311	0.84%	0.023%
158	10.911	10.892	10.934	VV	31093	389399	4.22%	0.117%
159	10.972	10.934	10.988	VV	51429	774840	8.39%	0.233%
160	11.001	10.988	11.015	VV	30761	365652	3.96%	0.110%
161	11.045	11.015	11.072	VV	29605	670613	7.26%	0.201%
162	11.110	11.072	11.114	VV	25337	359596	3.89%	0.108%
163	11.132	11.114	11.149	VV	27483	469205	5.08%	0.141%
164	11.169	11.149	11.182	VV	38696	532459	5.77%	0.160%
165	11.190	11.182	11.212	VV	28371	372086	4.03%	0.112%
166	11.235	11.212	11.256	VV	47660	608955	6.59%	0.183%
167	11.293	11.256	11.306	VV	33838	579418	6.27%	0.174%
168	11.325	11.306	11.343	VV	134414	1591755	17.24%	0.478%
169	11.354	11.343	11.376	VV	31161	400188	4.33%	0.120%
170	11.401	11.376	11.433	VV	55194	1016943	11.01%	0.306%
171	11.465	11.433	11.489	VV	15219	317705	3.44%	0.095%
172	11.508	11.489	11.534	VV	17636	231105	2.50%	0.069%
173	11.584	11.534	11.592	PV	6566	175086	1.90%	0.053%
174	11.619	11.592	11.644	VV	18189	281806	3.05%	0.085%
175	11.680	11.644	11.716	PV	13802	328090	3.55%	0.099%
176	11.734	11.716	11.744	VV	7335	81207	0.88%	0.024%
177	11.800	11.744	11.826	VV	37093	990266	10.72%	0.298%
178	11.853	11.826	11.872	VV	32721	624822	6.77%	0.188%
179	11.888	11.872	11.912	VV	21920	362112	3.92%	0.109%
180	11.932	11.912	11.948	VV	14077	196233	2.13%	0.059%
181	11.989	11.948	12.008	VV	25975	543742	5.89%	0.163%
182	12.016	12.008	12.029	VV	15825	175777	1.90%	0.053%
183	12.048	12.029	12.077	VV	26272	467220	5.06%	0.140%
184	12.133	12.077	12.145	VV	19955	369442	4.00%	0.111%
185	12.166	12.145	12.216	VV	41796	962107	10.42%	0.289%
186	12.255	12.216	12.269	VV	27864	610227	6.61%	0.183%
187	12.291	12.269	12.334	VV	51088	1233249	13.36%	0.371%
188	12.367	12.334	12.372	VV	14955	297003	3.22%	0.089%
189	12.398	12.372	12.428	VV	22160	587452	6.36%	0.176%
190	12.451	12.428	12.467	VV	27999	524099	5.68%	0.157%
191	12.472	12.467	12.479	VV	24712	151347	1.64%	0.045%
192	12.496	12.479	12.522	VV	39903	674074	7.30%	0.203%
193	12.544	12.522	12.587	VV	58159	1489683	16.13%	0.448%
194	12.613	12.587	12.639	VV	42480	1087527	11.78%	0.327%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/21/2025
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195	12.657	12.639	12.674	VV	36596	628449	6.81%	0.189%
196	12.728	12.674	12.772	VV	297899	5806815	62	
197	12.787	12.772	12.799	VV	30557	438621	4	
198	12.802	12.799	12.806	VV	27265	114425	1	
199	12.827	12.806	12.832	VV	32600	455718	4	
200	12.843	12.832	12.872	VV	35541	741536	8	
201	12.886	12.872	12.909	VV	33462	576667	6.24%	0.173%
202	12.931	12.909	12.946	VV	32749	616066	6.67%	0.185%
203	12.996	12.946	13.010	VV	52552	1420981	15.39%	0.427%
204	13.016	13.010	13.025	VV	45420	390320	4.23%	0.117%
205	13.041	13.025	13.067	VV	46259	1004124	10.87%	0.302%
206	13.092	13.067	13.111	VV	63894	1229406	13.31%	0.369%
207	13.119	13.111	13.140	VV	47727	751116	8.13%	0.226%
208	13.171	13.140	13.191	VV	336571	4468597	48.39%	1.343%
209	13.209	13.191	13.243	VV	73195	1664045	18.02%	0.500%
210	13.266	13.243	13.282	VV	49504	1067340	11.56%	0.321%
211	13.302	13.282	13.332	VV	67240	1581604	17.13%	0.475%
212	13.354	13.332	13.382	VV	70312	1603160	17.36%	0.482%
213	13.387	13.382	13.397	VV	38854	324241	3.51%	0.097%
214	13.421	13.397	13.447	VV	74864	1682981	18.23%	0.506%
215	13.473	13.447	13.514	VV	301491	4964956	53.77%	1.492%
216	13.527	13.514	13.542	VV	56846	866688	9.39%	0.260%
217	13.561	13.542	13.599	VV	64276	1541190	16.69%	0.463%
218	13.624	13.599	13.653	VV	57852	1423666	15.42%	0.428%
219	13.680	13.653	13.720	VV	64107	1849332	20.03%	0.556%
220	13.763	13.720	13.794	VV	404325	9234105	100.00%	2.774%
221	13.799	13.794	13.822	VV	157691	2149202	23.27%	0.646%
222	13.831	13.822	13.853	VV	105248	1589230	17.21%	0.477%
223	13.870	13.853	13.889	VV	64069	1240000	13.43%	0.373%
224	13.893	13.889	13.905	VV	51303	406894	4.41%	0.122%
225	13.966	13.905	13.999	VV	241481	5475306	59.29%	1.645%
226	14.021	13.999	14.050	VV	63657	1656181	17.94%	0.498%
227	14.064	14.050	14.083	VV	69026	1201096	13.01%	0.361%
228	14.090	14.083	14.132	VV	60586	1273050	13.79%	0.382%
229	14.173	14.132	14.190	VV	54846	1523209	16.50%	0.458%
230	14.216	14.190	14.247	VV	120337	2505363	27.13%	0.753%
231	14.262	14.247	14.277	VV	60489	867638	9.40%	0.261%
232	14.280	14.277	14.286	VV	40892	211830	2.29%	0.064%
233	14.313	14.286	14.334	VV	57545	1372718	14.87%	0.412%
234	14.345	14.334	14.372	VV	56429	1013001	10.97%	0.304%
235	14.386	14.372	14.400	VV	47228	670703	7.26%	0.202%
236	14.419	14.400	14.440	VV	62868	1133699	12.28%	0.341%
237	14.467	14.440	14.501	VV	57083	1537830	16.65%	0.462%
238	14.530	14.501	14.579	VV	48751	1770286	19.17%	0.532%
239	14.601	14.579	14.621	VV	46876	936091	10.14%	0.281%
240	14.650	14.621	14.659	VV	36624	700357	7.58%	0.210%
241	14.679	14.659	14.690	VV	44530	727305	7.88%	0.219%
242	14.727	14.690	14.748	VV	65641	1713068	18.55%	0.515%
243	14.768	14.748	14.782	VV	54159	916505	9.93%	0.275%
244	14.789	14.782	14.797	VV	48281	403089	4.37%	0.121%
245	14.806	14.797	14.829	VV	63096	982303	10.64%	0.295%
246	14.842	14.829	14.881	VV	50107	1334155	14.45%	0.401%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711

rteres

Manual IntegrationsAPPROVED

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247	14.894	14.881	14.932	VV	45530	1127482	12.21%	0.339%
248	14.990	14.932	15.018	VV	66793	2231510	24	
249	15.026	15.018	15.032	VV	42426	327012	3	
250	15.053	15.032	15.079	VV	82311	1601731	17	
251	15.115	15.079	15.141	VV	76212	1904358	20	
252	15.219	15.141	15.262	VV	137466	5069656	54	
253	15.268	15.262	15.302	VV	49710	1031466	11.17%	0.310%
254	15.310	15.302	15.315	VV	41190	276108	2.99%	0.083%
255	15.326	15.315	15.340	VV	58348	673862	7.30%	0.202%
256	15.375	15.340	15.393	VV	233113	4129763	44.72%	1.241%
257	15.416	15.393	15.456	VV	264657	4394533	47.59%	1.320%
258	15.463	15.456	15.473	VV	31838	297889	3.23%	0.089%
259	15.482	15.473	15.489	VV	33079	291589	3.16%	0.088%
260	15.499	15.489	15.508	VV	38036	368554	3.99%	0.111%
261	15.511	15.508	15.517	VV	38262	186834	2.02%	0.056%
262	15.535	15.517	15.541	VV	57479	669874	7.25%	0.201%
263	15.545	15.541	15.558	VV	55981	466326	5.05%	0.140%
264	15.565	15.558	15.581	VV	48493	563970	6.11%	0.169%
265	15.613	15.581	15.645	VV	109937	2492527	26.99%	0.749%
266	15.679	15.645	15.711	VV	96657	2280389	24.70%	0.685%
267	15.720	15.711	15.759	VV	53395	1145321	12.40%	0.344%
268	15.780	15.759	15.784	VV	36109	462932	5.01%	0.139%
269	15.809	15.784	15.887	VV	77011	2867200	31.05%	0.861%
270	15.901	15.887	15.924	VV	35482	627081	6.79%	0.188%
271	15.975	15.924	16.011	VV	355962	6029759	65.30%	1.812%
272	16.015	16.011	16.021	VV	34240	190030	2.06%	0.057%
273	16.084	16.021	16.113	VV	162386	4264075	46.18%	1.281%
274	16.117	16.113	16.123	VV	29168	157434	1.70%	0.047%
275	16.128	16.123	16.154	VV	32701	442124	4.79%	0.133%
276	16.177	16.154	16.184	VV	41615	591267	6.40%	0.178%
277	16.203	16.184	16.214	VV	45255	663515	7.19%	0.199%
278	16.221	16.214	16.256	VV	40260	642659	6.96%	0.193%
279	16.263	16.256	16.269	VV	17628	131335	1.42%	0.039%
280	16.321	16.269	16.337	VV	65868	1455647	15.76%	0.437%
281	16.347	16.337	16.367	VV	62305	803966	8.71%	0.242%
282	16.376	16.367	16.384	VV	31834	270739	2.93%	0.081%
283	16.388	16.384	16.396	VV	33173	170353	1.84%	0.051%
284	16.421	16.396	16.435	VV	49307	814149	8.82%	0.245%
285	16.457	16.435	16.469	VV	49356	695320	7.53%	0.209%
286	16.474	16.469	16.480	VV	37919	229610	2.49%	0.069%
287	16.495	16.480	16.509	VV	40396	551436	5.97%	0.166%
288	16.529	16.509	16.553	VV	36217	874593	9.47%	0.263%
289	16.574	16.553	16.592	VV	37671	706373	7.65%	0.212%
290	16.614	16.592	16.626	VV	39475	575550	6.23%	0.173%
291	16.629	16.626	16.635	VV	34603	167995	1.82%	0.050%
292	16.678	16.635	16.706	VV	95680	2505408	27.13%	0.753%
293	16.737	16.706	16.771	VV	95321	2184675	23.66%	0.656%
294	16.796	16.771	16.807	VV	62570	1134937	12.29%	0.341%
295	16.829	16.807	16.854	VV	80400	1871949	20.27%	0.562%
296	16.858	16.854	16.898	VV	57277	1193908	12.93%	0.359%
297	16.957	16.898	17.006	VV	266321	7802247	84.49%	2.344%
298	17.030	17.006	17.062	VV	127764	2794834	30.27%	0.840%
299	17.092	17.062	17.114	VV	116698	2486876	26.93%	0.747%

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WC-SOIL-20250711

Manual IntegrationsAPPROVED

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rteres

300	17.117	17.114	17.121	VV	65061	249305	2.70%	0.075%
301	17.124	17.121	17.150	VV	64998	919545	9	
302	17.178	17.150	17.189	VV	60666	1154669	12	
303	17.192	17.189	17.197	VV	47944	220413	2	
304	17.204	17.197	17.223	VV	50344	667550	7	
305	17.250	17.223	17.262	VV	88251	1624165	17	
306	17.286	17.262	17.309	VV	176533	3283230	35.56%	0.986%
307	17.343	17.309	17.377	VV	169344	3466257	37.54%	1.041%
308	17.402	17.377	17.428	VV	144580	2843911	30.80%	0.854%
309	17.445	17.428	17.468	VV	102581	1890188	20.47%	0.568%
310	17.472	17.468	17.482	VV	47938	368545	3.99%	0.111%
311	17.488	17.482	17.502	VV	52627	502495	5.44%	0.151%
312	17.528	17.502	17.539	VV	55458	970176	10.51%	0.291%
313	17.544	17.539	17.549	VV	50708	272008	2.95%	0.082%
314	17.559	17.549	17.569	VV	62957	606125	6.56%	0.182%
315	17.578	17.569	17.591	VV	60493	637024	6.90%	0.191%
316	17.608	17.591	17.627	VV	59768	1061373	11.49%	0.319%
317	17.678	17.627	17.695	VV	83069	2227193	24.12%	0.669%
318	17.713	17.695	17.741	VV	71456	1717266	18.60%	0.516%
319	17.753	17.741	17.770	VV	75965	1137989	12.32%	0.342%
320	17.787	17.770	17.809	VV	82200	1565108	16.95%	0.470%
321	17.818	17.809	17.832	VV	56866	745654	8.08%	0.224%
322	17.834	17.832	17.838	VV	55262	177700	1.92%	0.053%
323	17.869	17.838	17.896	VV	136048	2918683	31.61%	0.877%
324	17.907	17.896	17.914	VV	53412	491354	5.32%	0.148%
325	17.922	17.914	17.929	VV	50523	426985	4.62%	0.128%
326	17.935	17.929	17.945	VV	50519	422701	4.58%	0.127%
327	17.953	17.945	17.980	VV	50172	863001	9.35%	0.259%
328	18.000	17.980	18.031	VV	82189	1656592	17.94%	0.498%
329	18.035	18.031	18.040	VV	24569	121881	1.32%	0.037%
330	18.055	18.040	18.060	VV	40575	379338	4.11%	0.114%
331	18.063	18.060	18.068	VV	35195	170399	1.85%	0.051%
332	18.081	18.068	18.087	VV	46386	424564	4.60%	0.128%
333	18.089	18.087	18.104	VV	42554	341633	3.70%	0.103%
334	18.110	18.104	18.119	VV	35912	281498	3.05%	0.085%
335	18.142	18.119	18.167	VV	56296	1164781	12.61%	0.350%
336	18.176	18.167	18.189	VV	41474	478058	5.18%	0.144%
337	18.240	18.189	18.256	VV	74202	1960064	21.23%	0.589%
338	18.269	18.256	18.274	VV	42740	389484	4.22%	0.117%
339	18.313	18.274	18.361	VV	101891	2961494	32.07%	0.890%
340	18.372	18.361	18.393	VV	47336	747695	8.10%	0.225%
341	18.402	18.393	18.431	VV	44025	744293	8.06%	0.224%
342	18.479	18.431	18.499	VV	156675	3508407	37.99%	1.054%
343	18.505	18.499	18.512	VV	105238	789434	8.55%	0.237%
344	18.514	18.512	18.549	VV	94891	1324118	14.34%	0.398%
345	18.557	18.549	18.572	VV	54645	606884	6.57%	0.182%
346	18.582	18.572	18.611	VV	47423	840240	9.10%	0.252%
347	18.641	18.611	18.651	VV	83872	1324755	14.35%	0.398%
348	18.670	18.651	18.700	VV	178788	3735272	40.45%	1.122%
349	18.738	18.700	18.774	VV	209338	5086131	55.08%	1.528%
350	18.779	18.774	18.797	VV	55480	539827	5.85%	0.162%
351	18.808	18.797	18.816	VV	45509	450744	4.88%	0.135%

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ClientSampleId :
WC-SOIL-20250711

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rteres

352	18.849	18.816	18.876	VV	133549	3170725	34.34%	0.953%
353	18.882	18.876	18.919	VV	83140	1661260	17	
354	18.927	18.919	18.956	VV	56747	767081	8	
355	18.960	18.956	18.966	VV	15725	58146	0	
356	19.001	18.966	19.024	VV	161408	2849848	30	
357	19.034	19.024	19.039	VV	43783	304187	3	
358	19.043	19.039	19.051	VV	36930	192876	2.09%	0.058%
359	19.079	19.051	19.106	VV	68384	1324660	14.35%	0.398%
360	19.111	19.106	19.115	VV	27446	133505	1.45%	0.040%
361	19.146	19.115	19.182	VV	88068	1796163	19.45%	0.540%
362	19.211	19.182	19.219	PV	16986	216988	2.35%	0.065%
363	19.225	19.219	19.240	VV	22938	167291	1.81%	0.050%
364	19.278	19.240	19.302	VV	98950	1847425	20.01%	0.555%
365	19.322	19.302	19.350	VV	78385	1295622	14.03%	0.389%
366	19.359	19.350	19.378	VV	20494	221305	2.40%	0.066%
367	19.454	19.378	19.464	PV	28953	727140	7.87%	0.218%
368	19.487	19.464	19.502	VV	52756	819642	8.88%	0.246%
369	19.525	19.502	19.584	VV	95199	2265317	24.53%	0.681%
370	19.609	19.584	19.621	PBA	32822	722893	7.83%	0.217%
371	19.701	19.621	19.722	BV	52109	1109582	12.02%	0.333%
372	19.736	19.722	19.774	VV	58752	1037460	11.24%	0.312%
373	19.806	19.774	19.845	PV	56702	1267733	13.73%	0.381%
374	19.872	19.845	19.904	VV	36236	719137	7.79%	0.216%
375	19.911	19.904	19.916	VV	15495	86635	0.94%	0.026%
376	19.940	19.916	19.959	VV	65196	940072	10.18%	0.282%
377	19.988	19.959	20.003	VV	140761	2291063	24.81%	0.688%
378	20.012	20.003	20.051	VV	111529	1884571	20.41%	0.566%
379	20.084	20.051	20.131	VV	69524	1655979	17.93%	0.498%
380	20.171	20.131	20.201	PV	57791	1526124	16.53%	0.459%
381	20.205	20.201	20.213	VV	35950	193401	2.09%	0.058%
382	20.236	20.213	20.277	VV	73675	1555264	16.84%	0.467%
383	20.320	20.277	20.361	PBA	75324	1339458	14.51%	0.402%
384	20.385	20.361	20.390	BV	6723	-17587	-0.19%	-0.005%
385	20.397	20.390	20.411	VV	10198	63829	0.69%	0.019%
386	20.417	20.411	20.434	PV	6922	42562	0.46%	0.013%
387	20.446	20.434	20.462	PV	16900	147390	1.60%	0.044%
388	20.467	20.462	20.472	PV	12508	52861	0.57%	0.016%
389	20.487	20.472	20.492	VV	24773	194014	2.10%	0.058%
390	20.498	20.492	20.502	VV	18500	84081	0.91%	0.025%
391	20.504	20.502	20.512	VV	16133	55792	0.60%	0.017%
392	20.562	20.512	20.584	PV	58228	894306	9.68%	0.269%
393	20.592	20.584	20.601	PBA	19264	104142	1.13%	0.031%
394	20.641	20.619	20.669	BV	6761	30702	0.33%	0.009%
395	20.694	20.669	20.742	PV	39482	799443	8.66%	0.240%
396	20.747	20.742	20.752	VV	14067	49670	0.54%	0.015%
397	20.775	20.752	20.780	VV	29865	346487	3.75%	0.104%
398	20.783	20.780	20.801	VV	28964	181546	1.97%	0.055%
399	20.802	20.801	20.807	VV	9318	24061	0.26%	0.007%
400	20.812	20.807	20.826	VV	10629	69889	0.76%	0.021%
401	20.830	20.826	20.838	PV	12742	63914	0.69%	0.019%
402	20.851	20.838	20.896	VV	23997	409738	4.44%	0.123%
403	20.905	20.896	20.911	VV	15957	76261	0.83%	0.023%
404	20.919	20.911	20.959	VV	24849	456855	4.95%	0.137%

Instrument :
FID_G
ClientSampleId :
WC-SOIL-20250711

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025

405	20.971	20.959	20.974	VV	17386	122670	1.33%	0.037%
406	20.980	20.974	20.984	VV	22990	100147		
407	20.988	20.984	21.042	VV	17407	399155		
408	21.072	21.042	21.078	PV	13400	213586		
409	21.098	21.081	21.106	BV	10226	17844		
410	21.111	21.106	21.124	VV	9566	54831		
411	21.132	21.124	21.139	PV	14119	69855	0.76%	0.021%
412	21.147	21.139	21.172	VV	17238	180731	1.96%	0.054%
413	21.200	21.172	21.206	PV	26800	243179	2.63%	0.073%
414	21.216	21.206	21.230	VV	29398	354379	3.84%	0.106%
415	21.245	21.230	21.273	VV	33038	727651	7.88%	0.219%
416	21.286	21.273	21.339	VV	32449	869269	9.41%	0.261%
417	21.343	21.339	21.351	VV	21067	90114	0.98%	0.027%
418	21.355	21.351	21.369	VV	15691	122438	1.33%	0.037%
419	21.389	21.369	21.404	VV	21247	240141	2.60%	0.072%
420	21.410	21.404	21.424	PV	12370	89316	0.97%	0.027%
421	21.465	21.424	21.483	VV	32841	590204	6.39%	0.177%
422	21.491	21.483	21.519	VV	34911	482025	5.22%	0.145%
423	21.522	21.519	21.532	VV	17881	103653	1.12%	0.031%
424	21.541	21.532	21.596	VV	19779	393781	4.26%	0.118%
425	21.601	21.596	21.631	VV	8155	147167	1.59%	0.044%
426	21.662	21.631	21.668	VV	19151	199097	2.16%	0.060%
427	21.681	21.668	21.688	VV	17188	133052	1.44%	0.040%
428	21.694	21.688	21.699	VV	15250	82090	0.89%	0.025%
429	21.705	21.699	21.714	VV	20004	134611	1.46%	0.040%
430	21.717	21.714	21.728	VV	17848	72523	0.79%	0.022%
431	21.745	21.728	21.784	VV	24230	483447	5.24%	0.145%
432	21.807	21.784	21.823	PV	18923	296863	3.21%	0.089%
433	21.828	21.823	21.843	VV	20134	171268	1.85%	0.051%
434	21.847	21.843	21.858	VV	15257	93284	1.01%	0.028%
435	21.869	21.858	21.877	VV	17934	140306	1.52%	0.042%
436	21.885	21.877	21.907	VV	15034	199727	2.16%	0.060%
437	21.912	21.907	21.920	VV	16282	80373	0.87%	0.024%
438	21.927	21.920	21.945	VV	21066	217683	2.36%	0.065%
439	21.965	21.945	21.971	VV	33901	368147	3.99%	0.111%
440	21.975	21.971	22.000	VV	32868	285200	3.09%	0.086%
441	22.004	22.000	22.024	VV	14782	133406	1.44%	0.040%
442	22.032	22.024	22.039	VV	19863	113168	1.23%	0.034%
443	22.050	22.039	22.054	VV	17044	105856	1.15%	0.032%
444	22.066	22.054	22.081	VV	26940	348175	3.77%	0.105%
445	22.086	22.081	22.089	VV	21475	86913	0.94%	0.026%
446	22.092	22.089	22.096	VV	27708	94891	1.03%	0.029%
447	22.101	22.096	22.131	VV	21279	438286	4.75%	0.132%
448	22.135	22.131	22.144	VV	20606	90649	0.98%	0.027%
449	22.147	22.144	22.153	VV	14177	49325	0.53%	0.015%
450	22.158	22.153	22.162	VV	7053	40850	0.44%	0.012%
451	22.168	22.162	22.181	VV	12713	65123	0.71%	0.020%
452	22.185	22.181	22.194	VV	7302	31961	0.35%	0.010%
453	22.199	22.194	22.219	VV	8253	110269	1.19%	0.033%
454	22.226	22.219	22.264	VV	11792	188695	2.04%	0.057%
455	22.267	22.264	22.279	VV	15655	72835	0.79%	0.022%
456	22.283	22.279	22.296	VV	11892	69366	0.75%	0.021%

Instrument :
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WC-SOIL-20250711

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/21/2025
Supervised By :mohammad ahmed 07/23/2025

rteres

457	22.301	22.296	22.305	VV	11488	48489	0.53%	0.015%
458	22.315	22.305	22.341	VV	15536	217624		
459	22.345	22.341	22.354	VV	11539	44080		
460	22.364	22.354	22.396	PV	13307	223680		
461	22.409	22.396	22.414	VV	16729	96807		
462	22.422	22.414	22.466	VV	20442	383375		
463	22.512	22.466	22.574	VV	47206	1433315	15.52%	0.431%
464	22.585	22.574	22.594	PV	8329	58115	0.63%	0.017%
465	22.598	22.594	22.601	PBA	8191	-76077	-0.82%	-0.023%

Sum of corrected areas: 332843187

FG070925.M Fri Jul 18 11:46:47 2025

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO. Q 2592
QUOTE NO.
COC Number 2047546

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Parsons
ADDRESS: 301 Plainfield Road
CITY Syracuse STATE: NY ZIP: 13212
ATTENTION: Zohar Lavy
PHONE: (732) 796-5536 FAX: —

CLIENT PROJECT INFORMATION

PROJECT NAME: ConEd East River S1
PROJECT NO.: 454534 LOCATION: Manhattan
PROJECT MANAGER: Zohar Lavy
e-mail: Zohar.lavy@parsons.com
PHONE: (732)-796-5536 FAX: —

CLIENT BILLING INFORMATION

BILL TO: Parsons PO#: 454534
ADDRESS: 301 Plainfield Road
CITY Syracuse STATE: NY ZIP: 13212
ATTENTION: Zohar Lavy PHONE: (732)-796-5536

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): 5-day rush DAYS*
EDD: _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC + Raw Data) ☐ NYS ASP A ☐ NYS ASP B
☐ Other _____
☐ EDD FORMAT _____

ANALYSIS

1. VOCs, SVOCs
2. TAL metals
3. PCBs, TPH
4. TCLP VOCs, TCLP SVOCs
5. TCLP metals
6. TCLP pest, TCLP herb
7. Ignitability, reactivity
8. corrosivity, pH
9.

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
								E	E	E	E	E	E	E	E		← Specify Preservatives
1.	WC-Soil-20250711	S	X		7/11/25	1230	9	X	X	X	X	X	X	X	X		A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER
2.																	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1. Emma Sauer	7/11/25 1440	1.	7-11-25 1440
2.		2.	
3.	7-11-25 1637	3.	

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.1 °C
Comments: Include Zohar.lavy@parsons.com and Kirsten.valentini@parsons.com on all data

Page ____ of

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

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

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2592 PARS02
Client Name : PARSONS Engineering of N
Client Contact : Zohar Lavy
Invoice Name : PARSONS Engineering of N
Invoice Contact : Zohar Lavy

Order Date : 7/11/2025 3:05:25 PM
Project Name : Con Edison - East River Sit
Receive DateTime : 7/11/2025 ~~12:00:00 AM~~ 04:39:00 PM
Purchase Order :

Project Mgr :
Report Type : NYS ASP B
EDD Type : NYSDEC EDD V-3
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2592-01	WC-SOIL-20250711	Solid	07/11/2025	12:30					
					VOCMS Group1		8260D		5 Bus. Days

DP 07/15/2025

Relinguished By :
Date / Time : 7/14/25 0725

Received By : Sam
Date / Time : 07/14/25 10:00

Storage Area : **VOA Refridgerator Room**

SAMPLES RECEIVED ON 7/11/25 @ N40
SAMPLES PLACED IN SM-REF-2

RGH 6
FZ2