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

DATA PACKAGE

GC SEMI-VOLATILES

PROJECT NAME : FORMER SCHLUMBERGER STC PTC SITE D3868221

JACOBS ENGINEERING GROUP, INC.

412 Mt. Kemble Ave

Downtown Building

Morristown, NJ - 07960

Phone No: 9732670555

ORDER ID : Q1812

ATTENTION : John Ynfante

Laboratory Certification ID # 20012

Table Of Contents for Q1812

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Cover Page

Order ID : Q1812

Project ID : Former Schlumberger STC PTC Site D3868221

Client : JACOBS Engineering Group, Inc.

Lab Sample Number	Client Sample Number
Q1812-01	TB01-041525
Q1812-02	RINSE-EB-TANK-041525
Q1812-03	RINSE-EB-PUMP-041525

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 : APPROVED
By Nimisha Pandya, QA/QC Supervisor at 9:19 am, Apr 30, 2025

Date: 4/30/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

JACOBS Engineering Group, Inc.
Project Name: Former Schlumberger STC PTC Site D3868221
Project # N/A
Chemtech Project # Q1812
Test Name: Diesel Range Organics

A. Number of Samples and Date of Receipt:
3 Water samples were received on 04/15/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Diesel Range Organics, Gasoline Range Organics, Mercury, Metals ICP-RCRA, Metals ICP-TAL, METALS RCRA, METALS-TAL, SVOC-TCL BNA -20, TPH GC and VOC-TCLVOA-10. This data package contains results for Diesel Range Organics.

C. Analytical Techniques:
The analysis were performed on instrument FID_G. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 13302.The analysis of Diesel Range Organics was based on method 8015D and extraction was done based on method 3510.

D. QA/ QC Samples:

The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Retention Times were acceptable for all samples.
The RPD met criteria .
The Blank Spike met requirements for all samples .
The Blank Spike Duplicate met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .
The Continuous Calibration met the requirements .

E. Additional Comments:

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

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_____ **APPROVED**
By Nimisha Pandya, QA/QC Supervisor at 9:19 am, Apr 30, 2025

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DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

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

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GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1812 MATRIX: Water

METHOD: 8015D/3510

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

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GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

NA NO YES

ADDITIONAL COMMENTS:

QA REVIEW

REVIEWED
By Sohil Jodhani, QA/QC Director at 8:57 am, Apr 30, 2025

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1812

	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:** 04/30/2025

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LAB CHRONICLE

OrderID:	Q1812	**OrderDate:**	4/15/2025 4:26:00 PM
Client:	JACOBS Engineering Group, Inc.	**Project:**	Former Schlumberger STC PTC Site D3868221
Contact:	John Ynfante	**Location:**	L31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1812-02	**RINSE-EB-TANK-041525**	**Water**			**04/15/25**			**04/15/25**
			Diesel Range Organics	8015D		04/16/25	04/16/25	
			Gasoline Range Organics	8015D			04/16/25	
Q1812-03	**RINSE-EB-PUMP-041525**	**Water**			**04/15/25**			**04/15/25**
			Diesel Range Organics	8015D		04/16/25	04/16/25	
			Gasoline Range Organics	8015D			04/16/25	

QC SUMMARY

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WATER DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Chemtech Client: JACOBS Engineering Group, Inc.

Lab Code: CHEM Case No.: Q1812 SAS No.: Q1812 SDG No.: Q1812

EPA SAMPLE NO.	S1 TETRACOSANE-d50	S2	S3	S4	TOT OUT
PIBLK-FG015669.D	80				0
PIBLK-FG015677.D	87				0
PB167614BL	68				0
PB167614BS	81				0
PB167614BSD	77				0
RINSE-EB-TANK-041525	80				0
RINSE-EB-PUMP-041525	79				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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WATER DIESEL RANGE ORGANICS LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE

Lab Name: Chemtech **Client:** JACOBS Engineering Group, Inc.

Lab Code: CHEM **Cas No:** Q1812 **SAS No :** Q1812 **SDG No:** Q1812

Matrix Spike - EPA Sample No : PB167614BS **Datafile:** FG015673.D

COMPOUND	SPIKE ADDED ug/L	CONCENTRATION ug/L	LCS/LCSD CONCENTRATION ug/L	% REC	QC LIMITS
DRO	200	0	165	82	78-117

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WATER DIESEL RANGE ORGANICS LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE

Lab Name: Chemtech **Client:** JACOBS Engineering Group, Inc.

Lab Code: CHEM **Cas No:** Q1812 **SAS No :** Q1812 **SDG No:** Q1812

Matrix Spike - EPA Sample No : PB167614BSD **Datafile:** FG015674.D

COMPOUND	SPIKE ADDED ug/L	CONCENTRATION ug/L	LCS/LCSD CONCENTRATION ug/L	% REC	QC LIMITS
DRO	200	0	158	79	78-117

LCS/LCSD % Recovery RPD : 4.3

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4B
METHOD BLANK SUMMARY

EPA SAMPLE NO.
PB167614BL

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1812 SAS No.: Q1812 SDG NO.: Q1812

Lab File ID: FG015672.D Lab Sample ID: PB167614BL

Instrument ID: FG Date Extracted: 04/16/2025

Matrix: (soil/water) Water Date Analyzed: 04/16/25

Level: (low/med) low Time Analyzed: 15:14

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB167614BS	PB167614BS	FG015673.D	04/16/25
PB167614BSD	PB167614BSD	FG015674.D	04/16/25
RINSE-EB-TANK-041525	Q1812-02	FG015675.D	04/16/25
RINSE-EB-PUMP-041525	Q1812-03	FG015676.D	04/16/25

COMMENTS:

Form IV

SAMPLE DATA

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Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	04/15/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/15/25
Client Sample ID:	RINSE-EB-TANK-041525	SDG No.:	Q1812
Lab Sample ID:	Q1812-02	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0 Decanted:
Sample Wt/Vol:	900 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015675.D	1	04/16/25 10:05	04/16/25 16:42	PB167614

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	31.0	J	7.00	56.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	16.1		29 - 130	80%	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\FG041625\
Data File : FG015675.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 16:42
Operator : YP\AJ
Sample : Q1812-02
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
RINSE-EB-TANK-041525

Integration File: autoint1.e
Quant Time: Apr 17 02:18:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.007	1843174	16.089 ug/ml
Target Compounds			

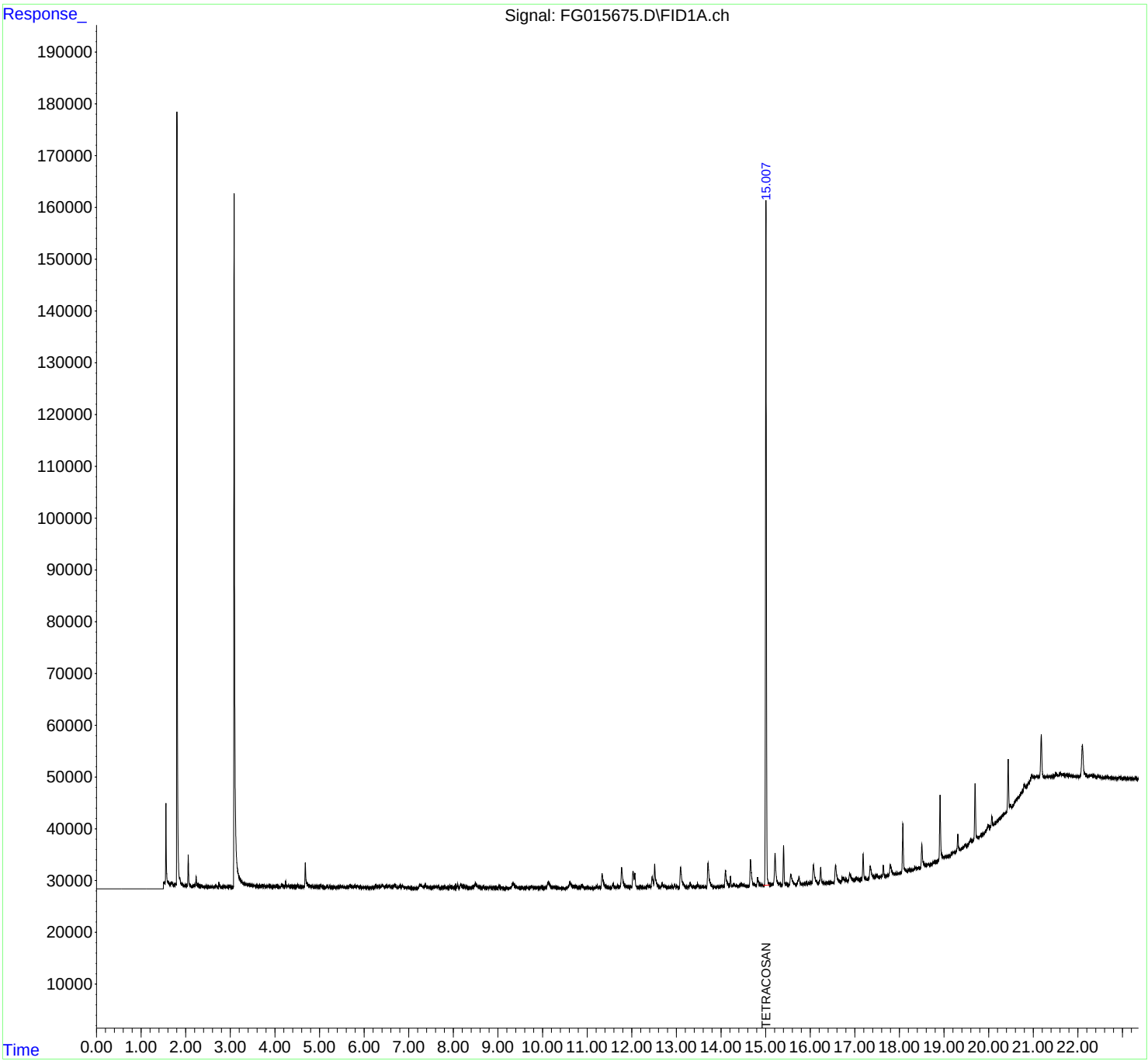
(f)=RT Delta > 1/2 Window (m)=manual int.

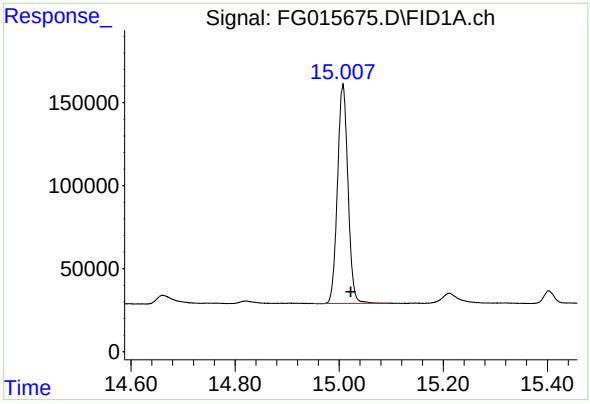
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015675.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 16:42
Operator : YP\AJ
Sample : Q1812-02
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
RINSE-EB-TANK-041525

Integration File: autoint1.e
Quant Time: Apr 17 02:18:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 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.:	15.007 min
Delta R.T.:	-0.015 min
Response:	1843174
Conc:	16.09 ug/ml

Instrument :
FID_G
ClientSampleId :
RINSE-EB-TANK-041525

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Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015675.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 16:42
Sample : Q1812-02
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.447	4.441	4.466	BV	38	301	0.02%	0.006%
2	4.469	4.466	4.478	PV	65	369	0.02%	0.007%
3	4.486	4.478	4.493	PV	179	615	0.03%	0.011%
4	4.515	4.493	4.544	VV	426	7190	0.39%	0.134%
5	4.548	4.544	4.575	VV	172	2109	0.11%	0.039%
6	4.578	4.575	4.583	VV	154	528	0.03%	0.010%
7	4.594	4.583	4.614	VV	152	1638	0.09%	0.030%
8	4.634	4.614	4.652	VV	261	3171	0.17%	0.059%
9	4.681	4.652	4.760	VV	4756	77317	4.15%	1.439%
10	4.763	4.760	4.813	VV	366	7526	0.40%	0.140%
11	4.831	4.813	4.863	VV	431	8271	0.44%	0.154%
12	4.866	4.863	4.870	VV	227	681	0.04%	0.013%
13	4.877	4.870	4.886	VV	197	1241	0.07%	0.023%
14	4.899	4.886	4.917	VV	243	2873	0.15%	0.053%
15	4.929	4.917	4.948	VV	275	3751	0.20%	0.070%
16	4.954	4.948	4.974	VV	169	1652	0.09%	0.031%
17	4.976	4.974	4.999	VV	158	1655	0.09%	0.031%
18	5.027	4.999	5.056	VV	535	7910	0.42%	0.147%
19	5.061	5.056	5.068	VV	190	786	0.04%	0.015%
20	5.072	5.068	5.083	VV	162	714	0.04%	0.013%
21	5.089	5.083	5.094	VV	140	566	0.03%	0.011%
22	5.097	5.094	5.110	VV	152	827	0.04%	0.015%
23	5.120	5.110	5.132	VV	125	1087	0.06%	0.020%
24	5.138	5.132	5.144	VV	106	751	0.04%	0.014%
25	5.156	5.144	5.163	VV	181	1432	0.08%	0.027%
26	5.175	5.163	5.209	VV	230	3627	0.19%	0.068%
27	5.229	5.209	5.262	VV	309	4229	0.23%	0.079%
28	5.274	5.262	5.283	VV	105	988	0.05%	0.018%
29	5.297	5.283	5.322	VV	132	1731	0.09%	0.032%
30	5.345	5.322	5.363	VV	220	2030	0.11%	0.038%
31	5.369	5.363	5.380	PV	89	451	0.02%	0.008%
32	5.390	5.380	5.436	VV	162	3136	0.17%	0.058%
33	5.455	5.436	5.466	VV	397	5003	0.27%	0.093%
34	5.499	5.466	5.537	VV	343	9943	0.53%	0.185%
35	5.540	5.537	5.547	VV	209	903	0.05%	0.017%
36	5.550	5.547	5.557	VV	153	830	0.04%	0.015%

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37	5.559	5.557	5.585	VV	169	1973	0.11%	0.037%
38	5.593	5.585	5.611	VV	200	1820	0.10%	0.034%
39	5.618	5.611	5.638	VV	171	1427	0.08%	0.027%
40	5.675	5.638	5.708	VV	514	13141	0.70%	0.245%
41	5.711	5.708	5.725	VV	315	2597	0.14%	0.048%
42	5.728	5.725	5.740	VV	276	1997	0.11%	0.037%
43	5.749	5.740	5.773	VV	292	4657	0.25%	0.087%
44	5.793	5.773	5.816	VV	427	8614	0.46%	0.160%
45	5.819	5.816	5.824	VV	336	1195	0.06%	0.022%
46	5.837	5.824	5.871	VV	515	9445	0.51%	0.176%
47	5.880	5.871	5.893	VV	229	2433	0.13%	0.045%
48	5.898	5.893	5.905	VV	205	1268	0.07%	0.024%
49	5.911	5.905	5.928	VV	249	2302	0.12%	0.043%
50	5.930	5.928	5.939	VV	232	849	0.05%	0.016%
51	5.944	5.939	5.982	VV	195	3443	0.18%	0.064%
52	5.995	5.982	6.005	VV	182	1647	0.09%	0.031%
53	6.010	6.005	6.017	VV	191	949	0.05%	0.018%
54	6.027	6.017	6.056	VV	302	3503	0.19%	0.065%
55	6.062	6.056	6.067	VV	159	851	0.05%	0.016%
56	6.071	6.067	6.100	VV	189	2216	0.12%	0.041%
57	6.104	6.100	6.108	VV	144	386	0.02%	0.007%
58	6.115	6.108	6.120	VV	100	476	0.03%	0.009%
59	6.129	6.120	6.161	PV	123	2156	0.12%	0.040%
60	6.188	6.161	6.213	VV	192	4071	0.22%	0.076%
61	6.257	6.213	6.263	VV	482	7732	0.41%	0.144%
62	6.264	6.263	6.329	VV	457	12988	0.70%	0.242%
63	6.337	6.329	6.378	VV	367	8470	0.45%	0.158%
64	6.405	6.378	6.423	VV	689	12975	0.70%	0.242%
65	6.428	6.423	6.453	VV	542	6940	0.37%	0.129%
66	6.462	6.453	6.469	VV	314	2802	0.15%	0.052%
67	6.492	6.469	6.516	VV	488	11016	0.59%	0.205%
68	6.522	6.516	6.535	VV	403	4141	0.22%	0.077%
69	6.557	6.535	6.596	VV	553	13781	0.74%	0.257%
70	6.600	6.596	6.607	VV	275	1514	0.08%	0.028%
71	6.626	6.607	6.636	VV	373	4983	0.27%	0.093%
72	6.655	6.636	6.668	VV	425	6640	0.36%	0.124%
73	6.682	6.668	6.761	VV	684	20858	1.12%	0.388%
74	6.771	6.761	6.778	VV	284	2195	0.12%	0.041%
75	6.807	6.778	6.831	VV	587	11127	0.60%	0.207%
76	6.857	6.831	6.882	VV	642	12467	0.67%	0.232%
77	6.890	6.882	6.909	VV	304	3411	0.18%	0.063%
78	6.914	6.909	6.923	VV	235	1658	0.09%	0.031%
79	6.947	6.923	6.957	VV	254	3496	0.19%	0.065%
80	6.969	6.957	7.014	VV	286	5588	0.30%	0.104%
81	7.017	7.014	7.026	VV	124	845	0.05%	0.016%
82	7.036	7.026	7.048	VV	179	1088	0.06%	0.020%
83	7.053	7.048	7.059	VV	131	476	0.03%	0.009%
84	7.062	7.059	7.069	VV	110	374	0.02%	0.007%
85	7.075	7.069	7.082	VV	112	515	0.03%	0.010%
86	7.087	7.082	7.099	PV	76	597	0.03%	0.011%
87	7.102	7.099	7.146	VV	90	1300	0.07%	0.024%
88	7.152	7.146	7.161	PV	99	472	0.03%	0.009%
89	7.164	7.161	7.188	VV	94	856	0.05%	0.016%

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90	7.199	7.188	7.220	VV	200	1970	0.11%	0.037%
91	7.244	7.220	7.292	VV	689	21838	1.17%	0.406%
92	7.298	7.292	7.322	VV	455	7034	0.38%	0.131%
93	7.331	7.322	7.354	VV	432	6406	0.34%	0.119%
94	7.374	7.354	7.408	VV	874	14991	0.80%	0.279%
95	7.412	7.408	7.426	VV	323	3048	0.16%	0.057%
96	7.430	7.426	7.439	VV	251	1716	0.09%	0.032%
97	7.441	7.439	7.452	VV	235	1242	0.07%	0.023%
98	7.473	7.452	7.510	VV	264	5770	0.31%	0.107%
99	7.512	7.510	7.519	VV	168	750	0.04%	0.014%
100	7.534	7.519	7.542	VV	210	2418	0.13%	0.045%
101	7.584	7.542	7.607	VV	426	9940	0.53%	0.185%
102	7.622	7.607	7.657	VV	372	8795	0.47%	0.164%
103	7.667	7.657	7.718	VV	372	6786	0.36%	0.126%
104	7.723	7.718	7.734	VV	174	1161	0.06%	0.022%
105	7.749	7.734	7.781	VV	288	5334	0.29%	0.099%
106	7.799	7.781	7.843	VV	408	10502	0.56%	0.195%
107	7.849	7.843	7.869	VV	224	2470	0.13%	0.046%
108	7.891	7.869	7.898	VV	183	2257	0.12%	0.042%
109	7.925	7.898	7.945	VV	604	8826	0.47%	0.164%
110	7.964	7.945	7.981	VV	564	4375	0.23%	0.081%
111	7.984	7.981	7.989	VV	232	709	0.04%	0.013%
112	7.993	7.989	7.999	VV	117	624	0.03%	0.012%
113	8.003	7.999	8.008	VV	115	459	0.02%	0.009%
114	8.011	8.008	8.021	VV	103	728	0.04%	0.014%
115	8.026	8.021	8.039	VV	132	973	0.05%	0.018%
116	8.044	8.039	8.056	VV	102	1265	0.07%	0.024%
117	8.098	8.056	8.137	VV	893	15698	0.84%	0.292%
118	8.168	8.137	8.249	VV	722	30397	1.63%	0.566%
119	8.253	8.249	8.277	VV	316	4433	0.24%	0.083%
120	8.280	8.277	8.297	VV	279	2841	0.15%	0.053%
121	8.304	8.297	8.343	VV	286	5627	0.30%	0.105%
122	8.356	8.343	8.382	VV	236	3572	0.19%	0.066%
123	8.390	8.382	8.407	VV	232	2276	0.12%	0.042%
124	8.433	8.407	8.445	VV	239	3850	0.21%	0.072%
125	8.496	8.445	8.567	VV	1011	38751	2.08%	0.721%
126	8.570	8.567	8.576	VV	329	1589	0.09%	0.030%
127	8.582	8.576	8.598	VV	278	3132	0.17%	0.058%
128	8.604	8.598	8.633	VV	264	3849	0.21%	0.072%
129	8.641	8.633	8.657	VV	152	2111	0.11%	0.039%
130	8.668	8.657	8.679	VV	248	2786	0.15%	0.052%
131	8.684	8.679	8.689	VV	261	1476	0.08%	0.027%
132	8.692	8.689	8.706	VV	244	1699	0.09%	0.032%
133	8.711	8.706	8.726	VV	162	1529	0.08%	0.028%
134	8.730	8.726	8.742	VV	161	1128	0.06%	0.021%
135	8.766	8.742	8.788	VV	200	2910	0.16%	0.054%
136	8.816	8.788	8.864	VV	266	7318	0.39%	0.136%
137	8.889	8.864	8.910	VV	282	4708	0.25%	0.088%
138	8.920	8.910	8.942	VV	146	1903	0.10%	0.035%
139	8.956	8.942	8.972	VV	216	2759	0.15%	0.051%
140	9.025	8.972	9.058	VV	625	13538	0.73%	0.252%
141	9.065	9.058	9.090	VV	227	3270	0.18%	0.061%

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142	9.095	9.090	9.112	VV	191	1741	0.09%	0.032%
143	9.119	9.112	9.135	VV	121	1249	0.07%	0.023%
144	9.139	9.135	9.143	VV	146	315	0.02%	0.006%
145	9.147	9.143	9.169	PV	88	579	0.03%	0.011%
146	9.185	9.169	9.191	VV	146	1387	0.07%	0.026%
147	9.202	9.191	9.222	VV	191	2394	0.13%	0.045%
148	9.228	9.222	9.246	VV	80	675	0.04%	0.013%
149	9.278	9.246	9.288	VV	297	4254	0.23%	0.079%
150	9.327	9.288	9.353	VV	1023	25814	1.38%	0.480%
151	9.357	9.353	9.394	VV	741	13740	0.74%	0.256%
152	9.398	9.394	9.452	VV	394	9576	0.51%	0.178%
153	9.458	9.452	9.478	VV	206	2211	0.12%	0.041%
154	9.494	9.478	9.527	VV	204	4332	0.23%	0.081%
155	9.533	9.527	9.540	VV	201	1040	0.06%	0.019%
156	9.546	9.540	9.566	VV	182	2123	0.11%	0.040%
157	9.570	9.566	9.587	VV	129	985	0.05%	0.018%
158	9.594	9.587	9.601	VV	94	523	0.03%	0.010%
159	9.640	9.601	9.672	VV	375	7163	0.38%	0.133%
160	9.676	9.672	9.699	VV	123	1623	0.09%	0.030%
161	9.750	9.699	9.776	VV	429	12866	0.69%	0.239%
162	9.780	9.776	9.808	VV	257	3516	0.19%	0.065%
163	9.815	9.808	9.822	VV	239	1663	0.09%	0.031%
164	9.831	9.822	9.860	VV	267	4461	0.24%	0.083%
165	9.868	9.860	9.908	VV	283	4448	0.24%	0.083%
166	9.914	9.908	9.917	VV	115	382	0.02%	0.007%
167	9.933	9.917	9.942	VV	143	1378	0.07%	0.026%
168	9.944	9.942	9.948	VV	108	264	0.01%	0.005%
169	9.973	9.948	9.993	VV	372	6001	0.32%	0.112%
170	10.005	9.993	10.011	VV	237	1765	0.09%	0.033%
171	10.015	10.011	10.044	VV	190	2264	0.12%	0.042%
172	10.061	10.044	10.070	VV	223	2379	0.13%	0.044%
173	10.123	10.070	10.130	VV	1214	22939	1.23%	0.427%
174	10.140	10.130	10.213	VV	1178	31060	1.67%	0.578%
175	10.220	10.213	10.232	VV	237	2342	0.13%	0.044%
176	10.252	10.232	10.275	VV	335	6503	0.35%	0.121%
177	10.279	10.275	10.284	VV	240	1100	0.06%	0.020%
178	10.305	10.284	10.355	VV	343	7878	0.42%	0.147%
179	10.362	10.355	10.368	VV	113	670	0.04%	0.012%
180	10.381	10.368	10.412	VV	153	1921	0.10%	0.036%
181	10.422	10.412	10.439	VV	87	376	0.02%	0.007%
182	10.457	10.439	10.463	PV	122	860	0.05%	0.016%
183	10.471	10.463	10.509	VV	143	1913	0.10%	0.036%
184	10.517	10.509	10.521	PV	48	260	0.01%	0.005%
185	10.539	10.521	10.552	VV	189	2627	0.14%	0.049%
186	10.612	10.552	10.688	VV	1259	50258	2.70%	0.936%
187	10.696	10.688	10.710	VV	383	4768	0.26%	0.089%
188	10.724	10.710	10.745	VV	432	7501	0.40%	0.140%
189	10.762	10.745	10.796	VV	395	9224	0.49%	0.172%
190	10.810	10.796	10.834	VV	310	4774	0.26%	0.089%
191	10.880	10.834	10.924	VV	811	22787	1.22%	0.424%
192	10.927	10.924	10.940	VV	291	2064	0.11%	0.038%
193	10.945	10.940	10.957	VV	196	1606	0.09%	0.030%
194	10.988	10.957	10.993	VV	225	3589	0.19%	0.067%

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195	10.999	10.993	11.023	VV	257	3081	0.17%	0.057%
196	11.038	11.023	11.052	VV	155	1666	0.09%	0.031%
197	11.072	11.052	11.094	VV	166	3314	0.18%	0.062%
198	11.106	11.094	11.134	VV	183	2379	0.13%	0.044%
199	11.219	11.134	11.251	PV	521	15204	0.82%	0.283%
200	11.273	11.251	11.292	VV	392	5740	0.31%	0.107%
201	11.335	11.292	11.419	VV	2900	82286	4.41%	1.532%
202	11.424	11.419	11.459	VV	447	8309	0.45%	0.155%
203	11.461	11.459	11.477	VV	271	2127	0.11%	0.040%
204	11.486	11.477	11.507	VV	163	2416	0.13%	0.045%
205	11.526	11.507	11.547	VV	254	3833	0.21%	0.071%
206	11.578	11.547	11.634	VV	892	22299	1.20%	0.415%
207	11.692	11.634	11.707	VV	567	12489	0.67%	0.232%
208	11.710	11.707	11.722	VV	280	1864	0.10%	0.035%
209	11.772	11.722	11.894	VV	4059	117191	6.29%	2.181%
210	11.907	11.894	11.912	VV	305	3145	0.17%	0.059%
211	11.918	11.912	11.945	VV	329	4143	0.22%	0.077%
212	11.976	11.945	11.995	VV	559	8533	0.46%	0.159%
213	12.028	11.995	12.054	VV	3292	67772	3.64%	1.262%
214	12.069	12.054	12.122	VV	2889	49100	2.63%	0.914%
215	12.127	12.122	12.156	VV	262	4473	0.24%	0.083%
216	12.159	12.156	12.188	VV	188	3132	0.17%	0.058%
217	12.199	12.188	12.214	VV	287	2831	0.15%	0.053%
218	12.225	12.214	12.234	VV	208	1657	0.09%	0.031%
219	12.238	12.234	12.254	VV	184	1951	0.10%	0.036%
220	12.258	12.254	12.292	VV	234	2659	0.14%	0.049%
221	12.316	12.292	12.334	VV	272	4219	0.23%	0.079%
222	12.356	12.334	12.378	VV	669	9786	0.52%	0.182%
223	12.395	12.378	12.425	VV	484	8940	0.48%	0.166%
224	12.431	12.425	12.433	VV	285	898	0.05%	0.017%
225	12.457	12.433	12.495	VV	2252	51420	2.76%	0.957%
226	12.514	12.495	12.588	VV	4690	96163	5.16%	1.790%
227	12.594	12.588	12.652	VV	422	10691	0.57%	0.199%
228	12.677	12.652	12.732	VV	925	22562	1.21%	0.420%
229	12.750	12.732	12.805	VV	390	8853	0.47%	0.165%
230	12.844	12.805	12.880	VV	231	6906	0.37%	0.129%
231	12.902	12.880	12.928	VV	619	8726	0.47%	0.162%
232	12.966	12.928	12.986	VV	745	12722	0.68%	0.237%
233	12.999	12.986	13.060	VV	324	7158	0.38%	0.133%
234	13.094	13.060	13.152	PV	4054	101662	5.45%	1.892%
235	13.157	13.152	13.199	VV	813	14138	0.76%	0.263%
236	13.203	13.199	13.222	VV	259	2822	0.15%	0.053%
237	13.229	13.222	13.246	VV	258	2395	0.13%	0.045%
238	13.312	13.246	13.398	VV	712	29797	1.60%	0.555%
239	13.420	13.398	13.446	VV	283	5468	0.29%	0.102%
240	13.474	13.446	13.503	VV	772	13646	0.73%	0.254%
241	13.512	13.503	13.524	VV	303	2894	0.16%	0.054%
242	13.528	13.524	13.535	VV	197	1048	0.06%	0.020%
243	13.569	13.535	13.586	VV	216	4823	0.26%	0.090%
244	13.592	13.586	13.600	VV	266	1581	0.08%	0.029%
245	13.605	13.600	13.632	VV	231	3156	0.17%	0.059%
246	13.647	13.632	13.675	VV	213	3553	0.19%	0.066%

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247	13.709	13.675	13.789	PV	4758	122841	6.59%	2.287%
248	13.798	13.789	13.825	VV	439	6638	0.36%	0.124%
249	13.833	13.825	13.847	VV	197	1828	0.10%	0.034%
250	13.854	13.847	13.859	VV	146	761	0.04%	0.014%
251	13.874	13.859	13.880	VV	163	1324	0.07%	0.025%
252	13.883	13.880	13.885	VV	107	287	0.02%	0.005%
253	13.894	13.885	13.918	VV	185	2928	0.16%	0.054%
254	13.923	13.918	13.951	VV	197	2519	0.14%	0.047%
255	13.959	13.951	13.975	VV	134	1470	0.08%	0.027%
256	14.014	13.975	14.019	VV	359	6366	0.34%	0.118%
257	14.022	14.019	14.048	VV	363	4532	0.24%	0.084%
258	14.058	14.048	14.064	VV	257	2213	0.12%	0.041%
259	14.100	14.064	14.190	VV	3204	88482	4.75%	1.647%
260	14.213	14.190	14.254	VV	2162	30649	1.64%	0.570%
261	14.282	14.254	14.320	VV	685	17455	0.94%	0.325%
262	14.336	14.320	14.385	VV	381	10918	0.59%	0.203%
263	14.390	14.385	14.412	VV	229	3444	0.18%	0.064%
264	14.433	14.412	14.451	VV	581	10959	0.59%	0.204%
265	14.465	14.451	14.488	VV	653	11187	0.60%	0.208%
266	14.504	14.488	14.538	VV	439	9615	0.52%	0.179%
267	14.552	14.538	14.606	VV	384	9890	0.53%	0.184%
268	14.613	14.606	14.627	PV	99	758	0.04%	0.014%
269	14.660	14.627	14.735	VV	5269	126055	6.76%	2.346%
270	14.753	14.735	14.787	VV	498	12149	0.65%	0.226%
271	14.821	14.787	14.865	VV	1742	38930	2.09%	0.725%
272	14.870	14.865	14.875	VV	386	1921	0.10%	0.036%
273	14.889	14.875	14.900	VV	394	5272	0.28%	0.098%
274	14.904	14.900	14.915	VV	404	3298	0.18%	0.061%
275	14.918	14.915	14.969	VV	402	7385	0.40%	0.137%
276	15.007	14.969	15.112	VV	131220	1864391	100.00%	34.704%
277	15.114	15.112	15.130	VV	353	2691	0.14%	0.050%
278	15.147	15.130	15.160	VV	386	5539	0.30%	0.103%
279	15.212	15.160	15.295	VV	6272	154650	8.29%	2.879%
280	15.301	15.295	15.310	VV	371	3335	0.18%	0.062%
281	15.314	15.310	15.317	VV	394	1563	0.08%	0.029%
282	15.321	15.317	15.374	VV	450	6884	0.37%	0.128%
283	15.403	15.374	15.459	VV	7734	112051	6.01%	2.086%
284	15.469	15.459	15.524	VV	304	6571	0.35%	0.122%
285	15.564	15.524	15.661	PV	2078	66341	3.56%	1.235%
286	15.665	15.661	15.680	VV	176	1467	0.08%	0.027%
287	15.750	15.680	15.811	VV	1479	39575	2.12%	0.737%
288	15.819	15.811	15.824	VV	115	652	0.03%	0.012%
289	15.827	15.824	15.842	VV	130	522	0.03%	0.010%
290	15.868	15.842	15.881	VV	224	3581	0.19%	0.067%
291	15.912	15.881	15.938	VV	347	7180	0.39%	0.134%
292	15.942	15.938	15.946	VV	99	513	0.03%	0.010%
293	15.962	15.946	15.975	VV	201	2961	0.16%	0.055%
294	15.994	15.975	16.012	VV	312	5500	0.29%	0.102%
295	16.024	16.012	16.040	VV	287	3645	0.20%	0.068%
296	16.071	16.040	16.169	VV	3781	103770	5.57%	1.932%
297	16.183	16.169	16.190	VV	165	1925	0.10%	0.036%
298	16.235	16.190	16.329	VV	3127	60510	3.25%	1.126%
299	16.333	16.329	16.340	VV	108	458	0.02%	0.009%

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300	16.349	16.340	16.358	VV	120	702	0.04%	0.013%
301	16.371	16.358	16.375	VV	193	1391	0.07%	0.026%
302	16.380	16.375	16.394	VV	210	1323	0.07%	0.025%
303	16.443	16.394	16.447	VV	133	2873	0.15%	0.053%
304	16.472	16.447	16.503	VV	201	4533	0.24%	0.084%
305	16.509	16.503	16.524	VV	119	1093	0.06%	0.020%
306	16.568	16.524	16.692	PV	3428	97207	5.21%	1.809%
307	16.719	16.692	16.734	VV	834	12844	0.69%	0.239%
308	16.750	16.734	16.782	VV	973	16077	0.86%	0.299%
309	16.802	16.782	16.838	VV	731	11880	0.64%	0.221%
310	16.843	16.838	16.846	PV	100	260	0.01%	0.005%
311	16.884	16.846	16.986	VV	1486	49742	2.67%	0.926%
312	17.035	16.986	17.061	VV	448	14807	0.79%	0.276%
313	17.070	17.061	17.103	VV	337	5794	0.31%	0.108%
314	17.135	17.103	17.148	VV	118	2086	0.11%	0.039%
315	17.187	17.148	17.223	VV	5007	76895	4.12%	1.431%
316	17.228	17.223	17.280	VV	292	5019	0.27%	0.093%
317	17.283	17.280	17.298	VV	85	435	0.02%	0.008%
318	17.304	17.298	17.310	PV	54	325	0.02%	0.006%
319	17.349	17.310	17.444	VV	2442	73189	3.93%	1.362%
320	17.482	17.444	17.542	VV	474	16782	0.90%	0.312%
321	17.546	17.542	17.552	VV	81	407	0.02%	0.008%
322	17.641	17.552	17.692	VV	2187	33423	1.79%	0.622%
323	17.702	17.692	17.709	PV	85	290	0.02%	0.005%
324	17.740	17.709	17.756	PV	173	2844	0.15%	0.053%
325	17.799	17.756	17.885	VV	1991	58939	3.16%	1.097%
326	17.918	17.885	17.927	VV	183	2554	0.14%	0.048%
327	17.933	17.927	17.939	VV	101	643	0.03%	0.012%
328	17.944	17.939	17.950	VV	64	250	0.01%	0.005%
329	17.976	17.950	17.982	PV	118	1472	0.08%	0.027%

Sum of corrected areas: 5372270

FG032725.M Wed Apr 23 01:57:50 2025

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	04/15/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/15/25
Client Sample ID:	RINSE-EB-PUMP-041525	SDG No.:	Q1812
Lab Sample ID:	Q1812-03	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0 Decanted:
Sample Wt/Vol:	990 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015676.D	1	04/16/25 10:05	04/16/25 17:12	PB167614

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	35.0	J	6.00	51.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	15.7		29 - 130	79%	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\FG041625\
Data File : FG015676.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 17:12
Operator : YP\AJ
Sample : Q1812-03
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
RINSE-EB-PUMP-041525

Integration File: autoint1.e
Quant Time: Apr 17 02:18:31 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.007	1800028	15.712 ug/ml
Target Compounds			

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

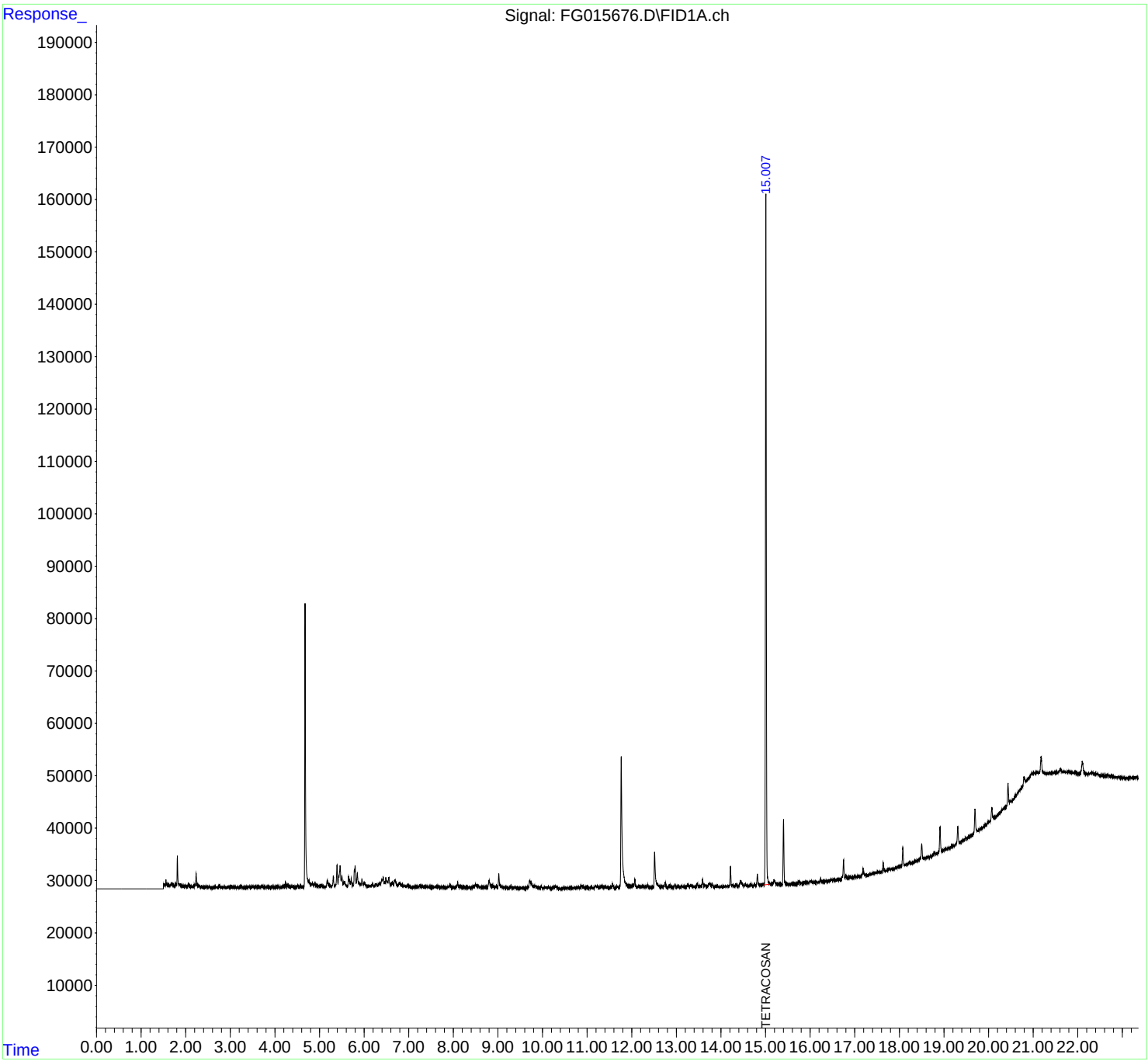
Quantitation Report (QT Reviewed)

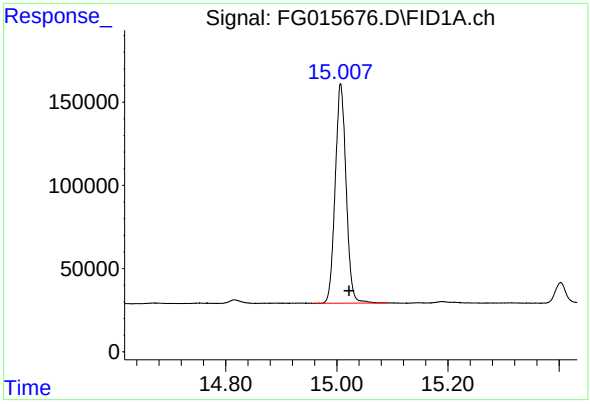
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015676.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 17:12
Operator : YP\AJ
Sample : Q1812-03
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
RINSE-EB-PUMP-041525

Integration File: autoint1.e
Quant Time: Apr 17 02:18:31 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 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.:	15.007 min
Delta R.T.:	-0.015 min
Response:	1800028
Conc:	15.71 ug/ml

Instrument :
FID_G
ClientSampleId :
RINSE-EB-PUMP-041525

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015676.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 17:12
Sample : Q1812-03
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.477	4.468	4.488	PV	72	973	0.05%	0.016%
2	4.512	4.488	4.545	VV	587	9214	0.51%	0.150%
3	4.551	4.545	4.563	VV	264	2078	0.11%	0.034%
4	4.578	4.563	4.622	VV	424	7102	0.39%	0.115%
5	4.634	4.622	4.649	VV	248	2592	0.14%	0.042%
6	4.676	4.649	4.745	VV	54251	653987	36.05%	10.619%
7	4.764	4.745	4.809	VV	1342	35337	1.95%	0.574%
8	4.841	4.809	4.878	VV	877	25224	1.39%	0.410%
9	4.897	4.878	4.925	VV	1127	18247	1.01%	0.296%
10	4.936	4.925	4.956	VV	455	7021	0.39%	0.114%
11	4.966	4.956	4.978	VV	364	3953	0.22%	0.064%
12	4.994	4.978	5.016	VV	333	6449	0.36%	0.105%
13	5.028	5.016	5.043	VV	360	4269	0.24%	0.069%
14	5.046	5.043	5.077	VV	329	4739	0.26%	0.077%
15	5.080	5.077	5.093	VV	209	1952	0.11%	0.032%
16	5.103	5.093	5.115	VV	253	2377	0.13%	0.039%
17	5.120	5.115	5.126	VV	233	1234	0.07%	0.020%
18	5.136	5.126	5.148	VV	286	2892	0.16%	0.047%
19	5.172	5.148	5.191	VV	1384	22428	1.24%	0.364%
20	5.199	5.191	5.213	VV	808	9220	0.51%	0.150%
21	5.219	5.213	5.259	VV	698	11189	0.62%	0.182%
22	5.310	5.259	5.342	VV	2211	37570	2.07%	0.610%
23	5.393	5.342	5.415	VV	4383	70419	3.88%	1.143%
24	5.431	5.415	5.437	VV	2181	20590	1.14%	0.334%
25	5.462	5.437	5.488	VV	4274	84963	4.68%	1.380%
26	5.502	5.488	5.530	VV	2236	36743	2.03%	0.597%
27	5.544	5.530	5.555	VV	1159	14429	0.80%	0.234%
28	5.567	5.555	5.588	VV	1253	17427	0.96%	0.283%
29	5.599	5.588	5.630	VV	562	10101	0.56%	0.164%
30	5.652	5.630	5.665	VV	2201	27355	1.51%	0.444%
31	5.672	5.665	5.695	VV	1377	19758	1.09%	0.321%
32	5.711	5.695	5.759	VV	1897	31532	1.74%	0.512%
33	5.782	5.759	5.789	VV	3559	35374	1.95%	0.574%
34	5.799	5.789	5.824	VV	4259	55381	3.05%	0.899%
35	5.847	5.824	5.872	VV	2862	50503	2.78%	0.820%
36	5.877	5.872	5.897	VV	1152	13412	0.74%	0.218%

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37	5.906	5.897	5.935	VV	865	16071	0.89%	0.261%
38	5.952	5.935	5.978	VV	1593	26354	1.45%	0.428%
39	5.992	5.978	5.999	VV	902	9372	0.52%	0.152%
40	6.012	5.999	6.051	VV	1104	22435	1.24%	0.364%
41	6.060	6.051	6.087	VV	487	8231	0.45%	0.134%
42	6.104	6.087	6.118	VV	370	5671	0.31%	0.092%
43	6.133	6.118	6.146	VV	370	5299	0.29%	0.086%
44	6.171	6.146	6.178	VV	587	7615	0.42%	0.124%
45	6.189	6.178	6.217	VV	850	12155	0.67%	0.197%
46	6.225	6.217	6.235	VV	359	3117	0.17%	0.051%
47	6.259	6.235	6.303	VV	707	21863	1.21%	0.355%
48	6.337	6.303	6.348	VV	888	16740	0.92%	0.272%
49	6.358	6.348	6.371	VV	979	11937	0.66%	0.194%
50	6.392	6.371	6.405	VV	1536	24376	1.34%	0.396%
51	6.427	6.405	6.450	VV	2071	41905	2.31%	0.680%
52	6.463	6.450	6.468	VV	1172	11209	0.62%	0.182%
53	6.490	6.468	6.510	VV	1951	36872	2.03%	0.599%
54	6.521	6.510	6.535	VV	1342	18116	1.00%	0.294%
55	6.552	6.535	6.608	VV	2030	48150	2.65%	0.782%
56	6.627	6.608	6.658	VV	1188	23989	1.32%	0.389%
57	6.697	6.658	6.752	VV	1471	53841	2.97%	0.874%
58	6.800	6.752	6.836	VV	1096	35946	1.98%	0.584%
59	6.849	6.836	6.859	VV	566	7427	0.41%	0.121%
60	6.862	6.859	6.885	VV	558	6947	0.38%	0.113%
61	6.889	6.885	6.895	VV	425	2324	0.13%	0.038%
62	6.899	6.895	6.911	VV	383	3260	0.18%	0.053%
63	6.924	6.911	6.935	VV	383	4804	0.26%	0.078%
64	6.939	6.935	6.947	VV	366	2095	0.12%	0.034%
65	6.973	6.947	7.017	VV	534	14696	0.81%	0.239%
66	7.023	7.017	7.062	VV	327	5151	0.28%	0.084%
67	7.085	7.062	7.097	VV	181	2635	0.15%	0.043%
68	7.101	7.097	7.123	VV	206	2273	0.13%	0.037%
69	7.130	7.123	7.146	VV	188	1858	0.10%	0.030%
70	7.160	7.146	7.168	VV	305	2832	0.16%	0.046%
71	7.171	7.168	7.179	VV	283	1417	0.08%	0.023%
72	7.182	7.179	7.192	VV	244	1574	0.09%	0.026%
73	7.198	7.192	7.206	VV	280	1957	0.11%	0.032%
74	7.210	7.206	7.225	VV	289	2959	0.16%	0.048%
75	7.241	7.225	7.255	VV	459	6489	0.36%	0.105%
76	7.262	7.255	7.310	VV	461	11609	0.64%	0.188%
77	7.333	7.310	7.346	VV	386	6683	0.37%	0.109%
78	7.350	7.346	7.372	VV	330	3643	0.20%	0.059%
79	7.380	7.372	7.393	VV	248	3048	0.17%	0.049%
80	7.409	7.393	7.439	VV	374	7759	0.43%	0.126%
81	7.443	7.439	7.455	VV	247	1866	0.10%	0.030%
82	7.476	7.455	7.502	VV	325	6156	0.34%	0.100%
83	7.524	7.502	7.533	VV	250	3499	0.19%	0.057%
84	7.540	7.533	7.561	VV	271	3224	0.18%	0.052%
85	7.567	7.561	7.573	VV	187	1165	0.06%	0.019%
86	7.578	7.573	7.587	VV	229	1530	0.08%	0.025%
87	7.619	7.587	7.628	VV	359	5822	0.32%	0.095%
88	7.637	7.628	7.668	VV	402	7946	0.44%	0.129%
89	7.669	7.668	7.681	VV	294	1945	0.11%	0.032%

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90	7.686	7.681	7.700	VV	224	2020	0.11%	0.033%
91	7.704	7.700	7.718	VV	188	2048	0.11%	0.033%
92	7.723	7.718	7.735	VV	276	1980	0.11%	0.032%
93	7.753	7.735	7.767	VV	265	3883	0.21%	0.063%
94	7.774	7.767	7.783	VV	252	1561	0.09%	0.025%
95	7.789	7.783	7.820	VV	202	3340	0.18%	0.054%
96	7.823	7.820	7.845	VV	160	1607	0.09%	0.026%
97	7.875	7.845	7.908	VV	283	6787	0.37%	0.110%
98	7.924	7.908	7.978	VV	892	14082	0.78%	0.229%
99	7.999	7.978	8.017	VV	226	3920	0.22%	0.064%
100	8.022	8.017	8.025	VV	199	752	0.04%	0.012%
101	8.034	8.025	8.042	VV	228	1670	0.09%	0.027%
102	8.099	8.042	8.135	VV	1187	23998	1.32%	0.390%
103	8.162	8.135	8.185	VV	356	7633	0.42%	0.124%
104	8.191	8.185	8.197	VV	238	1477	0.08%	0.024%
105	8.211	8.197	8.227	VV	266	3315	0.18%	0.054%
106	8.231	8.227	8.240	VV	210	1350	0.07%	0.022%
107	8.243	8.240	8.251	VV	181	911	0.05%	0.015%
108	8.255	8.251	8.258	VV	176	630	0.03%	0.010%
109	8.262	8.258	8.277	VV	213	1649	0.09%	0.027%
110	8.288	8.277	8.301	VV	214	2206	0.12%	0.036%
111	8.313	8.301	8.326	VV	179	2038	0.11%	0.033%
112	8.329	8.326	8.355	VV	177	1997	0.11%	0.032%
113	8.359	8.355	8.368	VV	134	853	0.05%	0.014%
114	8.373	8.368	8.396	VV	87	982	0.05%	0.016%
115	8.401	8.396	8.416	PV	112	740	0.04%	0.012%
116	8.466	8.416	8.476	VV	403	9403	0.52%	0.153%
117	8.495	8.476	8.517	VV	743	13072	0.72%	0.212%
118	8.529	8.517	8.536	VV	442	4420	0.24%	0.072%
119	8.541	8.536	8.552	VV	416	3420	0.19%	0.056%
120	8.556	8.552	8.582	VV	350	4618	0.25%	0.075%
121	8.588	8.582	8.611	VV	231	2913	0.16%	0.047%
122	8.616	8.611	8.620	VV	173	768	0.04%	0.012%
123	8.624	8.620	8.636	VV	192	1437	0.08%	0.023%
124	8.653	8.636	8.702	VB	172	3710	0.20%	0.060%
125	8.723	8.703	8.728	BV	171	1039	0.06%	0.017%
126	8.732	8.728	8.745	VV	129	913	0.05%	0.015%
127	8.753	8.745	8.760	VV	172	880	0.05%	0.014%
128	8.803	8.760	8.871	VV	1388	38683	2.13%	0.628%
129	8.885	8.871	8.918	VV	520	8391	0.46%	0.136%
130	8.922	8.918	8.929	VV	175	841	0.05%	0.014%
131	8.933	8.929	8.938	VV	145	669	0.04%	0.011%
132	8.960	8.938	8.984	VV	379	6297	0.35%	0.102%
133	9.020	8.984	9.108	VV	2755	50371	2.78%	0.818%
134	9.120	9.108	9.148	VV	248	3736	0.21%	0.061%
135	9.151	9.148	9.156	VV	158	539	0.03%	0.009%
136	9.187	9.156	9.196	VV	193	2812	0.15%	0.046%
137	9.201	9.196	9.213	VV	232	1440	0.08%	0.023%
138	9.217	9.213	9.222	VV	124	483	0.03%	0.008%
139	9.231	9.222	9.238	VV	121	679	0.04%	0.011%
140	9.268	9.238	9.277	VV	260	3425	0.19%	0.056%
141	9.296	9.277	9.315	VV	498	6598	0.36%	0.107%

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142	9.319	9.315	9.346	VV	261	3113	0.17%	0.051%
143	9.353	9.346	9.358	VV	248	1550	0.09%	0.025%
144	9.362	9.358	9.376	VV	232	2265	0.12%	0.037%
145	9.380	9.376	9.411	VV	213	3465	0.19%	0.056%
146	9.418	9.411	9.433	VV	197	1681	0.09%	0.027%
147	9.436	9.433	9.443	VV	143	793	0.04%	0.013%
148	9.449	9.443	9.463	VV	146	1166	0.06%	0.019%
149	9.470	9.463	9.476	VV	100	628	0.03%	0.010%
150	9.478	9.476	9.482	VV	94	297	0.02%	0.005%
151	9.487	9.482	9.494	VV	116	502	0.03%	0.008%
152	9.519	9.494	9.527	PV	116	1420	0.08%	0.023%
153	9.555	9.527	9.562	VV	188	2515	0.14%	0.041%
154	9.568	9.562	9.593	VV	170	2061	0.11%	0.033%
155	9.595	9.593	9.604	VV	138	592	0.03%	0.010%
156	9.607	9.604	9.612	VV	124	357	0.02%	0.006%
157	9.615	9.612	9.620	VV	113	399	0.02%	0.006%
158	9.642	9.620	9.647	VV	219	2716	0.15%	0.044%
159	9.669	9.647	9.689	VV	450	7913	0.44%	0.128%
160	9.712	9.689	9.795	VV	1592	59532	3.28%	0.967%
161	9.823	9.795	9.878	VV	648	22766	1.25%	0.370%
162	9.881	9.878	9.893	VV	351	2326	0.13%	0.038%
163	9.900	9.893	9.909	VV	280	2112	0.12%	0.034%
164	9.914	9.909	9.919	VV	239	1174	0.06%	0.019%
165	9.925	9.919	9.939	VV	227	2137	0.12%	0.035%
166	9.974	9.939	9.997	VV	641	10707	0.59%	0.174%
167	10.009	9.997	10.021	VV	216	1929	0.11%	0.031%
168	10.025	10.021	10.030	VV	141	716	0.04%	0.012%
169	10.061	10.030	10.075	VV	303	5295	0.29%	0.086%
170	10.085	10.075	10.111	VV	297	4658	0.26%	0.076%
171	10.142	10.111	10.161	VV	421	7256	0.40%	0.118%
172	10.168	10.161	10.188	VV	265	2338	0.13%	0.038%
173	10.190	10.188	10.203	VV	186	959	0.05%	0.016%
174	10.210	10.203	10.218	VV	183	1079	0.06%	0.018%
175	10.219	10.218	10.222	VV	162	328	0.02%	0.005%
176	10.253	10.222	10.264	VV	352	5525	0.30%	0.090%
177	10.274	10.264	10.290	VV	403	5202	0.29%	0.084%
178	10.301	10.290	10.368	VV	400	10605	0.58%	0.172%
179	10.373	10.368	10.382	VV	139	888	0.05%	0.014%
180	10.389	10.382	10.394	VV	148	612	0.03%	0.010%
181	10.399	10.394	10.403	PV	83	322	0.02%	0.005%
182	10.409	10.403	10.443	VV	98	1696	0.09%	0.028%
183	10.480	10.443	10.502	VV	260	5420	0.30%	0.088%
184	10.507	10.502	10.515	VV	124	756	0.04%	0.012%
185	10.526	10.515	10.541	VV	219	2210	0.12%	0.036%
186	10.554	10.541	10.584	VV	212	3775	0.21%	0.061%
187	10.599	10.584	10.605	VV	197	2241	0.12%	0.036%
188	10.618	10.605	10.643	VV	285	4561	0.25%	0.074%
189	10.645	10.643	10.680	VV	200	2987	0.16%	0.048%
190	10.697	10.680	10.725	VV	243	3949	0.22%	0.064%
191	10.732	10.725	10.749	VV	165	1550	0.09%	0.025%
192	10.769	10.749	10.786	VV	340	5038	0.28%	0.082%
193	10.803	10.786	10.829	VV	349	6481	0.36%	0.105%
194	10.876	10.829	10.928	VV	668	21107	1.16%	0.343%

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195	10.942	10.928	10.951	VV	273	3176	0.18%	0.052%
196	10.957	10.951	10.961	VV	281	1344	0.07%	0.022%
197	10.965	10.961	10.970	VV	224	897	0.05%	0.015%
198	10.988	10.970	11.029	VV	369	9243	0.51%	0.150%
199	11.031	11.029	11.062	VV	171	2744	0.15%	0.045%
200	11.066	11.062	11.090	VV	179	2500	0.14%	0.041%
201	11.104	11.090	11.116	VV	254	2606	0.14%	0.042%
202	11.127	11.116	11.139	VV	199	1642	0.09%	0.027%
203	11.153	11.139	11.166	VV	174	1740	0.10%	0.028%
204	11.184	11.166	11.216	VV	644	14108	0.78%	0.229%
205	11.221	11.216	11.257	VV	509	7897	0.44%	0.128%
206	11.261	11.257	11.268	VV	273	1722	0.09%	0.028%
207	11.275	11.268	11.296	VV	332	4243	0.23%	0.069%
208	11.324	11.296	11.333	VV	453	8108	0.45%	0.132%
209	11.338	11.333	11.383	VV	401	8953	0.49%	0.145%
210	11.395	11.383	11.400	VV	255	2207	0.12%	0.036%
211	11.411	11.400	11.421	VV	283	2868	0.16%	0.047%
212	11.425	11.421	11.448	VV	262	2465	0.14%	0.040%
213	11.462	11.448	11.468	VV	179	1392	0.08%	0.023%
214	11.478	11.468	11.502	VV	160	2325	0.13%	0.038%
215	11.523	11.502	11.550	VV	295	5520	0.30%	0.090%
216	11.571	11.550	11.608	VV	940	15414	0.85%	0.250%
217	11.611	11.608	11.616	VV	130	423	0.02%	0.007%
218	11.676	11.616	11.710	VV	358	11499	0.63%	0.187%
219	11.764	11.710	11.895	VV	25140	519266	28.62%	8.431%
220	11.905	11.895	11.923	VV	698	9157	0.50%	0.149%
221	11.928	11.923	11.958	VV	466	7422	0.41%	0.121%
222	11.972	11.958	11.991	VV	487	8114	0.45%	0.132%
223	12.042	11.991	12.053	VV	630	17539	0.97%	0.285%
224	12.069	12.053	12.110	VV	1775	26761	1.48%	0.435%
225	12.126	12.110	12.132	VV	407	4278	0.24%	0.069%
226	12.136	12.132	12.150	VV	390	3652	0.20%	0.059%
227	12.156	12.150	12.179	VV	349	5077	0.28%	0.082%
228	12.195	12.179	12.219	VV	349	6453	0.36%	0.105%
229	12.228	12.219	12.256	VV	383	6433	0.35%	0.104%
230	12.262	12.256	12.298	VV	329	5467	0.30%	0.089%
231	12.315	12.298	12.336	VV	370	6142	0.34%	0.100%
232	12.355	12.336	12.404	VV	694	12526	0.69%	0.203%
233	12.407	12.404	12.435	VV	233	2670	0.15%	0.043%
234	12.442	12.435	12.455	VV	137	935	0.05%	0.015%
235	12.468	12.455	12.478	VV	152	1661	0.09%	0.027%
236	12.513	12.478	12.572	VV	6839	122129	6.73%	1.983%
237	12.576	12.572	12.619	VV	751	14620	0.81%	0.237%
238	12.623	12.619	12.634	VV	374	2609	0.14%	0.042%
239	12.640	12.634	12.648	VV	251	2052	0.11%	0.033%
240	12.652	12.648	12.658	VV	252	1198	0.07%	0.019%
241	12.668	12.658	12.688	VV	233	3214	0.18%	0.052%
242	12.691	12.688	12.699	VV	235	1255	0.07%	0.020%
243	12.703	12.699	12.710	VV	290	1535	0.08%	0.025%
244	12.716	12.710	12.731	VV	261	3029	0.17%	0.049%
245	12.750	12.731	12.805	VV	1128	18054	1.00%	0.293%
246	12.808	12.805	12.814	VV	105	381	0.02%	0.006%

rteres

247	12.822	12.814	12.826	VV	134	724	0.04%	0.012%
248	12.854	12.826	12.884	VV	641	9860	0.54%	0.160%
249	12.904	12.884	12.925	VV	336	4131	0.23%	0.067%
250	12.931	12.925	12.948	PV	73	766	0.04%	0.012%
251	12.966	12.948	13.001	VV	664	9664	0.53%	0.157%
252	13.018	13.001	13.024	VV	190	1970	0.11%	0.032%
253	13.044	13.024	13.091	VV	306	8664	0.48%	0.141%
254	13.110	13.091	13.143	VV	277	6434	0.35%	0.104%
255	13.159	13.143	13.172	VV	233	3076	0.17%	0.050%
256	13.182	13.172	13.215	VV	243	3791	0.21%	0.062%
257	13.254	13.215	13.298	VV	690	17173	0.95%	0.279%
258	13.325	13.298	13.336	VV	484	7966	0.44%	0.129%
259	13.340	13.336	13.344	VV	364	1629	0.09%	0.026%
260	13.349	13.344	13.380	VV	344	4636	0.26%	0.075%
261	13.386	13.380	13.410	VV	227	2497	0.14%	0.041%
262	13.429	13.410	13.446	VV	179	2849	0.16%	0.046%
263	13.471	13.446	13.499	VV	895	13778	0.76%	0.224%
264	13.530	13.499	13.542	VV	320	5064	0.28%	0.082%
265	13.547	13.542	13.551	VV	221	1043	0.06%	0.017%
266	13.589	13.551	13.637	VV	1627	30997	1.71%	0.503%
267	13.648	13.637	13.677	VV	439	6334	0.35%	0.103%
268	13.693	13.677	13.700	VV	209	2087	0.12%	0.034%
269	13.727	13.700	13.742	VV	773	12934	0.71%	0.210%
270	13.756	13.742	13.782	VV	742	12455	0.69%	0.202%
271	13.799	13.782	13.835	VV	822	12315	0.68%	0.200%
272	13.840	13.835	13.853	VV	94	714	0.04%	0.012%
273	13.865	13.853	13.885	VV	165	2165	0.12%	0.035%
274	13.926	13.885	13.954	VV	298	6807	0.38%	0.111%
275	13.966	13.954	13.986	VV	147	1696	0.09%	0.028%
276	14.006	13.986	14.022	VV	166	2084	0.11%	0.034%
277	14.033	14.022	14.038	PV	115	726	0.04%	0.012%
278	14.061	14.038	14.066	VV	206	2274	0.13%	0.037%
279	14.069	14.066	14.073	VV	147	530	0.03%	0.009%
280	14.100	14.073	14.128	VV	256	5711	0.31%	0.093%
281	14.153	14.128	14.179	VV	215	4470	0.25%	0.073%
282	14.214	14.179	14.242	VV	3920	49735	2.74%	0.808%
283	14.262	14.242	14.290	VV	381	8257	0.46%	0.134%
284	14.294	14.290	14.300	VV	189	1039	0.06%	0.017%
285	14.347	14.300	14.395	VV	409	12196	0.67%	0.198%
286	14.437	14.395	14.516	VV	1132	39071	2.15%	0.634%
287	14.521	14.516	14.524	VV	235	863	0.05%	0.014%
288	14.544	14.524	14.559	VV	606	7742	0.43%	0.126%
289	14.564	14.559	14.569	VV	131	713	0.04%	0.012%
290	14.582	14.569	14.589	VV	185	1694	0.09%	0.028%
291	14.592	14.589	14.619	VV	171	1655	0.09%	0.027%
292	14.623	14.619	14.632	VV	110	381	0.02%	0.006%
293	14.640	14.632	14.647	PV	91	450	0.02%	0.007%
294	14.670	14.647	14.722	VV	461	9356	0.52%	0.152%
295	14.752	14.722	14.764	VV	369	5486	0.30%	0.089%
296	14.767	14.764	14.791	VV	259	3209	0.18%	0.052%
297	14.816	14.791	14.854	VV	2336	35772	1.97%	0.581%
298	14.871	14.854	14.875	VV	239	2514	0.14%	0.041%
299	14.881	14.875	14.883	VV	247	1081	0.06%	0.018%

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300	14.890	14.883	14.927	VV	279	5873	0.32%	0.095%
301	14.930	14.927	14.970	VV	300	5374	0.30%	0.087%
302	15.007	14.970	15.079	VV	131982	1814074	100.00%	29.455%
303	15.083	15.079	15.129	VV	441	8160	0.45%	0.132%
304	15.147	15.129	15.164	VV	431	6491	0.36%	0.105%
305	15.190	15.164	15.245	VV	1093	27996	1.54%	0.455%
306	15.250	15.245	15.260	VV	260	1852	0.10%	0.030%
307	15.267	15.260	15.271	VV	176	1144	0.06%	0.019%
308	15.277	15.271	15.284	VV	244	1356	0.07%	0.022%
309	15.314	15.284	15.339	VV	279	6353	0.35%	0.103%
310	15.344	15.339	15.352	VV	152	979	0.05%	0.016%
311	15.357	15.352	15.375	VV	153	1310	0.07%	0.021%
312	15.403	15.375	15.511	VV	12468	174525	9.62%	2.834%
313	15.530	15.511	15.556	VV	206	3101	0.17%	0.050%
314	15.583	15.556	15.587	VV	143	2047	0.11%	0.033%
315	15.599	15.587	15.604	VV	136	1149	0.06%	0.019%
316	15.627	15.604	15.640	VV	173	2575	0.14%	0.042%
317	15.645	15.640	15.668	VV	159	1461	0.08%	0.024%
318	15.687	15.668	15.692	PV	135	856	0.05%	0.014%
319	15.698	15.692	15.714	VV	71	617	0.03%	0.010%
320	15.749	15.714	15.777	VV	655	11958	0.66%	0.194%
321	15.782	15.777	15.802	VV	184	1783	0.10%	0.029%
322	15.811	15.802	15.815	VV	139	814	0.04%	0.013%
323	15.824	15.815	15.841	VV	154	1313	0.07%	0.021%
324	15.867	15.841	15.875	PV	266	3456	0.19%	0.056%
325	15.877	15.875	15.892	VV	240	1971	0.11%	0.032%
326	15.896	15.892	15.904	VV	280	1619	0.09%	0.026%
327	15.919	15.904	15.947	VV	439	5075	0.28%	0.082%
328	15.956	15.947	15.960	VV	182	1074	0.06%	0.017%
329	15.998	15.960	16.010	VV	467	8339	0.46%	0.135%
330	16.025	16.010	16.069	VV	414	8983	0.50%	0.146%
331	16.073	16.069	16.078	VV	106	446	0.02%	0.007%
332	16.087	16.078	16.092	VV	119	618	0.03%	0.010%
333	16.101	16.092	16.112	VV	111	888	0.05%	0.014%
334	16.115	16.112	16.125	VV	84	392	0.02%	0.006%
335	16.234	16.125	16.260	VV	640	11612	0.64%	0.189%
336	16.271	16.260	16.277	VV	162	1301	0.07%	0.021%
337	16.280	16.277	16.311	VV	154	2073	0.11%	0.034%
338	16.317	16.311	16.322	VV	139	518	0.03%	0.008%
339	16.326	16.322	16.329	VV	126	367	0.02%	0.006%
340	16.332	16.329	16.338	VV	123	486	0.03%	0.008%
341	16.349	16.338	16.355	VV	128	951	0.05%	0.015%
342	16.360	16.355	16.364	VV	132	601	0.03%	0.010%
343	16.368	16.364	16.393	VV	176	1730	0.10%	0.028%
344	16.406	16.393	16.415	PV	200	1592	0.09%	0.026%
345	16.419	16.415	16.437	VV	159	1665	0.09%	0.027%
346	16.451	16.437	16.455	VV	314	2586	0.14%	0.042%
347	16.462	16.455	16.495	VV	346	6020	0.33%	0.098%
348	16.515	16.495	16.539	VV	342	5885	0.32%	0.096%
349	16.557	16.539	16.565	VV	150	2040	0.11%	0.033%
350	16.598	16.565	16.610	VV	254	4509	0.25%	0.073%
351	16.612	16.610	16.616	VV	217	588	0.03%	0.010%

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352	16.625	16.616	16.647	VV	163	2145	0.12%	0.035%
353	16.651	16.647	16.654	VV	107	331	0.02%	0.005%
354	16.661	16.654	16.668	VV	126	646	0.04%	0.010%
355	16.686	16.668	16.690	PV	182	1534	0.08%	0.025%
356	16.750	16.690	16.783	VV	3785	63054	3.48%	1.024%
357	16.803	16.783	16.841	VV	879	14874	0.82%	0.242%
358	16.845	16.841	16.852	VV	175	732	0.04%	0.012%
359	16.876	16.852	16.914	VV	344	8247	0.45%	0.134%
360	16.939	16.914	16.965	VV	232	4932	0.27%	0.080%
361	17.005	16.965	17.027	VV	264	5459	0.30%	0.089%
362	17.081	17.027	17.124	VV	245	7998	0.44%	0.130%
363	17.187	17.124	17.232	PV	1571	29795	1.64%	0.484%
364	17.248	17.232	17.265	VV	180	2173	0.12%	0.035%
365	17.269	17.265	17.274	VV	43	232	0.01%	0.004%
366	17.281	17.274	17.286	VV	116	491	0.03%	0.008%
367	17.289	17.286	17.294	PV	88	308	0.02%	0.005%
368	17.341	17.294	17.355	VV	219	4401	0.24%	0.071%
369	17.366	17.355	17.371	VV	165	1252	0.07%	0.020%
370	17.378	17.371	17.384	VV	175	957	0.05%	0.016%
371	17.395	17.384	17.406	VV	199	1915	0.11%	0.031%
372	17.422	17.406	17.435	VV	225	2992	0.16%	0.049%
373	17.449	17.435	17.476	VV	245	4281	0.24%	0.070%
374	17.493	17.476	17.510	VV	173	3194	0.18%	0.052%
375	17.514	17.510	17.548	VV	232	2823	0.16%	0.046%
376	17.563	17.548	17.567	VV	117	832	0.05%	0.014%
377	17.577	17.567	17.584	VV	122	713	0.04%	0.012%
378	17.639	17.584	17.690	VV	1802	28831	1.59%	0.468%
379	17.720	17.690	17.726	PV	119	1489	0.08%	0.024%
380	17.760	17.726	17.769	PV	297	5122	0.28%	0.083%
381	17.778	17.769	17.825	VV	353	6410	0.35%	0.104%
382	17.848	17.825	17.862	VV	149	1848	0.10%	0.030%
383	17.868	17.862	17.872	VV	96	344	0.02%	0.006%
384	17.878	17.872	17.894	VV	89	923	0.05%	0.015%
385	17.911	17.894	17.918	VV	159	1165	0.06%	0.019%
386	17.926	17.918	17.939	VV	183	1051	0.06%	0.017%
387	17.964	17.939	17.975	PV	125	405	0.02%	0.007%

Sum of corrected areas: 6158885

FG032725.M Wed Apr 23 02:08:09 2025

CALIBRATION SUMMARY

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

DIESEL RANGE ORGANICS INITIAL CALIBRATION SUMMARY

Lab Name: Chemtech Contract: JACO05

ProjectID: Former Schlumberger STC PTC Site D3868221

Lab Code: CHEM Case No.: Q1812 SAS No.: Q1812 SDG No.: Q1812

Calibration Sequence : FG032725		Test : Diesel Range Organics	
Concentration (PPM)	**Area Count**	**Reference Factor**	**File ID**
1000	128890552	128891	FG015564.D
500	64353708	128707	FG015565.D
200	25939743	129699	FG015566.D
100	13247516	132475	FG015567.D
50	5806744	116135	FG015568.D
AVG RF : 127181	**% RSD : 4.998**		**AVG RT : 15.021**

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015564.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 08:56
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: Mar 27 10:11:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 10:10:17 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...	15.028	11585120	100.977 ug/ml
	Target Compounds			
1)	N-OCTANE	1.989	11663185	98.288 ug/ml
2)	N-DECANE	4.524	12021702	98.491 ug/ml
3)	N-DODECANE	6.707	12455066	98.356 ug/ml
4)	N-TETRADECANE	8.545	12767816	98.423 ug/ml
5)	N-HEXADECANE	10.159	12974788	99.025 ug/ml
6)	N-OCTADECANE	11.609	13298309	99.535 ug/ml
7)	N-EICOSANE	12.923	13509187	100.208 ug/ml
8)	N-DOCOSANE	14.127	13132063	100.755 ug/ml
10)	N-TETRACOSANE	15.234	13093665	101.506 ug/ml
11)	N-HEXACOSANE	16.256	12954998	102.301 ug/ml
12)	N-OCTACOSANE	17.209	12682958	102.902 ug/ml
13)	N-TRIACONTANE	18.099	12604784	103.340 ug/ml
14)	N-DOTRIACONTANE	18.932	11983496	105.353 ug/ml
15)	N-TETRATRIACONTANE	19.718	10989910	110.987 ug/ml
16)	N-HEXATRIACONTANE	20.458	9695272	119.457 ug/ml
17)	N-OCTATRIACONTANE	21.201	8711743	127.927 ug/ml
18)	N-TETRACONTANE	22.131	7971160	135.353 ug/ml

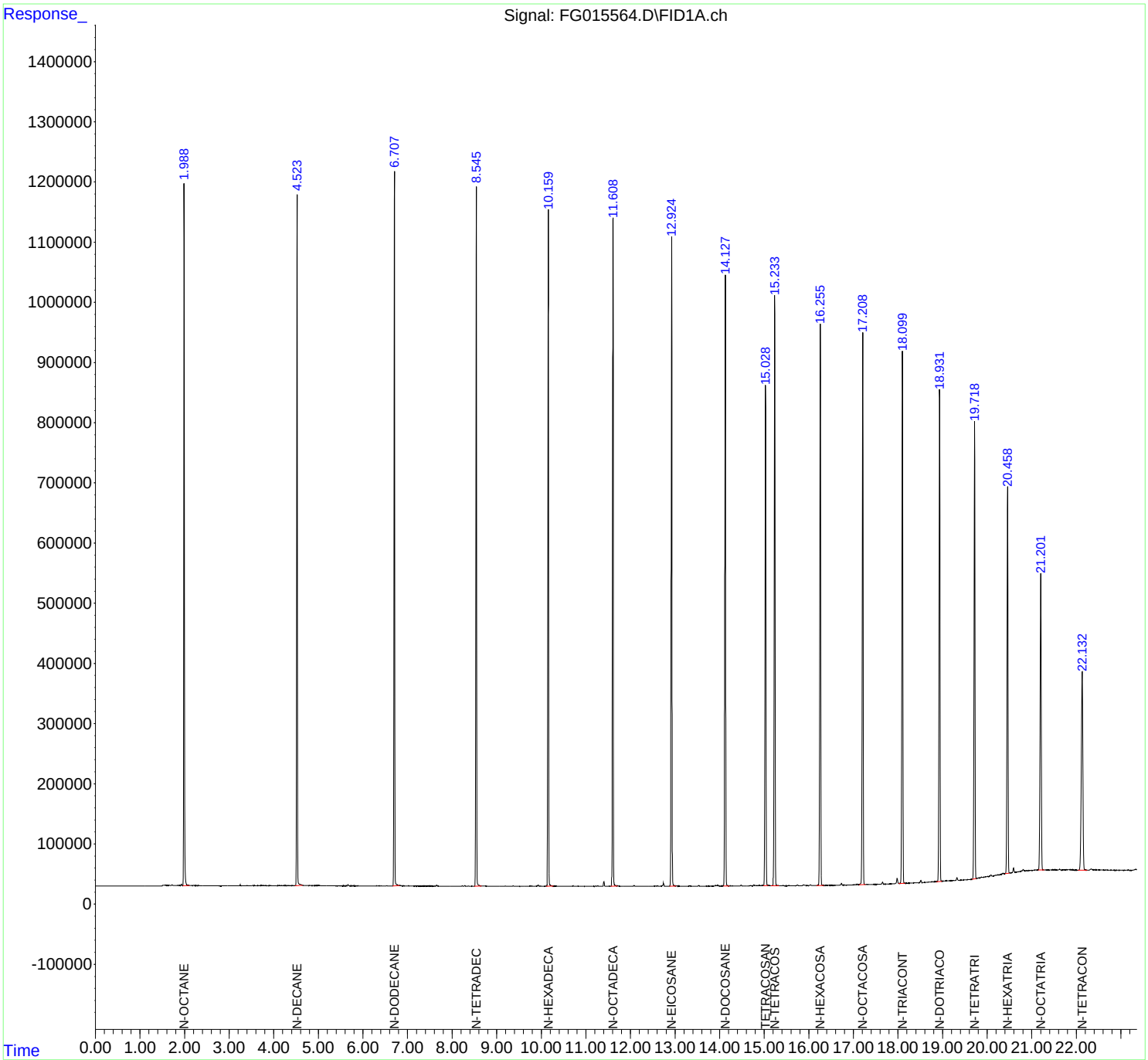
(f)=RT Delta > 1/2 Window (m)=manual int.

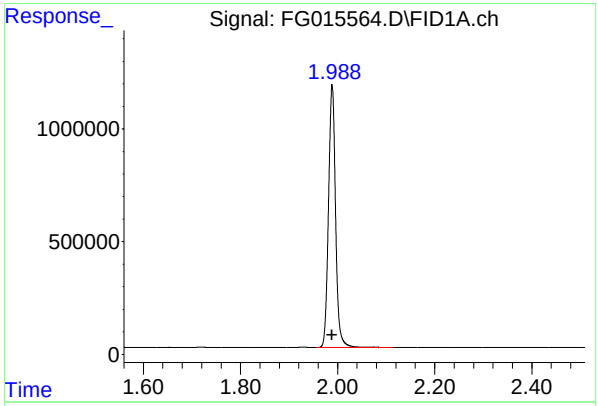
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015564.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 08:56
Operator : YP\AJ
Sample : 100 TRPH STD
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
100 TRPH STD

Integration File: autoint1.e
Quant Time: Mar 27 10:11:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 10:10:17 2025
Response via : Initial Calibration
Integrator: ChemStation

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

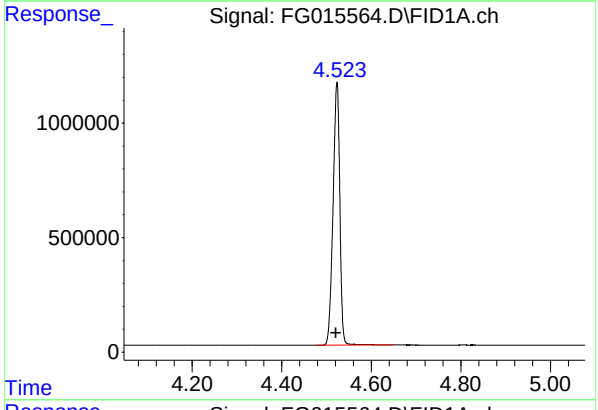




#1 N-OCTANE

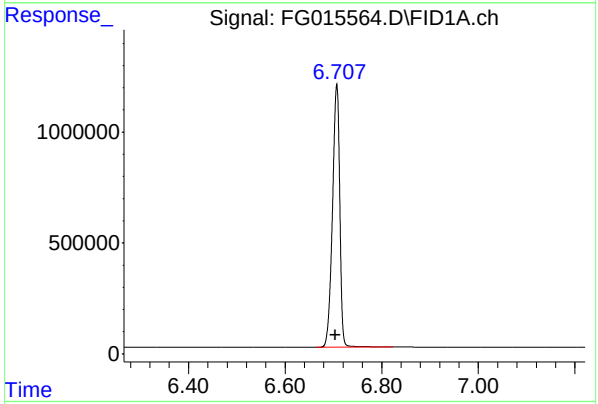
R.T.: 1.989 min
Delta R.T.: 0.000 min
Response: 11663185
Conc: 98.29 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



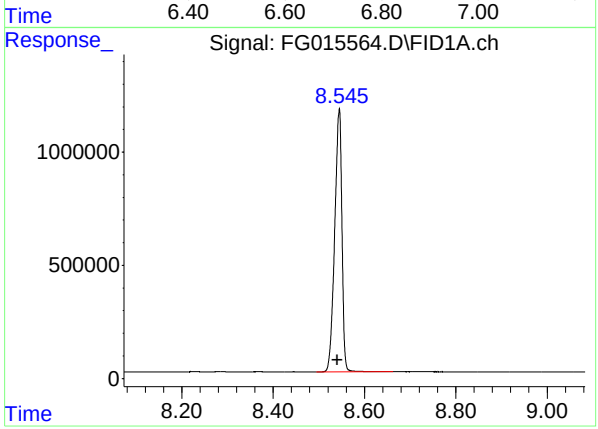
#2 N-DECANE

R.T.: 4.524 min
Delta R.T.: 0.002 min
Response: 12021702
Conc: 98.49 ug/ml



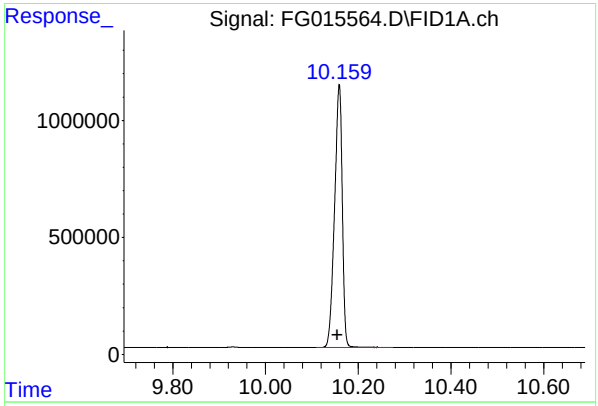
#3 N-DODECANE

R.T.: 6.707 min
Delta R.T.: 0.003 min
Response: 12455066
Conc: 98.36 ug/ml



#4 N-TETRADECANE

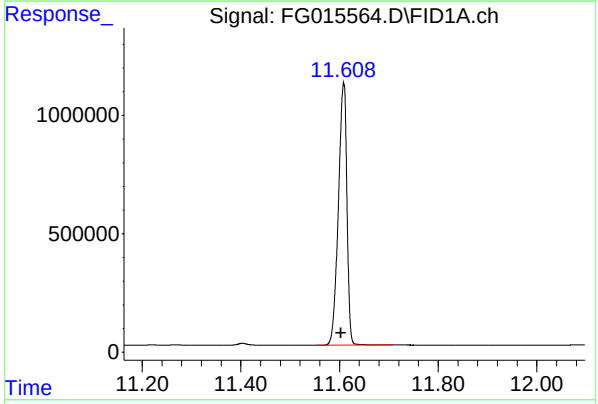
R.T.: 8.545 min
Delta R.T.: 0.005 min
Response: 12767816
Conc: 98.42 ug/ml



#5 N-HEXADECANE

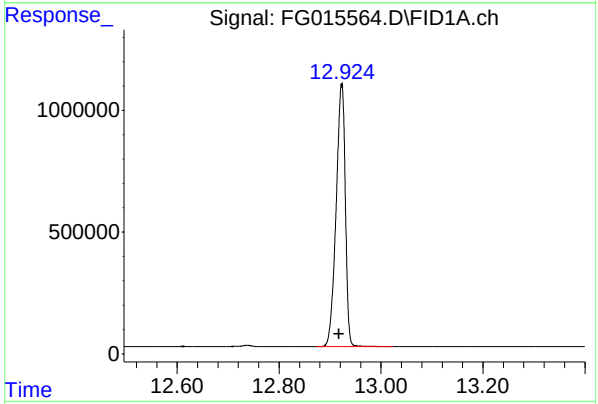
R.T.: 10.159 min
Delta R.T.: 0.004 min
Response: 12974788
Conc: 99.02 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



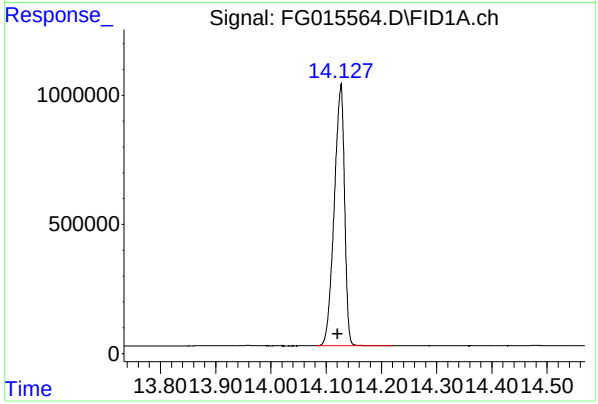
#6 N-OCTADECANE

R.T.: 11.609 min
Delta R.T.: 0.006 min
Response: 13298309
Conc: 99.53 ug/ml



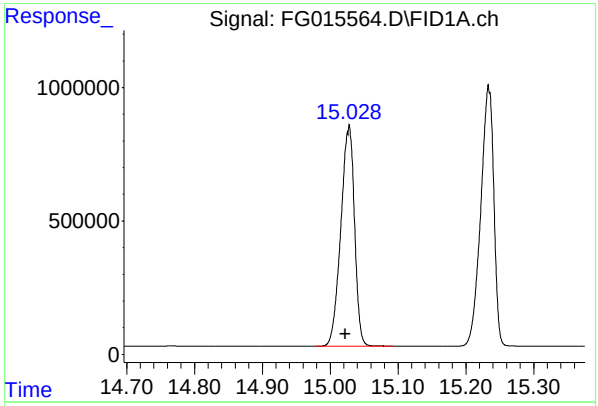
#7 N-EICOSANE

R.T.: 12.923 min
Delta R.T.: 0.005 min
Response: 13509187
Conc: 100.21 ug/ml



#8 N-DOCOSANE

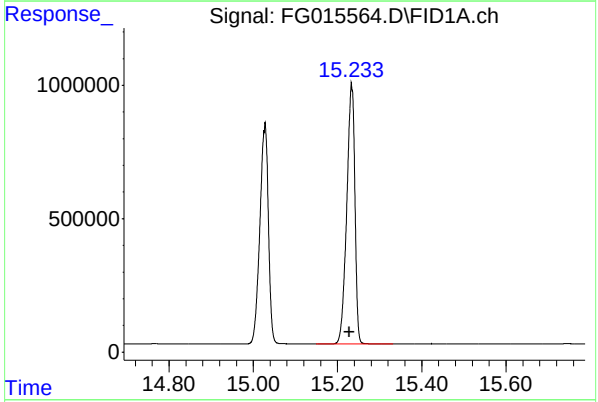
R.T.: 14.127 min
Delta R.T.: 0.006 min
Response: 13132063
Conc: 100.76 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

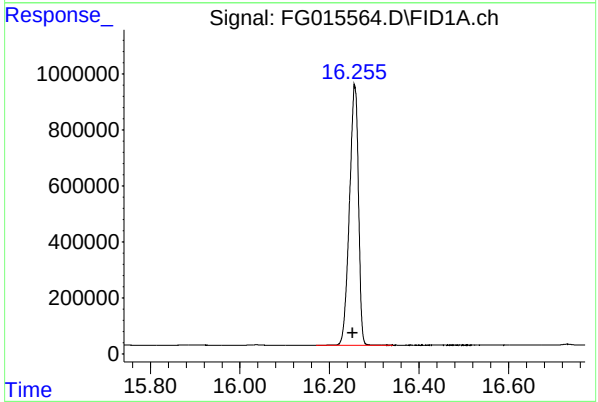
R.T.: 15.028 min
Delta R.T.: 0.006 min
Response: 11585120
Conc: 100.98 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



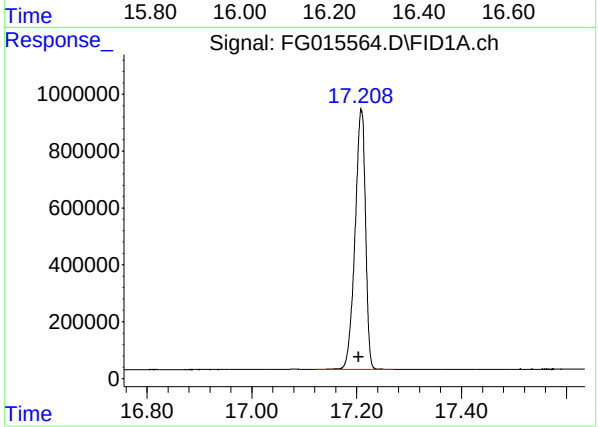
#10 N-TETRACOSANE

R.T.: 15.234 min
Delta R.T.: 0.006 min
Response: 13093665
Conc: 101.51 ug/ml



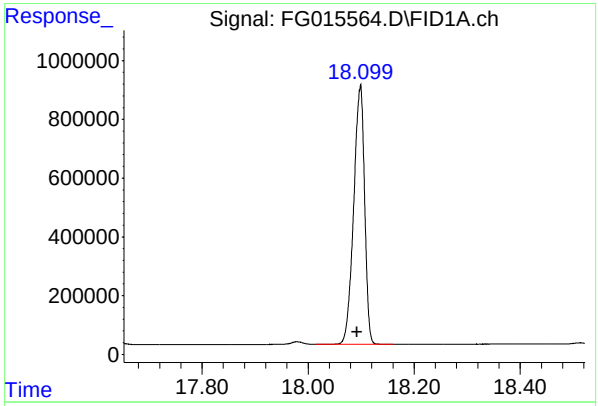
#11 N-HEXACOSANE

R.T.: 16.256 min
Delta R.T.: 0.005 min
Response: 12954998
Conc: 102.30 ug/ml



#12 N-OCTACOSANE

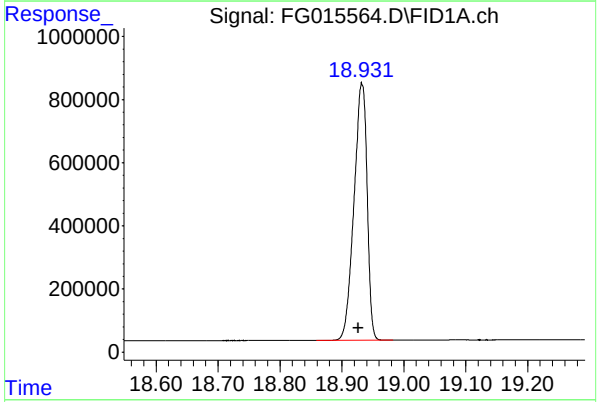
R.T.: 17.209 min
Delta R.T.: 0.005 min
Response: 12682958
Conc: 102.90 ug/ml



#13 N-TRIACONTANE

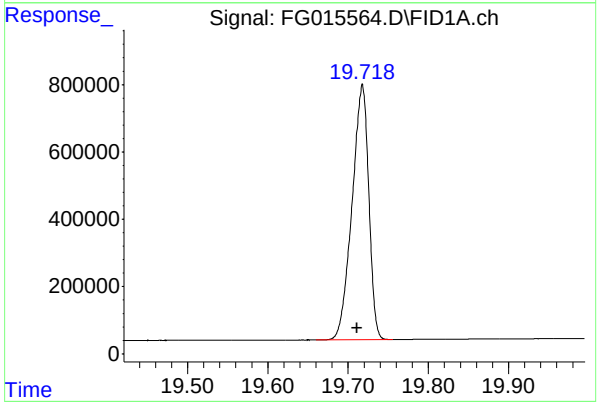
R.T.: 18.099 min
Delta R.T.: 0.006 min
Response: 12604784
Conc: 103.34 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



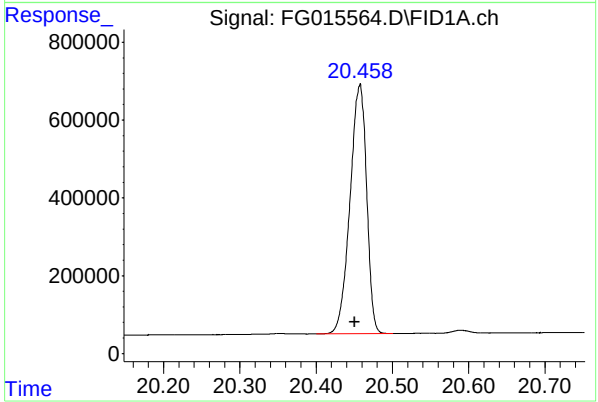
#14 N-DOTRIACONTANE

R.T.: 18.932 min
Delta R.T.: 0.006 min
Response: 11983496
Conc: 105.35 ug/ml



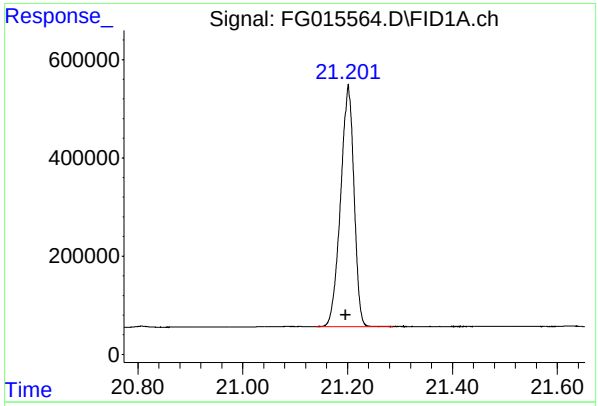
#15 N-TETRATRIACONTANE

R.T.: 19.718 min
Delta R.T.: 0.007 min
Response: 10989910
Conc: 110.99 ug/ml



#16 N-HEXATRIACONTANE

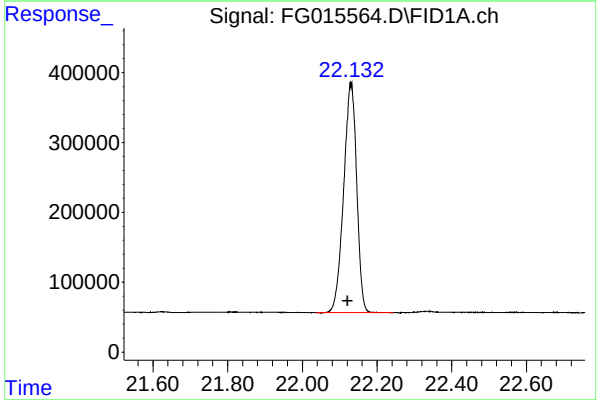
R.T.: 20.458 min
Delta R.T.: 0.007 min
Response: 9695272
Conc: 119.46 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.201 min
Delta R.T.: 0.005 min
Response: 8711743
Conc: 127.93 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.131 min
Delta R.T.: 0.009 min
Response: 7971160
Conc: 135.35 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015564.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 08:56
Sample : 100 TRPH STD
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.989	1.956	2.114	PB	1160029	11663185	86.34%	5.448%
2	4.524	4.477	4.648	BB	1147099	12021702	88.99%	5.615%
3	6.707	6.664	6.823	BB	1185516	12455066	92.20%	5.818%
4	8.545	8.494	8.662	BB	1162105	12767816	94.51%	5.964%
5	10.159	10.109	10.275	BB	1125043	12974788	96.04%	6.060%
6	11.609	11.553	11.708	BB	1107467	13298309	98.44%	6.211%
7	12.923	12.873	13.023	BB	1066404	13509187	100.00%	6.310%
8	14.127	14.082	14.221	BB	1007380	13132063	97.21%	6.134%
9	15.028	14.979	15.093	PV	832141	11585120	85.76%	5.411%
10	15.234	15.149	15.332	BB	974146	13093665	96.92%	6.116%
11	16.256	16.170	16.342	BB	919849	12954998	95.90%	6.051%
12	17.209	17.123	17.269	BV	909350	12682958	93.88%	5.924%
13	18.099	18.015	18.160	VB	884149	12604784	93.31%	5.887%
14	18.932	18.858	18.983	BV	811283	11983496	88.71%	5.597%
15	19.718	19.660	19.756	BV	760118	10989910	81.35%	5.133%
16	20.458	20.400	20.501	BV	639118	9695272	71.77%	4.528%
17	21.201	21.140	21.287	BB	492537	8711743	64.49%	4.069%
18	22.131	22.037	22.243	BB	328017	7971160	59.01%	3.723%

Sum of corrected areas: 214095222

FG032725.M Fri Mar 28 04:44:28 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015565.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 09:26
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: Mar 27 10:10:36 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 10:10:17 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...	15.022	5736491	50.000 ug/ml
	Target Compounds			
1)	N-OCTANE	1.989	5933145	50.000 ug/ml
2)	N-DECANE	4.521	6102939	50.000 ug/ml
3)	N-DODECANE	6.704	6331600	50.000 ug/ml
4)	N-TETRADECANE	8.540	6486167	50.000 ug/ml
5)	N-HEXADECANE	10.155	6551270	50.000 ug/ml
6)	N-OCTADECANE	11.603	6680218	50.000 ug/ml
7)	N-EICOSANE	12.918	6740576	50.000 ug/ml
8)	N-DOCOSANE	14.120	6516829	50.000 ug/ml
10)	N-TETRACOSANE	15.228	6449670	50.000 ug/ml
11)	N-HEXACOSANE	16.251	6331779	50.000 ug/ml
12)	N-OCTACOSANE	17.203	6162660	50.000 ug/ml
13)	N-TRIACONTANE	18.092	6098689	50.000 ug/ml
14)	N-DOTRIACONTANE	18.927	5687284	50.000 ug/ml
15)	N-TETRATRIACONTANE	19.711	4951006	50.000 ug/ml
16)	N-HEXATRIACONTANE	20.451	4058060	50.000 ug/ml
17)	N-OCTATRIACONTANE	21.196	3404959	50.000 ug/ml
18)	N-TETRACONTANE	22.122	2944576	50.000 ug/ml

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

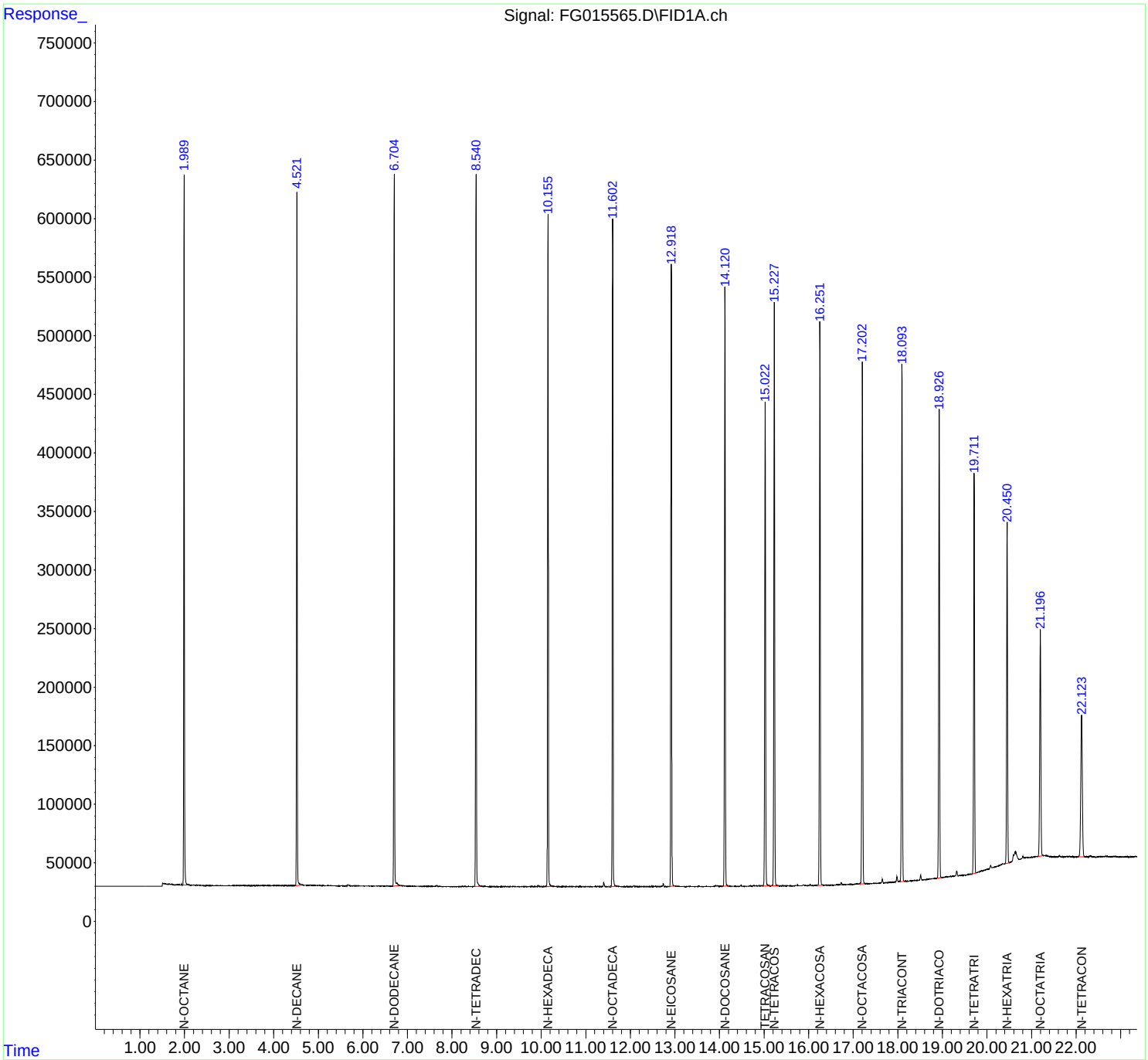
Quantitation Report (QT Reviewed)

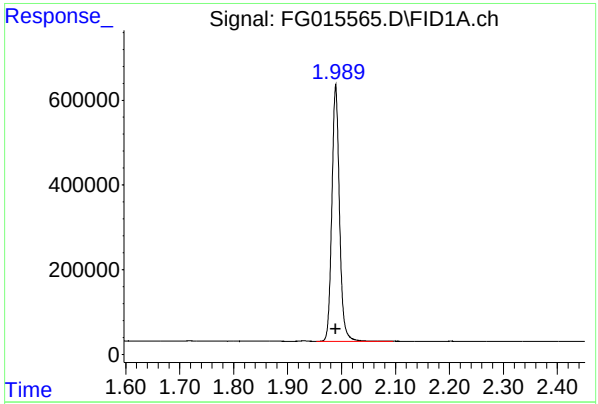
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015565.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 09:26
Operator : YP\AJ
Sample : 50 TRPH STD
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 TRPH STD

Integration File: autoint1.e
Quant Time: Mar 27 10:10:36 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 10:10:17 2025
Response via : Initial Calibration
Integrator: ChemStation

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

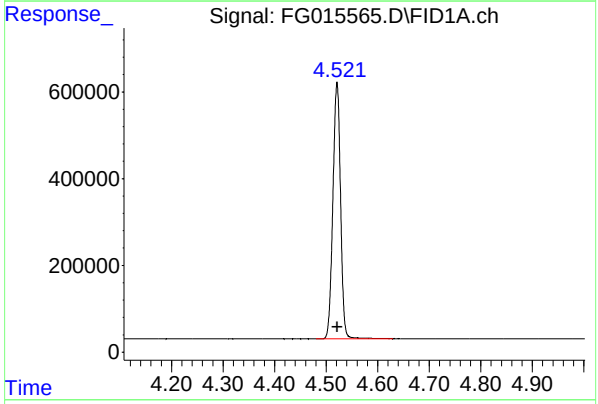




#1 N-OCTANE

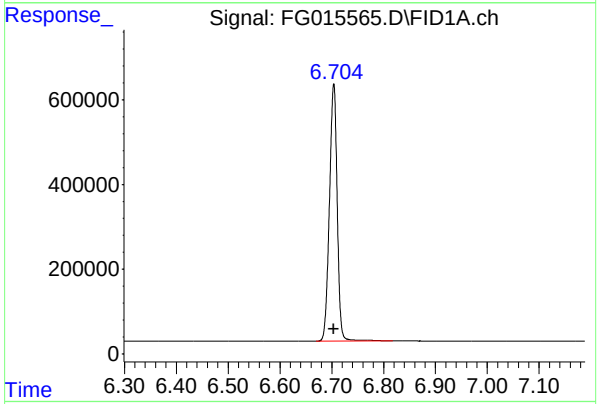
R.T.: 1.989 min
Delta R.T.: 0.000 min
Response: 5933145
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



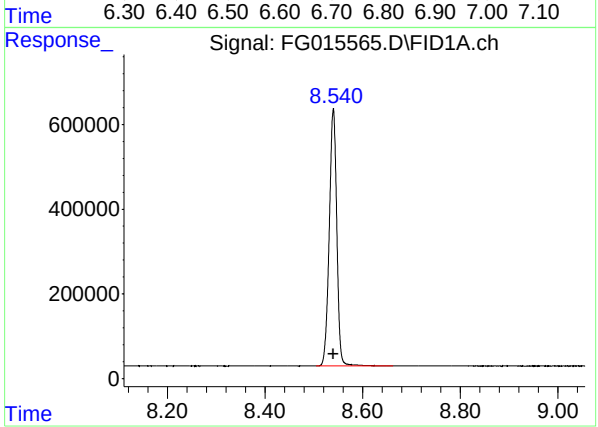
#2 N-DECANE

R.T.: 4.521 min
Delta R.T.: 0.000 min
Response: 6102939
Conc: 50.00 ug/ml



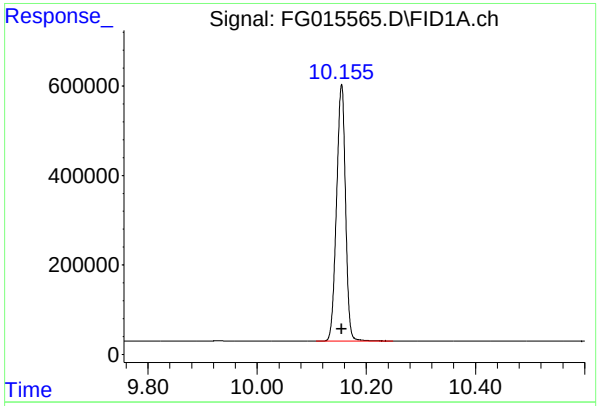
#3 N-DODECANE

R.T.: 6.704 min
Delta R.T.: 0.000 min
Response: 6331600
Conc: 50.00 ug/ml



#4 N-TETRADECANE

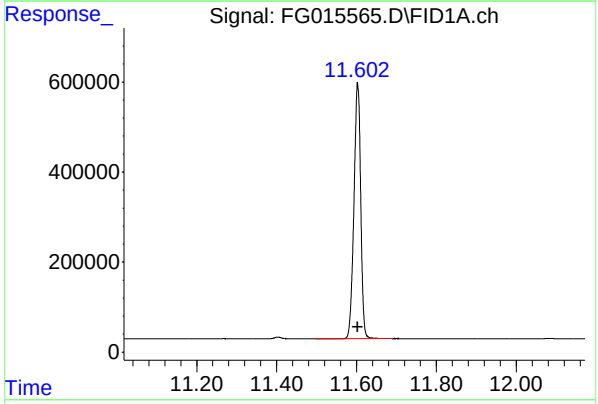
R.T.: 8.540 min
Delta R.T.: 0.000 min
Response: 6486167
Conc: 50.00 ug/ml



#5 N-HEXADECANE

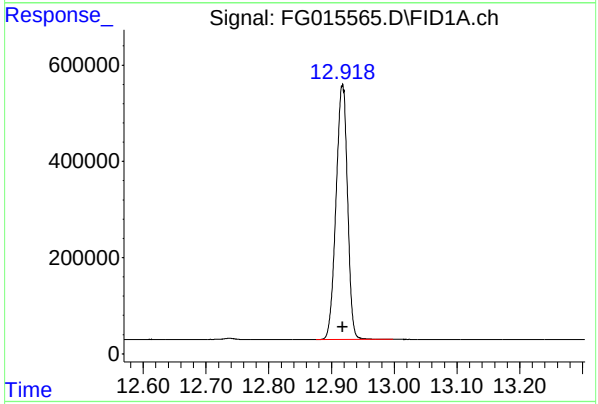
R.T.: 10.155 min
Delta R.T.: 0.000 min
Response: 6551270
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



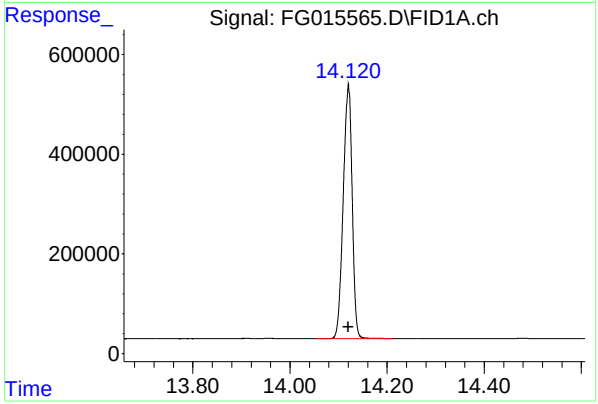
#6 N-OCTADECANE

R.T.: 11.603 min
Delta R.T.: 0.000 min
Response: 6680218
Conc: 50.00 ug/ml



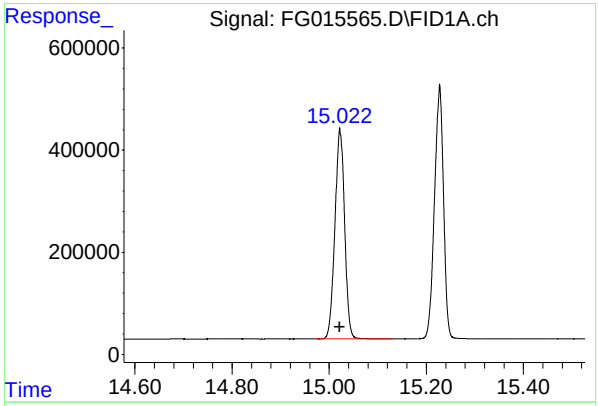
#7 N-EICOSANE

R.T.: 12.918 min
Delta R.T.: 0.000 min
Response: 6740576
Conc: 50.00 ug/ml



#8 N-DOCOSANE

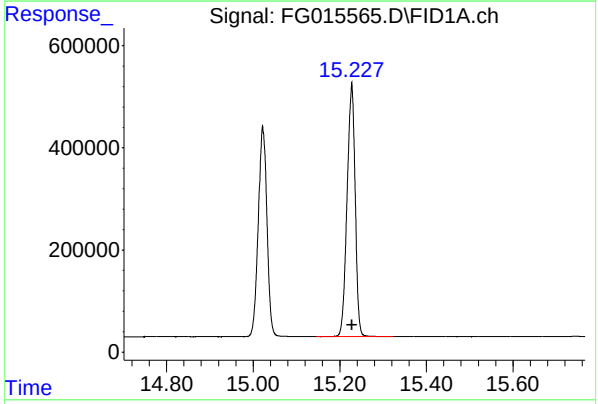
R.T.: 14.120 min
Delta R.T.: 0.000 min
Response: 6516829
Conc: 50.00 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

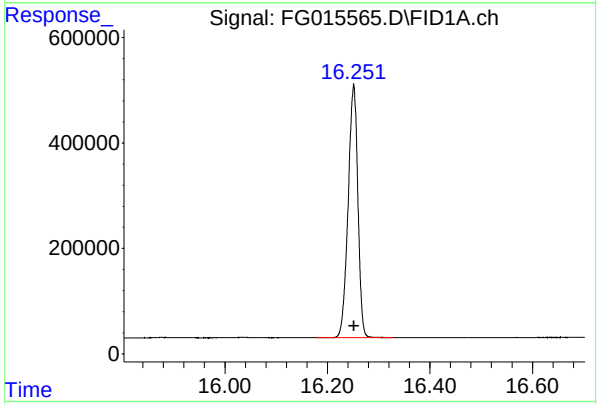
R.T.: 15.022 min
Delta R.T.: 0.000 min
Response: 5736491
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



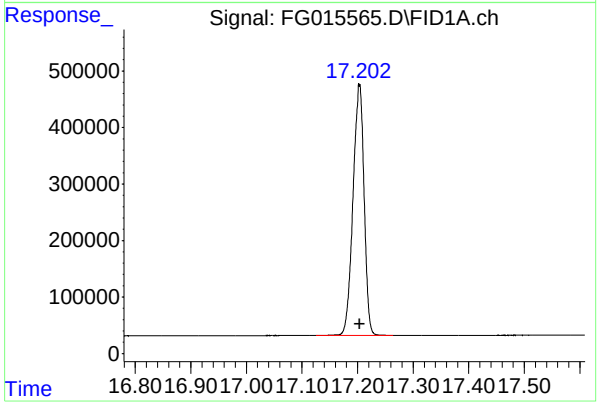
#10 N-TETRACOSANE

R.T.: 15.228 min
Delta R.T.: 0.000 min
Response: 6449670
Conc: 50.00 ug/ml



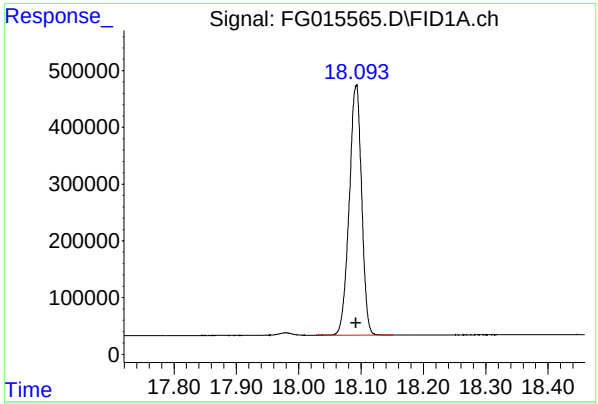
#11 N-HEXACOSANE

R.T.: 16.251 min
Delta R.T.: 0.000 min
Response: 6331779
Conc: 50.00 ug/ml



#12 N-OCTACOSANE

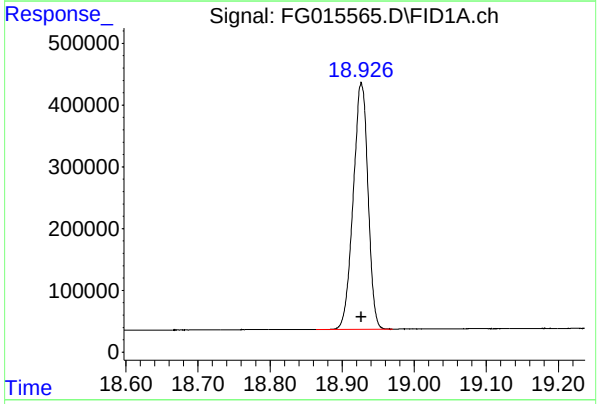
R.T.: 17.203 min
Delta R.T.: 0.000 min
Response: 6162660
Conc: 50.00 ug/ml



#13 N-TRIACONTANE

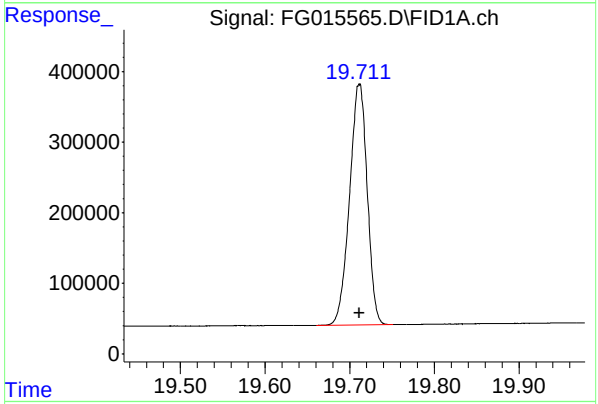
R.T.: 18.092 min
Delta R.T.: 0.000 min
Response: 6098689
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



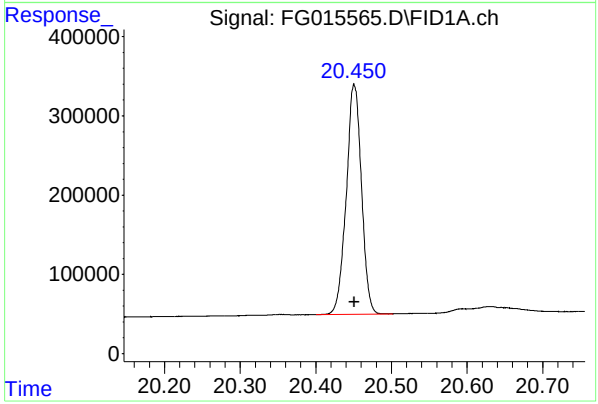
#14 N-DOTRIACONTANE

R.T.: 18.927 min
Delta R.T.: 0.000 min
Response: 5687284
Conc: 50.00 ug/ml



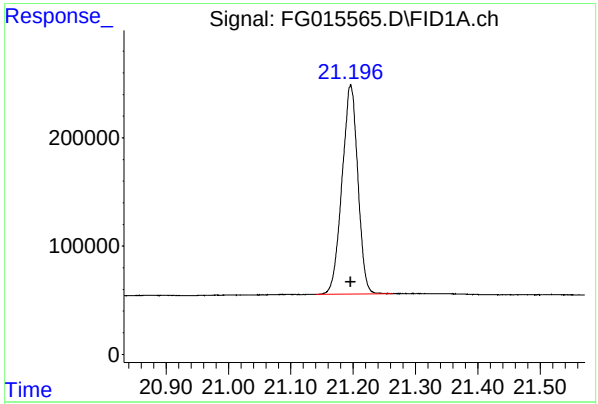
#15 N-TETRATRIACONTANE

R.T.: 19.711 min
Delta R.T.: 0.000 min
Response: 4951006
Conc: 50.00 ug/ml



#16 N-HEXATRIACONTANE

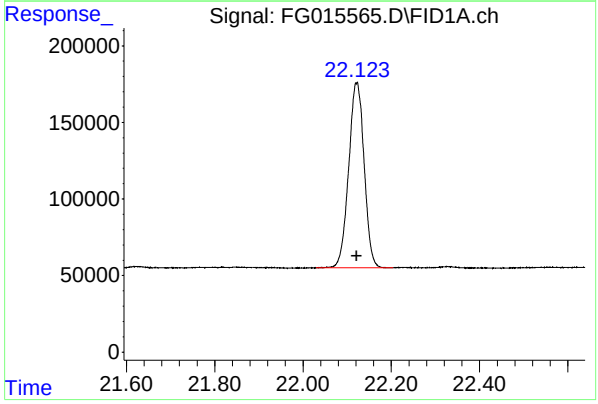
R.T.: 20.451 min
Delta R.T.: 0.000 min
Response: 4058060
Conc: 50.00 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.196 min
Delta R.T.: 0.000 mi
Response: 3404959
Conc: 50.00 ug/m

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.122 min
Delta R.T.: 0.000 min
Response: 2944576
Conc: 50.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015565.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 09:26
Sample : 50 TRPH STD
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.989	1.953	2.095	BB	606156	5933145	88.02%	5.751%
2	4.521	4.480	4.630	BB	591601	6102939	90.54%	5.916%
3	6.704	6.670	6.818	BB	607660	6331600	93.93%	6.137%
4	8.540	8.505	8.662	BB	608311	6486167	96.23%	6.287%
5	10.155	10.108	10.249	BB	573501	6551270	97.19%	6.350%
6	11.603	11.499	11.691	BB	565610	6680218	99.10%	6.475%
7	12.918	12.875	12.998	BB	529632	6740576	100.00%	6.534%
8	14.120	14.054	14.212	BB	510642	6516829	96.68%	6.317%
9	15.022	14.973	15.131	BB	411826	5736491	85.10%	5.560%
10	15.228	15.145	15.323	BB	498230	6449670	95.68%	6.252%
11	16.251	16.178	16.328	BB	481049	6331779	93.94%	6.137%
12	17.204	17.125	17.264	BB	441360	6162660	91.43%	5.973%
13	18.092	18.028	18.151	BB	439724	6098689	90.48%	5.911%
14	18.927	18.864	18.970	BV	399358	5687284	84.37%	5.513%
15	19.711	19.660	19.751	BV	341355	4951006	73.45%	4.799%
16	20.451	20.400	20.502	BV	289294	4058060	60.20%	3.933%
17	21.196	21.140	21.264	BB	193578	3404959	50.51%	3.300%
18	22.122	22.030	22.204	BB	120704	2944576	43.68%	2.854%

Sum of corrected areas: 103167916

FG032725.M Fri Mar 28 04:45:24 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015566.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 09:55
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: Mar 27 10:12:05 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 10:10:17 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...	15.019	2316571	20.093 ug/ml
	Target Compounds			
1)	N-OCTANE	1.991	2367896	20.127 ug/ml
2)	N-DECANE	4.520	2415965	19.944 ug/ml
3)	N-DODECANE	6.702	2493638	19.855 ug/ml
4)	N-TETRADECANE	8.538	2604089	20.234 ug/ml
5)	N-HEXADECANE	10.152	2647683	20.306 ug/ml
6)	N-OCTADECANE	11.601	2699154	20.250 ug/ml
7)	N-EICOSANE	12.915	2724346	20.188 ug/ml
8)	N-DOCOSANE	14.117	2632870	20.125 ug/ml
10)	N-TETRACOSANE	15.223	2614047	20.113 ug/ml
11)	N-HEXACOSANE	16.248	2578760	20.132 ug/ml
12)	N-OCTACOSANE	17.200	2529191	20.227 ug/ml
13)	N-TRIACONTANE	18.090	2522959	20.345 ug/ml
14)	N-DOTRIACONTANE	18.925	2371858	20.309 ug/ml
15)	N-TETRATRIACONTANE	19.709	2071847	19.834 ug/ml
16)	N-HEXATRIACONTANE	20.449	1708395	19.183 ug/ml
17)	N-OCTATRIACONTANE	21.193	1445409	18.624 ug/ml
18)	N-TETRACONTANE	22.117	1244629	17.960 ug/ml

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

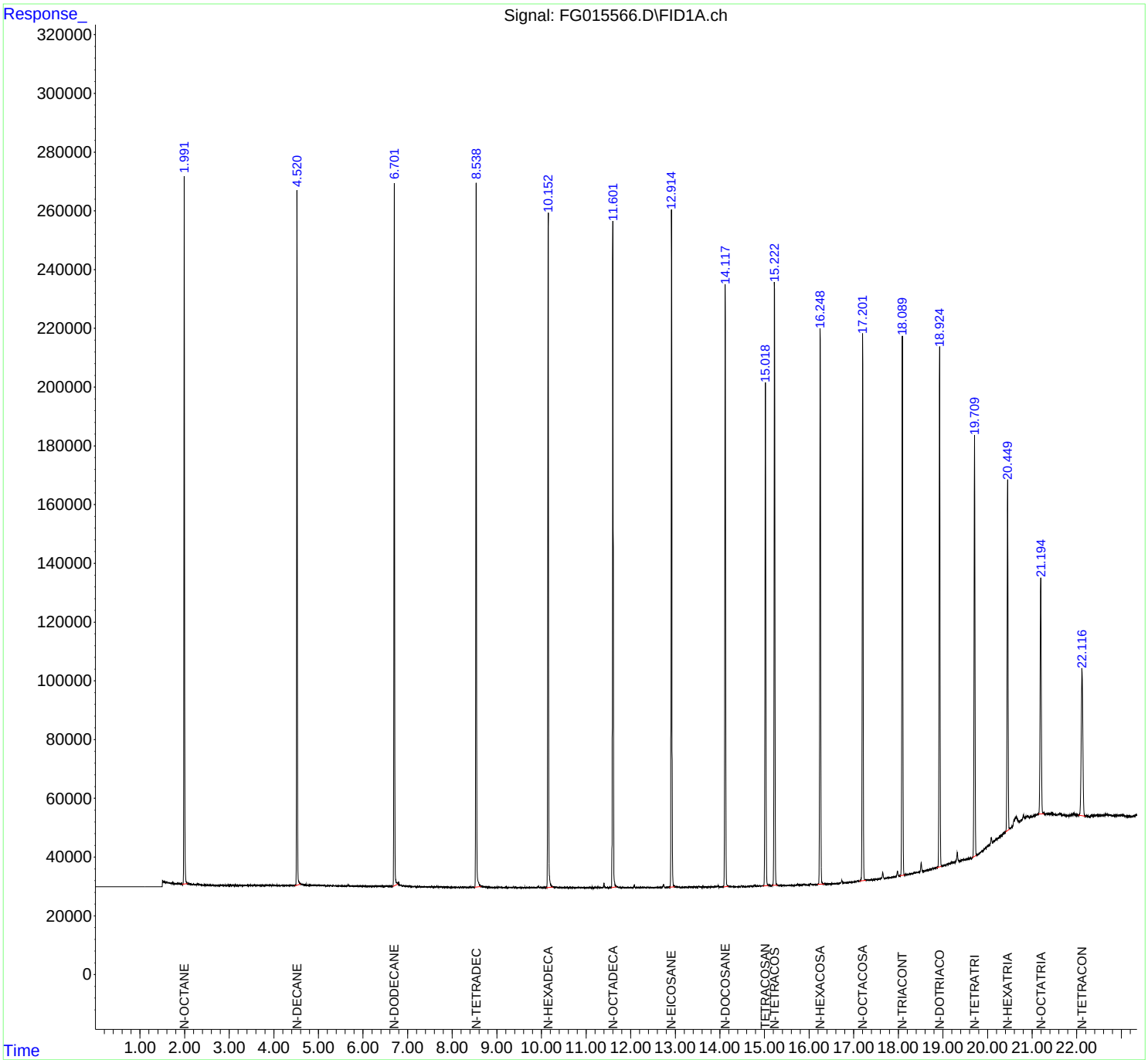
Quantitation Report (QT Reviewed)

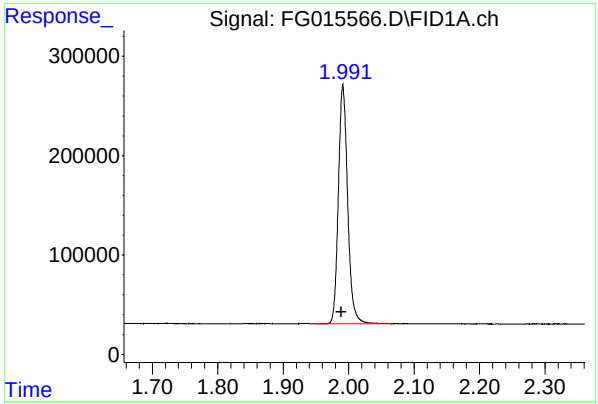
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015566.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 09:55
Operator : YP\AJ
Sample : 20 TRPH STD
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
20 TRPH STD

Integration File: autoint1.e
Quant Time: Mar 27 10:12:05 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 10:10:17 2025
Response via : Initial Calibration
Integrator: ChemStation

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

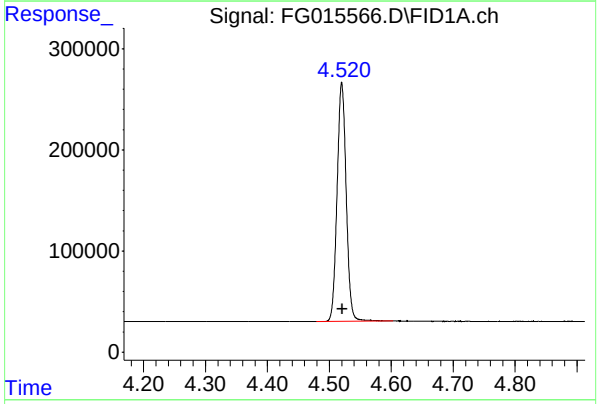




#1 N-OCTANE

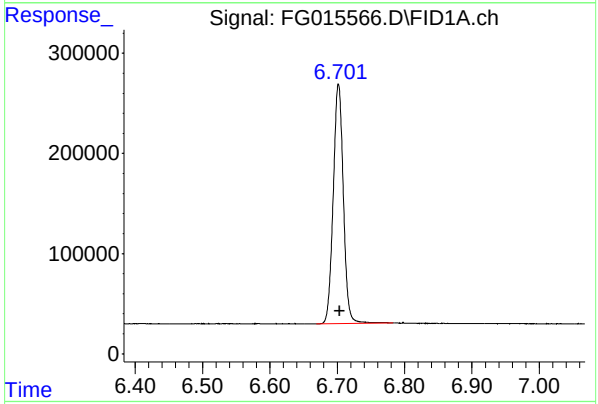
R.T.: 1.991 min
Delta R.T.: 0.002 min
Response: 2367896
Conc: 20.13 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



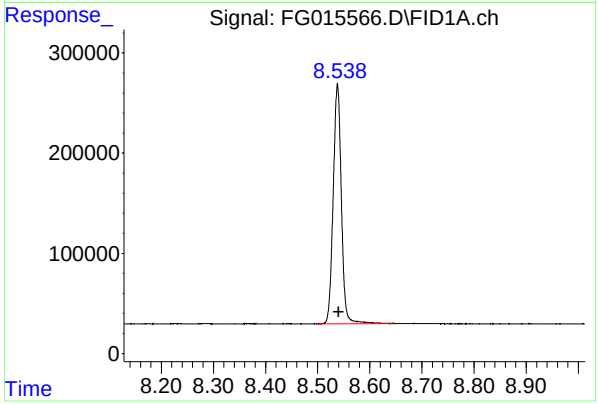
#2 N-DECANE

R.T.: 4.520 min
Delta R.T.: -0.001 min
Response: 2415965
Conc: 19.94 ug/ml



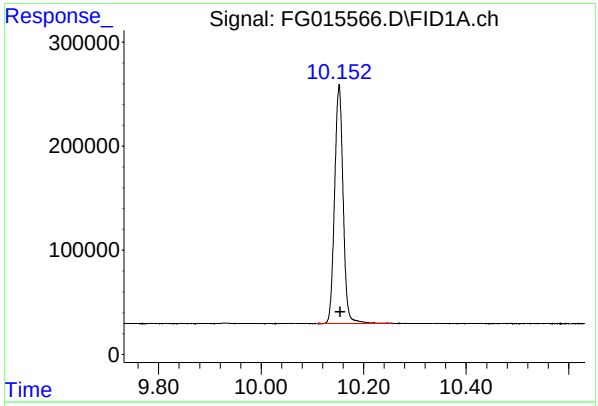
#3 N-DODECANE

R.T.: 6.702 min
Delta R.T.: -0.002 min
Response: 2493638
Conc: 19.86 ug/ml



#4 N-TETRADECANE

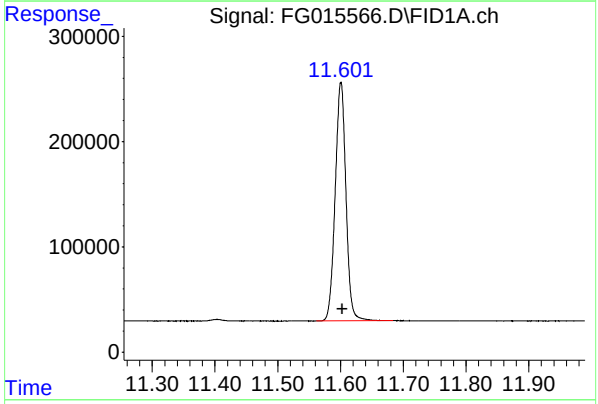
R.T.: 8.538 min
Delta R.T.: -0.002 min
Response: 2604089
Conc: 20.23 ug/ml



#5 N-HEXADECANE

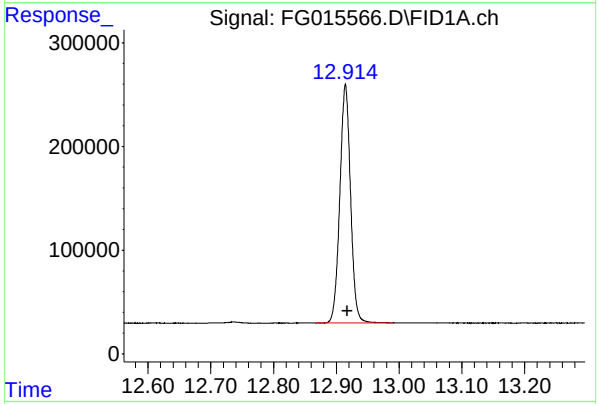
R.T.: 10.152 min
Delta R.T.: -0.003 min
Response: 2647683
Conc: 20.31 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



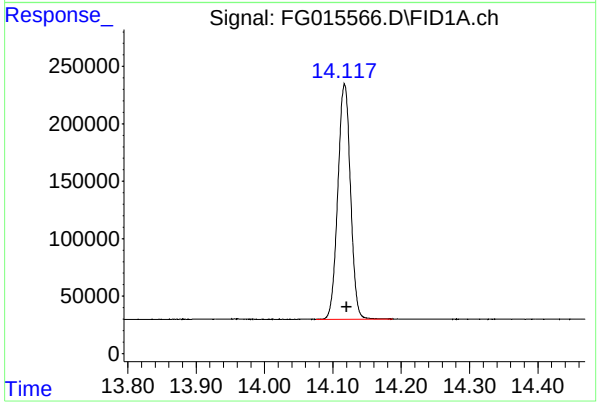
#6 N-OCTADECANE

R.T.: 11.601 min
Delta R.T.: -0.002 min
Response: 2699154
Conc: 20.25 ug/ml



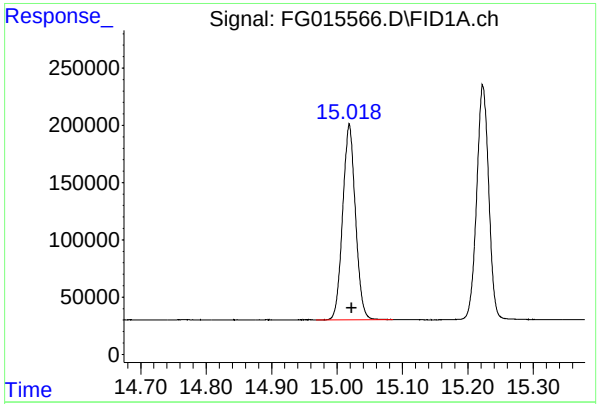
#7 N-EICOSANE

R.T.: 12.915 min
Delta R.T.: -0.003 min
Response: 2724346
Conc: 20.19 ug/ml



#8 N-DOCOSANE

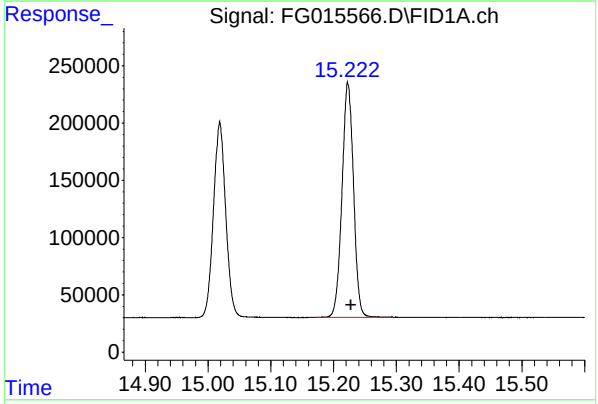
R.T.: 14.117 min
Delta R.T.: -0.003 min
Response: 2632870
Conc: 20.12 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

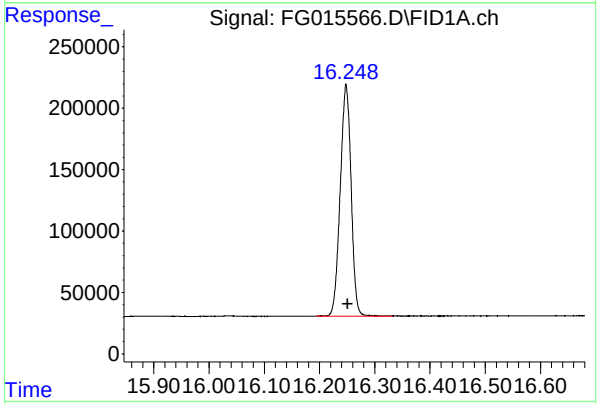
R.T.: 15.019 min
Delta R.T.: -0.003 min
Response: 2316571
Conc: 20.09 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



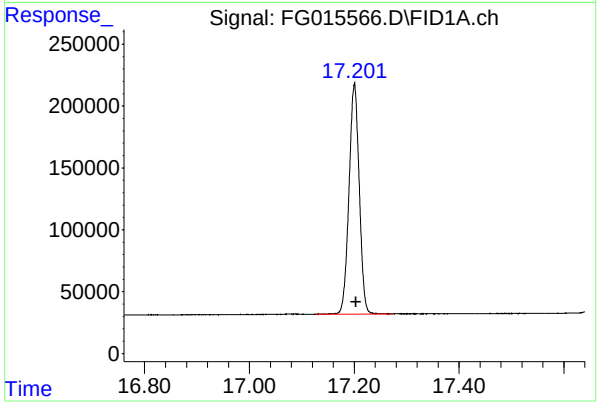
#10 N-TETRACOSANE

R.T.: 15.223 min
Delta R.T.: -0.005 min
Response: 2614047
Conc: 20.11 ug/ml



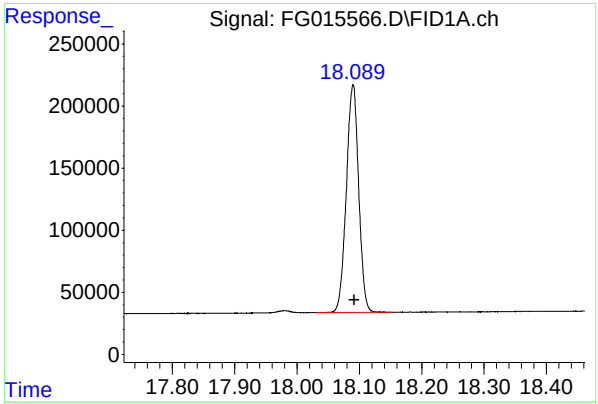
#11 N-HEXACOSANE

R.T.: 16.248 min
Delta R.T.: -0.003 min
Response: 2578760
Conc: 20.13 ug/ml



#12 N-OCTACOSANE

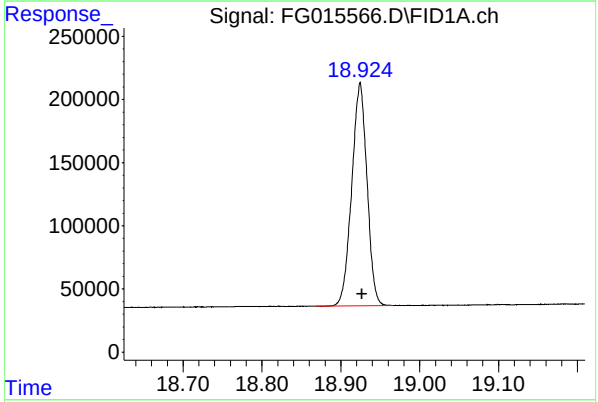
R.T.: 17.200 min
Delta R.T.: -0.003 min
Response: 2529191
Conc: 20.23 ug/ml



#13 N-TRIACONTANE

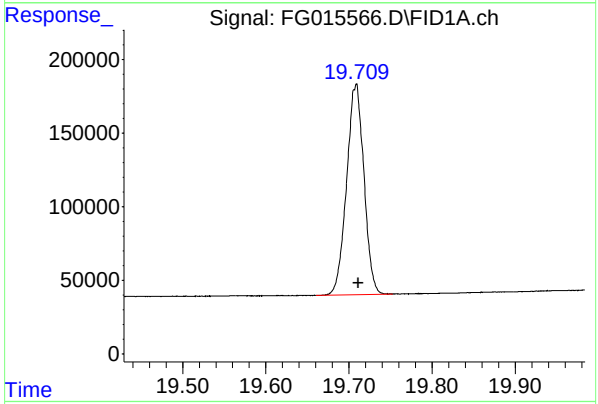
R.T.: 18.090 min
Delta R.T.: -0.002 min
Response: 2522959
Conc: 20.34 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



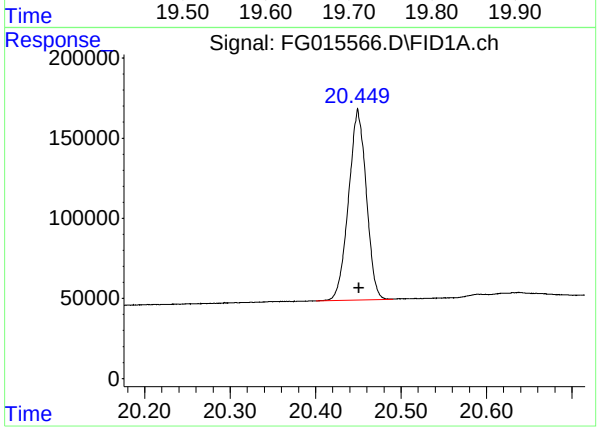
#14 N-DOTRIACONTANE

R.T.: 18.925 min
Delta R.T.: -0.002 min
Response: 2371858
Conc: 20.31 ug/ml



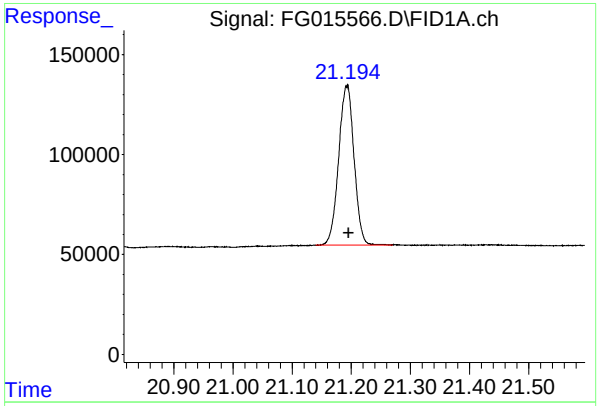
#15 N-TETRATRIACONTANE

R.T.: 19.709 min
Delta R.T.: -0.003 min
Response: 2071847
Conc: 19.83 ug/ml



#16 N-HEXATRIACONTANE

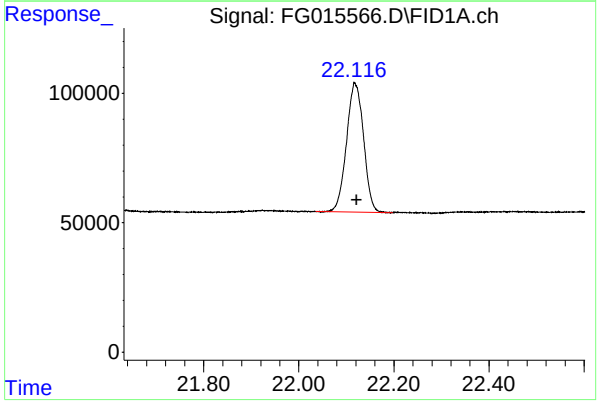
R.T.: 20.449 min
Delta R.T.: -0.001 min
Response: 1708395
Conc: 19.18 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.193 min
Delta R.T.: -0.003 min
Response: 1445409
Conc: 18.62 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.117 min
Delta R.T.: -0.005 min
Response: 1244629
Conc: 17.96 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015566.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 09:55
Sample : 20 TRPH STD
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.991	1.950	2.068	BB	240346	2367896	86.92%	5.639%
2	4.520	4.479	4.603	BB	236341	2415965	88.68%	5.754%
3	6.702	6.669	6.783	BB	238894	2493638	91.53%	5.939%
4	8.538	8.497	8.645	BB	239305	2604089	95.59%	6.202%
5	10.152	10.107	10.257	BB	229329	2647683	97.19%	6.306%
6	11.601	11.561	11.684	BB	226775	2699154	99.08%	6.428%
7	12.915	12.868	12.990	BB	230343	2724346	100.00%	6.488%
8	14.117	14.075	14.188	BB	204865	2632870	96.64%	6.270%
9	15.019	14.968	15.085	BB	171113	2316571	85.03%	5.517%
10	15.223	15.172	15.295	BB	203869	2614047	95.95%	6.226%
11	16.248	16.194	16.333	BB	189066	2578760	94.66%	6.141%
12	17.200	17.127	17.274	BB	185282	2529191	92.84%	6.023%
13	18.090	18.030	18.154	BB	183035	2522959	92.61%	6.009%
14	18.925	18.869	18.966	BB	176991	2371858	87.06%	5.649%
15	19.709	19.660	19.753	BB	143024	2071847	76.05%	4.934%
16	20.449	20.400	20.490	BV	118959	1708395	62.71%	4.069%
17	21.193	21.140	21.270	BB	78900	1445409	53.06%	3.442%
18	22.117	22.036	22.198	BB	49880	1244629	45.69%	2.964%
			Sum of corrected areas:			41989304		

FG032725.M Fri Mar 28 04:46:07 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015567.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 10:24
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: Mar 27 10:34:49 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 10:12:40 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...	15.018	1195793	10.356 ug/ml
	Target Compounds			
1)	N-OCTANE	1.990	1212240	10.282 ug/ml
2)	N-DECANE	4.520	1225955	10.130 ug/ml
3)	N-DODECANE	6.701	1251657	9.990 ug/ml
4)	N-TETRADECANE	8.537	1308108	10.125 ug/ml
5)	N-HEXADECANE	10.151	1336623	10.199 ug/ml
6)	N-OCTADECANE	11.599	1377571	10.292 ug/ml
7)	N-EICOSANE	12.914	1398350	10.330 ug/ml
8)	N-DOCOSANE	14.115	1356757	10.349 ug/ml
10)	N-TETRACOSANE	15.223	1359377	10.440 ug/ml
11)	N-HEXACOSANE	16.247	1326948	10.337 ug/ml
12)	N-OCTACOSANE	17.199	1306170	10.407 ug/ml
13)	N-TRIACONTANE	18.088	1313598	10.532 ug/ml
14)	N-DOTRIACONTANE	18.923	1250153	10.649 ug/ml
15)	N-TETRATRIACONTANE	19.708	1099428	10.554 ug/ml
16)	N-HEXATRIACONTANE	20.449	909217	10.350 ug/ml
17)	N-OCTATRIACONTANE	21.191	787789	10.389 ug/ml
18)	N-TETRACONTANE	22.118	696571	10.405 ug/ml

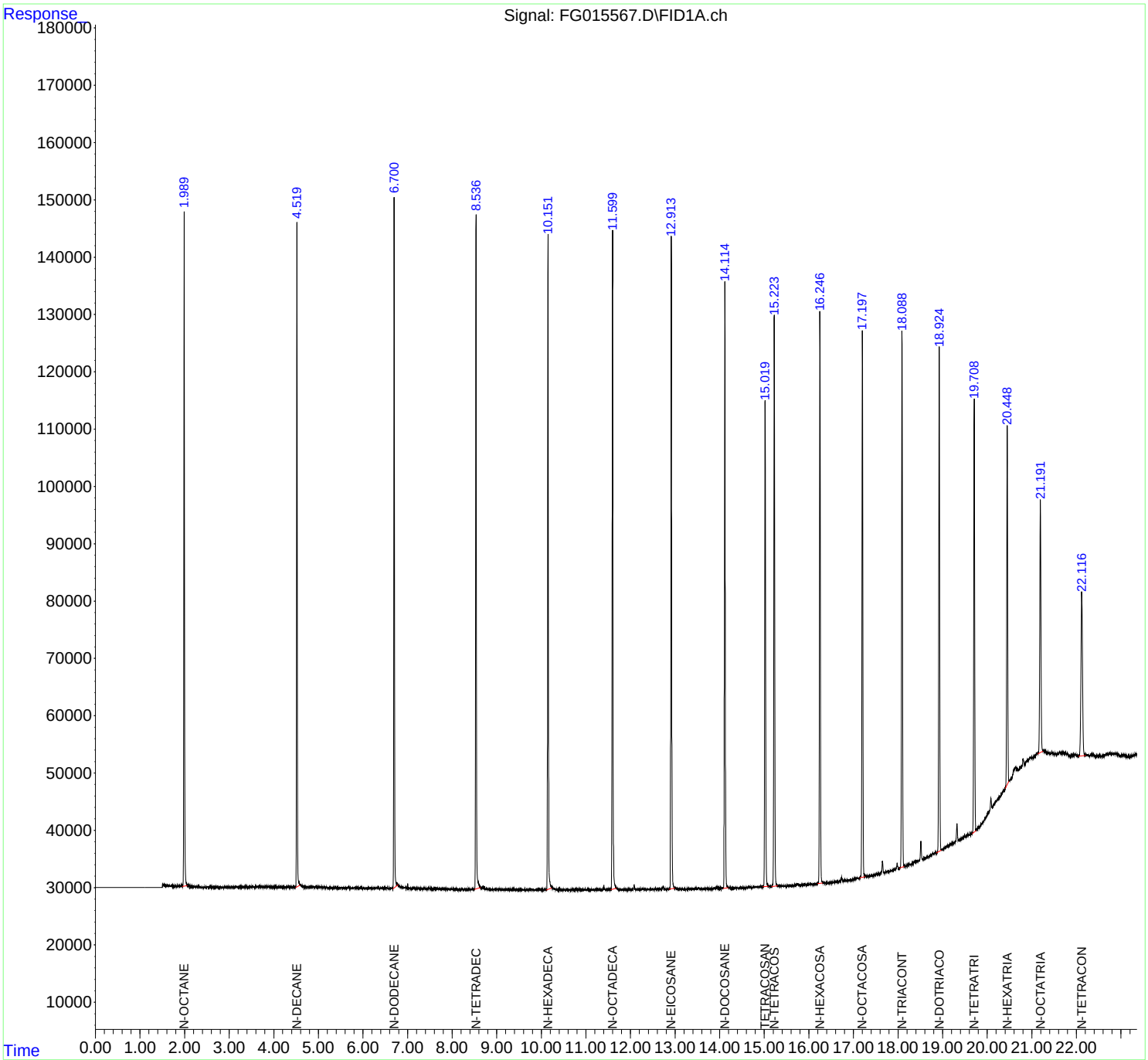
(f)=RT Delta > 1/2 Window (m)=manual int.

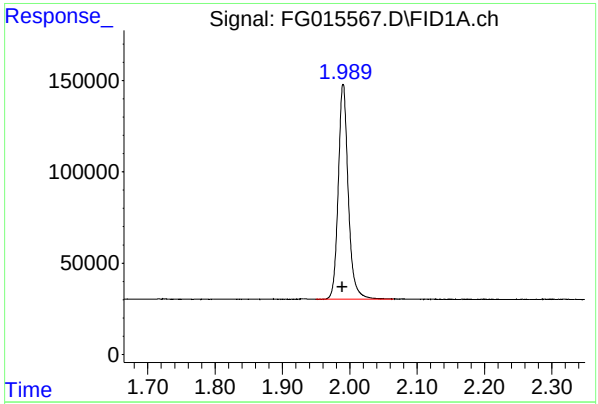
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015567.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 10:24
Operator : YP\AJ
Sample : 10 TRPH STD
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
10 TRPH STD

Integration File: autoint1.e
Quant Time: Mar 27 10:34:49 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 10:12:40 2025
Response via : Initial Calibration
Integrator: ChemStation

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

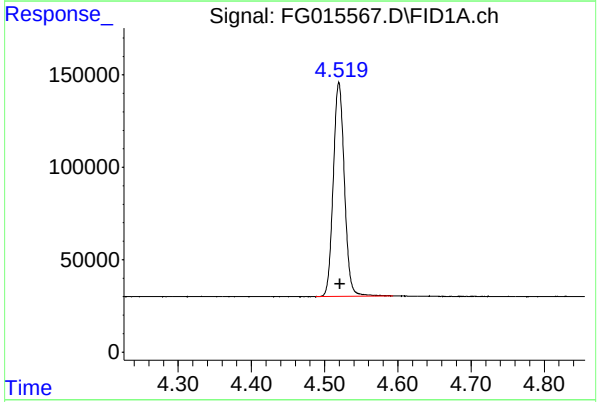




#1 N-OCTANE

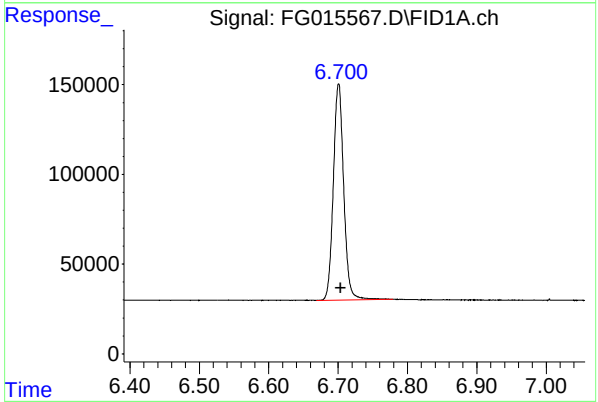
R.T.: 1.990 min
Delta R.T.: 0.001 min
Response: 1212240
Conc: 10.28 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



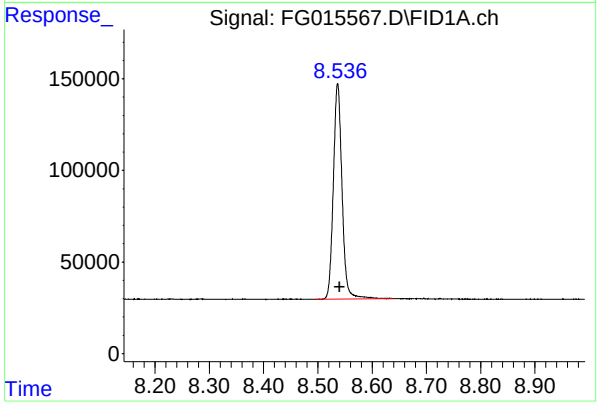
#2 N-DECANE

R.T.: 4.520 min
Delta R.T.: -0.002 min
Response: 1225955
Conc: 10.13 ug/ml



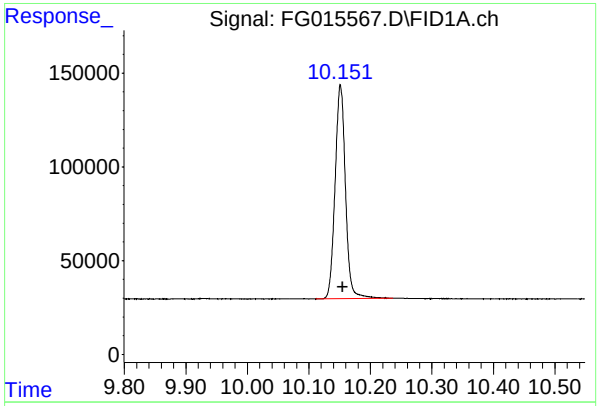
#3 N-DODECANE

R.T.: 6.701 min
Delta R.T.: -0.003 min
Response: 1251657
Conc: 9.99 ug/ml



#4 N-TETRADECANE

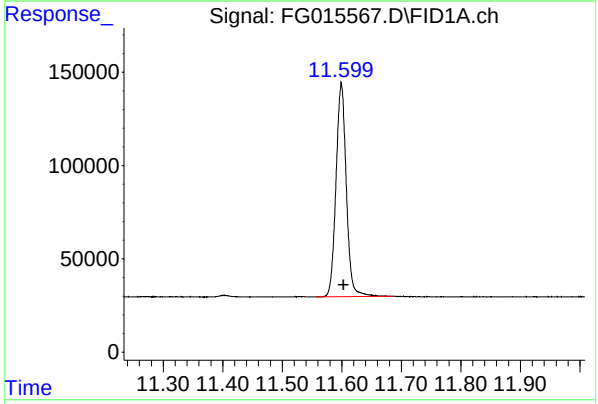
R.T.: 8.537 min
Delta R.T.: -0.004 min
Response: 1308108
Conc: 10.12 ug/ml



#5 N-HEXADECANE

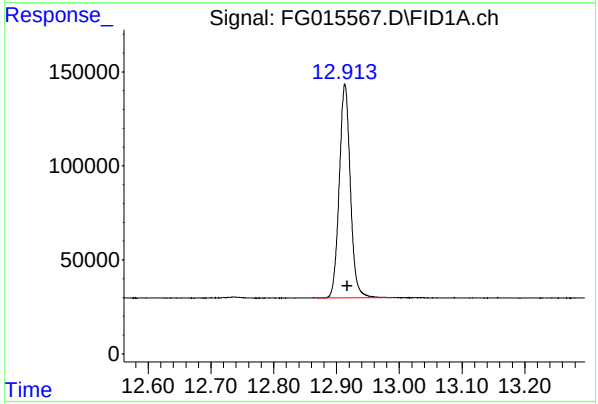
R.T.: 10.151 min
Delta R.T.: -0.003 min
Response: 1336623
Conc: 10.20 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



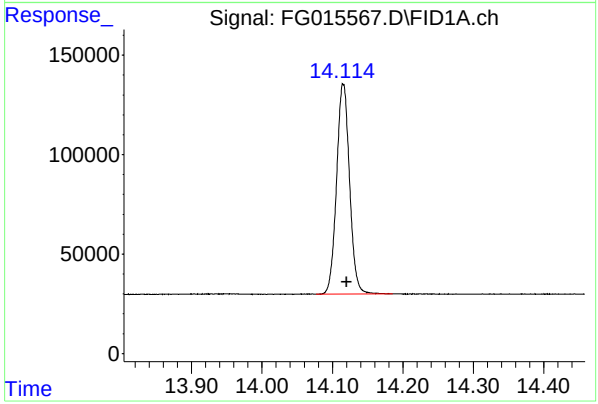
#6 N-OCTADECANE

R.T.: 11.599 min
Delta R.T.: -0.004 min
Response: 1377571
Conc: 10.29 ug/ml



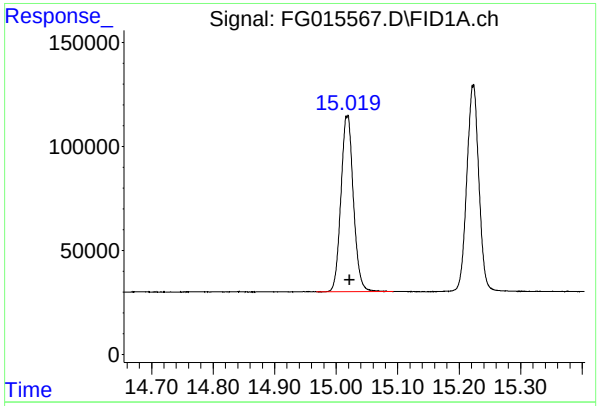
#7 N-EICOSANE

R.T.: 12.914 min
Delta R.T.: -0.004 min
Response: 1398350
Conc: 10.33 ug/ml



#8 N-DOCOSANE

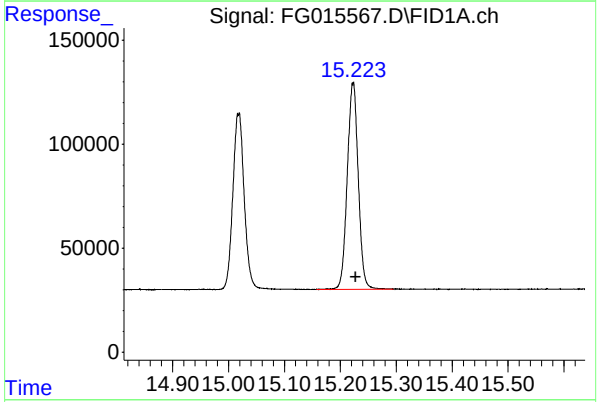
R.T.: 14.115 min
Delta R.T.: -0.005 min
Response: 1356757
Conc: 10.35 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

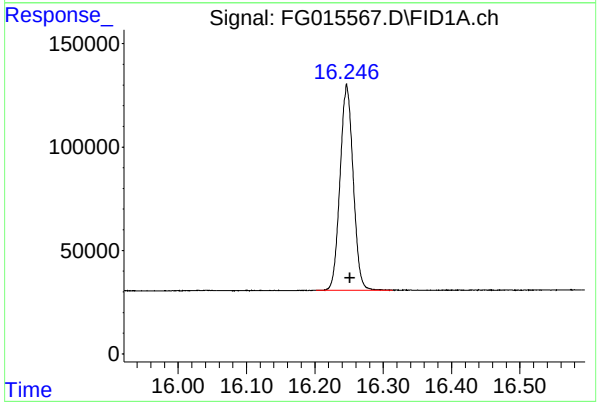
R.T.: 15.018 min
Delta R.T.: -0.004 min
Response: 1195793
Conc: 10.36 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



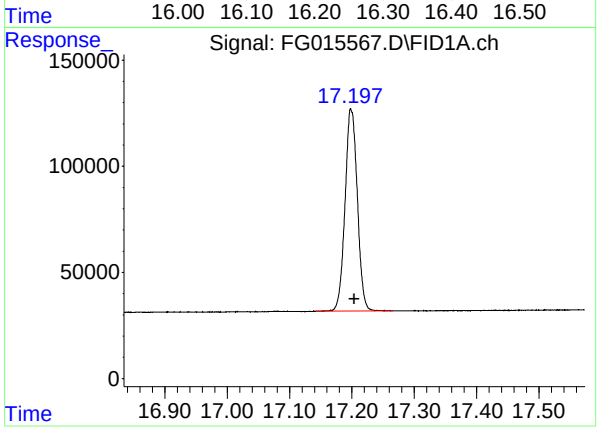
#10 N-TETRACOSANE

R.T.: 15.223 min
Delta R.T.: -0.005 min
Response: 1359377
Conc: 10.44 ug/ml



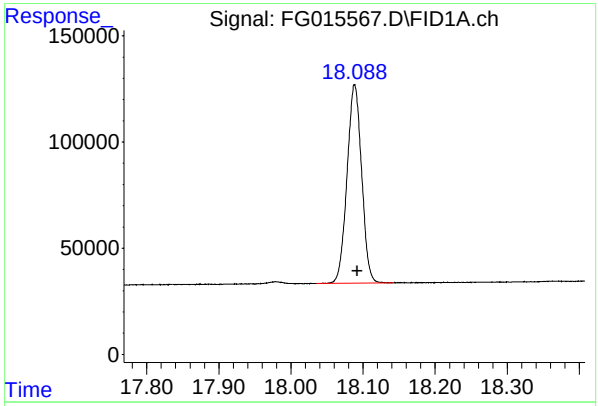
#11 N-HEXACOSANE

R.T.: 16.247 min
Delta R.T.: -0.005 min
Response: 1326948
Conc: 10.34 ug/ml



#12 N-OCTACOSANE

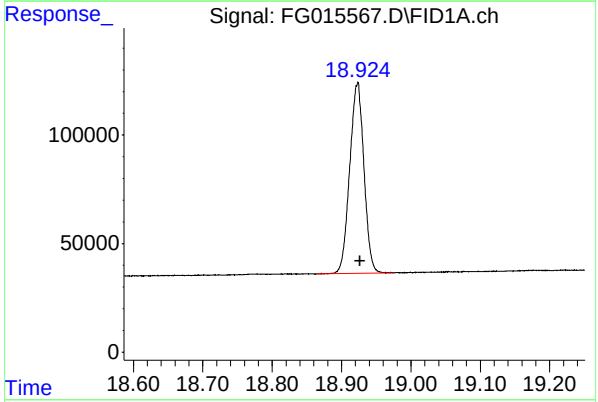
R.T.: 17.199 min
Delta R.T.: -0.005 min
Response: 1306170
Conc: 10.41 ug/ml



#13 N-TRIACONTANE

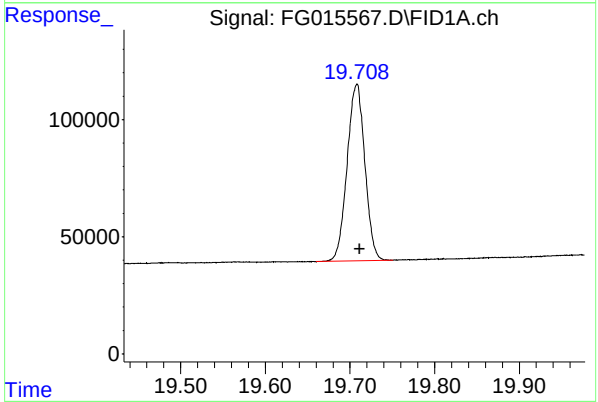
R.T.: 18.088 min
Delta R.T.: -0.004 min
Response: 1313598
Conc: 10.53 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



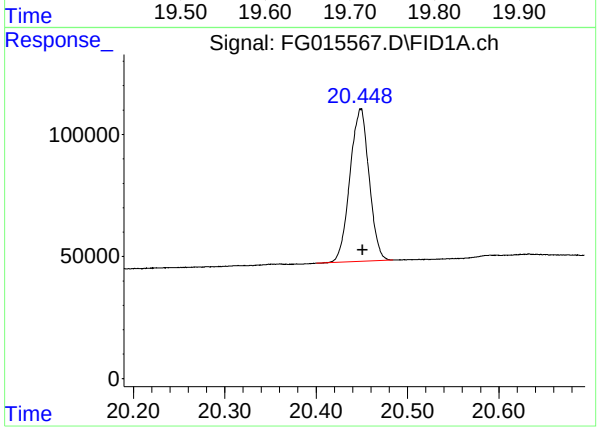
#14 N-DOTRIACONTANE

R.T.: 18.923 min
Delta R.T.: -0.004 min
Response: 1250153
Conc: 10.65 ug/ml



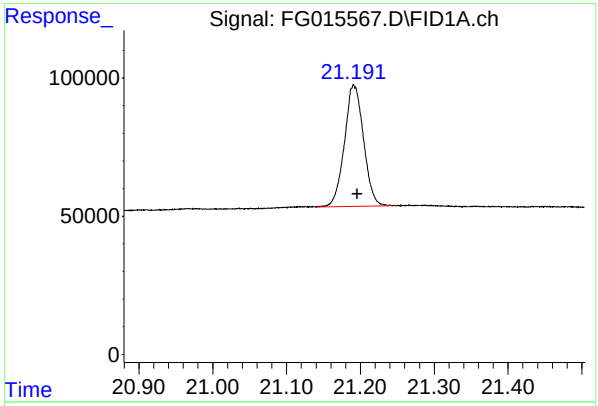
#15 N-TETRATRIACONTANE

R.T.: 19.708 min
Delta R.T.: -0.003 min
Response: 1099428
Conc: 10.55 ug/ml



#16 N-HEXATRIACONTANE

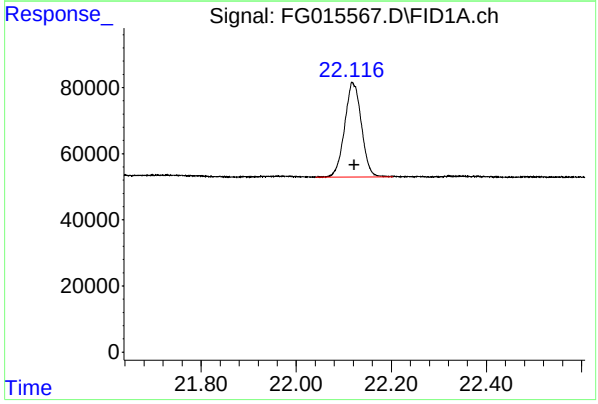
R.T.: 20.449 min
Delta R.T.: -0.002 min
Response: 909217
Conc: 10.35 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.191 min
Delta R.T.: -0.005 min
Response: 787789
Conc: 10.39 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.118 min
Delta R.T.: -0.004 min
Response: 696571
Conc: 10.41 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015567.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 10:24
Sample : 10 TRPH STD
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.990	1.950	2.064	BB	117749	1212240	86.69%	5.583%
2	4.520	4.488	4.593	BB	115953	1225955	87.67%	5.646%
3	6.701	6.668	6.779	BB	120557	1251657	89.51%	5.765%
4	8.537	8.497	8.638	BB	117721	1308108	93.55%	6.025%
5	10.151	10.112	10.237	BB	113831	1336623	95.59%	6.156%
6	11.599	11.557	11.686	BB	114628	1377571	98.51%	6.345%
7	12.914	12.868	12.990	BB	113782	1398350	100.00%	6.440%
8	14.115	14.077	14.186	BB	105285	1356757	97.03%	6.249%
9	15.018	14.968	15.093	BB	84094	1195793	85.51%	5.507%
10	15.223	15.157	15.294	BB	99419	1359377	97.21%	6.261%
11	16.247	16.202	16.314	BB	99588	1326948	94.89%	6.112%
12	17.199	17.143	17.266	BB	95023	1306170	93.41%	6.016%
13	18.088	18.035	18.142	BB	93376	1313598	93.94%	6.050%
14	18.923	18.863	18.974	BB	87600	1250153	89.40%	5.758%
15	19.708	19.660	19.751	BB	75569	1099428	78.62%	5.064%
16	20.449	20.400	20.484	BB	62145	909217	65.02%	4.188%
17	21.191	21.140	21.244	BB	44102	787789	56.34%	3.628%
18	22.118	22.042	22.203	BB	28515	696571	49.81%	3.208%
			Sum of corrected areas:			21712302		

FG032725.M Fri Mar 28 04:46:42 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015568.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 10:54
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: Mar 27 11:03:55 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 10:35:21 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...	15.018	534159	4.585 ug/ml
	Target Compounds			
1)	N-OCTANE	1.990	531185	4.474 ug/ml
2)	N-DECANE	4.520	525035	4.324 ug/ml
3)	N-DODECANE	6.701	530498	4.235 ug/ml
4)	N-TETRADECANE	8.537	560471	4.324 ug/ml
5)	N-HEXADECANE	10.151	584839	4.441 ug/ml
6)	N-OCTADECANE	11.599	597018	4.428 ug/ml
7)	N-EICOSANE	12.914	617744	4.526 ug/ml
8)	N-DOCOSANE	14.115	603781	4.566 ug/ml
10)	N-TETRACOSANE	15.222	605301	4.598 ug/ml
11)	N-HEXACOSANE	16.246	592779	4.579 ug/ml
12)	N-OCTACOSANE	17.198	589278	4.648 ug/ml
13)	N-TRIACONTANE	18.089	601727	4.761 ug/ml
14)	N-DOTRIACONTANE	18.921	580986	4.870 ug/ml
15)	N-TETRATRIACONTANE	19.707	497140	4.707 ug/ml
16)	N-HEXATRIACONTANE	20.448	418862	4.727 ug/ml
17)	N-OCTATRIACONTANE	21.191	334415	4.368 ug/ml
18)	N-TETRACONTANE	22.118	303485	4.488 ug/ml

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

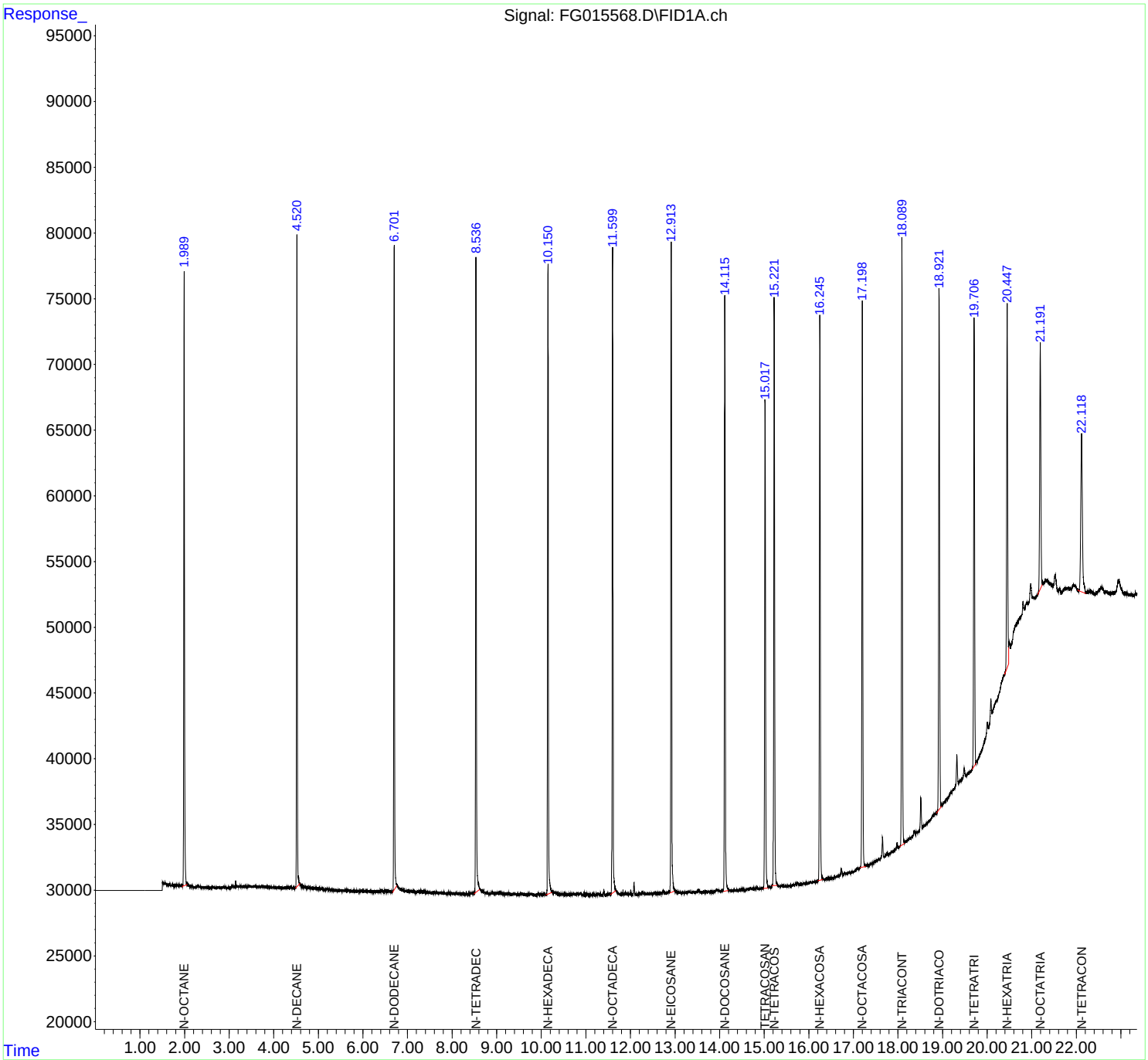
Quantitation Report (QT Reviewed)

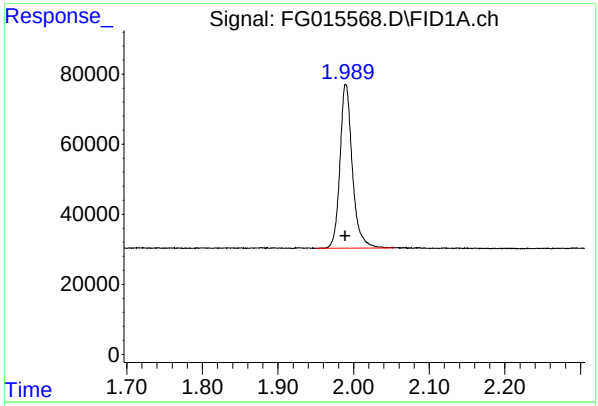
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015568.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 10:54
Operator : YP\AJ
Sample : 5 TRPH STD
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
5 TRPH STD

Integration File: autoint1.e
Quant Time: Mar 27 11:03:55 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 10:35:21 2025
Response via : Initial Calibration
Integrator: ChemStation

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

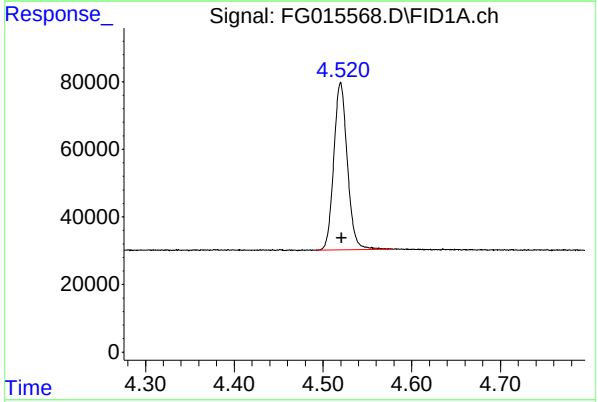




#1 N-OCTANE

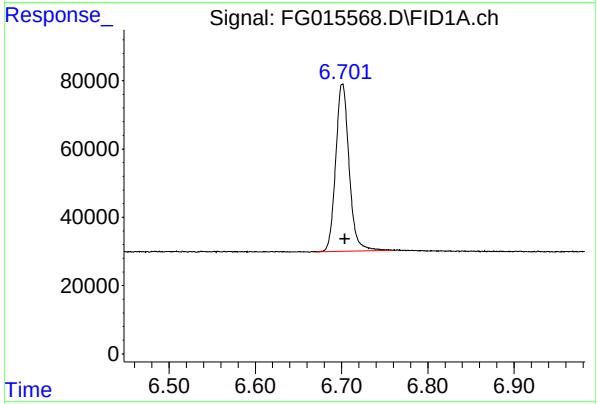
R.T.: 1.990 min
Delta R.T.: 0.000 min
Response: 531185
Conc: 4.47 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



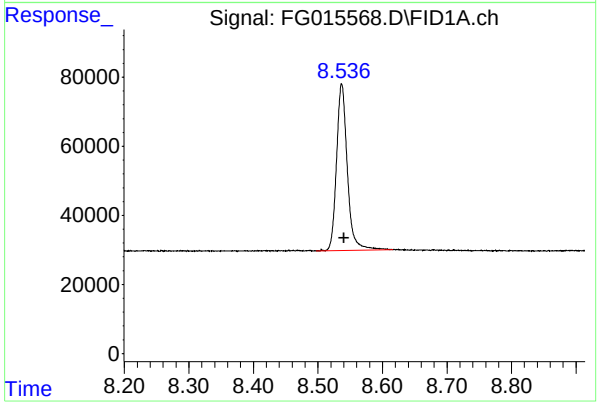
#2 N-DECANE

R.T.: 4.520 min
Delta R.T.: -0.001 min
Response: 525035
Conc: 4.32 ug/ml



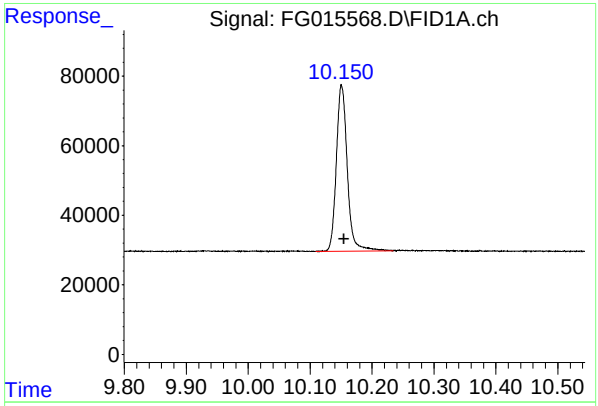
#3 N-DODECANE

R.T.: 6.701 min
Delta R.T.: -0.003 min
Response: 530498
Conc: 4.24 ug/ml



#4 N-TETRADECANE

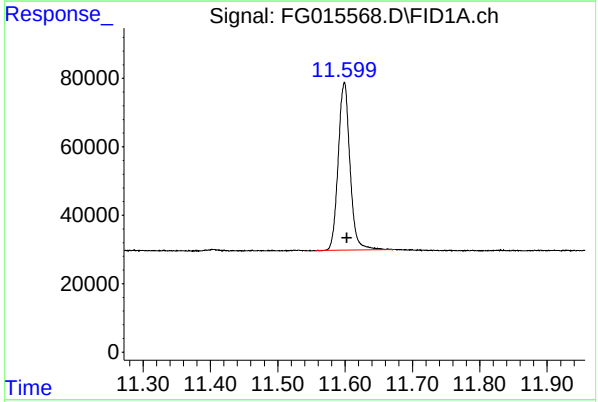
R.T.: 8.537 min
Delta R.T.: -0.003 min
Response: 560471
Conc: 4.32 ug/ml



#5 N-HEXADECANE

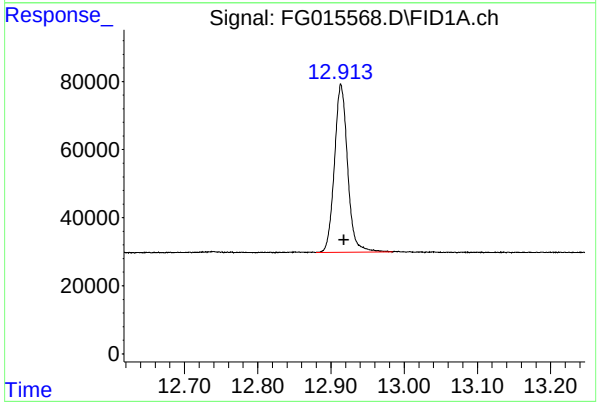
R.T.: 10.151 min
Delta R.T.: -0.004 min
Response: 584839
Conc: 4.44 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



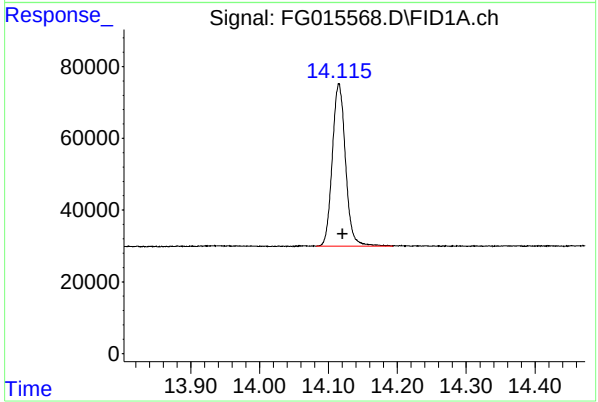
#6 N-OCTADECANE

R.T.: 11.599 min
Delta R.T.: -0.004 min
Response: 597018
Conc: 4.43 ug/ml



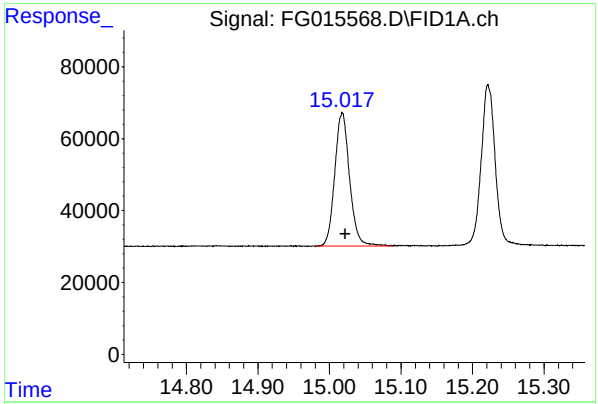
#7 N-EICOSANE

R.T.: 12.914 min
Delta R.T.: -0.004 min
Response: 617744
Conc: 4.53 ug/ml



#8 N-DOCOSANE

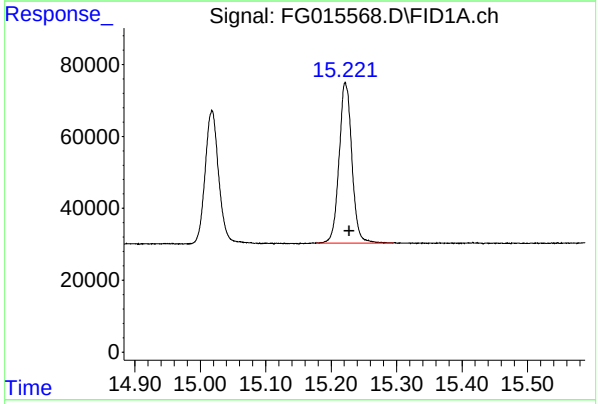
R.T.: 14.115 min
Delta R.T.: -0.005 min
Response: 603781
Conc: 4.57 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

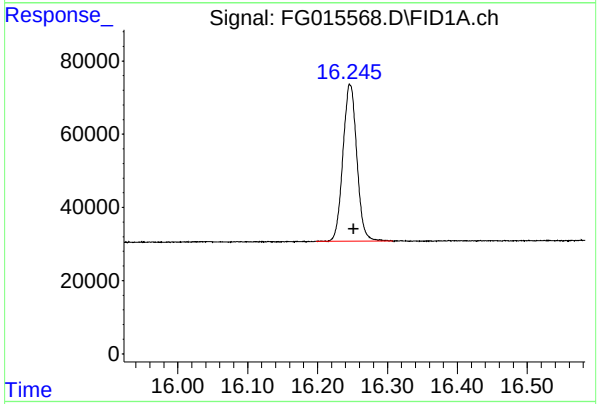
R.T.: 15.018 min
Delta R.T.: -0.004 min
Response: 534159
Conc: 4.59 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



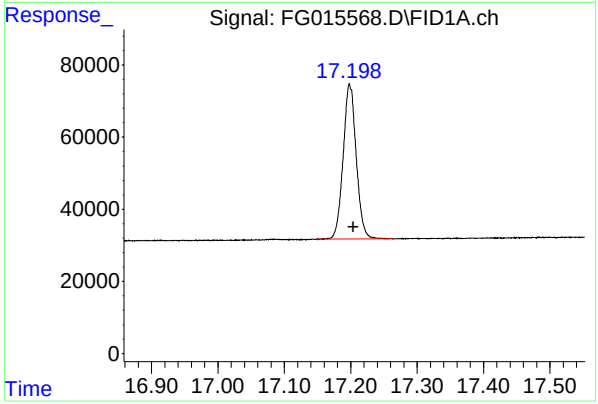
#10 N-TETRACOSANE

R.T.: 15.222 min
Delta R.T.: -0.006 min
Response: 605301
Conc: 4.60 ug/ml



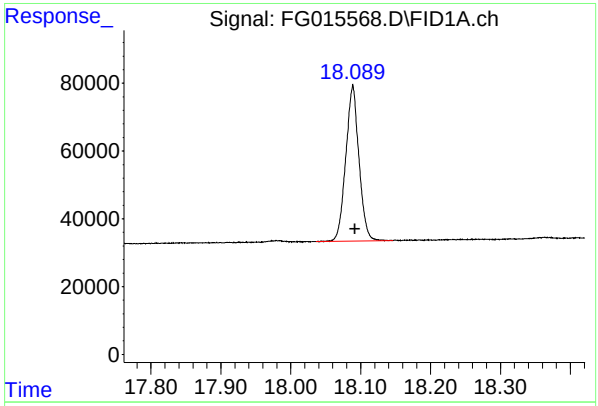
#11 N-HEXACOSANE

R.T.: 16.246 min
Delta R.T.: -0.005 min
Response: 592779
Conc: 4.58 ug/ml



#12 N-OCTACOSANE

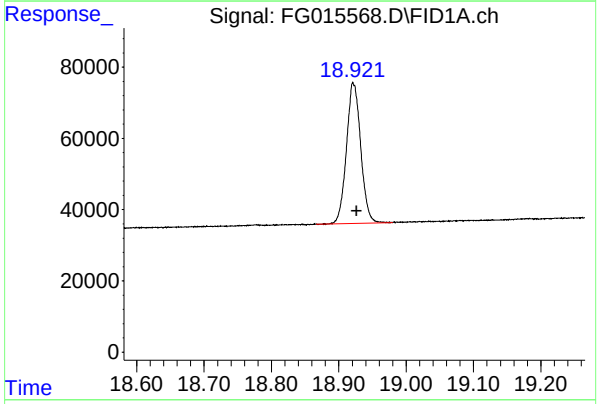
R.T.: 17.198 min
Delta R.T.: -0.005 min
Response: 589278
Conc: 4.65 ug/ml



#13 N-TRIACONTANE

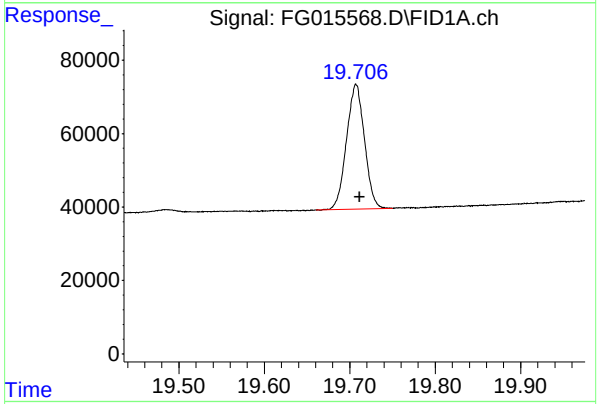
R.T.: 18.089 min
Delta R.T.: -0.003 min
Response: 601727
Conc: 4.76 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



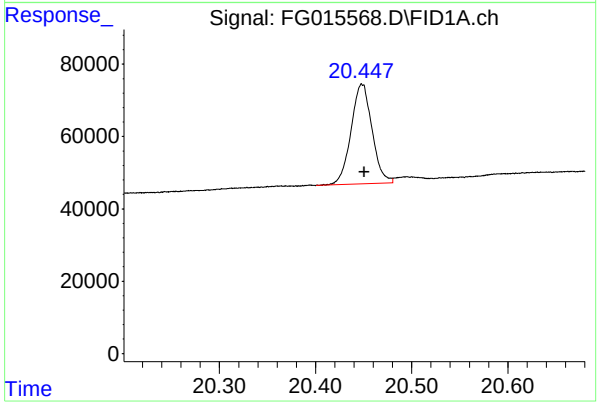
#14 N-DOTRIACONTANE

R.T.: 18.921 min
Delta R.T.: -0.005 min
Response: 580986
Conc: 4.87 ug/ml



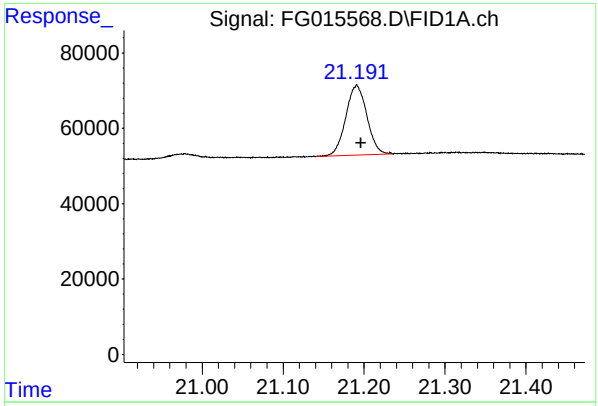
#15 N-TETRATRIACONTANE

R.T.: 19.707 min
Delta R.T.: -0.004 min
Response: 497140
Conc: 4.71 ug/ml



#16 N-HEXATRIACONTANE

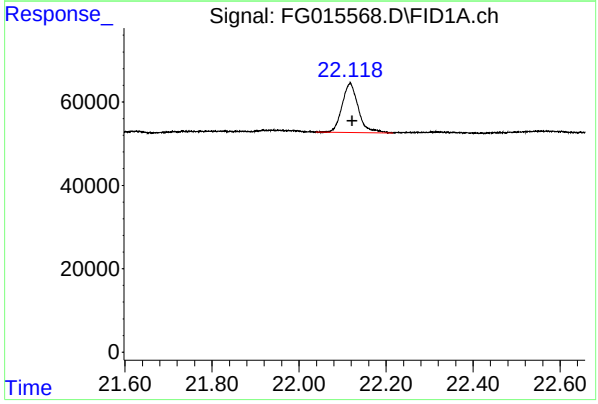
R.T.: 20.448 min
Delta R.T.: -0.002 min
Response: 418862
Conc: 4.73 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.191 min
Delta R.T.: -0.005 min
Response: 334415
Conc: 4.37 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.118 min
Delta R.T.: -0.004 min
Response: 303485
Conc: 4.49 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015568.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 10:54
Sample : 5 TRPH STD
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.990	1.950	2.052	BB	46626	531185	85.99%	5.528%
2	4.520	4.492	4.579	BB	49462	525035	84.99%	5.464%
3	6.701	6.670	6.760	BB	48963	530498	85.88%	5.521%
4	8.537	8.497	8.616	BB	48149	560471	90.73%	5.833%
5	10.151	10.110	10.234	BB	47436	584839	94.67%	6.087%
6	11.599	11.557	11.671	BB	49134	597018	96.64%	6.213%
7	12.914	12.880	12.985	BB	49315	617744	100.00%	6.429%
8	14.115	14.082	14.194	BB	45306	603781	97.74%	6.284%
9	15.018	14.981	15.089	BB	37071	534159	86.47%	5.559%
10	15.222	15.177	15.295	BB	44759	605301	97.99%	6.300%
11	16.246	16.198	16.308	BB	42781	592779	95.96%	6.169%
12	17.198	17.148	17.264	BB	42863	589278	95.39%	6.133%
13	18.089	18.036	18.146	BV	46075	601727	97.41%	6.262%
14	18.921	18.866	18.980	BB	39491	580986	94.05%	6.046%
15	19.707	19.660	19.750	BB	34085	497140	80.48%	5.174%
16	20.448	20.400	20.480	BV	27345	418862	67.81%	4.359%
17	21.191	21.141	21.236	BB	18614	334415	54.13%	3.480%
18	22.118	22.039	22.216	BV	11913	303485	49.13%	3.158%
			Sum of corrected areas:			9608703		

FG032725.M Fri Mar 28 04:47:22 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015569.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 11:23
Operator : YP\AJ
Sample : FG032725ICV
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
FG032725ICV

Integration File: autoint1.e
Quant Time: Mar 27 11:42:40 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 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...	15.022	5698651	49.742 ug/ml
	Target Compounds			
1)	N-OCTANE	1.987	5753939	49.505 ug/ml
2)	N-DECANE	4.521	5949464	50.361 ug/ml
3)	N-DODECANE	6.703	6111976	50.335 ug/ml
4)	N-TETRADECANE	8.540	6298106	49.944 ug/ml
5)	N-HEXADECANE	10.154	6380233	49.552 ug/ml
6)	N-OCTADECANE	11.603	6537211	49.622 ug/ml
7)	N-EICOSANE	12.918	6636596	49.563 ug/ml
8)	N-DOCOSANE	14.120	6446094	49.606 ug/ml
10)	N-TETRACOSANE	15.226	6433481	49.669 ug/ml
11)	N-HEXACOSANE	16.250	6346525	49.865 ug/ml
12)	N-OCTACOSANE	17.203	6232196	49.856 ug/ml
13)	N-TRIACONTANE	18.092	6295761	50.296 ug/ml
14)	N-DOTRIACONTANE	18.928	6332952	53.363 ug/ml
15)	N-TETRATRIACONTANE	19.712	5571430	53.378 ug/ml
16)	N-HEXATRIACONTANE	20.451	4633711	52.869 ug/ml
17)	N-OCTATRIACONTANE	21.195	3783039	50.691 ug/ml
18)	N-TETRACONTANE	22.121	3864697	58.346 ug/ml

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

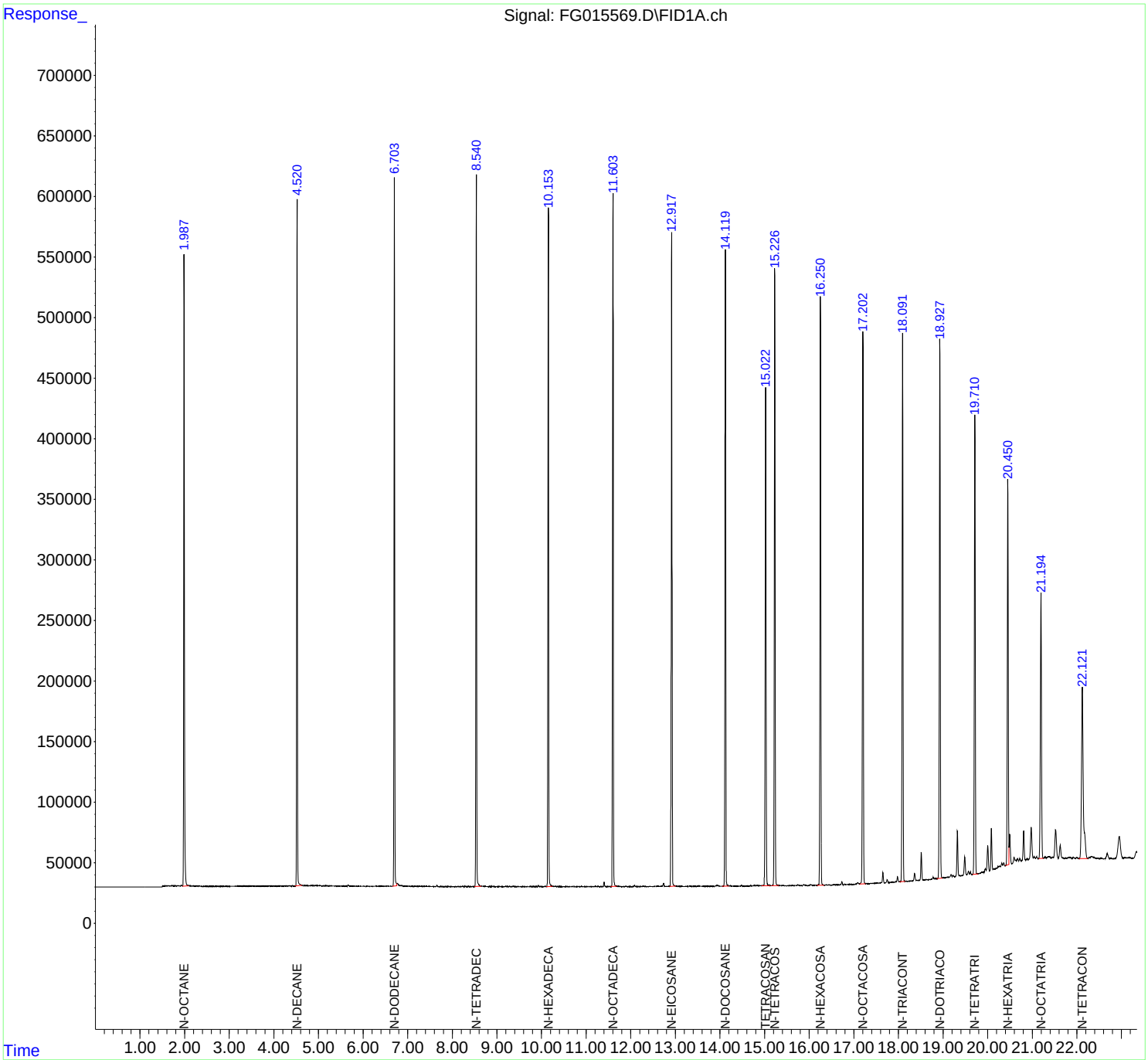
Quantitation Report (QT Reviewed)

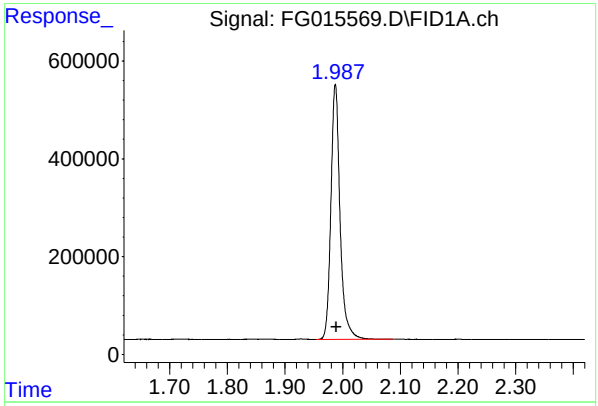
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015569.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 11:23
Operator : YP\AJ
Sample : FG032725ICV
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
FG032725ICV

Integration File: autoint1.e
Quant Time: Mar 27 11:42:40 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 2025
Response via : Initial Calibration
Integrator: ChemStation

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

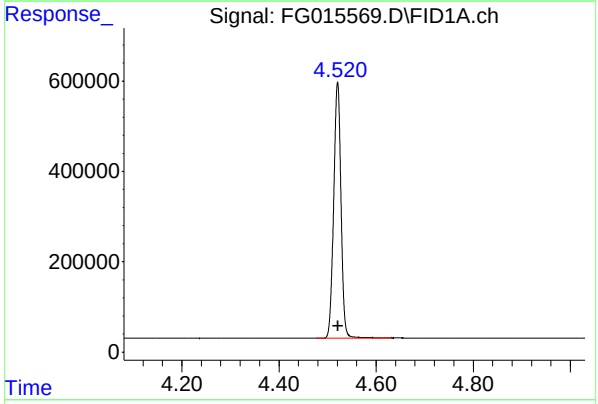




#1 N-OCTANE

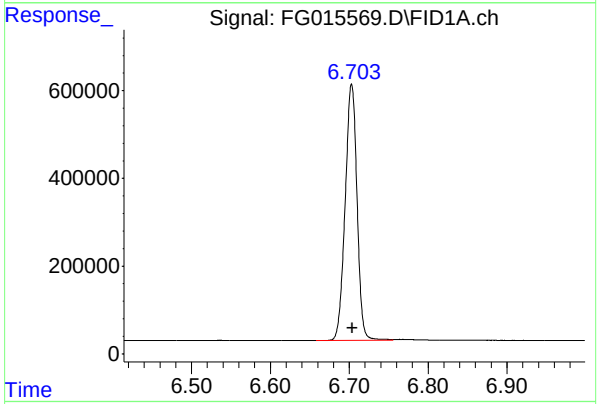
R.T.: 1.987 min
Delta R.T.: -0.002 min
Response: 5753939
Conc: 49.50 ug/ml

Instrument :
FID_G
ClientSampleId :
FG032725ICV



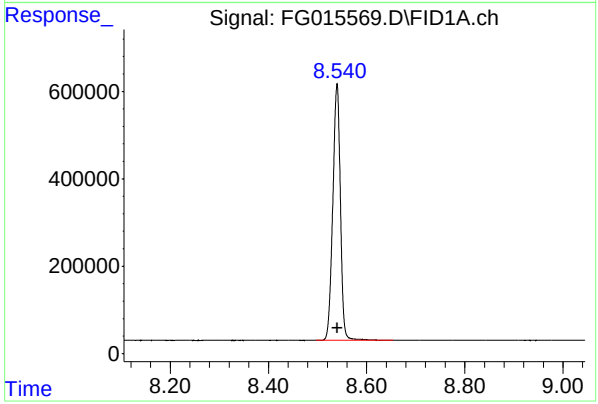
#2 N-DECANE

R.T.: 4.521 min
Delta R.T.: 0.000 min
Response: 5949464
Conc: 50.36 ug/ml



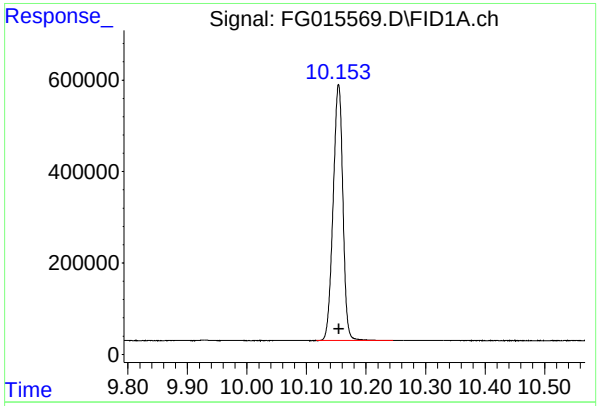
#3 N-DODECANE

R.T.: 6.703 min
Delta R.T.: 0.000 min
Response: 6111976
Conc: 50.34 ug/ml



#4 N-TETRADECANE

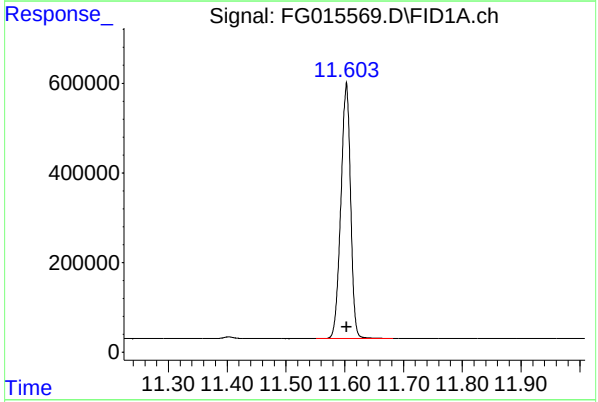
R.T.: 8.540 min
Delta R.T.: 0.000 min
Response: 6298106
Conc: 49.94 ug/ml



#5 N-HEXADECANE

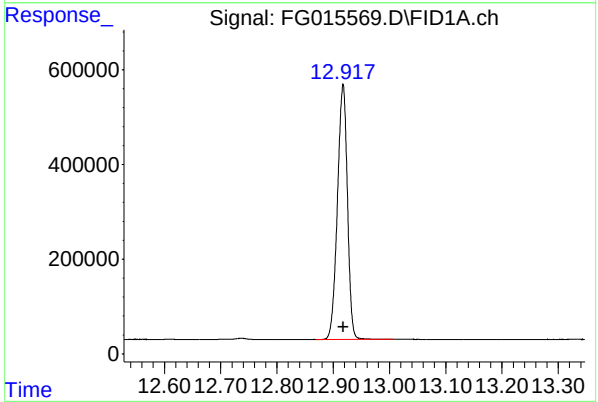
R.T.: 10.154 min
Delta R.T.: 0.000 min
Response: 6380233
Conc: 49.55 ug/ml

Instrument :
FID_G
ClientSampleId :
FG032725ICV



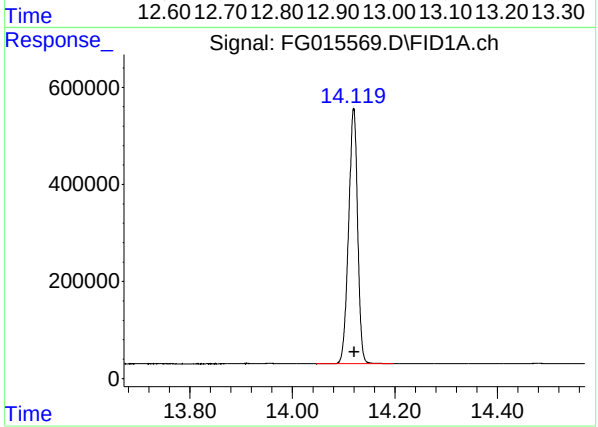
#6 N-OCTADECANE

R.T.: 11.603 min
Delta R.T.: 0.000 min
Response: 6537211
Conc: 49.62 ug/ml



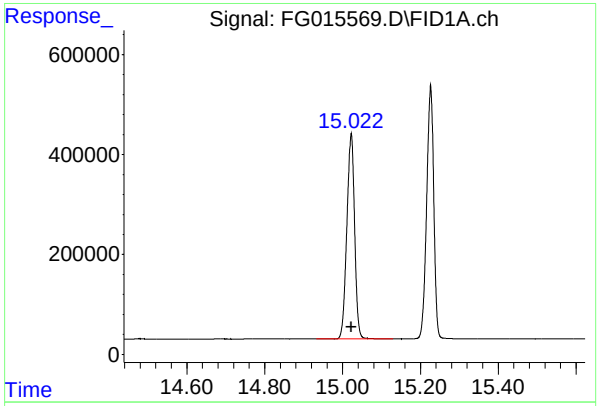
#7 N-EICOSANE

R.T.: 12.918 min
Delta R.T.: 0.000 min
Response: 6636596
Conc: 49.56 ug/ml



#8 N-DOCOSANE

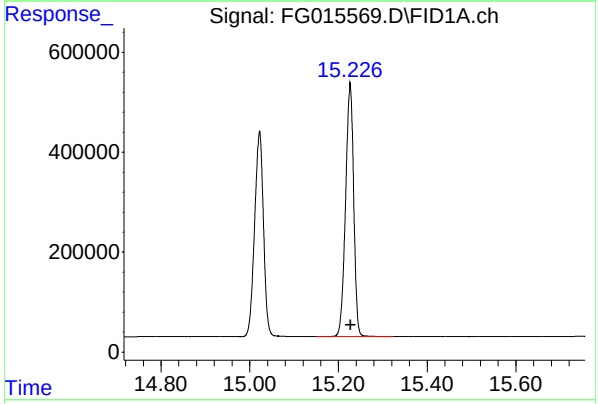
R.T.: 14.120 min
Delta R.T.: 0.000 min
Response: 6446094
Conc: 49.61 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

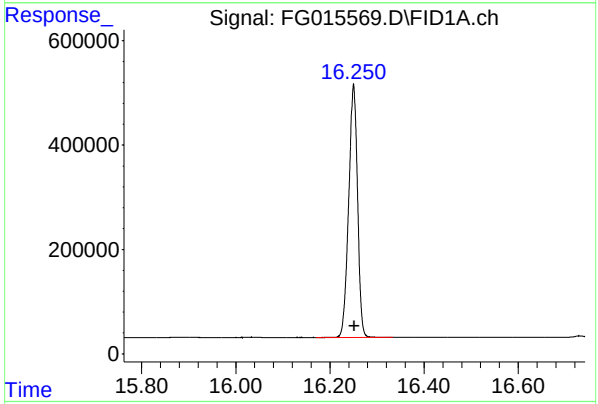
R.T.: 15.022 min
Delta R.T.: 0.000 min
Response: 5698651
Conc: 49.74 ug/ml

Instrument :
FID_G
ClientSampleId :
FG032725ICV



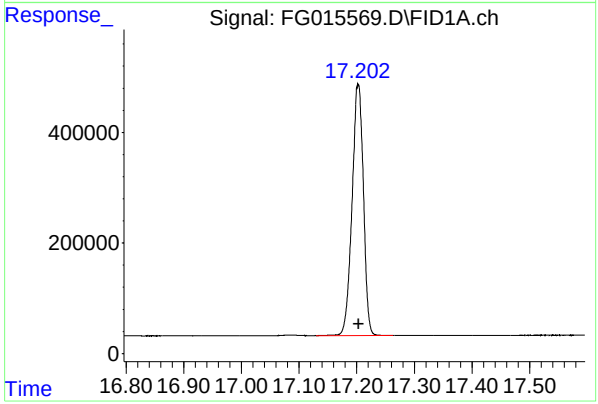
#10 N-TETRACOSANE

R.T.: 15.226 min
Delta R.T.: -0.001 min
Response: 6433481
Conc: 49.67 ug/ml



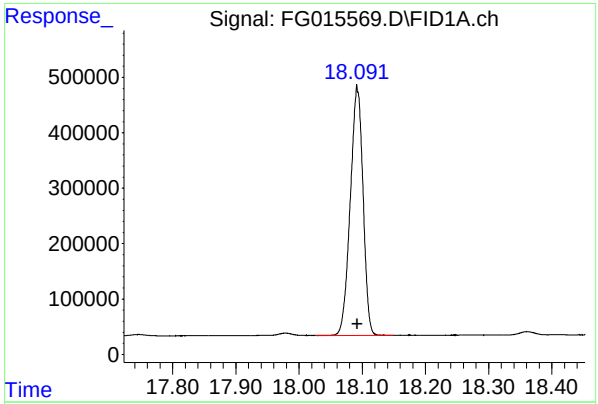
#11 N-HEXACOSANE

R.T.: 16.250 min
Delta R.T.: 0.000 min
Response: 6346525
Conc: 49.86 ug/ml



#12 N-OCTACOSANE

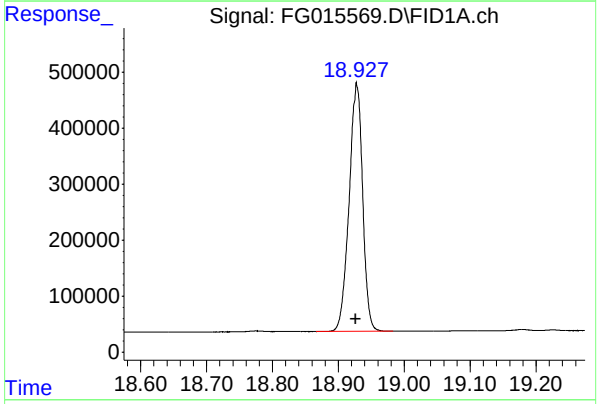
R.T.: 17.203 min
Delta R.T.: 0.000 min
Response: 6232196
Conc: 49.86 ug/ml



#13 N-TRIACONTANE

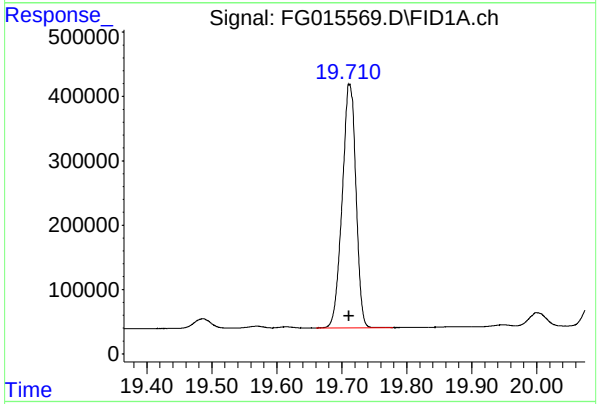
R.T.: 18.092 min
Delta R.T.: 0.000 min
Response: 6295761
Conc: 50.30 ug/ml

Instrument :
FID_G
ClientSampleId :
FG032725ICV



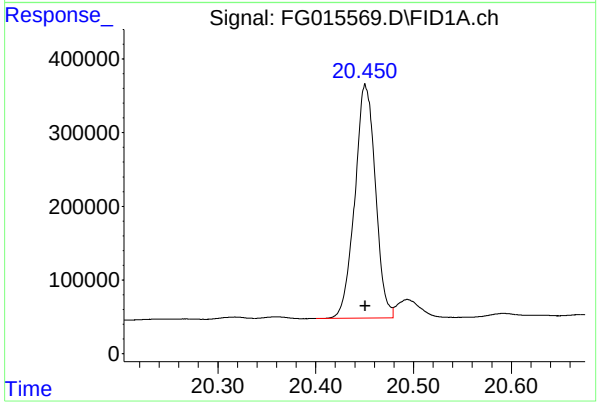
#14 N-DOTRIACONTANE

R.T.: 18.928 min
Delta R.T.: 0.001 min
Response: 6332952
Conc: 53.36 ug/ml



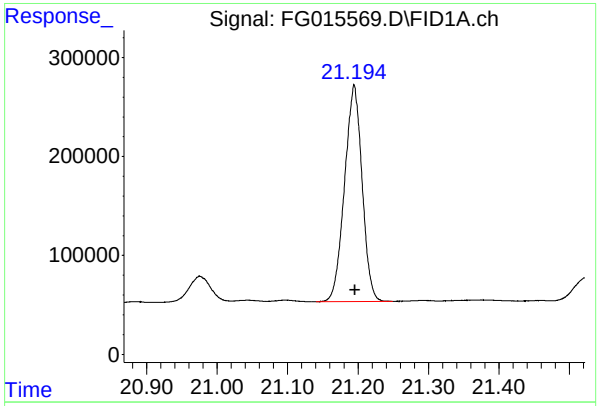
#15 N-TETRATRIACONTANE

R.T.: 19.712 min
Delta R.T.: 0.000 min
Response: 5571430
Conc: 53.38 ug/ml



#16 N-HEXATRIACONTANE

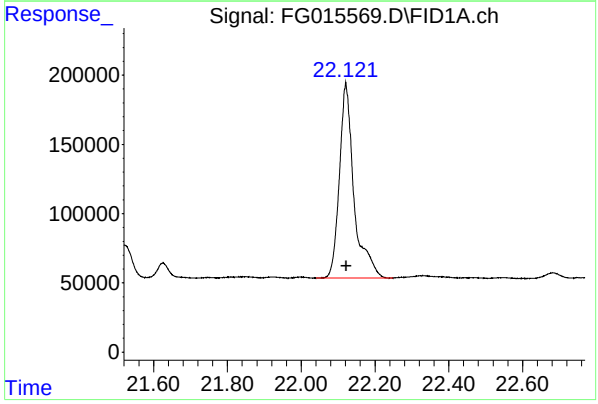
R.T.: 20.451 min
Delta R.T.: 0.000 min
Response: 4633711
Conc: 52.87 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.195 min
Delta R.T.: -0.001 min
Response: 3783039
Conc: 50.69 ug/ml

Instrument :
FID_G
ClientSampleId :
FG032725ICV



#18 N-TETRACONTANE

R.T.: 22.121 min
Delta R.T.: -0.001 min
Response: 3864697
Conc: 58.35 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG032725\
Data File : FG015569.D
Signal(s) : FID1A.ch
Acq On : 27 Mar 2025 11:23
Sample : FG032725ICV
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.987	1.954	2.087	PB	521125	5753939	86.70%	5.464%
2	4.521	4.476	4.635	BB	566965	5949464	89.65%	5.650%
3	6.703	6.658	6.755	BV	584402	6111976	92.10%	5.804%
4	8.540	8.497	8.654	BB	586381	6298106	94.90%	5.981%
5	10.154	10.116	10.245	BB	560216	6380233	96.14%	6.059%
6	11.603	11.551	11.682	BB	570369	6537211	98.50%	6.208%
7	12.918	12.870	13.006	BB	539403	6636596	100.00%	6.302%
8	14.120	14.046	14.196	BB	524672	6446094	97.13%	6.121%
9	15.022	14.932	15.130	BB	411474	5698651	85.87%	5.412%
10	15.226	15.150	15.323	BB	508770	6433481	96.94%	6.109%
11	16.250	16.170	16.334	BB	485651	6346525	95.63%	6.027%
12	17.203	17.130	17.263	BB	452879	6232196	93.91%	5.918%
13	18.092	18.027	18.149	BB	447767	6295761	94.86%	5.979%
14	18.928	18.866	18.983	BB	440844	6332952	95.42%	6.014%
15	19.712	19.660	19.779	BB	377949	5571430	83.95%	5.291%
16	20.451	20.400	20.479	BV	317883	4633711	69.82%	4.400%
17	21.195	21.140	21.250	BV	218945	3783039	57.00%	3.592%
18	22.121	22.040	22.249	BV	141448	3864697	58.23%	3.670%

Sum of corrected areas: 105306062

FG032725.M Fri Mar 28 04:52:31 2025

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

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: JACO05

ProjectID: Former Schlumberger STC PTC Site D3868221

Lab Code: CHEM Case No.: Q1812 SAS No.: Q1812 SDG No.: Q1812

DataFile: FG015670.D Analyst Name: YP\AJ Analyst Date: 04-16-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	61634101	123268	127181	3.077

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015670.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 11:37
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Apr 21 07:13:14 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 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...	15.011	5642589	49.253 ug/ml
	Target Compounds			
2)	N-DECANE	4.510	5967203	50.512 ug/ml
3)	N-DODECANE	6.693	6188092	50.962 ug/ml
4)	N-TETRADECANE	8.530	6231470	49.416 ug/ml
5)	N-HEXADECANE	10.144	6325604	49.128 ug/ml
6)	N-OCTADECANE	11.593	6491150	49.272 ug/ml
7)	N-EICOSANE	12.907	6388608	47.711 ug/ml
8)	N-DOCOSANE	14.109	6206579	47.763 ug/ml
10)	N-TETRACOSANE	15.217	6123149	47.273 ug/ml
11)	N-HEXACOSANE	16.240	5932175	46.609 ug/ml
12)	N-OCTACOSANE	17.193	5780071	46.239 ug/ml

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

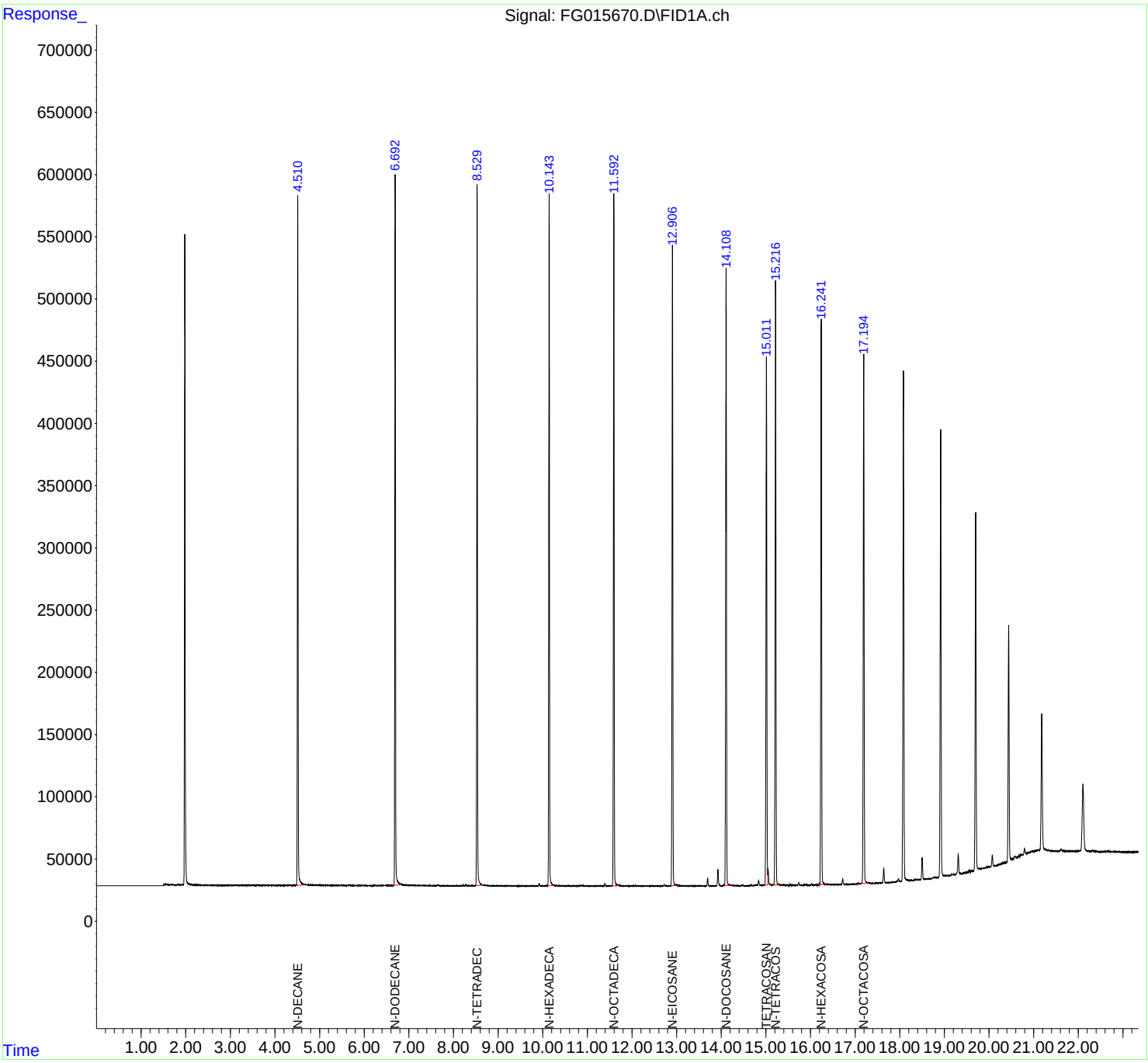
Quantitation Report (QT Reviewed)

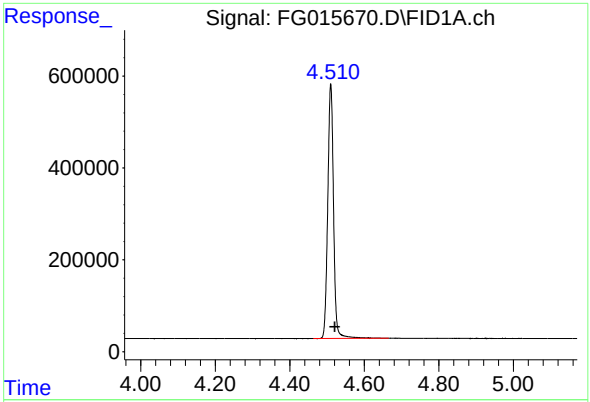
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015670.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 11:37
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Apr 21 07:13:14 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 2025
Response via : Initial Calibration
Integrator: ChemStation

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

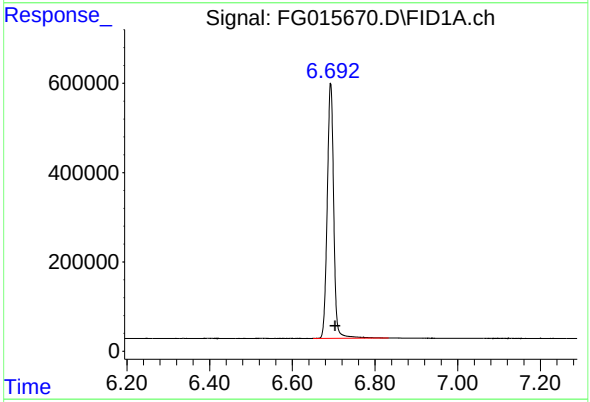




#2 N-DECANE

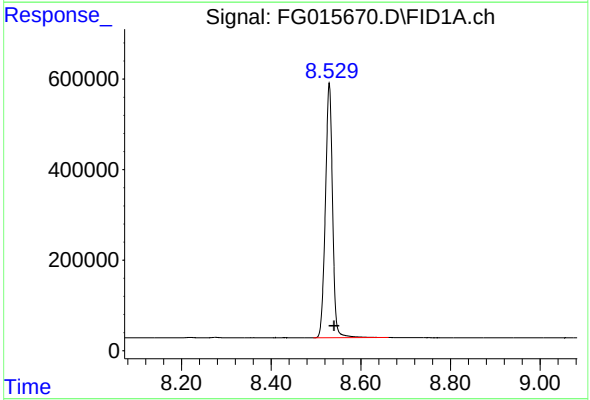
R.T.: 4.510 min
Delta R.T.: -0.011 min
Response: 5967203
Conc: 50.51 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



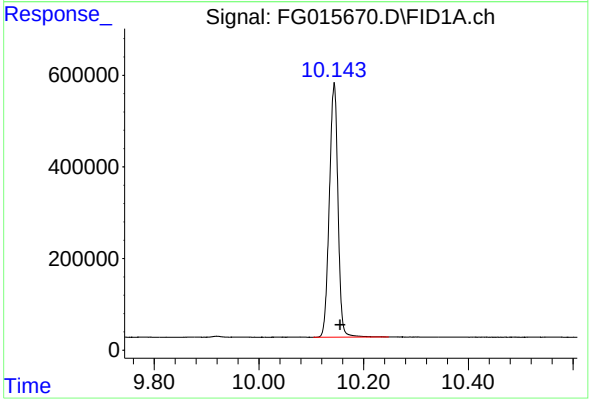
#3 N-DODECANE

R.T.: 6.693 min
Delta R.T.: -0.011 min
Response: 6188092
Conc: 50.96 ug/ml



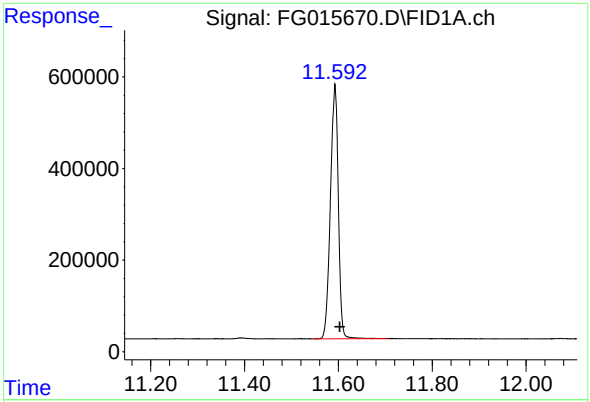
#4 N-TETRADECANE

R.T.: 8.530 min
Delta R.T.: -0.010 min
Response: 6231470
Conc: 49.42 ug/ml



#5 N-HEXADECANE

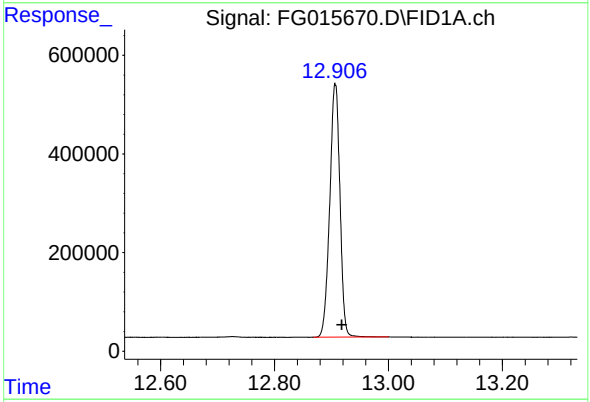
R.T.: 10.144 min
Delta R.T.: -0.011 min
Response: 6325604
Conc: 49.13 ug/ml



#6 N-OCTADECANE

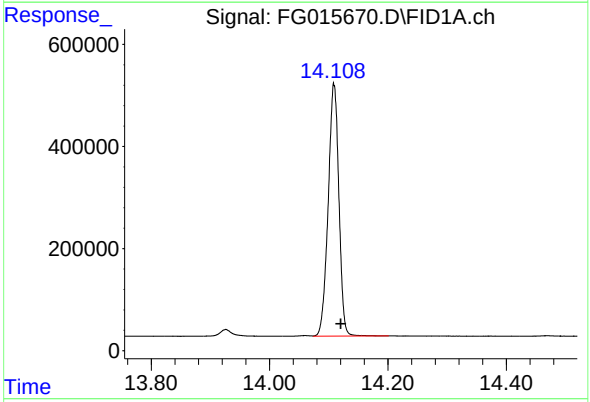
R.T.: 11.593 min
Delta R.T.: -0.010 min
Response: 6491150
Conc: 49.27 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



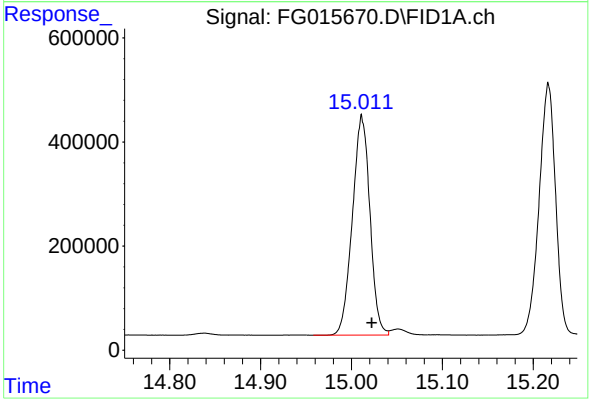
#7 N-EICOSANE

R.T.: 12.907 min
Delta R.T.: -0.011 min
Response: 6388608
Conc: 47.71 ug/ml



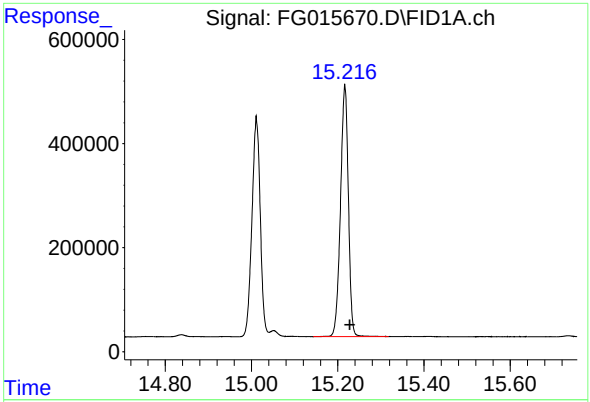
#8 N-DOCOSANE

R.T.: 14.109 min
Delta R.T.: -0.012 min
Response: 6206579
Conc: 47.76 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

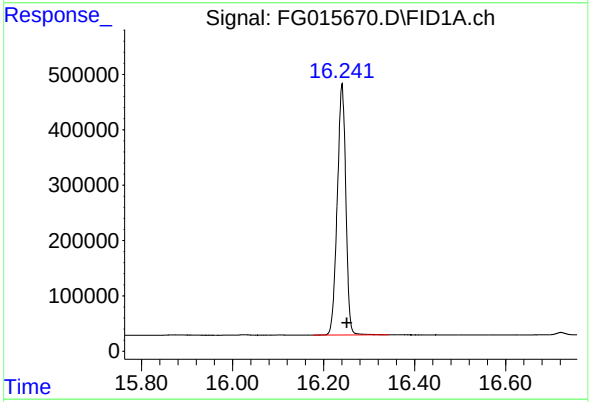
R.T.: 15.011 min
Delta R.T.: -0.011 min
Response: 5642589
Conc: 49.25 ug/ml



#10 N-TETRACOSANE

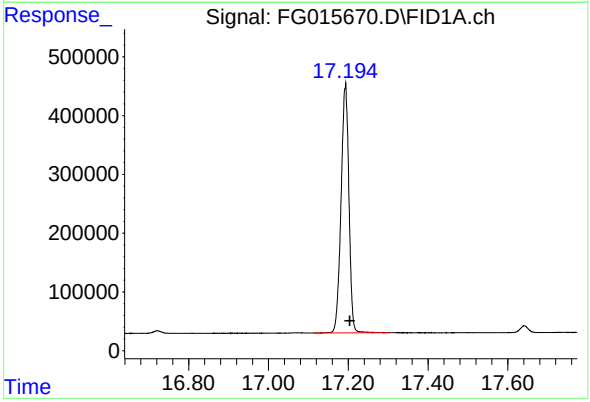
R.T.: 15.217 min
Delta R.T.: -0.011 min
Response: 6123149
Conc: 47.27 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



#11 N-HEXACOSANE

R.T.: 16.240 min
Delta R.T.: -0.011 min
Response: 5932175
Conc: 46.61 ug/ml



#12 N-OCTACOSANE

R.T.: 17.193 min
Delta R.T.: -0.011 min
Response: 5780071
Conc: 46.24 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015670.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 11:37
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.510	4.463	4.665	BB	553940	5967203	91.93%	8.870%
2	6.693	6.650	6.833	BB	569905	6188092	95.33%	9.198%
3	8.530	8.494	8.662	BB	562064	6231470	96.00%	9.262%
4	10.144	10.104	10.248	BB	555829	6325604	97.45%	9.402%
5	11.593	11.546	11.707	BB	555404	6491150	100.00%	9.648%
6	12.907	12.868	13.000	BB	510494	6388608	98.42%	9.496%
7	14.109	14.074	14.201	VB	492224	6206579	95.62%	9.225%
8	15.011	14.958	15.041	BV	421943	5642589	86.93%	8.387%
9	15.217	15.143	15.318	BB	481873	6123149	94.33%	9.101%
10	16.240	16.177	16.343	BB	453241	5932175	91.39%	8.818%
11	17.193	17.112	17.301	BB	417796	5780071	89.05%	8.591%
			Sum of corrected areas:			67276690		

FG032725.M Mon Apr 21 07:29:31 2025

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Fax : 908 789 8922

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: JACO05

ProjectID: Former Schlumberger STC PTC Site D3868221

Lab Code: CHEM Case No.: Q1812 SAS No.: Q1812 SDG No.: Q1812

DataFile: FG015678.D Analyst Name: YP\AJ Analyst Date: 04-16-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	52524577	105049	127181	17.402

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015678.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 18:40
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Apr 21 07:18:36 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 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...	15.009	4601706	40.167 ug/ml
	Target Compounds			
2)	N-DECANE	4.509	5128050	43.408 ug/ml
3)	N-DODECANE	6.692	5264065	43.352 ug/ml
4)	N-TETRADECANE	8.528	5361120	42.514 ug/ml
5)	N-HEXADECANE	10.142	5373683	41.735 ug/ml
6)	N-OCTADECANE	11.590	5432002	41.232 ug/ml
7)	N-EICOSANE	12.905	5446984	40.679 ug/ml
8)	N-DOCOSANE	14.107	5237042	40.302 ug/ml
10)	N-TETRACOSANE	15.214	5182081	40.008 ug/ml
11)	N-HEXACOSANE	16.238	5084479	39.949 ug/ml
12)	N-OCTACOSANE	17.190	5015071	40.120 ug/ml

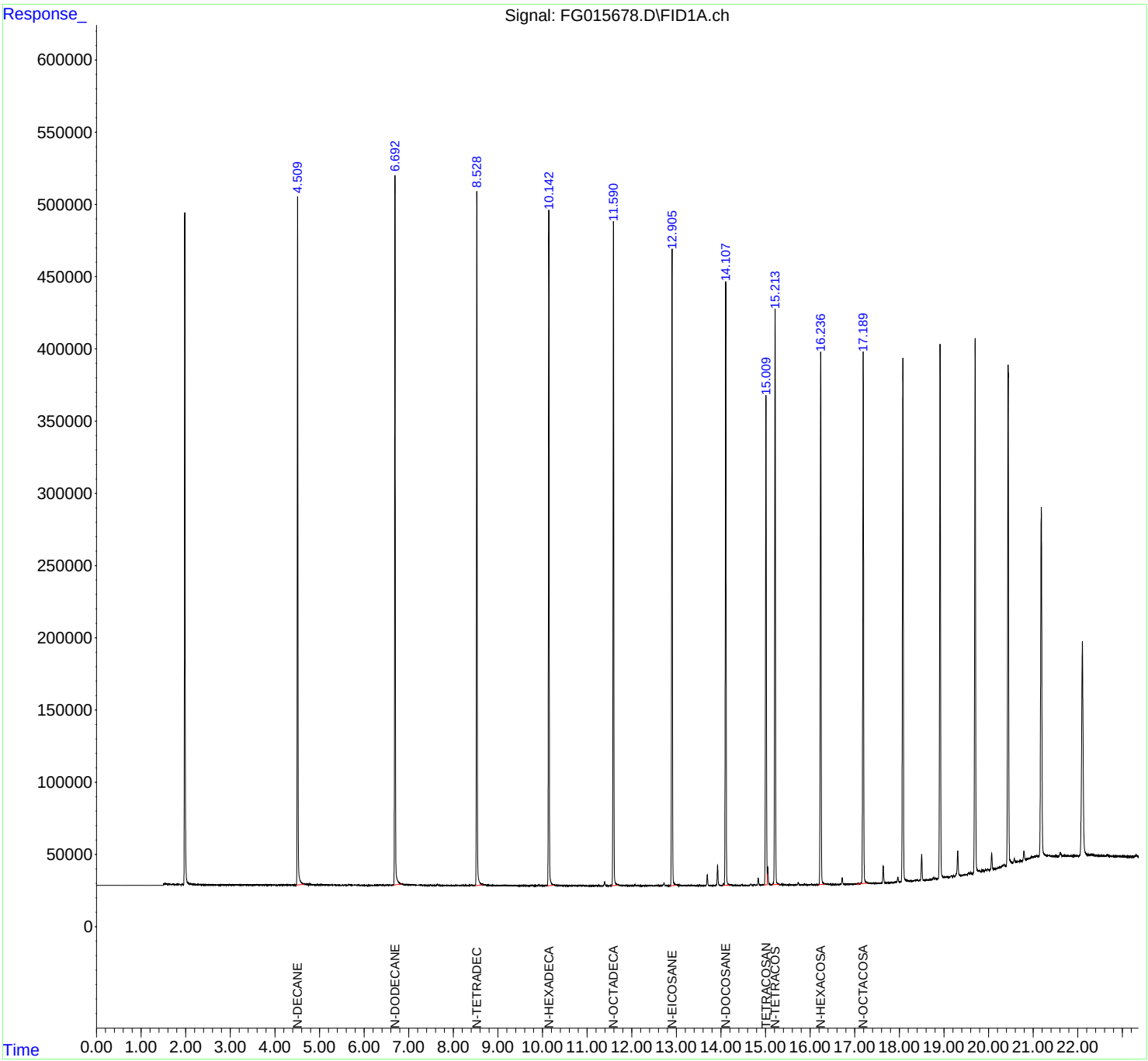
(f)=RT Delta > 1/2 Window (m)=manual int.

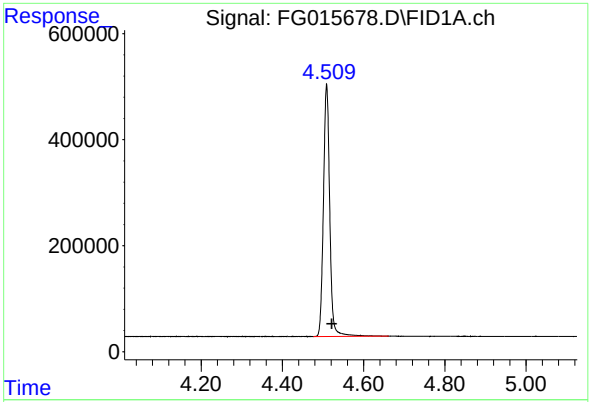
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015678.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 18:40
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Apr 21 07:18:36 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 2025
Response via : Initial Calibration
Integrator: ChemStation

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

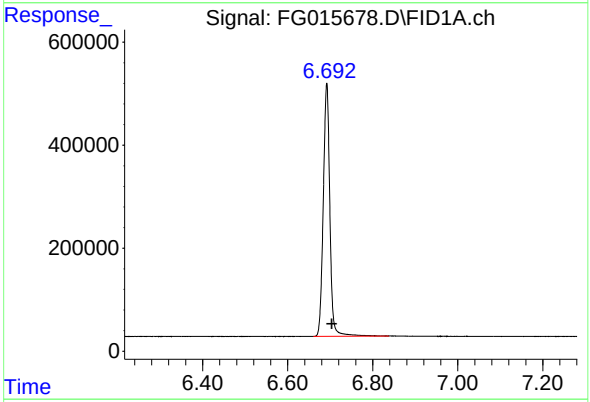




#2 N-DECANE

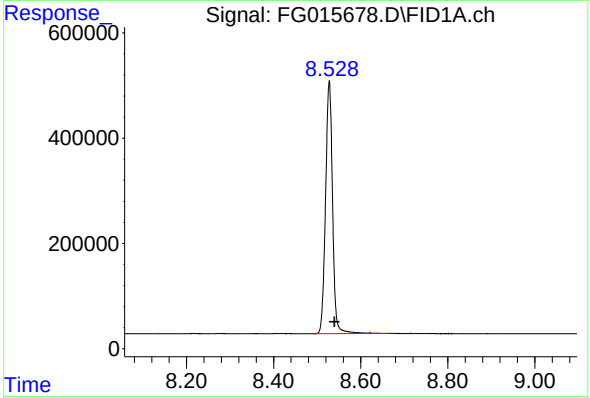
R.T.: 4.509 min
Delta R.T.: -0.012 min
Response: 5128050
Conc: 43.41 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



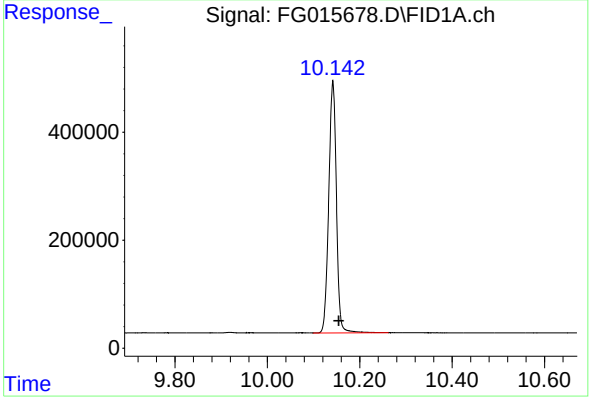
#3 N-DODECANE

R.T.: 6.692 min
Delta R.T.: -0.012 min
Response: 5264065
Conc: 43.35 ug/ml



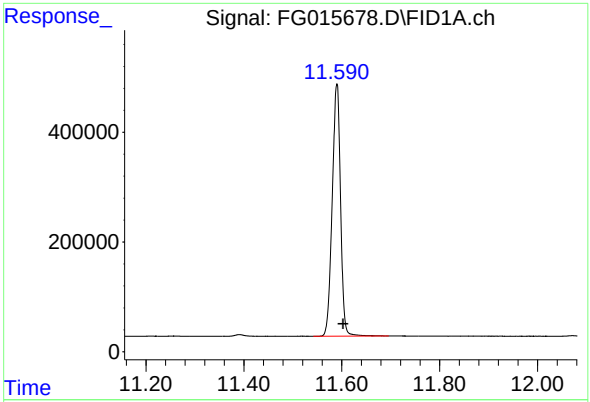
#4 N-TETRADECANE

R.T.: 8.528 min
Delta R.T.: -0.012 min
Response: 5361120
Conc: 42.51 ug/ml



#5 N-HEXADECANE

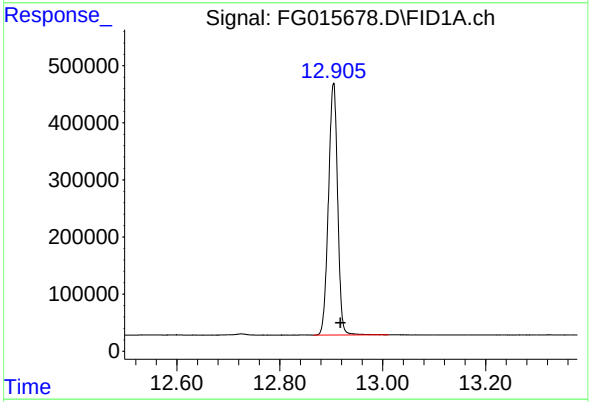
R.T.: 10.142 min
Delta R.T.: -0.013 min
Response: 5373683
Conc: 41.73 ug/ml



#6 N-OCTADECANE

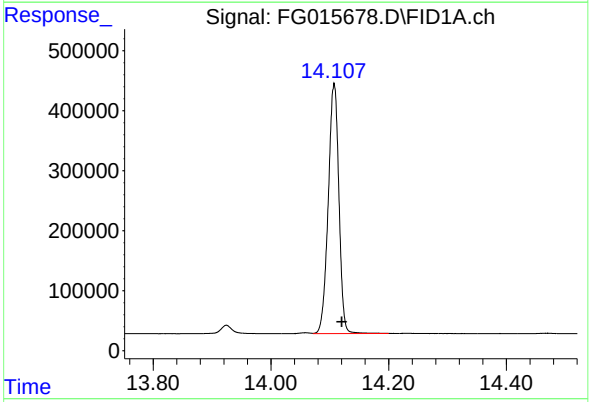
R.T.: 11.590 min
Delta R.T.: -0.013 min
Response: 5432002
Conc: 41.23 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



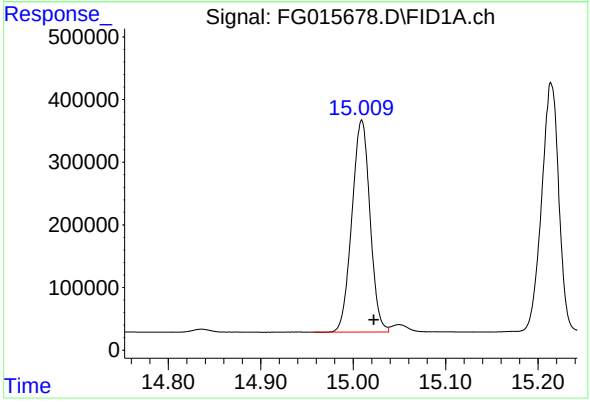
#7 N-EICOSANE

R.T.: 12.905 min
Delta R.T.: -0.013 min
Response: 5446984
Conc: 40.68 ug/ml



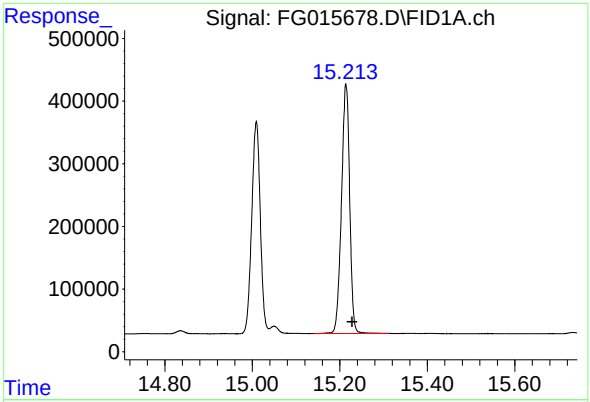
#8 N-DOCOSANE

R.T.: 14.107 min
Delta R.T.: -0.013 min
Response: 5237042
Conc: 40.30 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

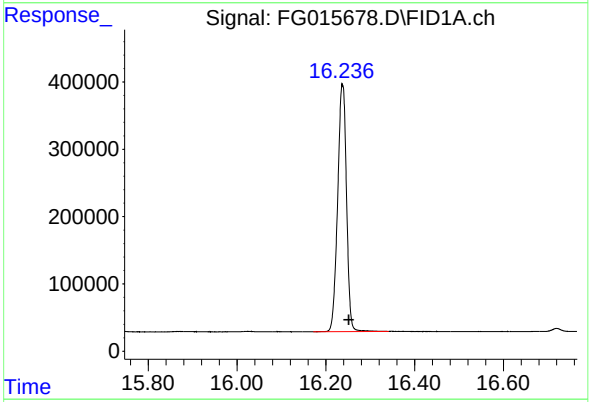
R.T.: 15.009 min
Delta R.T.: -0.013 min
Response: 4601706
Conc: 40.17 ug/ml



#10 N-TETRACOSANE

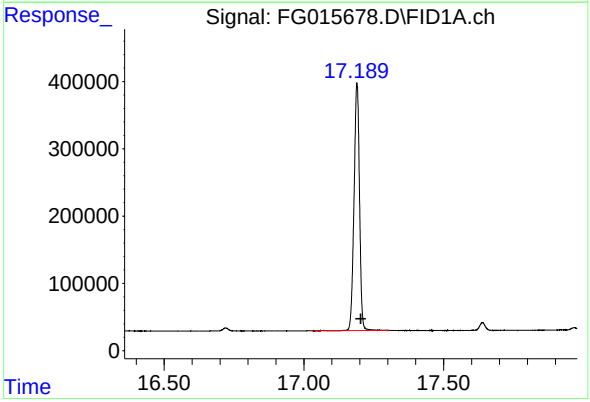
R.T.: 15.214 min
Delta R.T.: -0.014 min
Response: 5182081
Conc: 40.01 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



#11 N-HEXACOSANE

R.T.: 16.238 min
Delta R.T.: -0.014 min
Response: 5084479
Conc: 39.95 ug/ml



#12 N-OCTACOSANE

R.T.: 17.190 min
Delta R.T.: -0.014 min
Response: 5015071
Conc: 40.12 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015678.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 18:40
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.509	4.476	4.662	BB	476018	5128050	94.14%	8.977%
2	6.692	6.660	6.838	BB	490906	5264065	96.64%	9.215%
3	8.528	8.491	8.664	BB	478852	5361120	98.42%	9.385%
4	10.142	10.099	10.263	BB	467202	5373683	98.65%	9.407%
5	11.590	11.542	11.696	BB	459674	5432002	99.72%	9.509%
6	12.905	12.865	13.012	BB	440221	5446984	100.00%	9.535%
7	14.107	14.072	14.200	VB	417539	5237042	96.15%	9.167%
8	15.009	14.957	15.038	BV	338475	4601706	84.48%	8.055%
9	15.214	15.139	15.312	BB	396983	5182081	95.14%	9.071%
10	16.238	16.172	16.342	BB	365273	5084479	93.34%	8.900%
11	17.190	17.033	17.303	BB	367193	5015071	92.07%	8.779%

Sum of corrected areas: 57126284

FG032725.M Mon Apr 21 07:35:14 2025

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Fax : 908 789 8922

Analytical Sequence

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Project: Former Schlumberger STC PTC Site D3868221 **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 **15.021**

EPA SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
PIBLK01	I.BLK01	16 Apr 2025 11:08	FG015669.D	15.009	
50 PPM TRPH STD	50 PPM TRPH STD	16 Apr 2025 11:37	FG015670.D	15.011	
PB167614BL	PB167614BL	16 Apr 2025 15:14	FG015672.D	15.008	
PB167614BS	PB167614BS	16 Apr 2025 15:44	FG015673.D	15.008	
PB167614BSD	PB167614BSD	16 Apr 2025 16:13	FG015674.D	15.007	
RINSE-EB-TANK-041525	Q1812-02	16 Apr 2025 16:42	FG015675.D	15.007	
RINSE-EB-PUMP-041525	Q1812-03	16 Apr 2025 17:12	FG015676.D	15.007	
PIBLK02	I.BLK02	16 Apr 2025 17:41	FG015677.D	15.008	
50 PPM TRPH STD	50 PPM TRPH STD	16 Apr 2025 18:40	FG015678.D	15.009	

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

QC Limits	Lower Limit	Upper Limits
(± 0.10 minutes)	14.921	15.121

QC SAMPLE DATA

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Fax : 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	
Client Sample ID:	PB167614BL	SDG No.:	Q1812
Lab Sample ID:	PB167614BL	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015672.D	1	04/16/25 10:05	04/16/25 15:14	PB167614

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	13.7		29 - 130	68%	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\FG041625\
Data File : FG015672.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 15:14
Operator : YP\AJ
Sample : PB167614BL
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB167614BL

Integration File: autoint1.e
Quant Time: Apr 17 02:17:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 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...	15.008	1569735	13.702 ug/ml
Target Compounds			

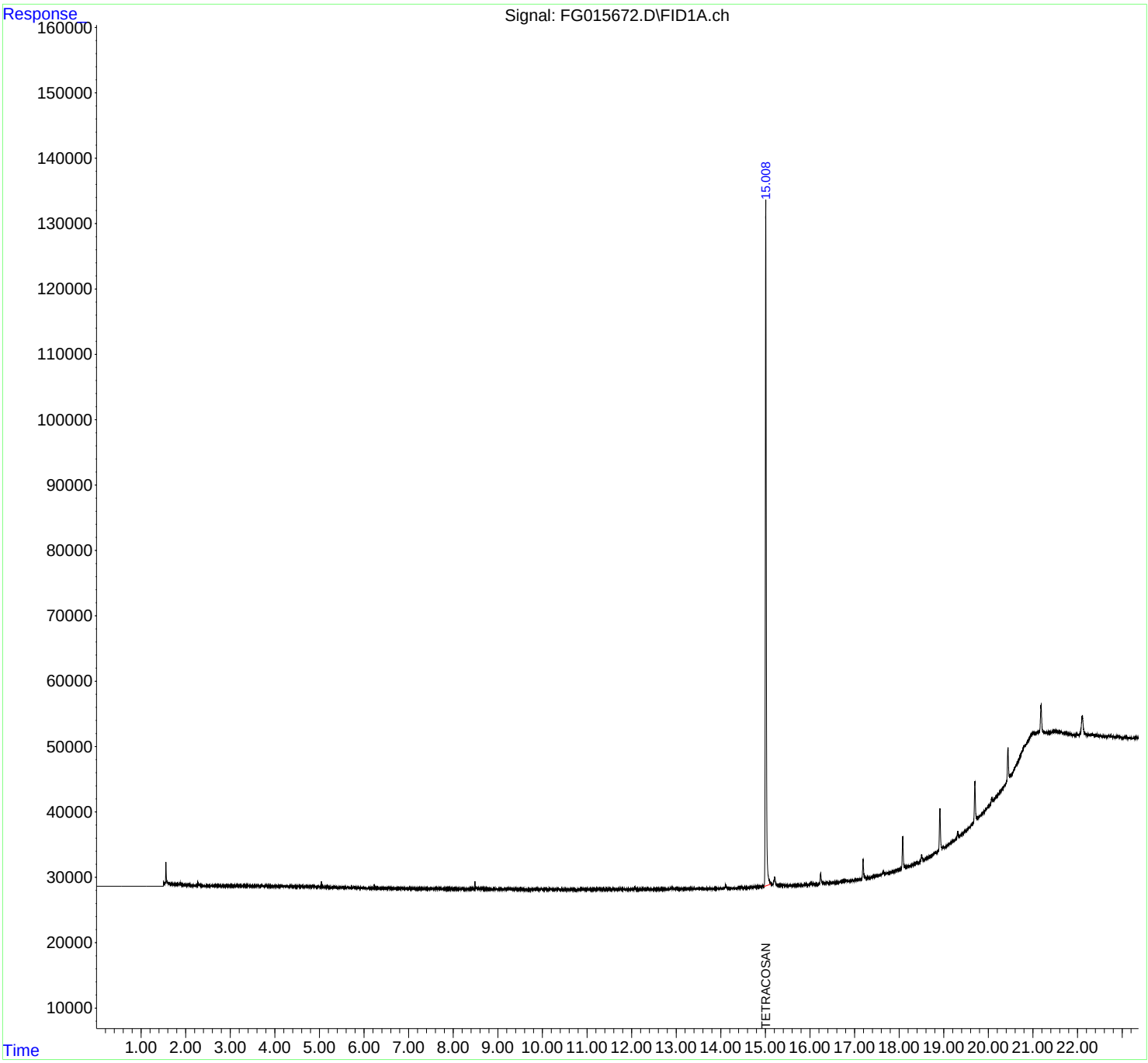
(f)=RT Delta > 1/2 Window (m)=manual int.

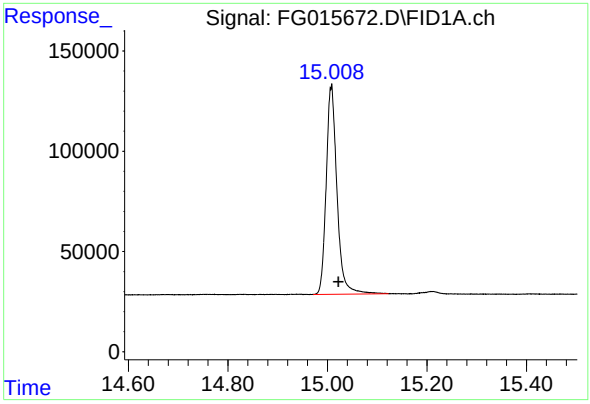
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015672.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 15:14
Operator : YP\AJ
Sample : PB167614BL
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB167614BL

Integration File: autoint1.e
Quant Time: Apr 17 02:17:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 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.:	15.008 min
Delta R.T.:	-0.014 min
Response:	1569735
Conc:	13.70 ug/ml

Instrument :
FID_G
ClientSampleId :
PB167614BL

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015672.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 15:14
Sample : PB167614BL
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.008	14.971	15.123	BB	103645	1569735	100.00%	100.000%
			Sum of corrected areas:			1569735		

FG032725.M Mon Apr 21 07:30:26 2025

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Fax : 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	04/16/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/16/25
Client Sample ID:	PIBLK-FG015669.D	SDG No.:	Q1812
Lab Sample ID:	I.BLK-FG015669.D	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015669.D	1		04/16/25	FG041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	16.1		29 - 130	80%	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\FG041625\
Data File : FG015669.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 11:08
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: Apr 17 02:16:19 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 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...	15.009	1838659	16.049 ug/ml
Target Compounds			

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

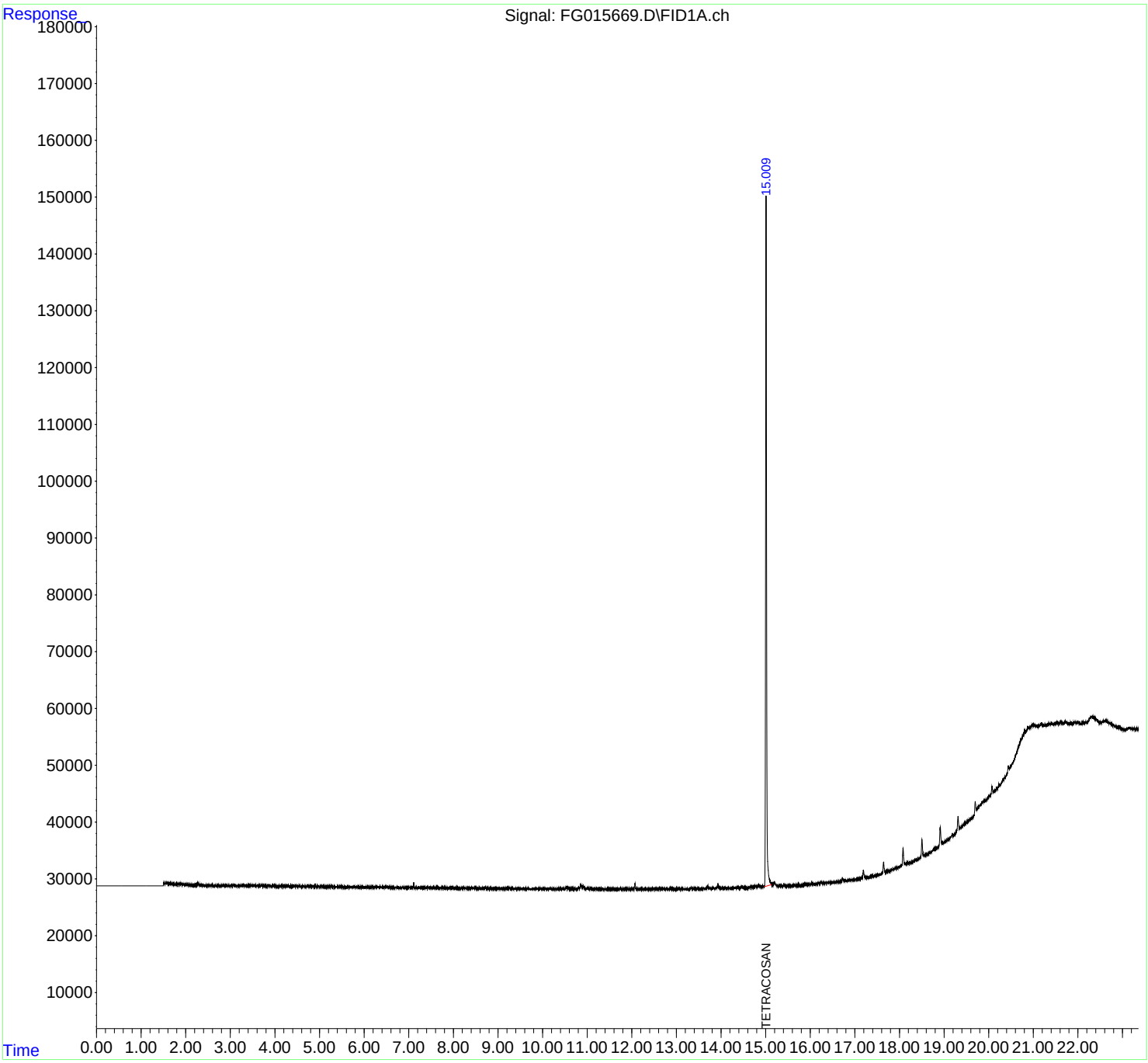
Quantitation Report (QT Reviewed)

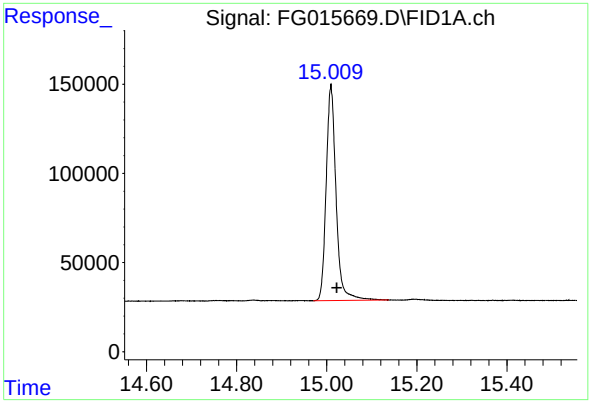
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015669.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 11:08
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Apr 17 02:16:19 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 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.:	15.009 min
Delta R.T.:	-0.013 min
Response:	1838659
Conc:	16.05 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015669.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 11:08
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.009	14.970	15.138	BB	120889	1838659	100.00%	100.000%
			Sum of corrected areas:			1838659		

FG032725.M Mon Apr 21 07:27:10 2025

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	04/16/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/16/25
Client Sample ID:	PIBLK-FG015677.D	SDG No.:	Q1812
Lab Sample ID:	I.BLK-FG015677.D	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015677.D	1		04/16/25	FG041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	17.4		29 - 130	87%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015677.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 17:41
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: Apr 17 02:18:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 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...	15.008	1991439	17.383 ug/ml
Target Compounds			

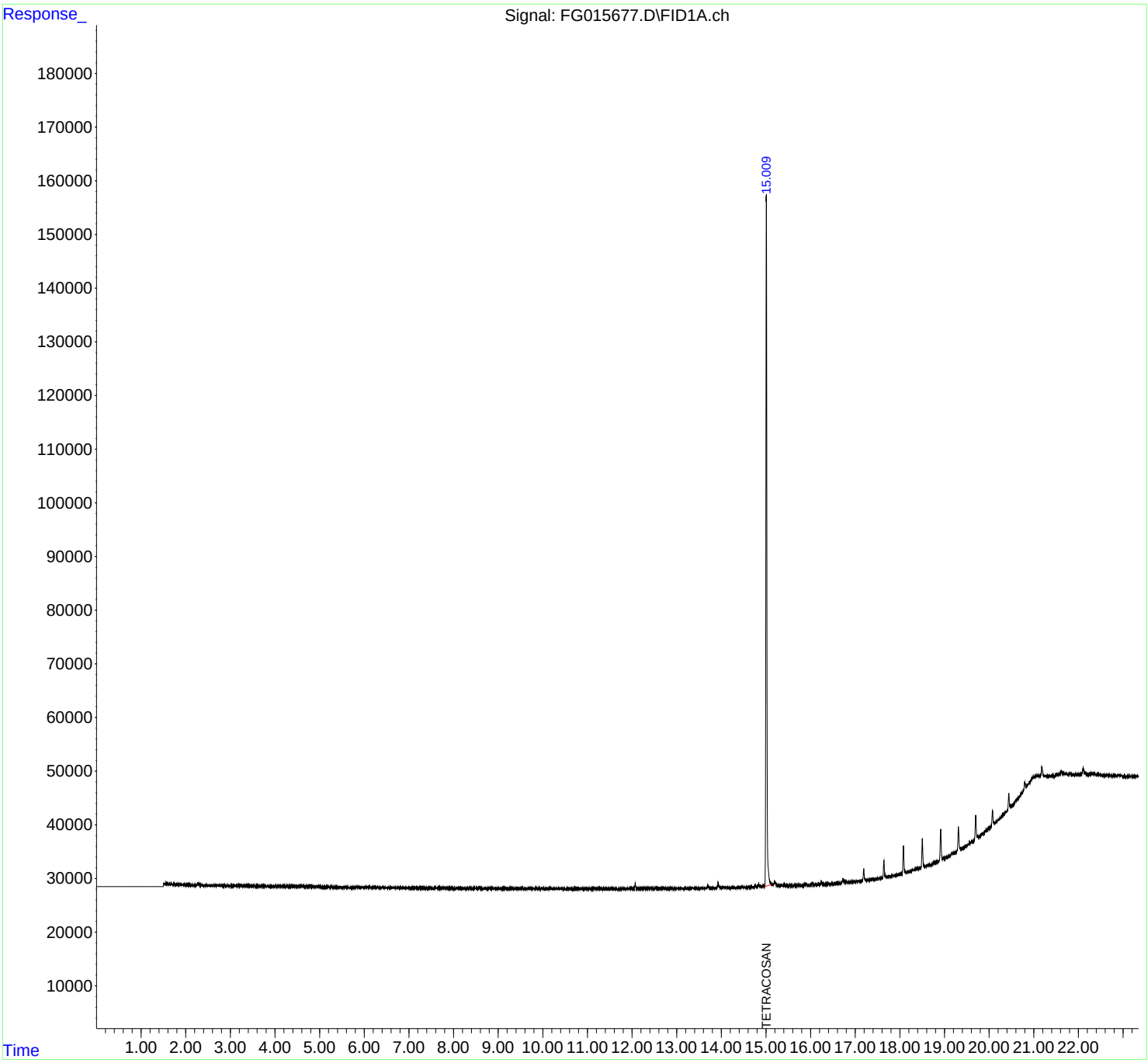
(f)=RT Delta > 1/2 Window (m)=manual int.

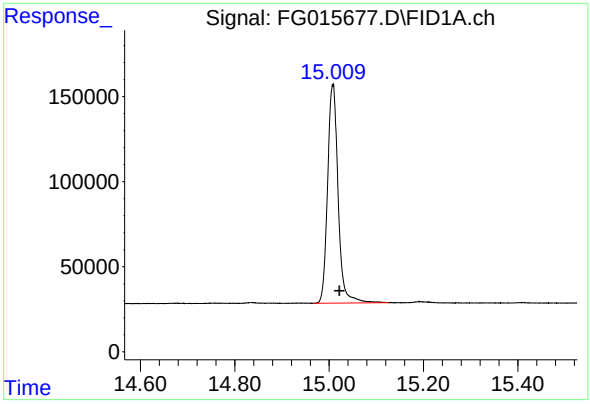
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015677.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 17:41
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Apr 17 02:18:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 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.:	15.008 min
Delta R.T.:	-0.014 min
Response:	1991439
Conc:	17.38 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015677.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 17:41
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.008	14.966	15.126	BB	127939	1991439	100.00%	100.000%
			Sum of corrected areas:			1991439		

FG032725.M Mon Apr 21 07:34:22 2025

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	
Client Sample ID:	PB167614BS	SDG No.:	Q1812
Lab Sample ID:	PB167614BS	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015673.D	1	04/16/25 10:05	04/16/25 15:44	PB167614

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	165		6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	16.3		29 - 130	81%	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\FG041625\
Data File : FG015673.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 15:44
Operator : YP\AJ
Sample : PB167614BS
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB167614BS

Integration File: autoint1.e
Quant Time: Apr 21 07:15:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 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...	15.008	1862173	16.254 ug/ml
	Target Compounds			
2)	N-DECANE	4.509	1973485	16.705 ug/ml
3)	N-DODECANE	6.691	2084713	17.169 ug/ml
4)	N-TETRADECANE	8.527	2085598	16.539 ug/ml
5)	N-HEXADECANE	10.141	2152789	16.720 ug/ml
6)	N-OCTADECANE	11.588	2229141	16.921 ug/ml
7)	N-EICOSANE	12.903	2172633	16.226 ug/ml
8)	N-DOCOSANE	14.105	2130686	16.397 ug/ml
10)	N-TETRACOSANE	15.212	2118911	16.359 ug/ml
11)	N-HEXACOSANE	16.237	2046755	16.081 ug/ml
12)	N-OCTACOSANE	17.188	1997631	15.981 ug/ml

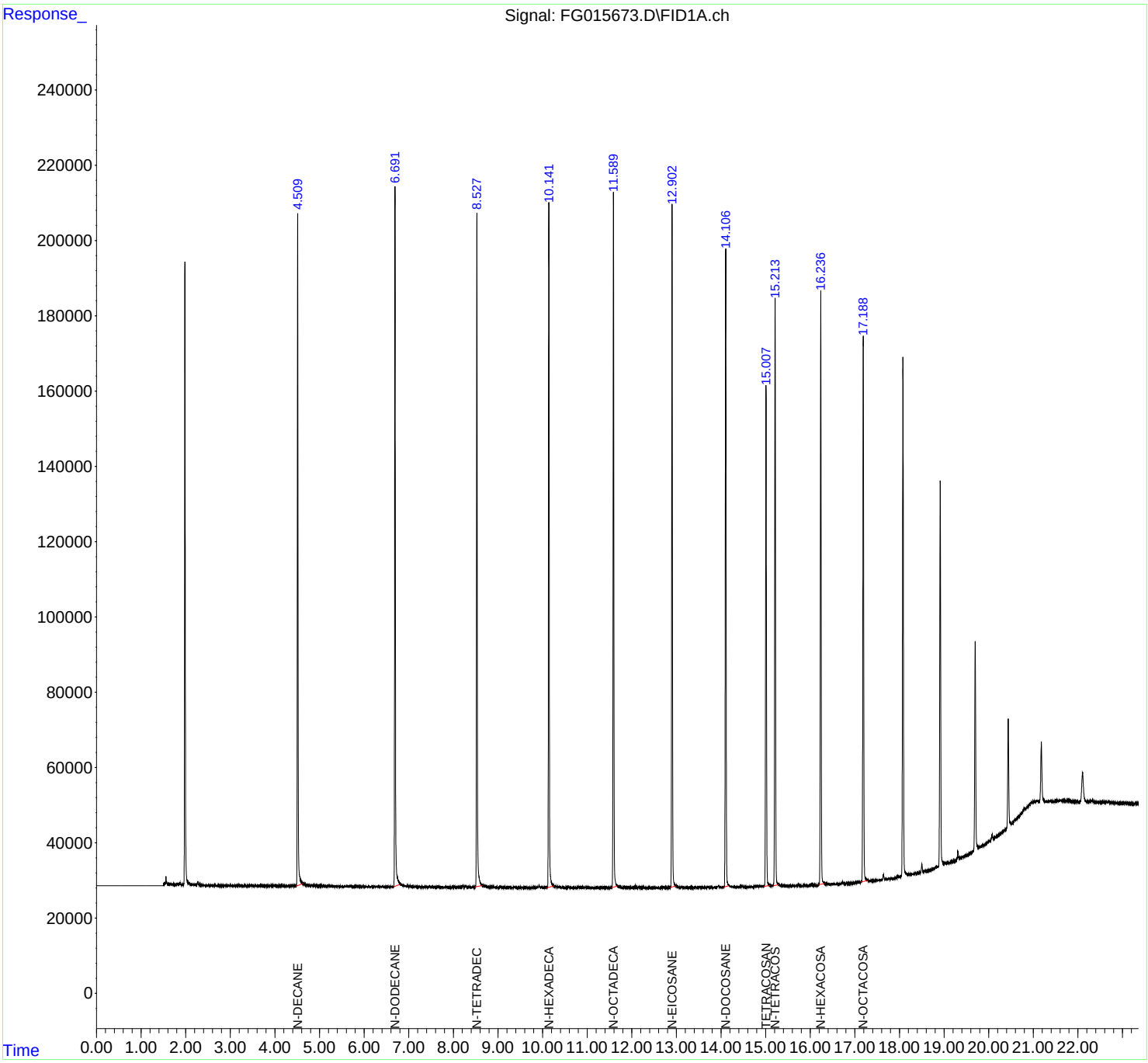
(f)=RT Delta > 1/2 Window (m)=manual int.

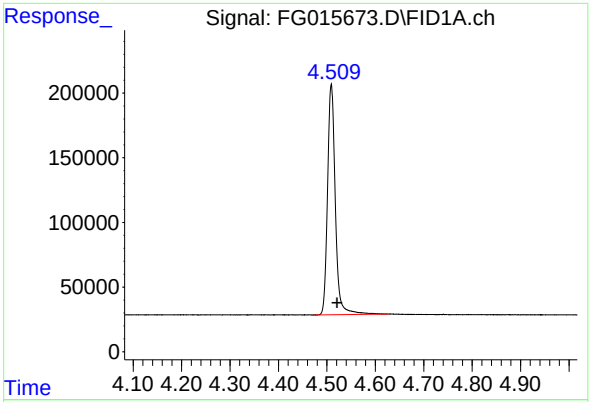
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015673.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 15:44
Operator : YP\AJ
Sample : PB167614BS
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB167614BS

Integration File: autoint1.e
Quant Time: Apr 21 07:15:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 2025
Response via : Initial Calibration
Integrator: ChemStation

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

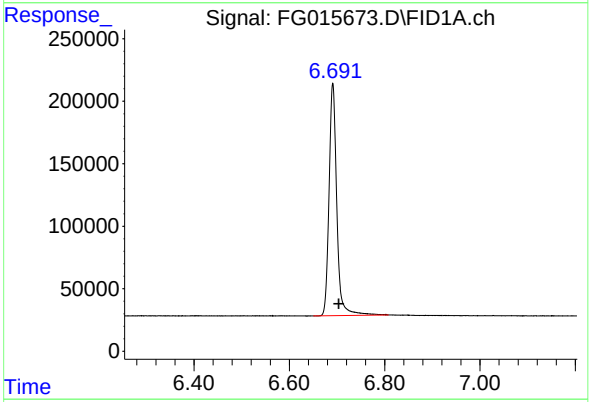




#2 N-DECANE

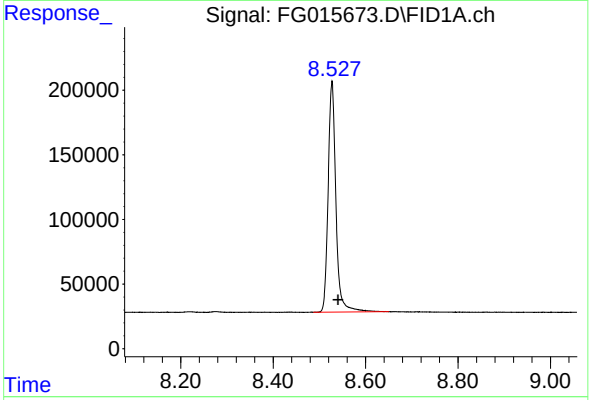
R.T.: 4.509 min
Delta R.T.: -0.012 min
Response: 1973485
Conc: 16.71 ug/ml

Instrument :
FID_G
ClientSampleId :
PB167614BS



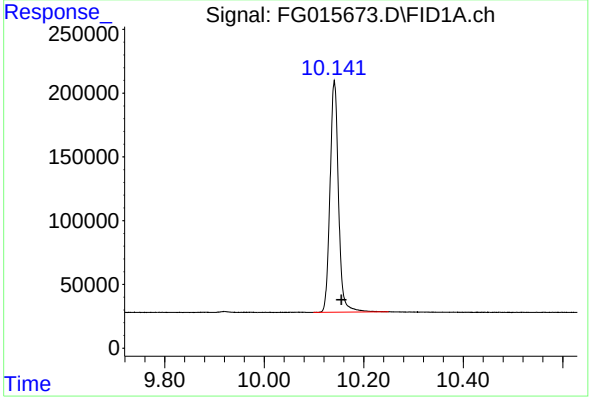
#3 N-DODECANE

R.T.: 6.691 min
Delta R.T.: -0.013 min
Response: 2084713
Conc: 17.17 ug/ml



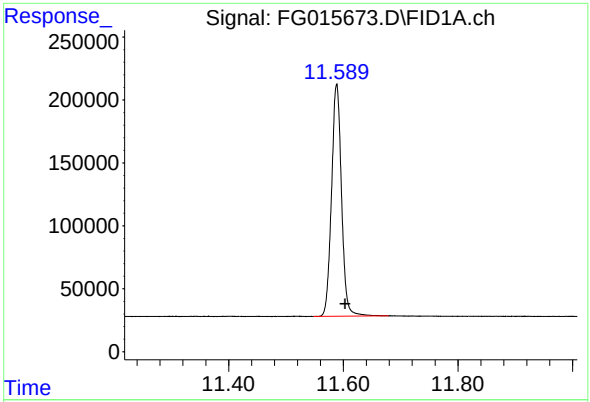
#4 N-TETRADECANE

R.T.: 8.527 min
Delta R.T.: -0.013 min
Response: 2085598
Conc: 16.54 ug/ml



#5 N-HEXADECANE

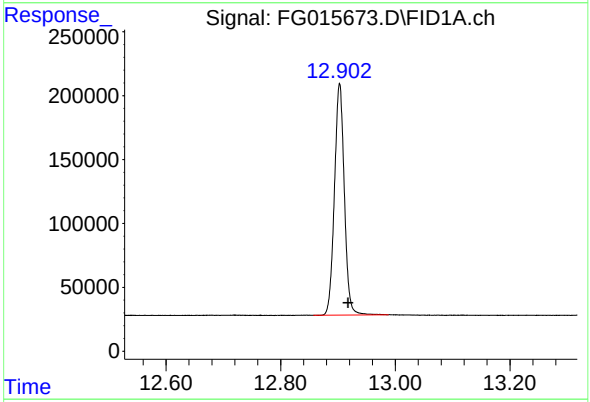
R.T.: 10.141 min
Delta R.T.: -0.014 min
Response: 2152789
Conc: 16.72 ug/ml



#6 N-OCTADECANE

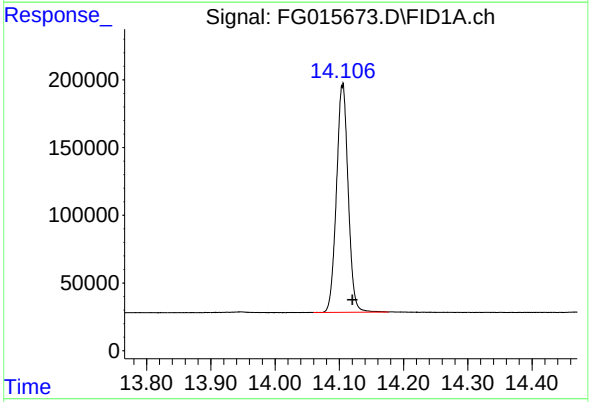
R.T.: 11.588 min
Delta R.T.: -0.015 min
Response: 2229141
Conc: 16.92 ug/ml

Instrument :
FID_G
ClientSampleId :
PB167614BS



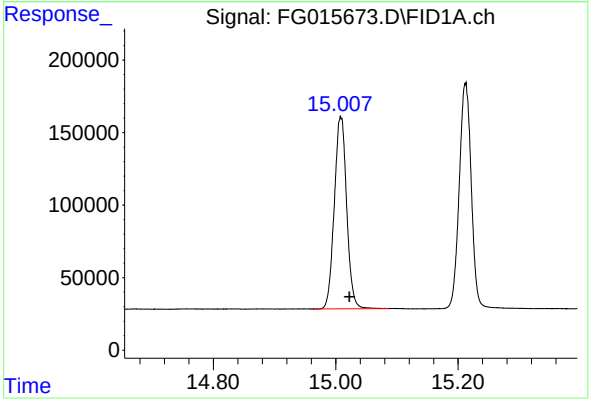
#7 N-EICOSANE

R.T.: 12.903 min
Delta R.T.: -0.015 min
Response: 2172633
Conc: 16.23 ug/ml



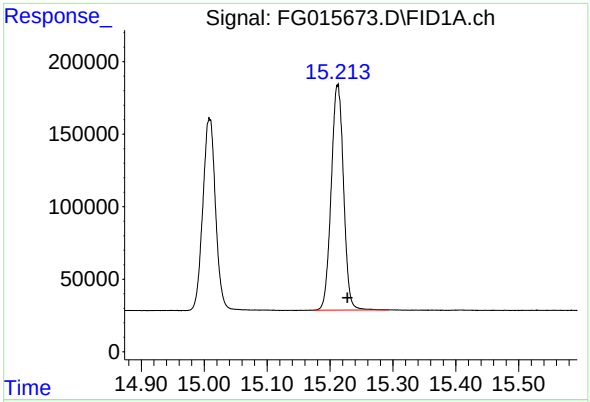
#8 N-DOCOSANE

R.T.: 14.105 min
Delta R.T.: -0.015 min
Response: 2130686
Conc: 16.40 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

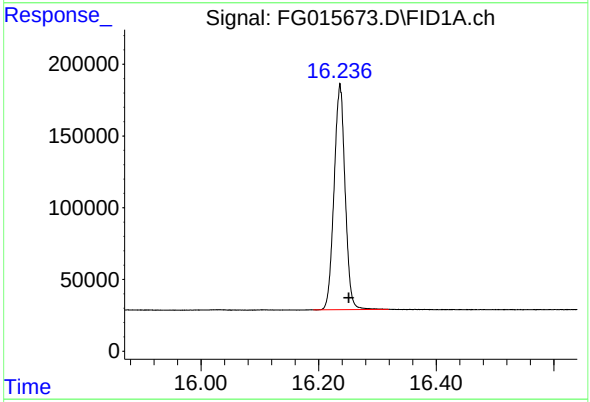
R.T.: 15.008 min
Delta R.T.: -0.014 min
Response: 1862173
Conc: 16.25 ug/ml



#10 N-TETRACOSANE

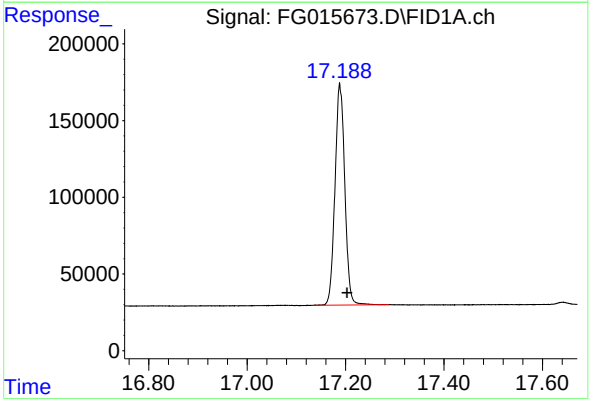
R.T.: 15.212 min
Delta R.T.: -0.016 min
Response: 2118911
Conc: 16.36 ug/ml

Instrument :
FID_G
ClientSampleId :
PB167614BS



#11 N-HEXACOSANE

R.T.: 16.237 min
Delta R.T.: -0.015 min
Response: 2046755
Conc: 16.08 ug/ml



#12 N-OCTACOSANE

R.T.: 17.188 min
Delta R.T.: -0.015 min
Response: 1997631
Conc: 15.98 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015673.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 15:44
Sample : PB167614BS
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.509	4.472	4.628	BB	178043	1973485	88.53%	8.635%
2	6.691	6.650	6.808	BB	185713	2084713	93.52%	9.122%
3	8.527	8.487	8.650	BB	179001	2085598	93.56%	9.126%
4	10.141	10.098	10.250	BB	181464	2152789	96.57%	9.420%
5	11.588	11.548	11.679	BB	184274	2229141	100.00%	9.754%
6	12.903	12.857	12.988	BB	181234	2172633	97.47%	9.506%
7	14.105	14.059	14.177	BB	166393	2130686	95.58%	9.323%
8	15.008	14.963	15.087	BB	132232	1862173	83.54%	8.148%
9	15.212	15.173	15.293	BB	154760	2118911	95.06%	9.271%
10	16.237	16.191	16.319	BB	157478	2046755	91.82%	8.956%
11	17.188	17.134	17.288	BB	144751	1997631	89.61%	8.741%
			Sum of corrected areas:			22854515		

FG032725.M Mon Apr 21 07:31:26 2025

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	
Client Sample ID:	PB167614BSD	SDG No.:	Q1812
Lab Sample ID:	PB167614BSD	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015674.D	1	04/16/25 10:05	04/16/25 16:13	PB167614

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	158		6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	15.5		29 - 130	77%	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\FG041625\
Data File : FG015674.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 16:13
Operator : YP\AJ
Sample : PB167614BSD
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB167614BSD

Integration File: autoint1.e
Quant Time: Apr 21 07:16:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 2025
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	15.007	1771962	15.467 ug/ml
	Target Compounds			
2)	N-DECANE	4.509	1852637	15.682 ug/ml
3)	N-DODECANE	6.691	1970793	16.230 ug/ml
4)	N-TETRADECANE	8.527	1966853	15.597 ug/ml
5)	N-HEXADECANE	10.140	2041903	15.859 ug/ml
6)	N-OCTADECANE	11.588	2124184	16.124 ug/ml
7)	N-EICOSANE	12.902	2084943	15.571 ug/ml
8)	N-DOCOSANE	14.105	2050242	15.778 ug/ml
10)	N-TETRACOSANE	15.211	2043295	15.775 ug/ml
11)	N-HEXACOSANE	16.236	1987214	15.614 ug/ml
12)	N-OCTACOSANE	17.188	1954774	15.638 ug/ml

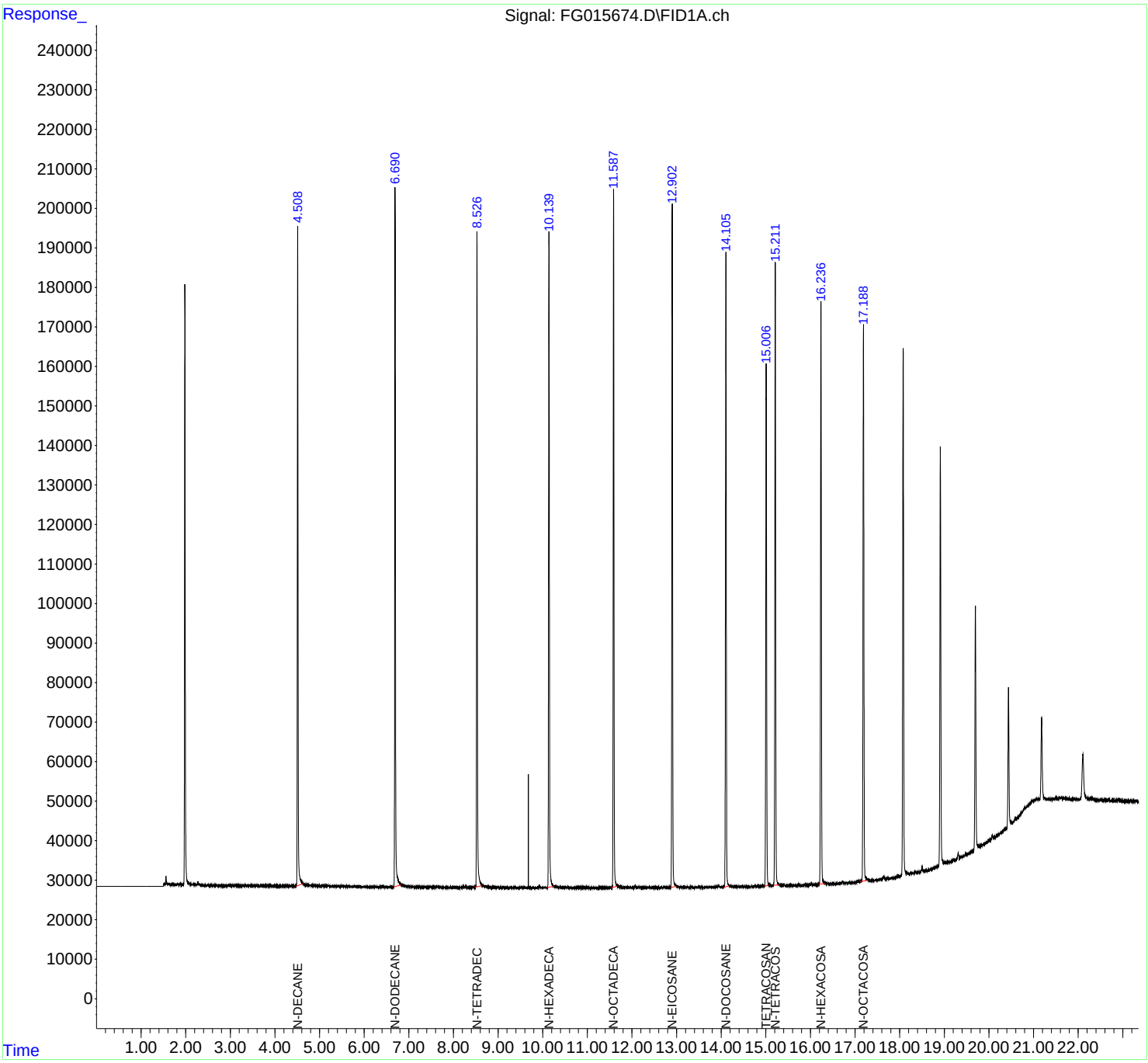
(f)=RT Delta > 1/2 Window (m)=manual int.

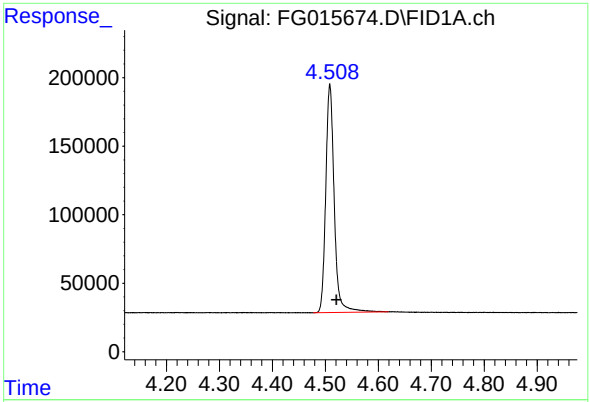
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015674.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 16:13
Operator : YP\AJ
Sample : PB167614BSD
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB167614BSD

Integration File: autoint1.e
Quant Time: Apr 21 07:16:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Quant Title :
QLast Update : Thu Mar 27 11:04:29 2025
Response via : Initial Calibration
Integrator: ChemStation

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

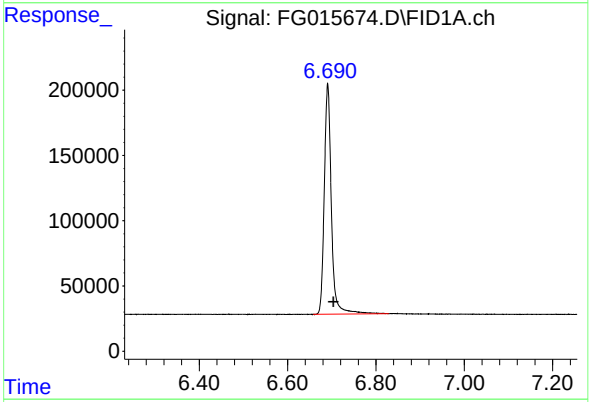




#2 N-DECANE

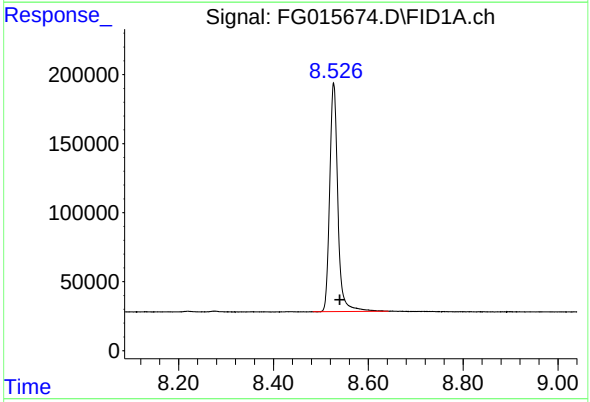
R.T.: 4.509 min
Delta R.T.: -0.013 min
Response: 1852637
Conc: 15.68 ug/ml

Instrument :
FID_G
ClientSampleId :
PB167614BSD



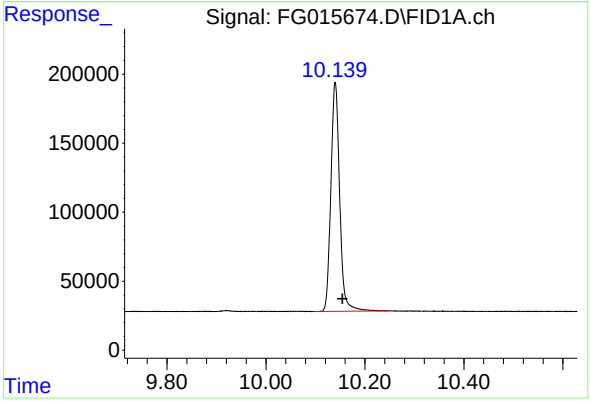
#3 N-DODECANE

R.T.: 6.691 min
Delta R.T.: -0.013 min
Response: 1970793
Conc: 16.23 ug/ml



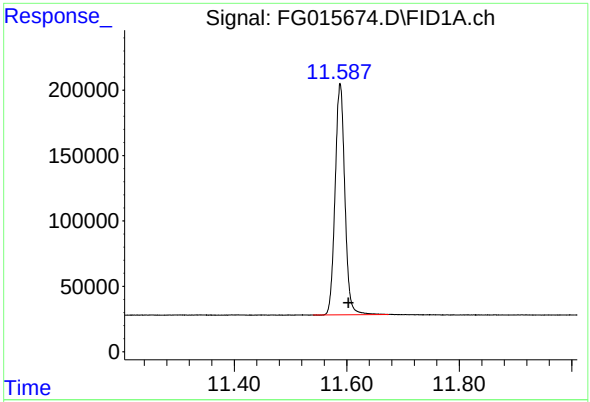
#4 N-TETRADECANE

R.T.: 8.527 min
Delta R.T.: -0.013 min
Response: 1966853
Conc: 15.60 ug/ml



#5 N-HEXADECANE

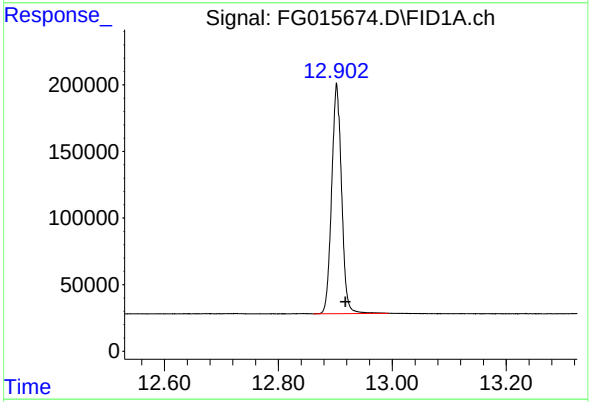
R.T.: 10.140 min
Delta R.T.: -0.015 min
Response: 2041903
Conc: 15.86 ug/ml



#6 N-OCTADECANE

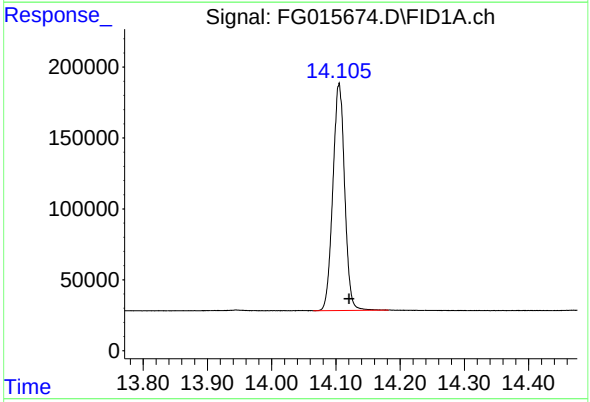
R.T.: 11.588 min
Delta R.T.: -0.015 min
Response: 2124184
Conc: 16.12 ug/ml

Instrument :
FID_G
ClientSampleId :
PB167614BSD



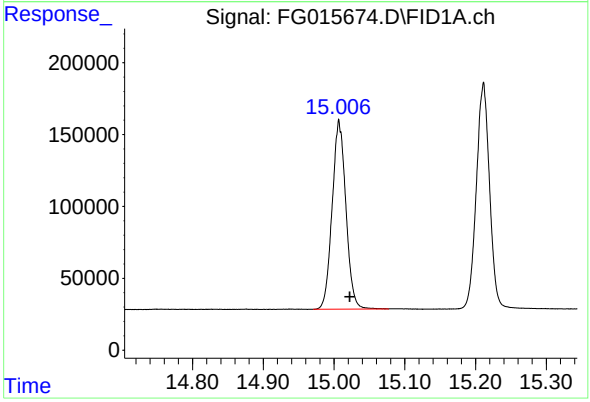
#7 N-EICOSANE

R.T.: 12.902 min
Delta R.T.: -0.015 min
Response: 2084943
Conc: 15.57 ug/ml



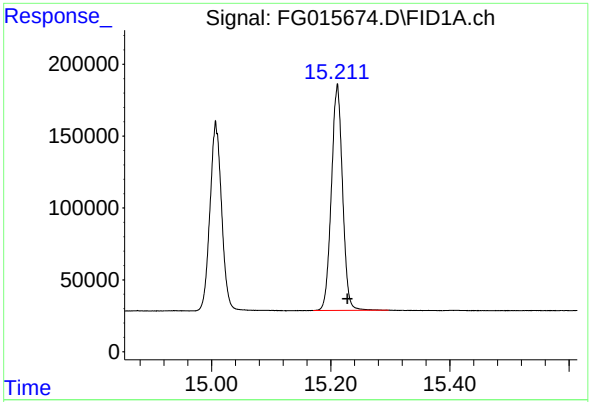
#8 N-DOCOSANE

R.T.: 14.105 min
Delta R.T.: -0.016 min
Response: 2050242
Conc: 15.78 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

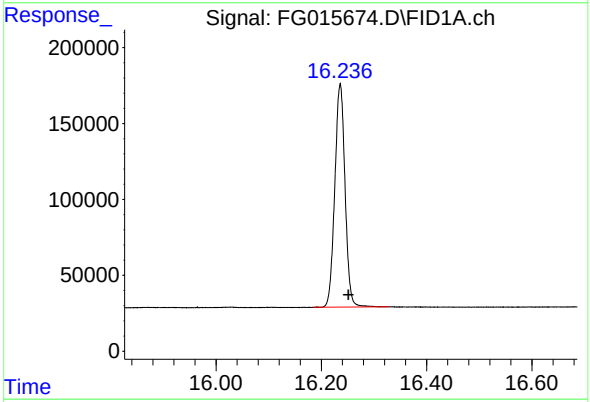
R.T.: 15.007 min
Delta R.T.: -0.015 min
Response: 1771962
Conc: 15.47 ug/ml



#10 N-TETRACOSANE

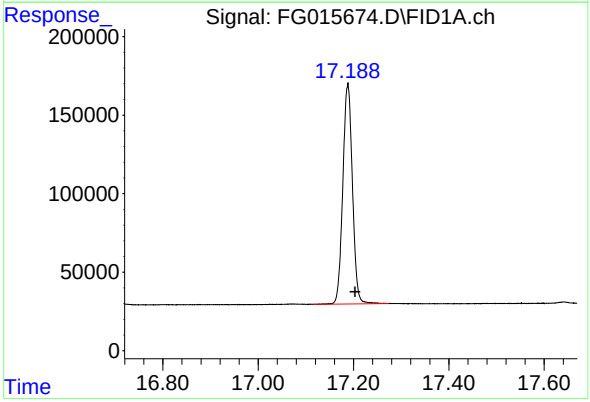
R.T.: 15.211 min
Delta R.T.: -0.017 min
Response: 2043295
Conc: 15.78 ug/ml

Instrument :
FID_G
ClientSampleId :
PB167614BSD



#11 N-HEXACOSANE

R.T.: 16.236 min
Delta R.T.: -0.015 min
Response: 1987214
Conc: 15.61 ug/ml



#12 N-OCTACOSANE

R.T.: 17.188 min
Delta R.T.: -0.015 min
Response: 1954774
Conc: 15.64 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG041625\
Data File : FG015674.D
Signal(s) : FID1A.ch
Acq On : 16 Apr 2025 16:13
Sample : PB167614BSD
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG032725.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.509	4.477	4.620	BB	166749	1852637	87.22%	8.479%
2	6.691	6.658	6.829	BB	176462	1970793	92.78%	9.020%
3	8.527	8.484	8.643	BB	165404	1966853	92.59%	9.002%
4	10.140	10.095	10.248	BB	165936	2041903	96.13%	9.346%
5	11.588	11.540	11.675	BB	176333	2124184	100.00%	9.722%
6	12.902	12.861	12.994	BB	172831	2084943	98.15%	9.543%
7	14.105	14.065	14.182	BB	159584	2050242	96.52%	9.384%
8	15.007	14.970	15.077	BB	131674	1771962	83.42%	8.110%
9	15.211	15.170	15.297	BB	157531	2043295	96.19%	9.352%
10	16.236	16.185	16.328	BB	147459	1987214	93.55%	9.095%
11	17.188	17.115	17.274	BB	139915	1954774	92.02%	8.947%
			Sum of corrected areas:			21848798		

FG032725.M Mon Apr 21 07:33:55 2025

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 # FG032725

Review By	yogesh	Review On	3/27/2025 11:57:36 AM		
Supervise By	mohammad	Supervise On	3/31/2025 1:17:35 AM		
SubDirectory	FG032725	HP Acquire Method		HP Processing Method	FG032725

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966
CCC	PP23963
Internal Standard/PEM	
ICV/I.BLK	PP23962,PP23967
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FG015562.D	27 Mar 2025 07:58	YP\AJ	Ok
2	I.BLK	FG015563.D	27 Mar 2025 08:27	YP\AJ	Ok
3	100 TRPH STD	FG015564.D	27 Mar 2025 08:56	YP\AJ	Ok
4	50 TRPH STD	FG015565.D	27 Mar 2025 09:26	YP\AJ	Ok
5	20 TRPH STD	FG015566.D	27 Mar 2025 09:55	YP\AJ	Ok
6	10 TRPH STD	FG015567.D	27 Mar 2025 10:24	YP\AJ	Ok
7	5 TRPH STD	FG015568.D	27 Mar 2025 10:54	YP\AJ	Ok
8	FG032725ICV	FG015569.D	27 Mar 2025 11:23	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 # FG041625

Review By	yogesh	Review On	4/16/2025 12:42:26 PM		
Supervise By	mohammad	Supervise On	4/18/2025 1:19:54 AM		
SubDirectory	FG041625	HP Acquire Method		HP Processing Method	FG032725

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966
CCC	PP23963
Internal Standard/PEM	
ICV/I.BLK	PP23962,PP23967
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FG015668.D	16 Apr 2025 10:38	YP\AJ	Ok
2	I.BLK	FG015669.D	16 Apr 2025 11:08	YP\AJ	Ok
3	50 PPM TRPH STD	FG015670.D	16 Apr 2025 11:37	YP\AJ	Ok
4	RT MARKER	FG015671.D	16 Apr 2025 12:10	YP\AJ	Ok
5	PB167614BL	FG015672.D	16 Apr 2025 15:14	YP\AJ	Ok
6	PB167614BS	FG015673.D	16 Apr 2025 15:44	YP\AJ	Ok
7	PB167614BSD	FG015674.D	16 Apr 2025 16:13	YP\AJ	Ok
8	Q1812-02	FG015675.D	16 Apr 2025 16:42	YP\AJ	Ok
9	Q1812-03	FG015676.D	16 Apr 2025 17:12	YP\AJ	Ok
10	I.BLK	FG015677.D	16 Apr 2025 17:41	YP\AJ	Ok
11	50 PPM TRPH STD	FG015678.D	16 Apr 2025 18:40	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 # FG032725

Review By	yogesh	Review On	3/27/2025 11:57:36 AM		
Supervise By	mohammad	Supervise On	3/31/2025 1:17:35 AM		
SubDirectory	FG032725	HP Acquire Method		HP Processing Method	FG032725

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966
CCC	PP23963
Internal Standard/PEM	
ICV/I.BLK	PP23962,PP23967
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FG015562.D	27 Mar 2025 07:58		YP\AJ	Ok
2	I.BLK		FG015563.D	27 Mar 2025 08:27		YP\AJ	Ok
3	100 TRPH STD		FG015564.D	27 Mar 2025 08:56		YP\AJ	Ok
4	50 TRPH STD		FG015565.D	27 Mar 2025 09:26		YP\AJ	Ok
5	20 TRPH STD		FG015566.D	27 Mar 2025 09:55		YP\AJ	Ok
6	10 TRPH STD		FG015567.D	27 Mar 2025 10:24		YP\AJ	Ok
7	5 TRPH STD		FG015568.D	27 Mar 2025 10:54		YP\AJ	Ok
8	FG032725ICV		FG015569.D	27 Mar 2025 11:23		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 # FG041625

Review By	yogesh	Review On	4/16/2025 12:42:26 PM		
Supervise By	mohammad	Supervise On	4/18/2025 1:19:54 AM		
SubDirectory	FG041625	HP Acquire Method		HP Processing Method	FG032725

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966
CCC	PP23963
Internal Standard/PEM	
ICV/I.BLK	PP23962,PP23967
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FG015668.D	16 Apr 2025 10:38		YP\AJ	Ok
2	I.BLK		FG015669.D	16 Apr 2025 11:08		YP\AJ	Ok
3	50 PPM TRPH STD		FG015670.D	16 Apr 2025 11:37		YP\AJ	Ok
4	RT MARKER		FG015671.D	16 Apr 2025 12:10		YP\AJ	Ok
5	PB167614BL		FG015672.D	16 Apr 2025 15:14		YP\AJ	Ok
6	PB167614BS		FG015673.D	16 Apr 2025 15:44		YP\AJ	Ok
7	PB167614BSD		FG015674.D	16 Apr 2025 16:13		YP\AJ	Ok
8	Q1812-02		FG015675.D	16 Apr 2025 16:42		YP\AJ	Ok
9	Q1812-03		FG015676.D	16 Apr 2025 17:12		YP\AJ	Ok
10	I.BLK		FG015677.D	16 Apr 2025 17:41		YP\AJ	Ok
11	50 PPM TRPH STD		FG015678.D	16 Apr 2025 18:40		YP\AJ	Ok

M : Manual Integration

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB167614

SOP ID:	M3510C,3580A-Extraction DRO-12				
Clean Up SOP #:	N/A			**Extraction Start Date :**	04/16/2025
Matrix :	Water			**Extraction Start Time :**	10:05
Weigh By:	N/A	**Extraction By:**	RJ	**Extraction End Date :**	04/16/2025
Balance check:	N/A	**Filter By:**	RJ	**Extraction End Time :**	14:40
Balance ID:	N/A	**pH Meter ID:**	N/A	**Concentration By:**	EH
pH Strip Lot#:	E3880	**Hood ID:**	4,6,7	**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
Surrogate	1.0ML	20 PPM	PP24162
Spike Sol 1	1.0ML	20 PPM	PP24180
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Methylene Chloride	N/A	E3926
Baked Na2SO4	N/A	EP2599
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5 ML Vial lot# 2210443.

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

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
4/16/25	RS (Ext lab)	Y-P pest lab.
14:45	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB167614

Analytical Method: M3510C,3580A-Extraction DRO-12

Concentration Date: 04/16/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB167614BL	PB167614BL	Diesel Range Organics	1000	6	ritesh	Evelyn	1			SEP-1
PB167614BS	PB167614BS	Diesel Range Organics	1000	6	ritesh	Evelyn	1			2
PB167614BSD	PB167614BSD	Diesel Range Organics	1000	6	ritesh	Evelyn	1			3
Q1812-02	RINSE-EB-TANK-041525	Diesel Range Organics	900	6	ritesh	Evelyn	1	H		4
Q1812-03	RINSE-EB-PUMP-041525	Diesel Range Organics	990	6	ritesh	Evelyn	1	H		5

RS
4/16

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

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1812D **WorkList ID :** 188967 **Department :** Extraction **Date :** 04-16-2025 10:00:46

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1812-02	RINSE-EB-TANK-041525	Water	Diesel Range Organics	Cool 4 deg C	JACO05	L31	04/15/2025	8015D
Q1812-03	RINSE-EB-PUMP-041525	Water	Diesel Range Organics	Cool 4 deg C	JACO05	L31	04/15/2025	8015D

Date/Time 4/16/25 10:00
Raw Sample Received by: RJ (EXT-Lab)
Raw Sample Relinquished by: [signature]

Date/Time 4/16/25 10:30
Raw Sample Received by: [signature]
Raw Sample Relinquished by: RJ (EXT-Lab)

Page 1 of 1

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

Prep Standard - Chemical Standard Summary

Order ID : Q1812

Test : Diesel Range Organics

Prepbatch ID : PB167614,

Sequence ID/Qc Batch ID: FG041625,

Standard ID :
EP2599,PP23961,PP23962,PP23963,PP23964,PP23965,PP23966,PP23967,PP24162,PP24180,

Chemical ID :
E3551,E3828,E3874,E3926,P11955,P11956,P11958,P11959,P13213,P13218,P13219,P13487,P13488,P13489,P13490
,

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

Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2599	04/07/2025	07/01/2025	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 04/07/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
433	100/100 PPM DRO (Restek)	PP23961	11/13/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/13/2024

FROM 1.00000ml of P11958 + 1.00000ml of P11959 + 1.00000ml of P13213 + 7.00000ml of E3828 = 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
3796	100/100 PPM DRO STD (CPI)	PP23962	11/13/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/13/2024

FROM 1.00000ml of P13213 + 1.00000ml of P13218 + 1.00000ml of P13219 + 7.00000ml of E3828 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
435	50 PPM ICC DRO STD (Restek)	PP23963	11/13/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/13/2024

FROM 0.50000ml of E3828 + 0.50000ml of PP23961 = 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
437	20 PPM ICC DRO STD (Restek)	PP23964	11/13/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/13/2024

FROM 0.80000ml of E3828 + 0.20000ml of PP23961 = Final Quantity: 1.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
438	10 PPM ICC DRO STD (Restek)	PP23965	11/13/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/13/2024

FROM 0.90000ml of E3828 + 0.10000ml of PP23961 = 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
439	5 PPM ICC DRO STD (Restek)	PP23966	11/13/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/13/2024

FROM 0.90000ml of E3828 + 0.10000ml of PP23963 = Final Quantity: 1.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3797	50 PPM DRO ICV STD (CPI)	PP23967	11/13/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/13/2024

FROM 0.80000ml of E3828 + 0.50000ml of PP23962 = 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
3609	20 PPM DRO SPIKE SOLUTION (RESTEK)	PP24162	01/31/2025	07/30/2025	Yogesh Patel	None	None	Ankita Jodhani 01/31/2025

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

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

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

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

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	07/01/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24G0862003	05/09/2025	11/09/2024 / Rajesh	11/04/2024 / Rajesh	E3828

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A0262002	10/08/2025	04/08/2025 / Rajesh	02/07/2025 / Rajesh	E3926

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

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

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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 #
Restek	31266 / Florida TRPH Standard	A0186840	05/13/2025	11/13/2024 / yogesh	07/11/2022 / Yogesh	P11958

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0186840	05/13/2025	11/13/2024 / yogesh	07/11/2022 / Yogesh	P11959

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	05/13/2025	11/13/2024 / yogesh	01/17/2024 / Ankita	P13213

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110400-05-01 / TRPH Standard (C8-C40), 500 mg/L, 1 ml	514983	02/14/2025	08/14/2024 / yogesh	01/31/2024 / Ankita	P13218

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110400-05-01 / TRPH Standard (C8-C40), 500 mg/L, 1 ml	514983	05/13/2025	11/13/2024 / yogesh	01/31/2024 / Ankita	P13219

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

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 #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	08/03/2025	02/03/2025 / yogesh	07/24/2024 / yogesh	P13488

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

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

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

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

avantor™ | J.T.Baker

Material No.: 9266-A4
Batch No.: 24J0862003
Manufactured Date: 2024-09-12
Expiration Date:2025-12-12
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	2
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 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 3828

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

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

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

avantor | J.T.Baker

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

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	4
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.8 ppm
Titrable Acid (µeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

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

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

E 3874

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials,LLC
100 Matsonford Rd, Suite 200,Radnor,PA,19087.U.S.A.Phone 610.386.1700

Page 1 of 1

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

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

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)

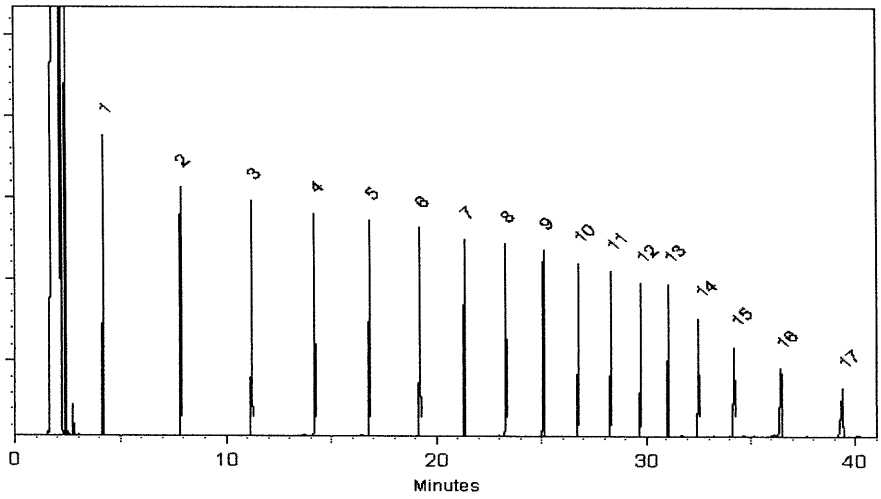
Carrier Gas:
hydrogen-constant pressure 10 psi.

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.

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

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)

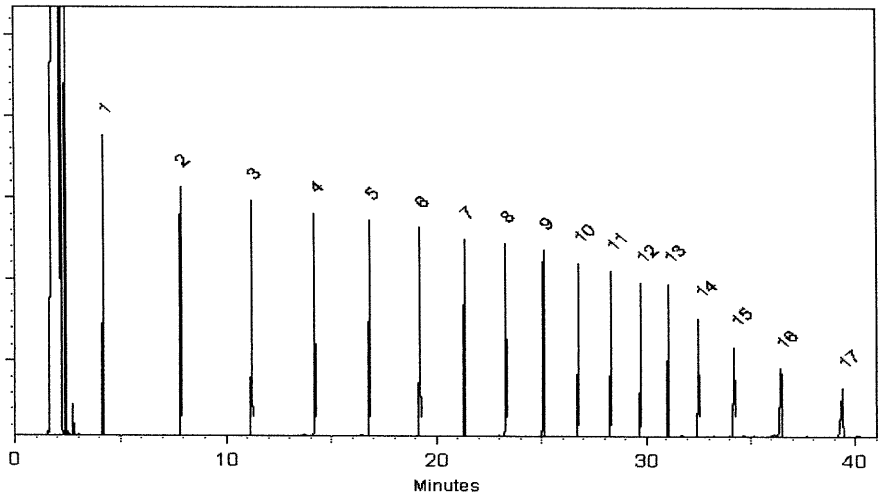
Carrier Gas:
hydrogen-constant pressure 10 psi.

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:

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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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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)

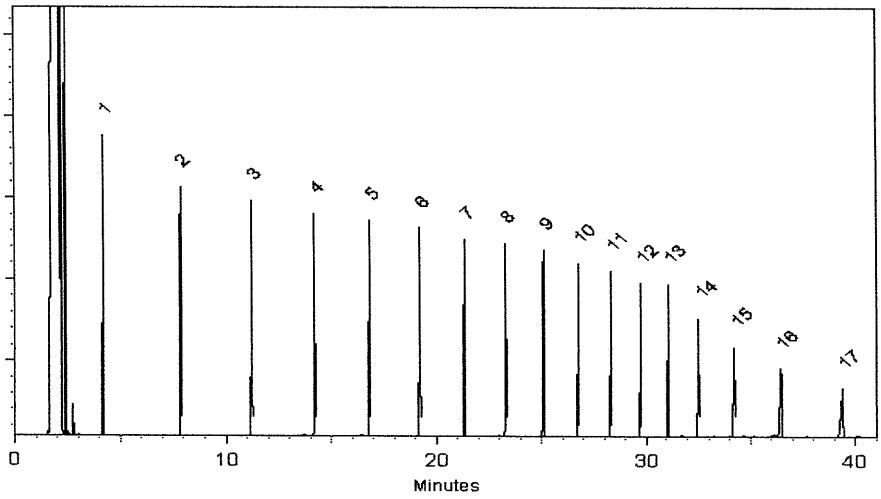
Carrier Gas:
hydrogen-constant pressure 10 psi.

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:

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Manufacturing Notes:

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Handling Notes:

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

P11948
&
P11962
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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
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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
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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:
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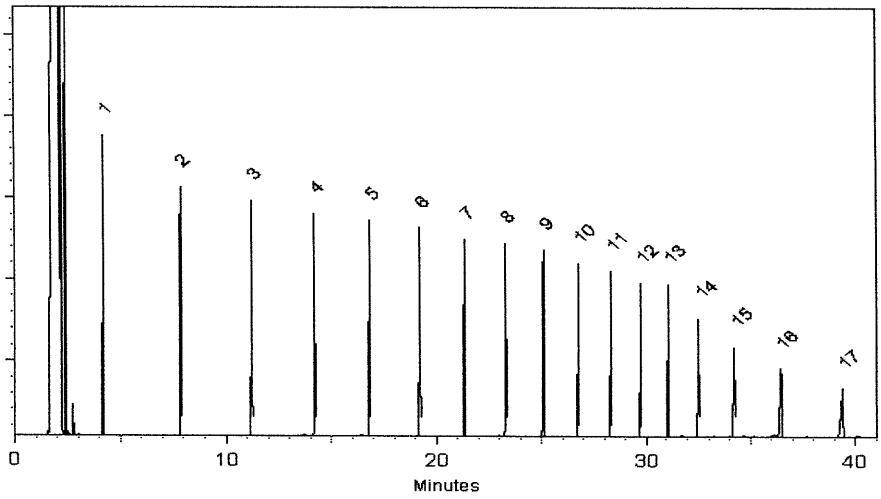
Det. Temp:
330°C

Det. Type:
FID



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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:

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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

Solvent(s): Methylene chloride **Lot#** 105345

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

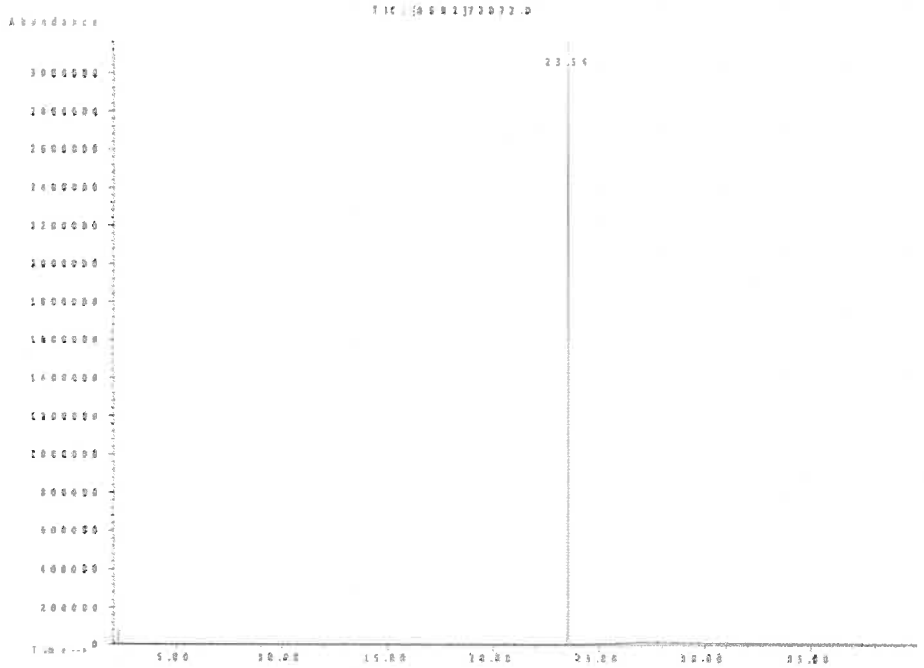
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

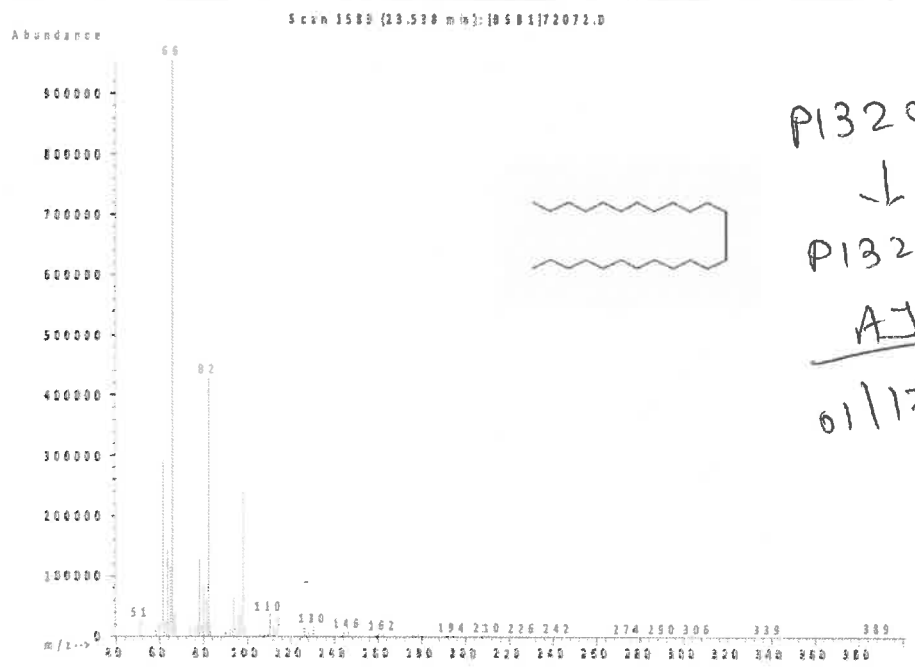
Weight(s) shown below were combined and diluted to (mL): 200.0

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





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01/17/24

- 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).

CPI INTERNATIONAL

5580 Skylane Blvd
Santa Rosa, CA 95403

(707)525-5788
(800)878-7654 Toll Free
(707)545-7901 Fax

Manufacturer's Quality System
Audited & Registered
by TUV USA to ISO 9001:2015

Date Received:_____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110400-05 -01	514983	≤ -10 Degrees C	Hexane	11/20/2028	TRPH Standard (C8-C40), 500 mg/L, 1 ml

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
decane (C10)	124-18-5	99.7	415.7.2P	498.5 ± 6.92
docosane (C22)	629-97-0	98.8	420.9.1P	499.4 ± 6.93
dodecane (C12)	112-40-3	99.7	416.9.3P	502 ± 6.97
dotriacontane (C32)	544-85-4	97	425.9.2.2P	499.6 ± 8.53
eicosane (C20)	112-95-8	99.8	419.7.1P	501 ± 6.95
hexacosane (C26)	630-01-3	99.3	422.7.2.1P	501 ± 6.95
hexatriacontane (C36)	630-06-8	98	427.29.1.1P	499.3 ± 8.53
n-hexadecane (C16)	544-76-3	99.45	368.271.1P	498.7 ± 6.91
octacosane (C28)	630-02-4	99.1	423.24.1P	500.5 ± 6.95
n-octadecane (C18)	593-45-3	99.5	418.29.1P	499.5 ± 6.92
octane (C8)	111-65-9	99.4	385.7.2.1P	498.5 ± 6.92
octatriacontane (C38)	7194-85-6	95	428.1.2P	500.2 ± 6.94
tetracontane (C40)	4181-95-7	97	429.7.2P	499.6 ± 6.93
n-tetracosane (C24)	646-31-1	99.5	421.7.1P	499.5 ± 6.93
n-tetradecane (C14)	629-59-4	99.3	417.9.1P	500 ± 6.94
tetratriacontane (C34)	14167-59-0	96.1	426.7.2.2P	499.7 ± 8.53
triacontane (C30)	638-68-6	99.5	424.7.1.1P	500 ± 6.94

P 13215
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P 13224

AJ
01/31/24

*Not a certified value

Let the standard warm to room temperature and sonicate before opening.

Certified By: Andrea Schaible

Andrea Schaible
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

CPI INTERNATIONAL

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Santa Rosa, CA 95403

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Manufacturer's Quality System
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by TUV USA to ISO 9001:2015

Date Received:_____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110400-05 -01	514983	≤ -10 Degrees C	Hexane	11/20/2028	TRPH Standard (C8-C40), 500 mg/L, 1 ml

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
decane (C10)	124-18-5	99.7	415.7.2P	498.5 ± 6.92
docosane (C22)	629-97-0	98.8	420.9.1P	499.4 ± 6.93
dodecane (C12)	112-40-3	99.7	416.9.3P	502 ± 6.97
dotriacontane (C32)	544-85-4	97	425.9.2.2P	499.6 ± 8.53
eicosane (C20)	112-95-8	99.8	419.7.1P	501 ± 6.95
hexacosane (C26)	630-01-3	99.3	422.7.2.1P	501 ± 6.95
hexatriacontane (C36)	630-06-8	98	427.29.1.1P	499.3 ± 8.53
n-hexadecane (C16)	544-76-3	99.45	368.271.1P	498.7 ± 6.91
octacosane (C28)	630-02-4	99.1	423.24.1P	500.5 ± 6.95
n-octadecane (C18)	593-45-3	99.5	418.29.1P	499.5 ± 6.92
octane (C8)	111-65-9	99.4	385.7.2.1P	498.5 ± 6.92
octatriacontane (C38)	7194-85-6	95	428.1.2P	500.2 ± 6.94
tetracontane (C40)	4181-95-7	97	429.7.2P	499.6 ± 6.93
n-tetracosane (C24)	646-31-1	99.5	421.7.1P	499.5 ± 6.93
n-tetradecane (C14)	629-59-4	99.3	417.9.1P	500 ± 6.94
tetratriacontane (C34)	14167-59-0	96.1	426.7.2.2P	499.7 ± 8.53
triacontane (C30)	638-68-6	99.5	424.7.1.1P	500 ± 6.94

P 13215
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P 13224

AJ
01/31/24

*Not a certified value

Let the standard warm to room temperature and sonicate before opening.

Certified By: Andrea Schaible

Andrea Schaible
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

ABSOLUTE STANDARDS, INC.

ISO - 17034

Certificate of Analysis

Certified Reference Material (CRM)

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

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

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

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

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

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

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

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

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

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

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

Minimum Sample Size: 0.5 uL for analytical applications.

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

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

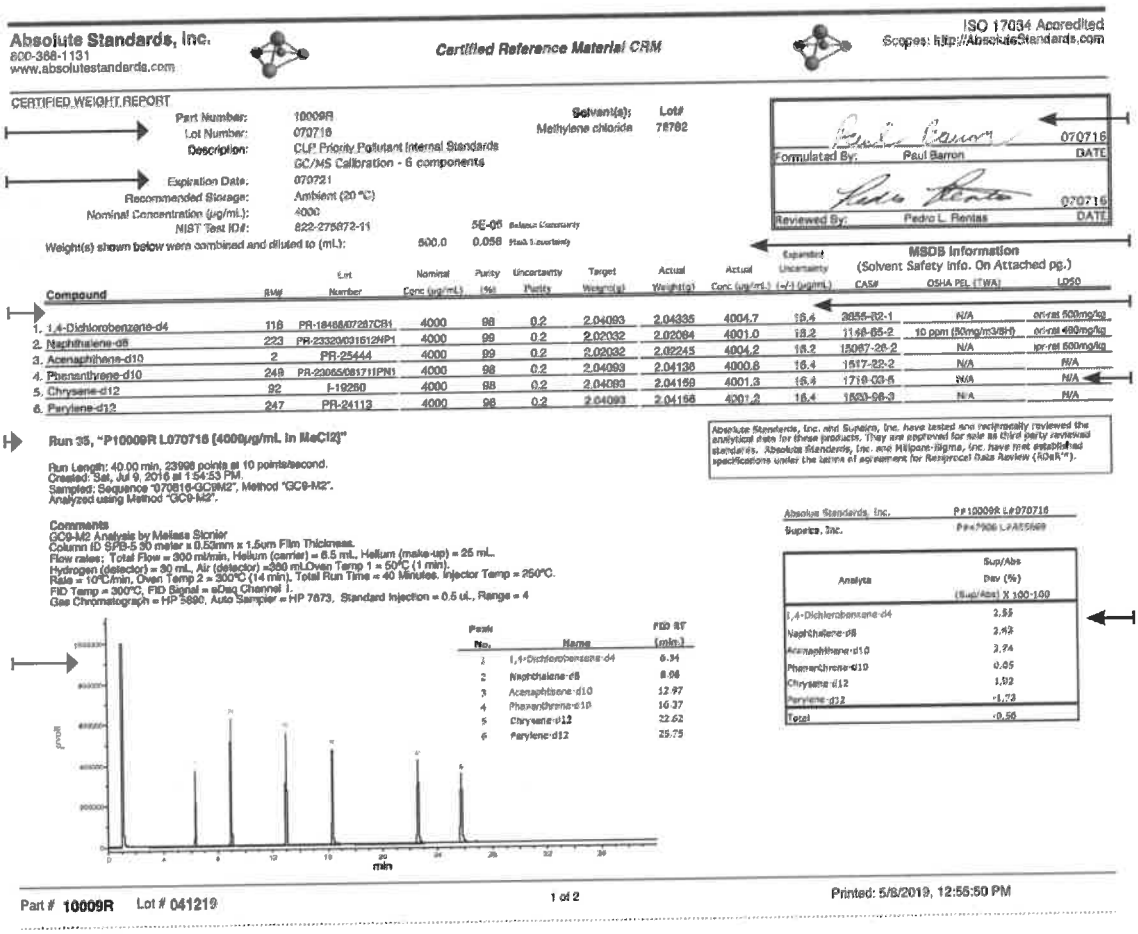
Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

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



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

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

Solvent(s): Methylene chloride
Lot#: 78782

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

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-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-230605061711PN1	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	1.02
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

Formulator / Reviewer

Actual Concentration

Target Compounds

Uncertainty Values

Health & Safety

Method of Analysis

3rd Party Comparison

Qualitative / Quantitative

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

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

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

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

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

Solvent(s):	Lot#
Methylene chloride	105345

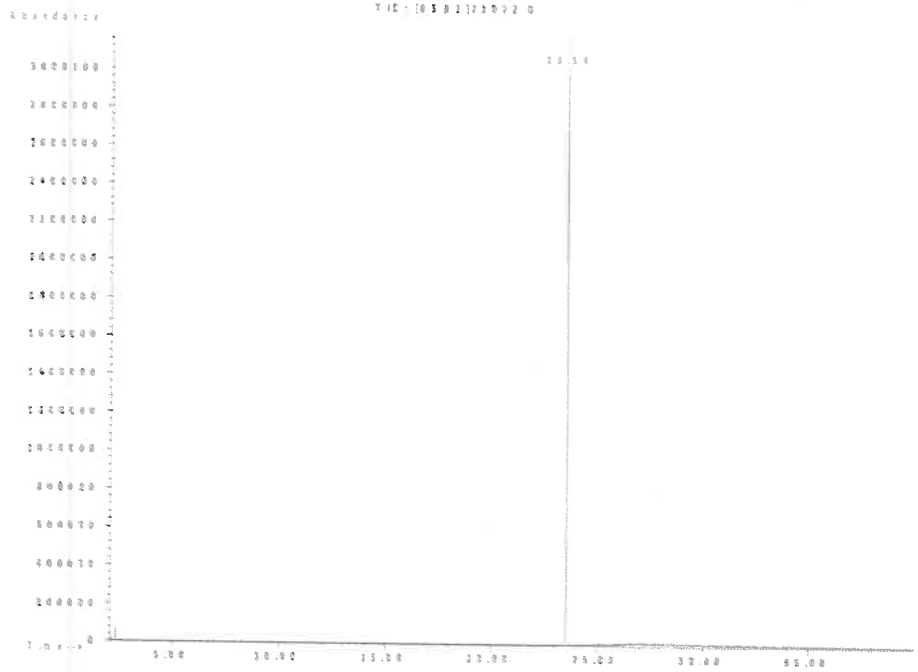
P13477 → P13496 } X.P. 07/24/24

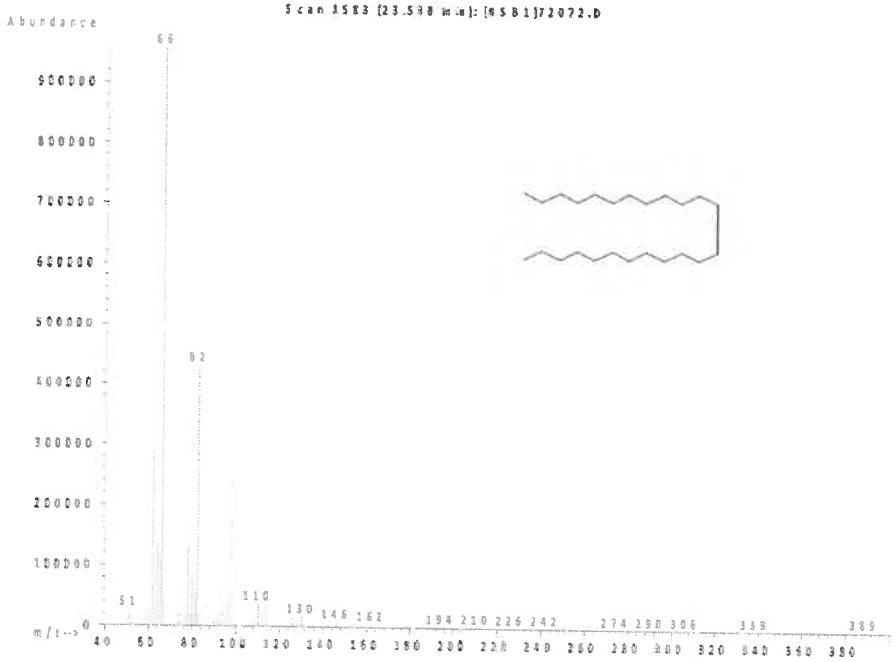
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

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

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Assay (%D)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. n-Tetracosane-d50	2072	PR-26606	1000	98.7	0.2	99.0	0.20471	0.20482	1000.6	4.1	16416-32-3	N/A	N/A

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





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

ABSOLUTE STANDARDS, INC.

ISO - 17034

Certificate of Analysis

Certified Reference Material (CRM)

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

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

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

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

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

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

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

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

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

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

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

Minimum Sample Size: 0.5 uL for analytical applications.

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

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

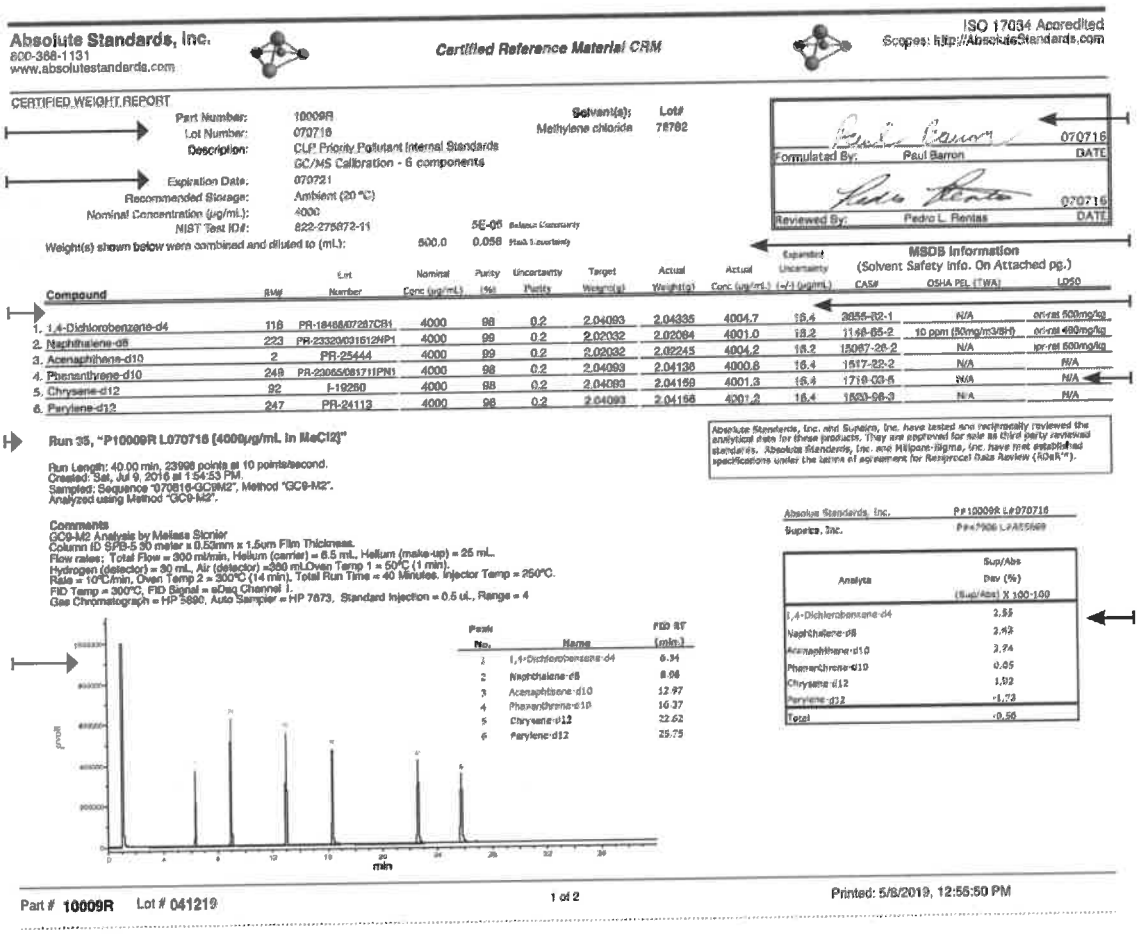
Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

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



Absolute Standards, Inc.
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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

5E-05 Balance Uncertainty
0.056 Flask Uncertainty

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

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

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-18488/07267CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	or-rat 500mg/kg
2. Naphthalene-d8	223	PR-233230/31612NP1	4000	99	0.2	2.02032	2.02064	4001.0	16.2	1146-65-2	10 ppm (50mg/m3/8H)	or-rat 490mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	16.2	15067-26-2	N/A	ipr-rat 500mg/kg
4. Phenanthrene-d10	248	PR-23065/051711PN1	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	1.02
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

Formulator / Reviewer

Actual Concentration

Target Compounds

Uncertainty Values

Health & Safety

Method of Analysis

3rd Party Comparison

Qualitative / Quantitative

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

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

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

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

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

Solvent(s):	Lot#
Methylene chloride	105345

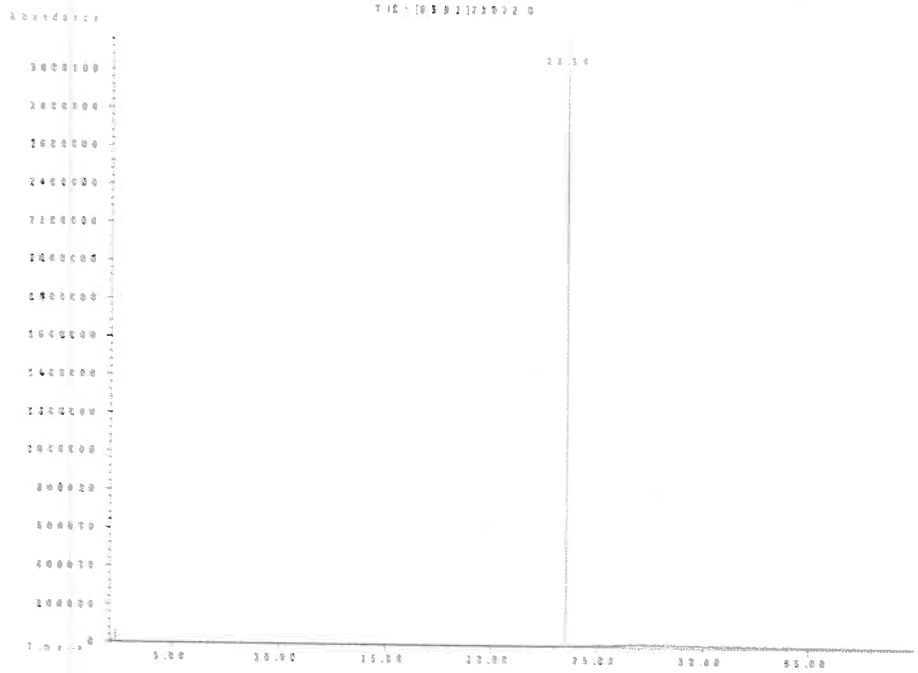
P13477 → P13496 } X.P. 07/24/24

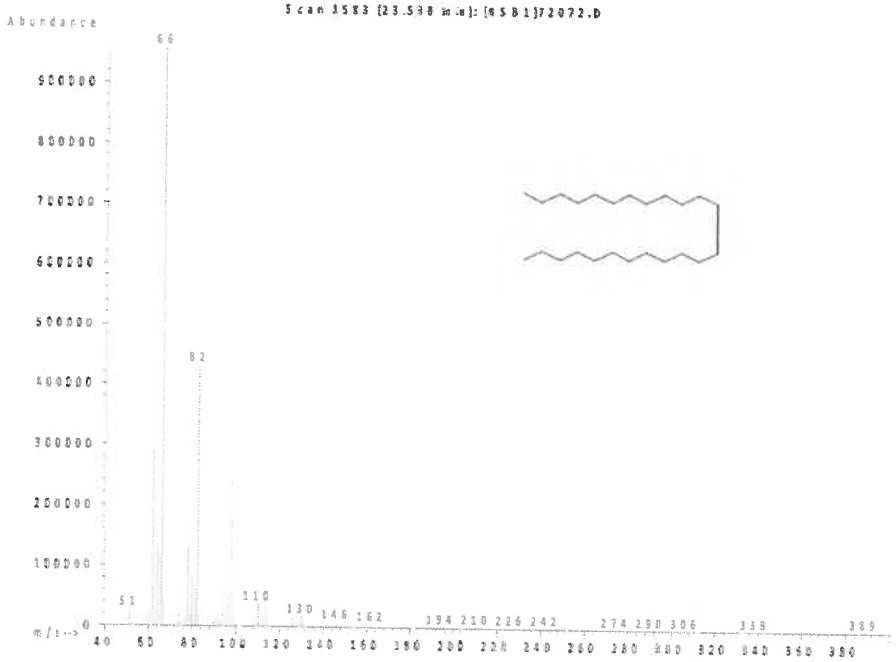
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

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

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Assay (%D)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. n-Tetracosane-d50	2072	PR-26606	1000	98.7	0.2	99.0	0.20471	0.20482	1000.6	4.1	16416-32-3	N/A	N/A

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





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

ABSOLUTE STANDARDS, INC.

ISO - 17034

Certificate of Analysis

Certified Reference Material (CRM)

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

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

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

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

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

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

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

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

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

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

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

Minimum Sample Size: 0.5 uL for analytical applications.

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

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

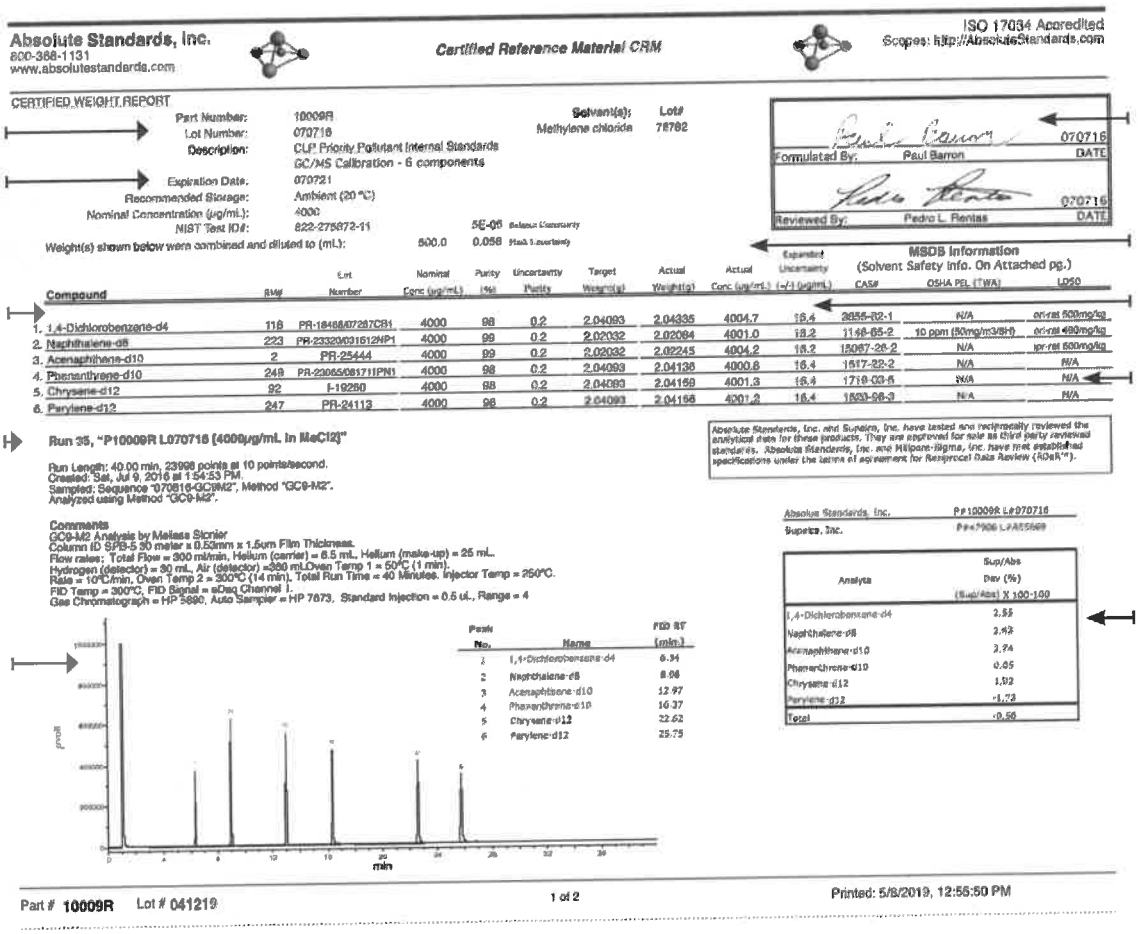
Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

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



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

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

Solvent(s): Methylene chloride
Lot# 78782

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

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

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	orl-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)	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 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

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

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Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

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

Solvent(s):	Lot#
Methylene chloride	105345

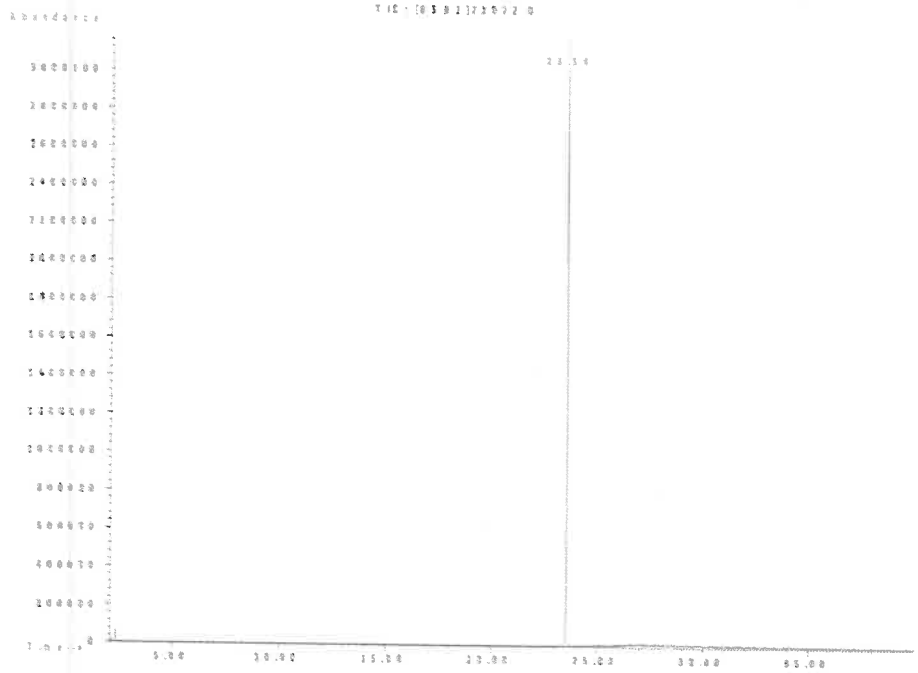
P13477 → P13496 } X.P. 07/24/24

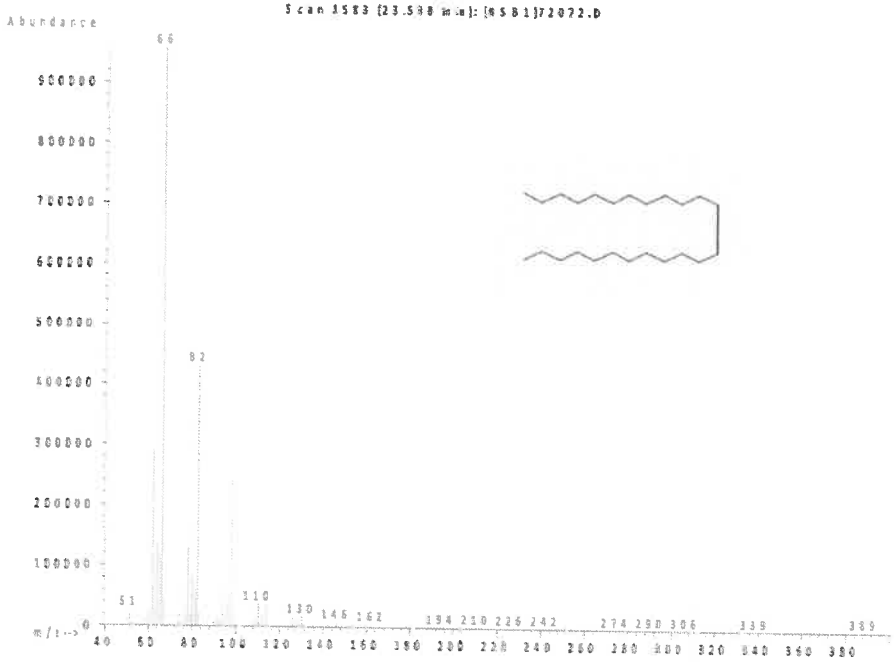
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

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

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Assay (%D)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. n-Tetracosane-d50	2072	PR-26606	1000	98.7	0.2	99.0	0.20471	0.20482	1000.6	4.1	16416-32-3	N/A	N/A

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





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

ABSOLUTE STANDARDS, INC.

ISO - 17034

Certificate of Analysis

Certified Reference Material (CRM)

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

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

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

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

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

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

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

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

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

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

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

Minimum Sample Size: 0.5 uL for analytical applications.

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

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

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

ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

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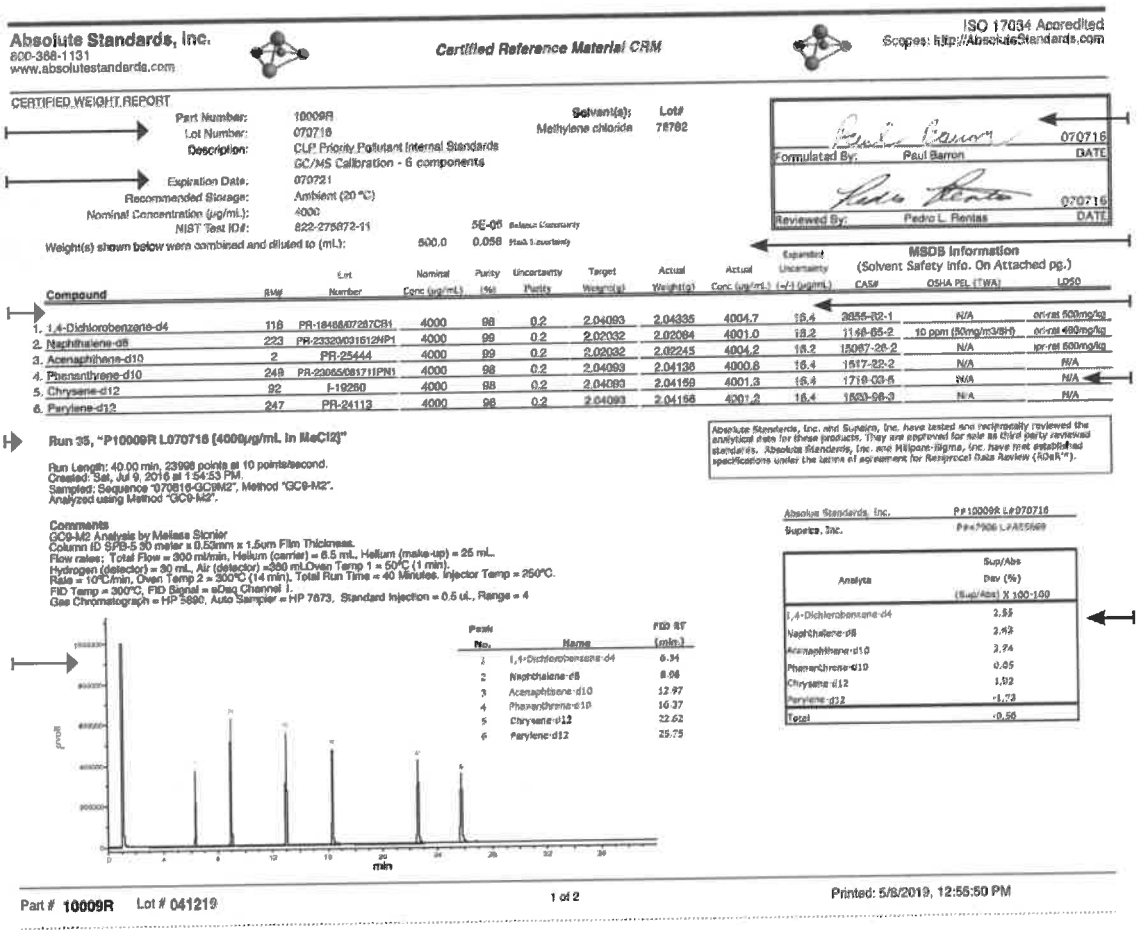

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www.absolutestandards.com

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 | 0.058 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-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 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. 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# [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

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

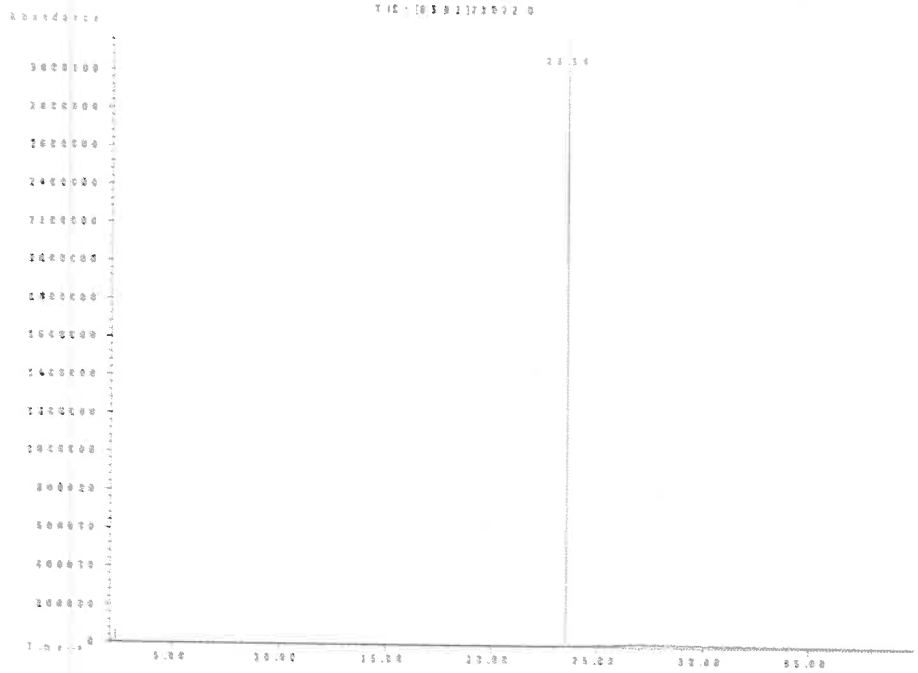
P13477 → P13496 } X.P. 07/24/24

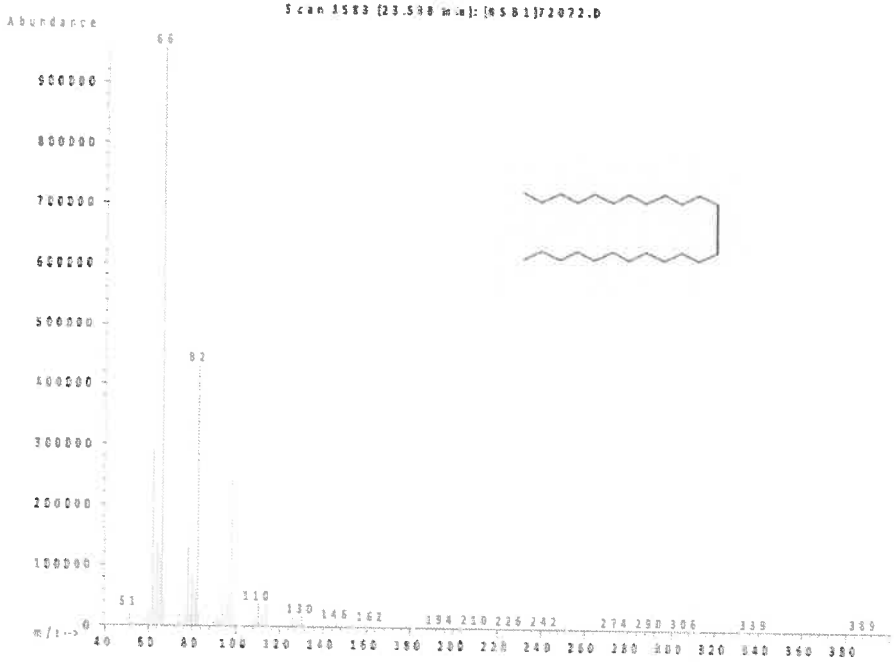
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 200.0 0.058 Flask Uncertainty

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).

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

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

ALLIANCE PROJECT NO.
QUOTE NO. Q1812
COC Number 2046603

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Jacobs
ADDRESS: 412 Mt Kemble Ave Suite #100
CITY Morristown STATE: NJ ZIP: 07960
ATTENTION: John Yufante John.Yufante@Jacobs.com
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: STC PTC
PROJECT NO.: D3868221 LOCATION: Princeton Junction
PROJECT MANAGER: Mary Murphy
e-mail: Mary.Murphy@Jacobs.com
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: Mary Murphy PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) Rush TAT (48hr) DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

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

ANALYSIS

1. TCL VOCs (8260D)
2. TCL SVOCs (8270E)
3. TAL Metals (6020B/7470A)
4. TPH-GRO (8015M)
5. TPH-DRO/ORO (8015M)
6. ~~TPH CC~~ (TA)
7.
8.
9.

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1 A/E	2 E	3 B/E	4 A/E	5 E	6 ~~E~~	7	8	9	COMMENTS
1.	TB01-041525	DI		X	4/15/25	1100	2	✓									
2.	RINSE-EB-TANK-041525	W		x	4/15/25	1120	8	✓	✓	✓	✓	✓	✓				
3.	RINSE-EB-PUMP-041525	W		X	4/15/25	1135	8	✓	✓	✓	✓	✓	✓				
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

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

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. [signature]	4/15/25 1600	1. YG 4/15/25 16:10
2.		2.
3.		3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 5.5 °C
Comments:

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

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1812 JACO05
Client Name : JACOBS Engineering Grou
Client Contact : John Ynfante
Invoice Name : JACOBS Engineering Grou
Invoice Contact : John Ynfante

Order Date : 4/15/2025 4:26:00 PM
Project Name : Former Schlumberger STC
Receive DateTime : 4/15/2025 4:10:00 PM
Purchase Order :

Project Mgr : Yazmeen
Report Type : Level 4
EDD Type : CH2MHILL
Hard Copy Date :
Date Signoff : 4/16/2025 9:55:15 AM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD		FAX DATE	DUE DATES
Q1812-01	TB01-041525	Water	04/15/2025	11:00						
					VOC-TCLVOA-10		8260-Low	1 Bus. Day	04/17/2025	
Q1812-02	RINSE-EB-TANK-041525	Water	04/15/2025	11:20						
					VOC-TCLVOA-10		8260-Low	1 Bus. Day	04/17/2025	
Q1812-03	RINSE-EB-PUMP-041525	Water	04/15/2025	11:35						
					VOC-TCLVOA-10		8260-Low	1 Bus. Day	04/17/2025	

Relinquished By :
Date / Time : 4 15 25 16:30

Received By :
Date / Time : 4.15.25 16:30

Storage Area : VOA Refridgerator Room