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Cover Page

Order ID : P3845

Project ID : NJ Waste Water PT

Client : Chemtech Consulting Group

Lab Sample Number	Client Sample Number
P3845-01	PT-VOA-WP
P3845-02	PT-VOA-WP
P3845-03	PT-BN-WP
P3845-04	PT-BN-WP
P3845-05	PT-BN-WP
P3845-06	PT-ACIDS-WP
P3845-07	PT-ACIDS-WP
P3845-08	PT-ACIDS-WP
P3845-09	PT-PEST-WP
P3845-10	PT-PEST-WP
P3845-11	PT-CHLR-WP
P3845-12	PT-CHLR-WP
P3845-13	PT-TXP-WP
P3845-14	PT-TXP-WP
P3845-15	PT-PCBW-WP
P3845-16	PT-PCBW-WP
P3845-17	PT-HERB-WP
P3845-18	RR-GAS-WP
P3845-19	RR-DIES-WP
P3845-20	RR-8011-WP
P3845-21	RR-PAH-WP
P3845-22	RR-TRIAZINE-WP

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

Signature : _____

Date: 10/23/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Chemtech Consulting Group
Project Name: NJ Waste Water PT
Project # N/A
Chemtech Project # P3845
Test Name: Diesel Range Organics

A. Number of Samples and Date of Receipt:
22 Water samples were received on 09/05/2024.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Diesel Range Organics, Gasoline Range Organics, Herbicide group1, PCB, PESTICIDE Group1, PESTICIDE Group2, PESTICIDE Group3, SVOCMS Group1, SVOCMS Group2, SVOCMS Group3, SVOCMS Group4, SVOCMS Group5, SVOCMS Group6, VOCGC Group 1 and VOCMS Group1. This data package contains results for Diesel Range Organics.

C. Analytical Techniques:
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 Blank Spike met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .
The Continuous Calibration met the requirements .

Samples RR-DIES-WP was diluted due to bad matrix The above samples original run is reported as screening data in miscellaneous data.

E. Additional Comments:

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

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

Signature_____

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DATA REPORTING QUALIFIERS- ORGANIC

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

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

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GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: P3845 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 .			✓
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:

Samples RR-DIES-WP was diluted due to bad matrix The above samples original run is reported as screening data in miscellaneous data.

_____ _____

QA REVIEW Date

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **P3845**

	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:** **10/23/2024**

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LAB CHRONICLE

OrderID:	P3845	**OrderDate:**	9/5/2024 2:19:00 PM
Client:	Chemtech Consulting Group	**Project:**	NJ Waste Water PT
Contact:	QA Officer	**Location:**	QA Office,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3845-18	**RR-GAS-WP**	**Water**			**09/03/24**			**09/05/24**
			Gasoline Range Organics	8015D			09/09/24	
P3845-18RE	**RR-GAS-WP**	**Water**			**09/03/24**			**09/05/24**
			Gasoline Range Organics	8015D			09/09/24	
P3845-19	**RR-DIES-WP**	**Water**						**09/05/24**
			Diesel Range Organics	8015D		09/09/24	09/10/24	
P3845-20	**RR-8011-WP**	**WATER**			**09/03/24**			**09/05/24**
			VOCGC Group 1	8011		09/11/24	09/11/24	
P3845-20DL	**RR-8011-WPDL**	**WATER**			**09/03/24**			**09/05/24**
			VOCGC Group 1	8011		09/11/24	09/11/24	

QC SUMMARY

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WATER DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Chemtech Client: Chemtech Consulting Group

Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG No.: P3845

EPA SAMPLE NO.	S1 TETRACOSANE-d50	S2	S3	S4	TOT OUT
PIBLK-FF014469.D	106				0
PIBLK-FF014476.D	81				0
RR-DIES-WP	78				0
PB163245BL	71				0
PB163245BS	86				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:** Chemtech Consulting Group

Lab Code: CHEM **Cas No:** P3845 **SAS No :** P3845 **SDG No:** P3845

Matrix Spike - EPA Sample No : PB163245BS **Datafile:** FF014474.D

COMPOUND	SPIKE ADDED ug/L	CONCENTRATION ug/L	LCS/LCSD CONCENTRATION ug/L	% REC	QC LIMITS
DRO	200	0	194	97	78-117

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4B

METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB163245BL

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG NO.: P3845

Lab File ID: FF014473.D Lab Sample ID: PB163245BL

Instrument ID: FF Date Extracted: 09/10/2024

Matrix: (soil/water) Water Date Analyzed: 09/10/24

Level: (low/med) low Time Analyzed: 9:11

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB163245BS	PB163245BS	FF014474.D	09/10/24
RR-DIES-WP	P3845-19	FF014475.D	09/10/24

COMMENTS:

SAMPLE DATA

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	09/03/24
Project:	NJ Waste Water PT	Date Received:	09/05/24
Client Sample ID:	RR-DIES-WP	SDG No.:	P3845
Lab Sample ID:	P3845-19	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
FF014475.D	5	09/09/24 10:07	09/10/24 10:09	PB163245

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	2200		50.0	250	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	3.13		29 - 130	78%	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_F\Data\FF091024\
Data File : FF014475.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 10:09
Operator : YP\AJ
Sample : P3845-19 5X
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
RR-DIES-WP

Integration File: autoint1.e
Quant Time: Sep 11 01:31:16 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	14.900	369155	3.128 ug/ml
	Target Compounds			

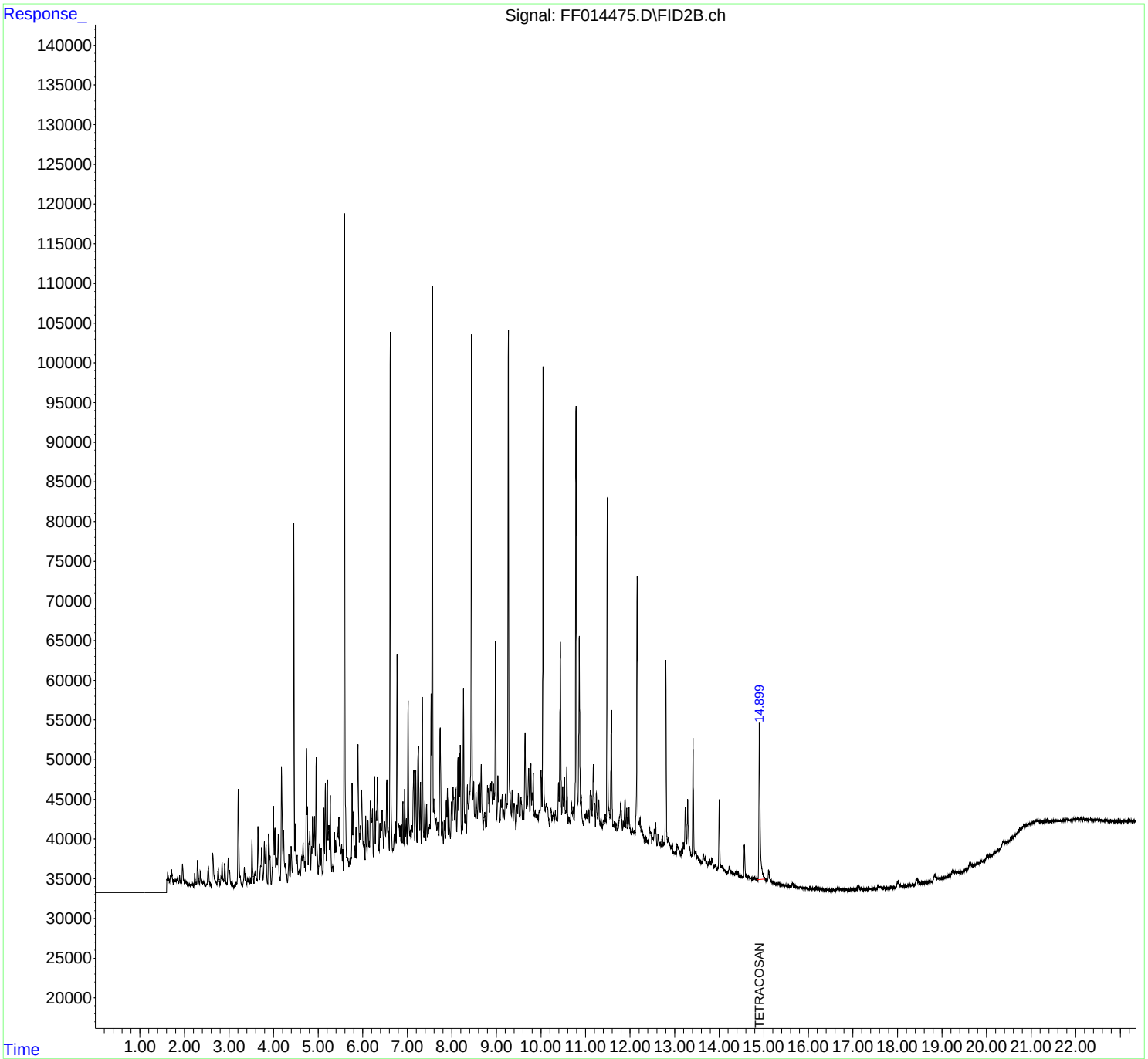
(f)=RT Delta > 1/2 Window (m)=manual int.

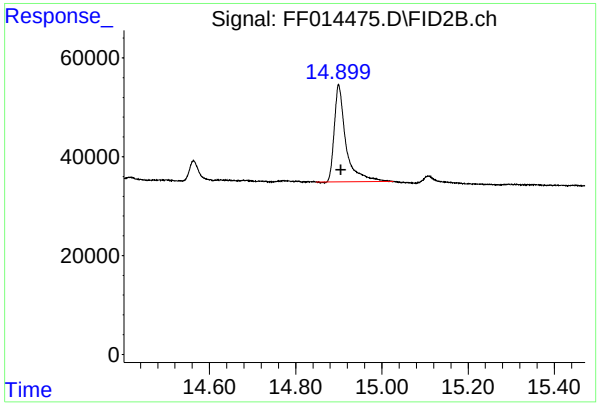
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014475.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 10:09
Operator : YP\AJ
Sample : P3845-19 5X
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
RR-DIES-WP

Integration File: autoint1.e
Quant Time: Sep 11 01:31:16 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.900 min
Delta R.T.: -0.005 mi
Response: 369155
Conc: 3.13 ug/m

Instrument :
FID_F
ClientSampleId :
RR-DIES-WP

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014475.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 10:09
Sample : P3845-19 5X
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.344	4.311	4.372	VV	4185	78787	5.87%	0.139%
2	4.395	4.372	4.420	VV	5200	94368	7.03%	0.166%
3	4.454	4.420	4.478	VV	45875	558602	41.62%	0.983%
4	4.491	4.478	4.511	VV	8075	106895	7.96%	0.188%
5	4.529	4.511	4.554	VV	4096	77796	5.80%	0.137%
6	4.576	4.554	4.594	VV	2184	45768	3.41%	0.081%
7	4.629	4.594	4.643	VV	3937	83237	6.20%	0.147%
8	4.662	4.643	4.694	VV	5571	123125	9.17%	0.217%
9	4.706	4.694	4.719	VV	3299	42140	3.14%	0.074%
10	4.738	4.719	4.752	VV	17586	207281	15.44%	0.365%
11	4.758	4.752	4.777	VV	10235	105854	7.89%	0.186%
12	4.795	4.777	4.802	VV	5660	71591	5.33%	0.126%
13	4.814	4.802	4.834	VV	7185	101126	7.53%	0.178%
14	4.851	4.834	4.860	VV	5219	63476	4.73%	0.112%
15	4.876	4.860	4.902	VV	9010	170502	12.70%	0.300%
16	4.917	4.902	4.939	VV	9024	145325	10.83%	0.256%
17	4.956	4.939	5.001	VV	16431	271225	20.21%	0.477%
18	5.035	5.001	5.052	VV	5562	107499	8.01%	0.189%
19	5.067	5.052	5.097	VV	4981	90415	6.74%	0.159%
20	5.130	5.097	5.144	VV	10059	138899	10.35%	0.244%
21	5.162	5.144	5.187	VV	13206	209160	15.58%	0.368%
22	5.206	5.187	5.221	VV	13636	173899	12.96%	0.306%
23	5.241	5.221	5.257	VV	7884	145344	10.83%	0.256%
24	5.273	5.257	5.307	VV	11656	182842	13.62%	0.322%
25	5.321	5.307	5.327	VV	2599	30037	2.24%	0.053%
26	5.333	5.327	5.347	VV	2719	29344	2.19%	0.052%
27	5.368	5.347	5.381	VV	7009	99738	7.43%	0.176%
28	5.392	5.381	5.408	VV	6042	82827	6.17%	0.146%
29	5.430	5.408	5.451	VV	7703	164344	12.25%	0.289%
30	5.466	5.451	5.482	VV	8956	133430	9.94%	0.235%
31	5.489	5.482	5.516	VV	5708	102374	7.63%	0.180%
32	5.529	5.516	5.543	VV	5462	75336	5.61%	0.133%
33	5.553	5.543	5.567	VV	4881	55246	4.12%	0.097%
34	5.590	5.567	5.654	VV	84989	1119498	83.41%	1.971%
35	5.664	5.654	5.692	VV	3846	76373	5.69%	0.134%
36	5.717	5.692	5.729	VV	3824	73321	5.46%	0.129%

rteres

37	5.763	5.729	5.777	VV	13190	198380	14.78%	0.349%
38	5.792	5.777	5.809	VV	9606	147387	10.98%	0.259%
39	5.817	5.809	5.833	VV	5338	66054	4.92%	0.116%
40	5.850	5.833	5.864	VV	7688	105079	7.83%	0.185%
41	5.894	5.864	5.925	VV	18088	390725	29.11%	0.688%
42	5.934	5.925	5.942	VV	6865	66217	4.93%	0.117%
43	5.953	5.942	5.958	VV	7818	71636	5.34%	0.126%
44	5.975	5.958	6.009	VV	12282	273241	20.36%	0.481%
45	6.018	6.009	6.030	VV	5935	71646	5.34%	0.126%
46	6.037	6.030	6.052	VV	5557	62087	4.63%	0.109%
47	6.068	6.052	6.099	VV	9112	171852	12.80%	0.302%
48	6.120	6.099	6.138	VV	8521	156130	11.63%	0.275%
49	6.147	6.138	6.156	VV	5670	59039	4.40%	0.104%
50	6.175	6.156	6.196	VV	10910	215175	16.03%	0.379%
51	6.219	6.196	6.240	VV	10019	206837	15.41%	0.364%
52	6.265	6.240	6.284	VV	13979	221665	16.52%	0.390%
53	6.305	6.284	6.315	VV	9684	153373	11.43%	0.270%
54	6.331	6.315	6.371	VV	13974	303759	22.63%	0.535%
55	6.387	6.371	6.398	VV	8204	107655	8.02%	0.189%
56	6.411	6.398	6.420	VV	7953	97994	7.30%	0.172%
57	6.437	6.420	6.472	VV	9839	242633	18.08%	0.427%
58	6.491	6.472	6.514	VV	8378	183886	13.70%	0.324%
59	6.541	6.514	6.563	VV	13693	270567	20.16%	0.476%
60	6.569	6.563	6.597	VV	7321	136050	10.14%	0.239%
61	6.619	6.597	6.669	VV	70021	938250	69.91%	1.651%
62	6.679	6.669	6.688	VV	5013	53712	4.00%	0.095%
63	6.710	6.688	6.723	VV	6868	123200	9.18%	0.217%
64	6.739	6.723	6.752	VV	8371	118955	8.86%	0.209%
65	6.772	6.752	6.794	VV	29478	403752	30.08%	0.711%
66	6.804	6.794	6.815	VV	8220	101005	7.53%	0.178%
67	6.821	6.815	6.834	VV	7843	84665	6.31%	0.149%
68	6.845	6.834	6.858	VV	7880	100713	7.50%	0.177%
69	6.873	6.858	6.887	VV	7933	117873	8.78%	0.207%
70	6.901	6.887	6.924	VV	10894	178707	13.32%	0.315%
71	6.943	6.924	6.964	VV	12500	209389	15.60%	0.369%
72	6.980	6.964	6.995	VV	8815	139406	10.39%	0.245%
73	7.019	6.995	7.057	VV	23623	431502	32.15%	0.760%
74	7.067	7.057	7.084	VV	7282	112521	8.38%	0.198%
75	7.109	7.084	7.119	VV	7895	147801	11.01%	0.260%
76	7.147	7.119	7.169	VV	14782	327901	24.43%	0.577%
77	7.191	7.169	7.220	VV	14831	295926	22.05%	0.521%
78	7.251	7.220	7.282	VV	17838	460459	34.31%	0.810%
79	7.296	7.282	7.314	VV	13411	183095	13.64%	0.322%
80	7.338	7.314	7.375	VV	24096	446200	33.25%	0.785%
81	7.398	7.375	7.419	VV	11061	221731	16.52%	0.390%
82	7.436	7.419	7.454	VV	10585	173732	12.94%	0.306%
83	7.465	7.454	7.476	VV	7484	95301	7.10%	0.168%
84	7.503	7.476	7.514	VV	8125	171273	12.76%	0.301%
85	7.537	7.514	7.547	VV	24524	323382	24.10%	0.569%
86	7.564	7.547	7.587	VV	75816	903563	67.32%	1.590%
87	7.596	7.587	7.610	VV	11199	139868	10.42%	0.246%
88	7.613	7.610	7.628	VV	9814	102412	7.63%	0.180%
89	7.640	7.628	7.664	VV	8823	178444	13.30%	0.314%

90	7.687	7.664	7.707	VV	8356	196639	14.65%	0.346%
91	7.738	7.707	7.772	VV	20240	483236	36.01%	0.851%
92	7.788	7.772	7.812	VV	8351	174253	12.98%	0.307%
93	7.830	7.812	7.859	VV	8645	201578	15.02%	0.355%
94	7.878	7.859	7.890	VV	11106	166850	12.43%	0.294%
95	7.903	7.890	7.918	VV	12645	175825	13.10%	0.309%
96	7.933	7.918	7.970	VV	11533	259461	19.33%	0.457%
97	7.994	7.970	8.010	VV	10875	213865	15.94%	0.376%
98	8.029	8.010	8.066	VV	12856	363521	27.09%	0.640%
99	8.092	8.066	8.111	VV	12496	266570	19.86%	0.469%
100	8.138	8.111	8.153	VV	16511	290645	21.66%	0.512%
101	8.168	8.153	8.180	VV	17131	222876	16.61%	0.392%
102	8.193	8.180	8.218	VV	18064	278311	20.74%	0.490%
103	8.231	8.218	8.241	VV	8145	109513	8.16%	0.193%
104	8.263	8.241	8.293	VV	25223	437276	32.58%	0.770%
105	8.309	8.293	8.330	VV	9270	189502	14.12%	0.334%
106	8.349	8.330	8.379	VV	13095	308109	22.96%	0.542%
107	8.444	8.379	8.476	VV	69849	1296155	96.58%	2.281%
108	8.492	8.476	8.510	VV	13444	237665	17.71%	0.418%
109	8.517	8.510	8.527	VV	9474	91258	6.80%	0.161%
110	8.543	8.527	8.574	VV	12175	296189	22.07%	0.521%
111	8.598	8.574	8.613	VV	13079	257655	19.20%	0.454%
112	8.625	8.613	8.640	VV	13122	182589	13.60%	0.321%
113	8.661	8.640	8.705	VV	15605	436984	32.56%	0.769%
114	8.735	8.705	8.760	VV	9646	285087	21.24%	0.502%
115	8.774	8.760	8.782	VV	8204	108667	8.10%	0.191%
116	8.802	8.782	8.811	VV	13030	190840	14.22%	0.336%
117	8.817	8.811	8.845	VV	12547	229650	17.11%	0.404%
118	8.871	8.845	8.881	VV	13235	257683	19.20%	0.454%
119	8.895	8.881	8.914	VV	13529	240295	17.90%	0.423%
120	8.936	8.914	8.950	VV	13198	262319	19.55%	0.462%
121	8.983	8.950	9.009	VV	31227	600912	44.77%	1.058%
122	9.035	9.009	9.049	VV	14207	277117	20.65%	0.488%
123	9.057	9.049	9.076	VV	11343	163632	12.19%	0.288%
124	9.104	9.076	9.117	VV	11233	241906	18.02%	0.426%
125	9.130	9.117	9.150	VV	11877	207120	15.43%	0.365%
126	9.162	9.150	9.180	VV	9936	172312	12.84%	0.303%
127	9.207	9.180	9.227	VV	11854	300512	22.39%	0.529%
128	9.269	9.227	9.335	VV	70282	1342095	100.00%	2.362%
129	9.355	9.335	9.378	VV	12477	273881	20.41%	0.482%
130	9.399	9.378	9.439	VV	10817	343600	25.60%	0.605%
131	9.467	9.439	9.479	VV	10573	223995	16.69%	0.394%
132	9.495	9.479	9.523	VV	12032	278929	20.78%	0.491%
133	9.552	9.523	9.586	VV	11500	386303	28.78%	0.680%
134	9.599	9.586	9.617	VV	10113	173895	12.96%	0.306%
135	9.645	9.617	9.677	VV	19682	486108	36.22%	0.856%
136	9.690	9.677	9.701	VV	11551	156191	11.64%	0.275%
137	9.728	9.701	9.751	VV	15222	383371	28.57%	0.675%
138	9.776	9.751	9.793	VV	15772	309661	23.07%	0.545%
139	9.806	9.793	9.815	VV	12094	155253	11.57%	0.273%
140	9.829	9.815	9.850	VV	14580	252344	18.80%	0.444%
141	9.873	9.850	9.888	VV	9962	212996	15.87%	0.375%

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142	9.898	9.888	9.920	VV	9240	172850	12.88%	0.304%
143	9.931	9.920	9.942	VV	9323	121487	9.05%	0.214%
144	9.960	9.942	9.970	VV	9968	161421	12.03%	0.284%
145	10.005	9.970	10.026	VV	14964	407062	30.33%	0.716%
146	10.049	10.026	10.095	VV	65878	1052520	78.42%	1.853%
147	10.117	10.095	10.123	VV	10726	171013	12.74%	0.301%
148	10.130	10.123	10.145	VV	10790	142120	10.59%	0.250%
149	10.153	10.145	10.198	VV	10252	284736	21.22%	0.501%
150	10.218	10.198	10.250	VV	10131	292986	21.83%	0.516%
151	10.279	10.250	10.303	VV	9602	288862	21.52%	0.508%
152	10.322	10.303	10.345	VV	9884	230904	17.20%	0.406%
153	10.351	10.345	10.357	VV	8903	65772	4.90%	0.116%
154	10.358	10.357	10.370	VV	8956	69944	5.21%	0.123%
155	10.396	10.370	10.409	VV	13438	255200	19.02%	0.449%
156	10.437	10.409	10.466	VV	31136	653099	48.66%	1.150%
157	10.490	10.466	10.509	VV	12849	286508	21.35%	0.504%
158	10.528	10.509	10.548	VV	14037	274860	20.48%	0.484%
159	10.582	10.548	10.608	VV	15374	403808	30.09%	0.711%
160	10.625	10.608	10.657	VV	9068	255580	19.04%	0.450%
161	10.684	10.657	10.705	VV	10955	280428	20.89%	0.494%
162	10.720	10.705	10.744	VV	10350	222364	16.57%	0.391%
163	10.788	10.744	10.827	VV	60734	1099785	81.95%	1.936%
164	10.860	10.827	10.890	VV	31898	690792	51.47%	1.216%
165	10.903	10.890	10.953	VV	11525	366610	27.32%	0.645%
166	10.981	10.953	11.012	VV	9422	319539	23.81%	0.562%
167	11.025	11.012	11.043	VV	9892	173264	12.91%	0.305%
168	11.066	11.043	11.088	VV	9886	250922	18.70%	0.442%
169	11.112	11.088	11.126	VV	12442	257249	19.17%	0.453%
170	11.129	11.126	11.148	VV	11839	138414	10.31%	0.244%
171	11.178	11.148	11.223	VV	15644	518161	38.61%	0.912%
172	11.243	11.223	11.278	VV	12157	326403	24.32%	0.575%
173	11.296	11.278	11.334	VV	11199	313802	23.38%	0.552%
174	11.348	11.334	11.377	VV	8964	215469	16.05%	0.379%
175	11.404	11.377	11.422	VV	8691	227220	16.93%	0.400%
176	11.441	11.422	11.461	VV	9464	208258	15.52%	0.367%
177	11.490	11.461	11.551	VV	49230	968715	72.18%	1.705%
178	11.582	11.551	11.625	VV	22605	582955	43.44%	1.026%
179	11.647	11.625	11.667	VV	8579	204413	15.23%	0.360%
180	11.690	11.667	11.707	VV	8285	190073	14.16%	0.335%
181	11.788	11.707	11.827	VV	10920	637124	47.47%	1.121%
182	11.845	11.827	11.862	VV	8575	167814	12.50%	0.295%
183	11.886	11.862	11.908	VV	11349	265859	19.81%	0.468%
184	11.926	11.908	11.954	VV	10289	243246	18.12%	0.428%
185	11.976	11.954	12.024	VV	10382	349314	26.03%	0.615%
186	12.046	12.024	12.068	VV	7820	196122	14.61%	0.345%
187	12.092	12.068	12.114	VV	7494	197205	14.69%	0.347%
188	12.160	12.114	12.194	VV	39547	793173	59.10%	1.396%
189	12.197	12.194	12.207	VV	8334	66252	4.94%	0.117%
190	12.224	12.207	12.252	VV	8977	222537	16.58%	0.392%
191	12.266	12.252	12.332	VV	7573	329877	24.58%	0.581%
192	12.353	12.332	12.385	VV	6719	197453	14.71%	0.348%
193	12.388	12.385	12.401	VV	6134	60514	4.51%	0.107%
194	12.435	12.401	12.486	VV	7875	350179	26.09%	0.616%

195	12.499	12.486	12.512	VV	6575	96952	7.22%	0.171%
196	12.519	12.512	12.523	VV	6537	43519	3.24%	0.077%
197	12.542	12.523	12.556	VV	7594	141349	10.53%	0.249%
198	12.571	12.556	12.606	VV	8508	209975	15.65%	0.370%
199	12.627	12.606	12.652	VV	7006	172269	12.84%	0.303%
200	12.656	12.652	12.670	VV	6008	61551	4.59%	0.108%
201	12.679	12.670	12.694	VV	5842	82605	6.15%	0.145%
202	12.725	12.694	12.747	VV	6788	193380	14.41%	0.340%
203	12.763	12.747	12.771	VV	5965	84000	6.26%	0.148%
204	12.800	12.771	12.850	VV	28907	568558	42.36%	1.001%
205	12.862	12.850	12.885	VV	6450	127867	9.53%	0.225%
206	12.890	12.885	12.913	VV	5737	92114	6.86%	0.162%
207	12.924	12.913	12.932	VV	5387	57285	4.27%	0.101%
208	12.939	12.932	12.975	VV	5521	135741	10.11%	0.239%
209	12.979	12.975	13.006	VV	4719	83927	6.25%	0.148%
210	13.019	13.006	13.034	VV	4715	78242	5.83%	0.138%
211	13.054	13.034	13.078	VV	5712	137749	10.26%	0.242%
212	13.091	13.078	13.110	VV	5386	98695	7.35%	0.174%
213	13.121	13.110	13.141	VV	4930	86267	6.43%	0.152%
214	13.162	13.141	13.178	VV	5184	104976	7.82%	0.185%
215	13.194	13.178	13.209	VV	5954	100940	7.52%	0.178%
216	13.237	13.209	13.270	VV	10476	270117	20.13%	0.475%
217	13.292	13.270	13.380	VV	11431	421412	31.40%	0.742%
218	13.412	13.380	13.445	VV	19141	354561	26.42%	0.624%
219	13.452	13.445	13.461	VV	4743	44173	3.29%	0.078%
220	13.477	13.461	13.501	VV	5038	110557	8.24%	0.195%
221	13.518	13.501	13.539	VV	4285	91428	6.81%	0.161%
222	13.542	13.539	13.566	VV	3893	60508	4.51%	0.107%
223	13.580	13.566	13.604	VV	3716	79328	5.91%	0.140%
224	13.642	13.604	13.671	VV	4501	160042	11.92%	0.282%
225	13.682	13.671	13.709	VV	4050	86612	6.45%	0.152%
226	13.723	13.709	13.745	VV	3606	71687	5.34%	0.126%
227	13.764	13.745	13.776	VV	3443	62707	4.67%	0.110%
228	13.796	13.776	13.814	VV	3720	78988	5.89%	0.139%
229	13.836	13.814	13.880	VV	3985	134603	10.03%	0.237%
230	13.885	13.880	13.890	VV	2921	16068	1.20%	0.028%
231	13.905	13.890	13.948	VV	3169	100818	7.51%	0.177%
232	13.968	13.948	13.972	VV	2798	38830	2.89%	0.068%
233	13.999	13.972	14.044	VV	11418	232593	17.33%	0.409%
234	14.055	14.044	14.071	VV	3046	48678	3.63%	0.086%
235	14.082	14.071	14.104	VV	2907	54671	4.07%	0.096%
236	14.108	14.104	14.127	VV	2614	33591	2.50%	0.059%
237	14.138	14.127	14.170	VV	2543	61052	4.55%	0.107%
238	14.174	14.170	14.195	VV	2189	31442	2.34%	0.055%
239	14.230	14.195	14.280	VV	2993	128802	9.60%	0.227%
240	14.284	14.280	14.288	VV	2252	10411	0.78%	0.018%
241	14.296	14.288	14.324	VV	2302	45801	3.41%	0.081%
242	14.328	14.324	14.345	VV	2120	26482	1.97%	0.047%
243	14.362	14.345	14.385	VV	2307	50590	3.77%	0.089%
244	14.388	14.385	14.403	VV	2232	23914	1.78%	0.042%
245	14.413	14.403	14.458	VV	2260	65056	4.85%	0.115%
246	14.471	14.458	14.481	VV	1787	24175	1.80%	0.043%

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247	14.500	14.481	14.531	VV	1792	50146	3.74%	0.088%
248	14.563	14.531	14.616	VV	5713	140952	10.50%	0.248%
249	14.626	14.616	14.662	VV	1829	47040	3.50%	0.083%
250	14.668	14.662	14.671	VV	1612	8339	0.62%	0.015%
251	14.679	14.671	14.682	VV	1709	11075	0.83%	0.019%
252	14.687	14.682	14.710	VV	1715	25354	1.89%	0.045%
253	14.715	14.710	14.748	VV	1549	33258	2.48%	0.059%
254	14.771	14.748	14.790	VV	1627	38023	2.83%	0.067%
255	14.794	14.790	14.814	VV	1471	21643	1.61%	0.038%
256	14.820	14.814	14.867	VV	1446	42946	3.20%	0.076%
257	14.900	14.867	15.081	VV	21098	545049	40.61%	0.959%
258	15.108	15.081	15.195	VV	2598	104430	7.78%	0.184%
259	15.200	15.195	15.225	VV	1045	17647	1.31%	0.031%
260	15.231	15.225	15.245	VV	964	10768	0.80%	0.019%
261	15.250	15.245	15.275	VV	936	14909	1.11%	0.026%
262	15.294	15.275	15.324	VV	938	25083	1.87%	0.044%
263	15.331	15.324	15.334	VV	832	4580	0.34%	0.008%
264	15.339	15.334	15.350	VV	858	7966	0.59%	0.014%
265	15.354	15.350	15.379	VV	894	13333	0.99%	0.023%
266	15.391	15.379	15.396	VV	749	7011	0.52%	0.012%
267	15.408	15.396	15.431	VV	731	14382	1.07%	0.025%
268	15.443	15.431	15.465	VV	684	13155	0.98%	0.023%
269	15.487	15.465	15.508	VV	707	16277	1.21%	0.029%
270	15.513	15.508	15.524	VV	731	6583	0.49%	0.012%
271	15.527	15.524	15.566	VV	718	15036	1.12%	0.026%
272	15.577	15.566	15.607	VV	578	11966	0.89%	0.021%
273	15.641	15.607	15.728	VV	890	47040	3.50%	0.083%
274	15.735	15.728	15.748	VV	490	5439	0.41%	0.010%
275	15.754	15.748	15.831	VV	427	19048	1.42%	0.034%
276	15.844	15.831	15.858	VV	426	5872	0.44%	0.010%
277	15.868	15.858	15.881	VV	371	4597	0.34%	0.008%
278	15.888	15.881	15.895	VV	360	2987	0.22%	0.005%
279	15.906	15.895	15.933	VV	389	7432	0.55%	0.013%
280	15.937	15.933	15.958	VV	326	4572	0.34%	0.008%
281	16.025	15.958	16.039	VV	343	12656	0.94%	0.022%
282	16.040	16.039	16.047	VV	282	1199	0.09%	0.002%
283	16.061	16.047	16.086	VV	288	5570	0.41%	0.010%
284	16.092	16.086	16.120	VV	377	4716	0.35%	0.008%
285	16.146	16.120	16.159	VV	397	6288	0.47%	0.011%
286	16.166	16.159	16.193	VV	336	5756	0.43%	0.010%
287	16.197	16.193	16.235	VV	223	5491	0.41%	0.010%
288	16.241	16.235	16.255	VV	217	2269	0.17%	0.004%
289	16.269	16.255	16.314	VV	291	6997	0.52%	0.012%
290	16.320	16.314	16.347	VV	196	2765	0.21%	0.005%
291	16.358	16.347	16.376	VV	158	1957	0.15%	0.003%
292	16.380	16.376	16.395	VV	165	1299	0.10%	0.002%
293	16.399	16.395	16.421	VV	136	1505	0.11%	0.003%
294	16.425	16.421	16.432	VV	113	663	0.05%	0.001%
295	16.437	16.432	16.446	VV	167	969	0.07%	0.002%
296	16.455	16.446	16.461	VV	148	1224	0.09%	0.002%
297	16.465	16.461	16.481	VV	178	1540	0.11%	0.003%
298	16.485	16.481	16.509	VV	132	1512	0.11%	0.003%
299	16.510	16.509	16.537	VV	137	966	0.07%	0.002%

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300	16.551	16.537	16.562	VV	138	1252	0.09%	0.002%
301	16.565	16.562	16.593	VV	128	1676	0.12%	0.003%
302	16.598	16.593	16.604	VV	119	485	0.04%	0.001%
303	16.615	16.604	16.618	VV	107	634	0.05%	0.001%
304	16.652	16.618	16.658	VV	325	5160	0.38%	0.009%
305	16.660	16.658	16.666	VV	286	1260	0.09%	0.002%
306	16.667	16.666	16.729	VV	293	7356	0.55%	0.013%
307	16.736	16.729	16.761	VV	181	3099	0.23%	0.005%
308	16.792	16.761	16.823	VV	285	6772	0.50%	0.012%
309	16.835	16.823	16.854	VV	192	2711	0.20%	0.005%
310	16.856	16.854	16.871	VV	185	1346	0.10%	0.002%
311	16.873	16.871	16.898	VV	194	1853	0.14%	0.003%
312	16.903	16.898	16.910	PV	115	667	0.05%	0.001%
313	16.916	16.910	16.926	VV	127	983	0.07%	0.002%
314	16.931	16.926	16.937	VV	123	431	0.03%	0.001%
315	16.958	16.937	16.971	VV	137	1851	0.14%	0.003%
316	16.975	16.971	16.989	VV	102	669	0.05%	0.001%
317	16.996	16.989	17.001	VV	102	406	0.03%	0.001%
318	17.022	17.001	17.057	VV	139	1568	0.12%	0.003%
319	17.066	17.057	17.092	VV	70	884	0.07%	0.002%
320	17.119	17.092	17.142	VV	287	6186	0.46%	0.011%
321	17.145	17.142	17.180	VV	241	2220	0.17%	0.004%

Sum of corrected areas: 56812676

FF081624.M Wed Sep 11 02:07:19 2024

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: CHEM02

ProjectID: NJ Waste Water PT

Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG No.: P3845

Calibration Sequence : FF081624		Test : Diesel Range Organics	
Concentration (PPM)	**Area Count**	**Reference Factor**	**File ID**
1000	127092762	127093	FF014428.D
500	61256107	122512	FF014429.D
200	24948959	124745	FF014430.D
100	12726763	127268	FF014431.D
50	7061027	141221	FF014432.D

AVG RF : 128568 **% RSD : 5.706** **AVG RT : 14.906**

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014428.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 07:46
Operator : YP\AJ
Sample : 100 TRPH STD
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
100 TRPH STD

Integration File: autoint1.e
Quant Time: Aug 16 11:06:08 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:03:33 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	14.911	11373299	101.228 ug/ml
	Target Compounds			
1)	N-OCTANE	1.950	11980300	102.302 ug/ml
2)	N-DECANE	4.461	12287781	102.433 ug/ml
3)	N-DODECANE	6.629	12497932	102.602 ug/ml
4)	N-TETRADECANE	8.456	12636582	102.456 ug/ml
5)	N-HEXADECANE	10.061	12722689	102.382 ug/ml
6)	N-OCTADECANE	11.504	12989891	101.927 ug/ml
7)	N-EICOSANE	12.815	13158989	101.583 ug/ml
8)	N-DOCOSANE	14.013	12783233	101.396 ug/ml
10)	N-TETRACOSANE	15.117	12777903	101.274 ug/ml
11)	N-HEXACOSANE	16.137	12712692	101.266 ug/ml
12)	N-OCTACOSANE	17.087	12525070	101.099 ug/ml
13)	N-TRIACONTANE	17.974	12555417	100.972 ug/ml
14)	N-DOTRIACONTANE	18.804	12300166	101.140 ug/ml
15)	N-TETRATRIACONTANE	19.587	11962001	103.749 ug/ml
16)	N-HEXATRIACONTANE	20.325	11187417	107.776 ug/ml
17)	N-OCTATRIACONTANE	21.044	10557200	112.067 ug/ml
18)	N-TETRACONTANE	21.912	9709479	116.046 ug/ml

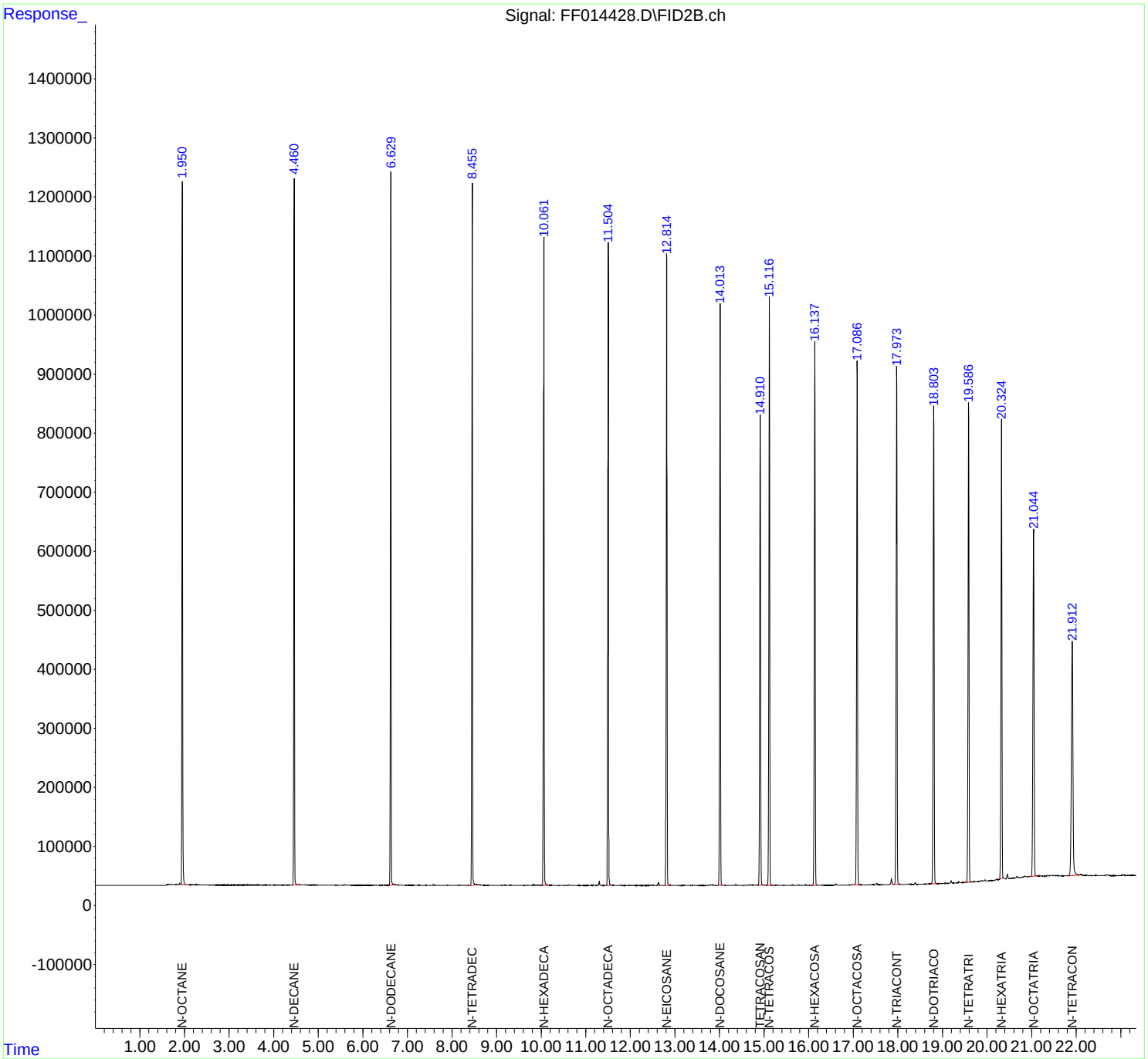
(f)=RT Delta > 1/2 Window (m)=manual int.

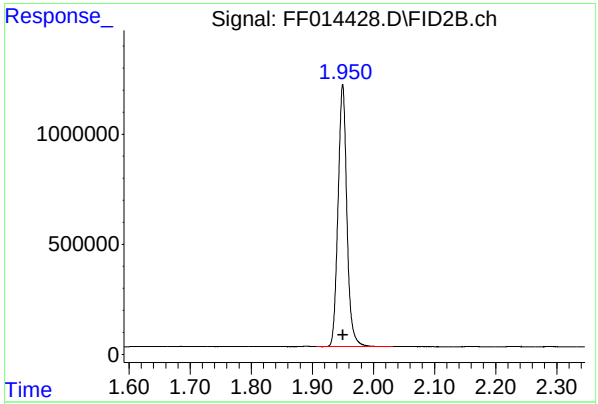
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014428.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 07:46
Operator : YP\AJ
Sample : 100 TRPH STD
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
100 TRPH STD

Integration File: autoint1.e
Quant Time: Aug 16 11:06:08 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:03:33 2024
Response via : Initial Calibration
Integrator: ChemStation

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

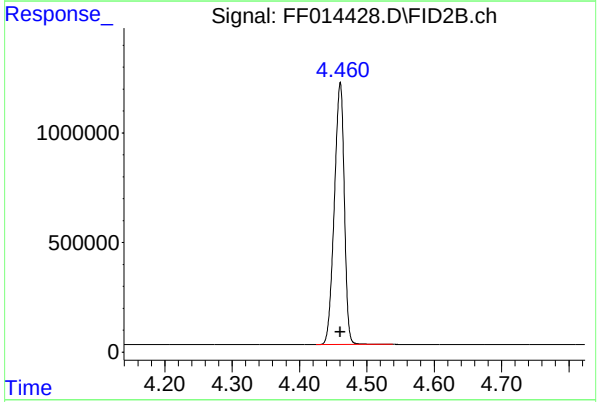




#1 N-OCTANE

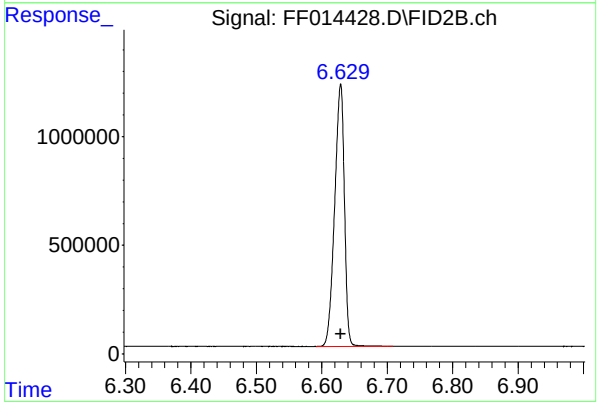
R.T.: 1.950 min
Delta R.T.: 0.000 min
Response: 11980300
Conc: 102.30 ug/ml

Instrument :
FID_F
ClientSampleId :
100 TRPH STD



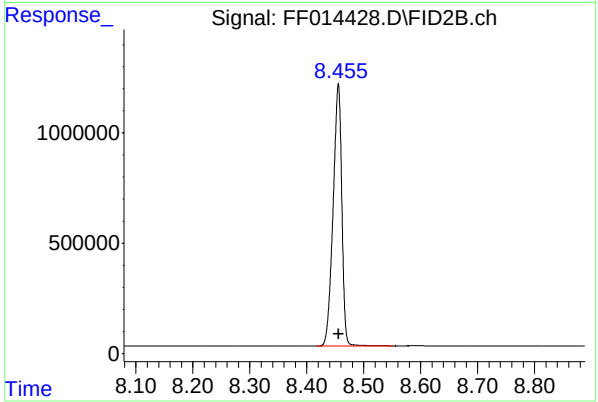
#2 N-DECANE

R.T.: 4.461 min
Delta R.T.: 0.000 min
Response: 12287781
Conc: 102.43 ug/ml



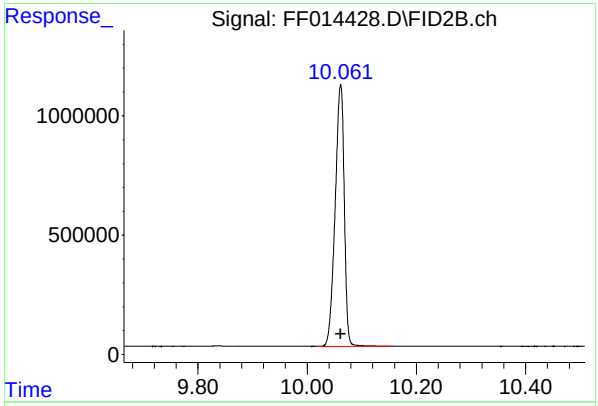
#3 N-DODECANE

R.T.: 6.629 min
Delta R.T.: 0.000 min
Response: 12497932
Conc: 102.60 ug/ml



#4 N-TETRADECANE

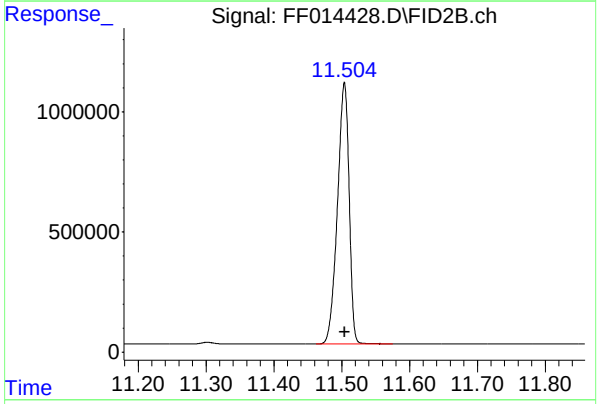
R.T.: 8.456 min
Delta R.T.: 0.000 min
Response: 12636582
Conc: 102.46 ug/ml



#5 N-HEXADECANE

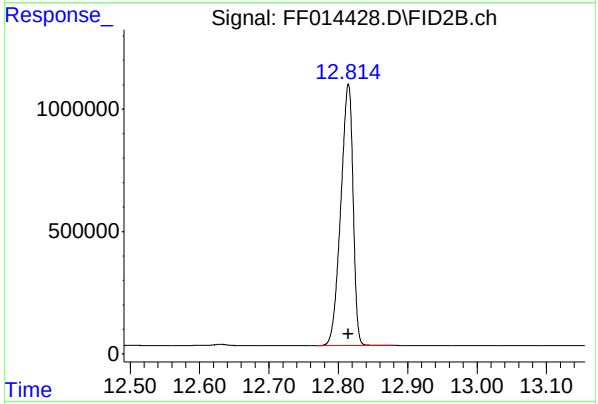
R.T.: 10.061 min
Delta R.T.: 0.000 min
Response: 12722689
Conc: 102.38 ug/ml

Instrument :
FID_F
ClientSampleId :
100 TRPH STD



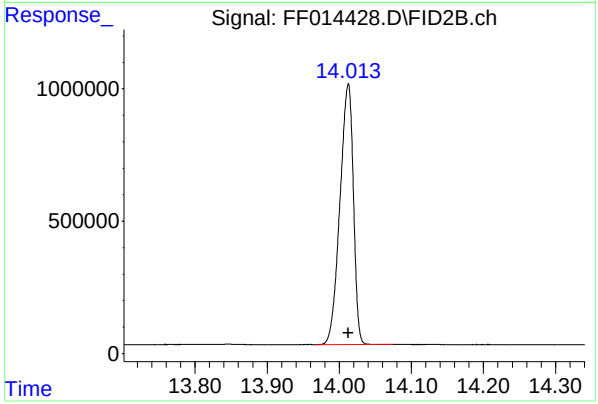
#6 N-OCTADECANE

R.T.: 11.504 min
Delta R.T.: 0.000 min
Response: 12989891
Conc: 101.93 ug/ml



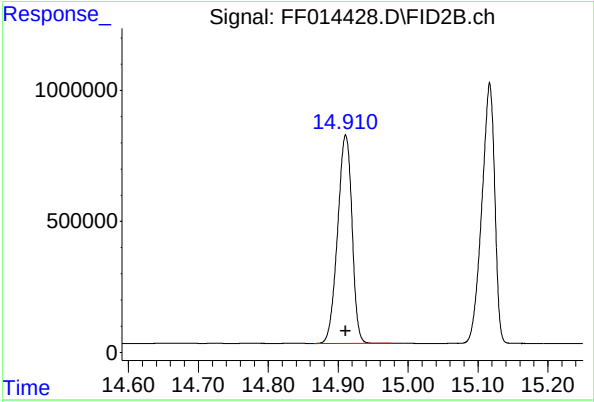
#7 N-EICOSANE

R.T.: 12.815 min
Delta R.T.: 0.000 min
Response: 13158989
Conc: 101.58 ug/ml



#8 N-DOCOSANE

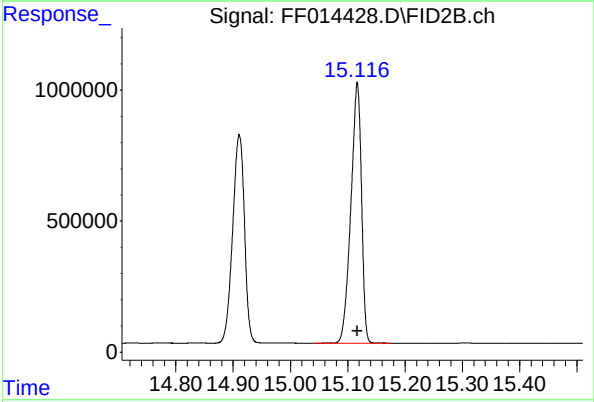
R.T.: 14.013 min
Delta R.T.: 0.000 min
Response: 12783233
Conc: 101.40 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

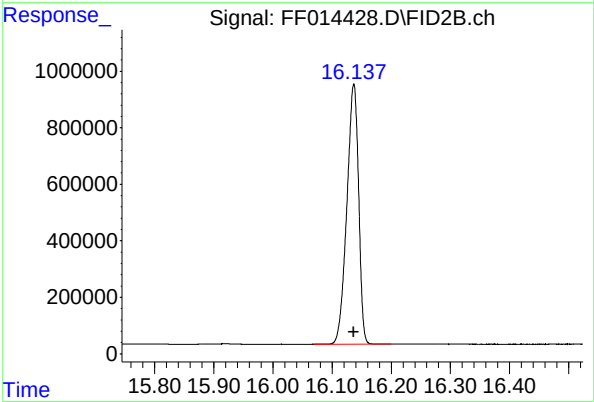
R.T.: 14.911 min
Delta R.T.: 0.000 min
Response: 11373299
Conc: 101.23 ug/ml

Instrument :
FID_F
ClientSampleId :
100 TRPH STD



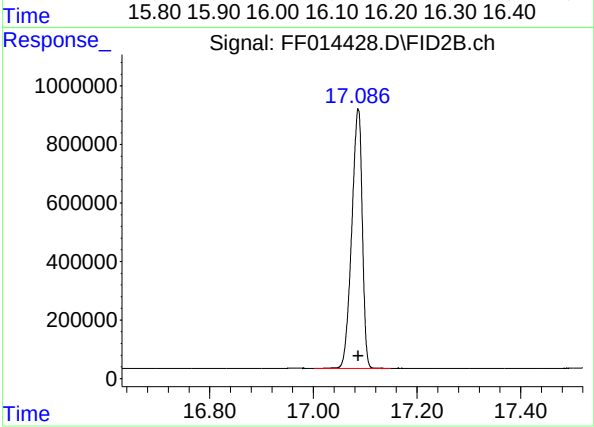
#10 N-TETRACOSANE

R.T.: 15.117 min
Delta R.T.: 0.000 min
Response: 12777903
Conc: 101.27 ug/ml



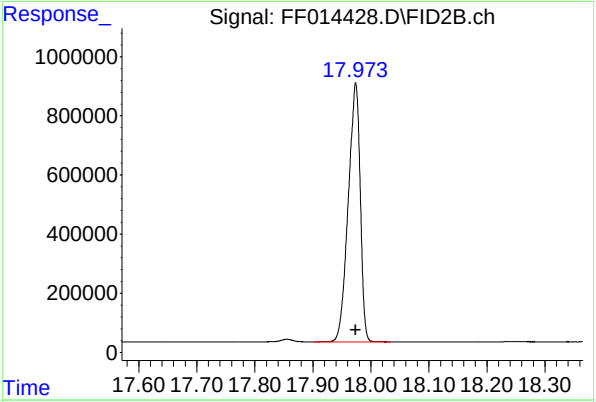
#11 N-HEXACOSANE

R.T.: 16.137 min
Delta R.T.: 0.000 min
Response: 12712692
Conc: 101.27 ug/ml



#12 N-OCTACOSANE

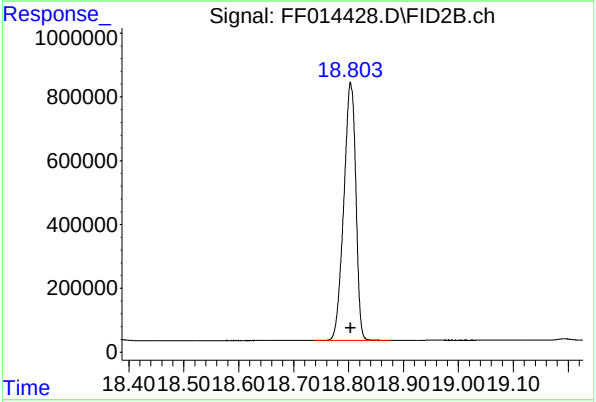
R.T.: 17.087 min
Delta R.T.: 0.000 min
Response: 12525070
Conc: 101.10 ug/ml



#13 N-TRIACONTANE

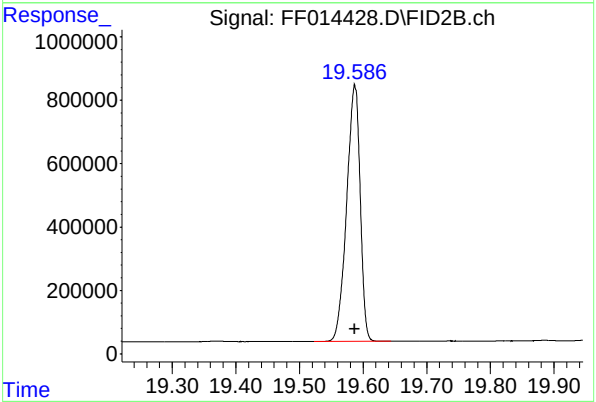
R.T.: 17.974 min
Delta R.T.: 0.000 min
Response: 12555417
Conc: 100.97 ug/ml

Instrument :
FID_F
ClientSampleId :
100 TRPH STD



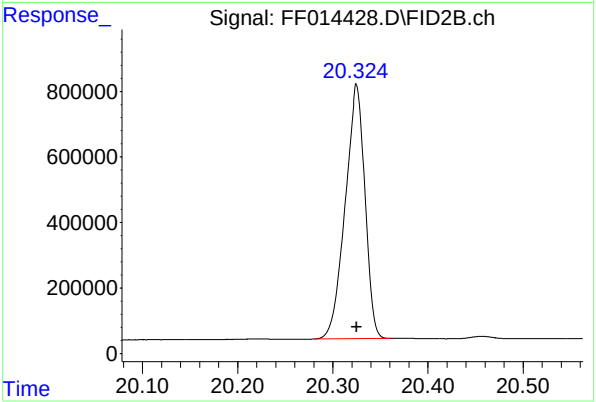
#14 N-DOTRIACONTANE

R.T.: 18.804 min
Delta R.T.: 0.000 min
Response: 12300166
Conc: 101.14 ug/ml



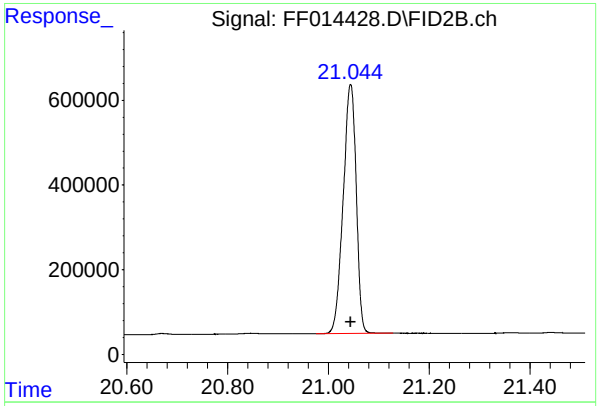
#15 N-TETRATRIACONTANE

R.T.: 19.587 min
Delta R.T.: 0.000 min
Response: 11962001
Conc: 103.75 ug/ml



#16 N-HEXATRIACONTANE

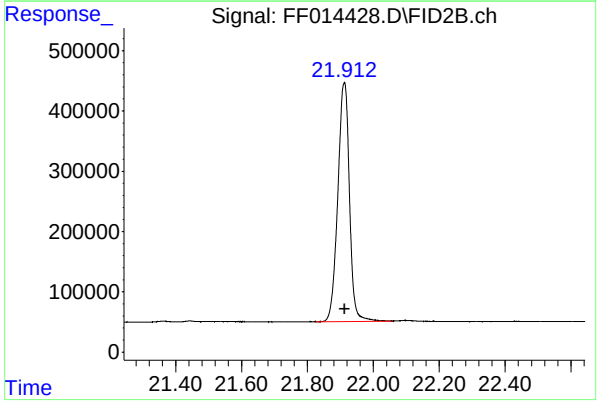
R.T.: 20.325 min
Delta R.T.: 0.000 min
Response: 11187417
Conc: 107.78 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.044 min
Delta R.T.: 0.000 min
Response: 10557200
Conc: 112.07 ug/ml

Instrument :
FID_F
ClientSampleId :
100 TRPH STD



#18 N-TETRACONTANE

R.T.: 21.912 min
Delta R.T.: 0.000 min
Response: 9709479
Conc: 116.05 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014428.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 07:46
Sample : 100 TRPH STD
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.950	1.906	2.032	BB	1189675	11980300	91.04%	5.478%
2	4.461	4.425	4.539	BB	1195852	12287781	93.38%	5.618%
3	6.629	6.591	6.709	BB	1207866	12497932	94.98%	5.714%
4	8.456	8.416	8.551	BB	1188328	12636582	96.03%	5.778%
5	10.061	10.016	10.157	BB	1096832	12722689	96.68%	5.817%
6	11.504	11.462	11.575	BB	1089185	12989891	98.71%	5.939%
7	12.815	12.768	12.879	BB	1069349	13158989	100.00%	6.016%
8	14.013	13.968	14.075	BB	985753	12783233	97.14%	5.845%
9	14.911	14.865	14.975	BB	794858	11373299	86.43%	5.200%
10	15.117	15.041	15.175	BB	994731	12777903	97.10%	5.842%
11	16.137	16.070	16.200	BB	921555	12712692	96.61%	5.812%
12	17.087	17.001	17.150	BB	882742	12525070	95.18%	5.727%
13	17.974	17.902	18.035	BB	877143	12555417	95.41%	5.740%
14	18.804	18.737	18.877	BB	808064	12300166	93.47%	5.624%
15	19.587	19.523	19.644	BB	809490	11962001	90.90%	5.469%
16	20.325	20.280	20.361	BV	774122	11187417	85.02%	5.115%
17	21.044	20.975	21.128	BB	588134	10557200	80.23%	4.827%
18	21.912	21.826	22.060	BB	396802	9709479	73.79%	4.439%

Sum of corrected areas: 218718043

FF081624.M Fri Aug 16 16:08:26 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014429.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 08:16
Operator : YP\AJ
Sample : 50 TRPH STD
Misc :
ALS Vial : 71 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
50 TRPH STD

Integration File: autoint1.e
Quant Time: Aug 16 11:03:50 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:03:33 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	14.906	5548714	50.000 ug/ml
	Target Compounds			
1)	N-OCTANE	1.950	5720619	50.000 ug/ml
2)	N-DECANE	4.458	5852042	50.000 ug/ml
3)	N-DODECANE	6.625	5931994	50.000 ug/ml
4)	N-TETRADECANE	8.451	6015381	50.000 ug/ml
5)	N-HEXADECANE	10.058	6065324	50.000 ug/ml
6)	N-OCTADECANE	11.499	6249352	50.000 ug/ml
7)	N-EICOSANE	12.810	6374459	50.000 ug/ml
8)	N-DOCOSANE	14.007	6215558	50.000 ug/ml
10)	N-TETRACOSANE	15.112	6228213	50.000 ug/ml
11)	N-HEXACOSANE	16.132	6197452	50.000 ug/ml
12)	N-OCTACOSANE	17.082	6126332	50.000 ug/ml
13)	N-TRIACONTANE	17.968	6156859	50.000 ug/ml
14)	N-DOTRIACONTANE	18.800	6011429	50.000 ug/ml
15)	N-TETRATRIACONTANE	19.582	5548777	50.000 ug/ml
16)	N-HEXATRIACONTANE	20.321	4786498	50.000 ug/ml
17)	N-OCTATRIACONTANE	21.038	4141874	50.000 ug/ml
18)	N-TETRACONTANE	21.909	3512192	50.000 ug/ml

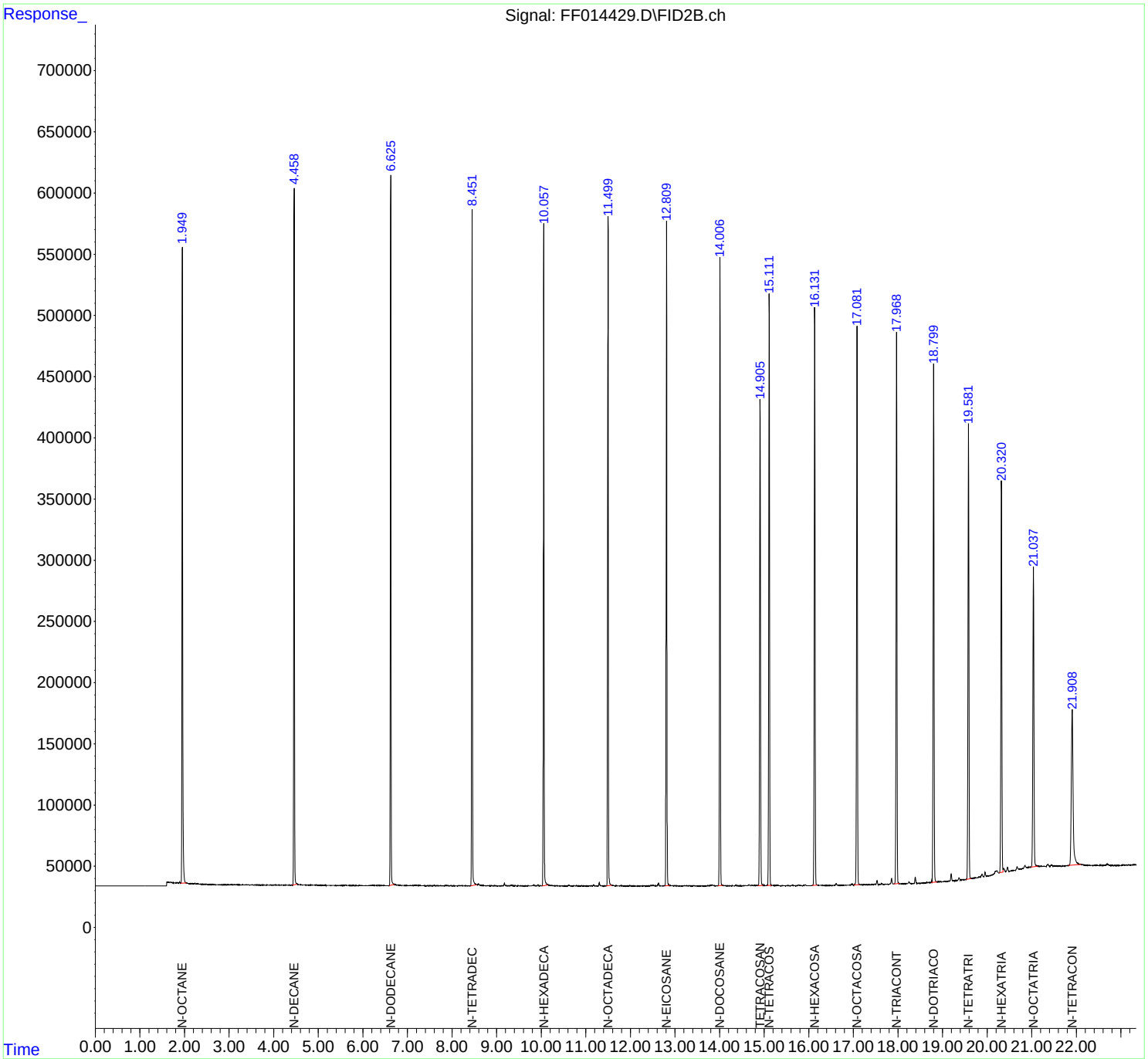
(f)=RT Delta > 1/2 Window (m)=manual int.

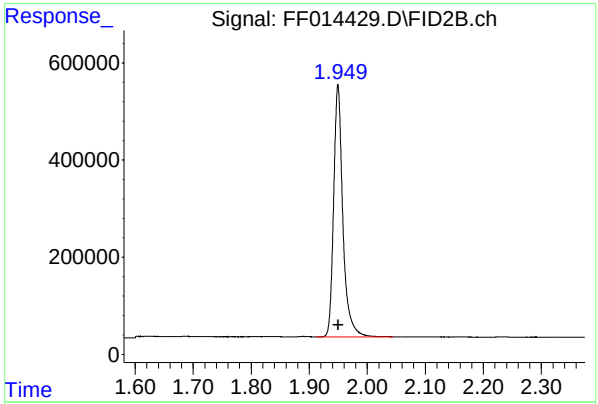
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014429.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 08:16
Operator : YP\AJ
Sample : 50 TRPH STD
Misc :
ALS Vial : 71 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
50 TRPH STD

Integration File: autoint1.e
Quant Time: Aug 16 11:03:50 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:03:33 2024
Response via : Initial Calibration
Integrator: ChemStation

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

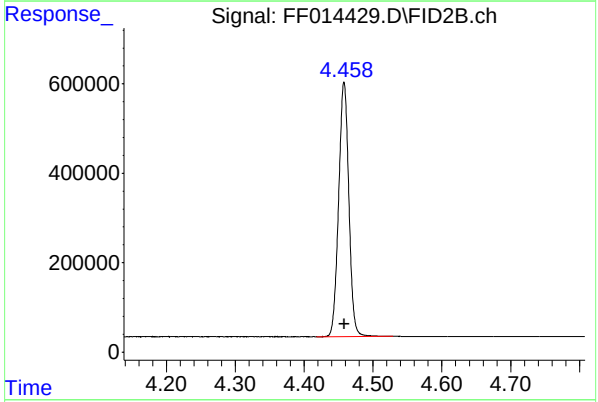




#1 N-OCTANE

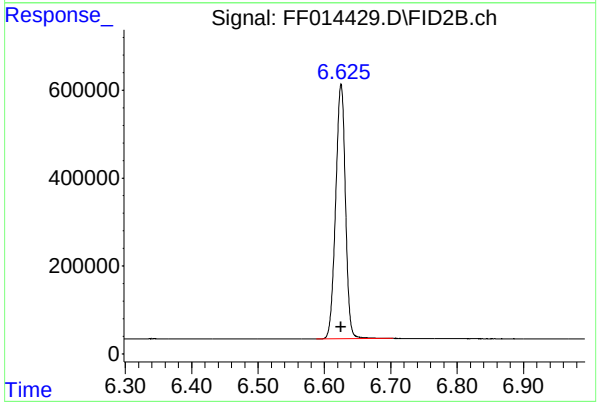
R.T.: 1.950 min
Delta R.T.: 0.000 min
Response: 5720619
Conc: 50.00 ug/ml

Instrument :
FID_F
ClientSampleId :
50 TRPH STD



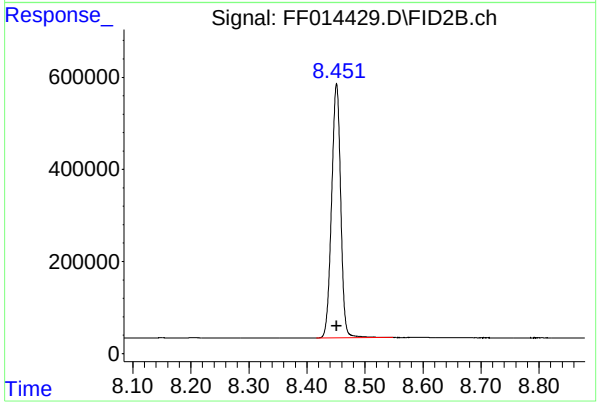
#2 N-DECANE

R.T.: 4.458 min
Delta R.T.: 0.000 min
Response: 5852042
Conc: 50.00 ug/ml



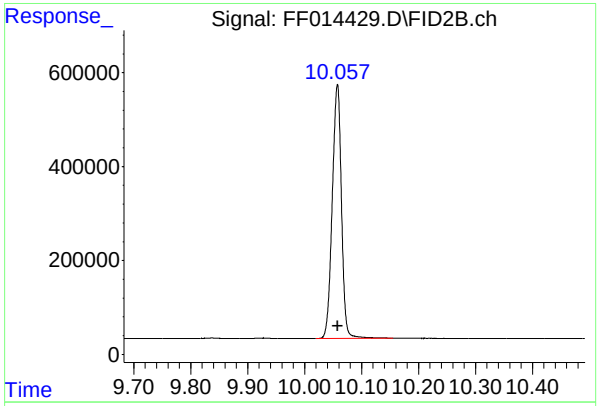
#3 N-DODECANE

R.T.: 6.625 min
Delta R.T.: 0.000 min
Response: 5931994
Conc: 50.00 ug/ml



#4 N-TETRADECANE

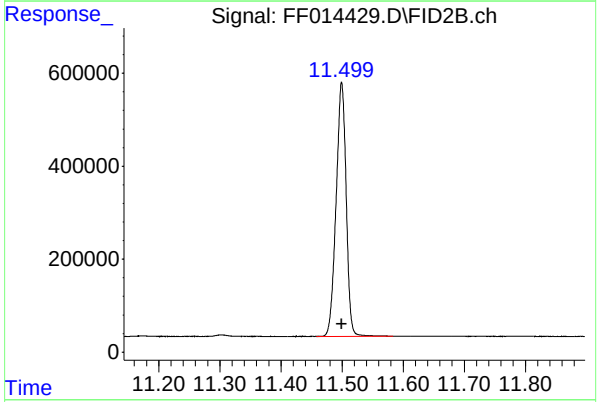
R.T.: 8.451 min
Delta R.T.: 0.000 min
Response: 6015381
Conc: 50.00 ug/ml



#5 N-HEXADECANE

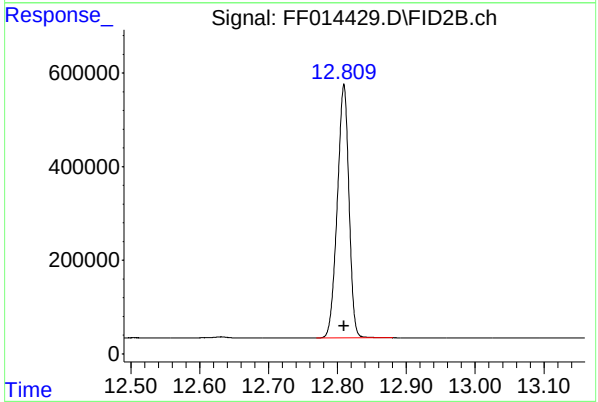
R.T.: 10.058 min
Delta R.T.: 0.000 min
Response: 6065324
Conc: 50.00 ug/ml

Instrument :
FID_F
ClientSampleId :
50 TRPH STD



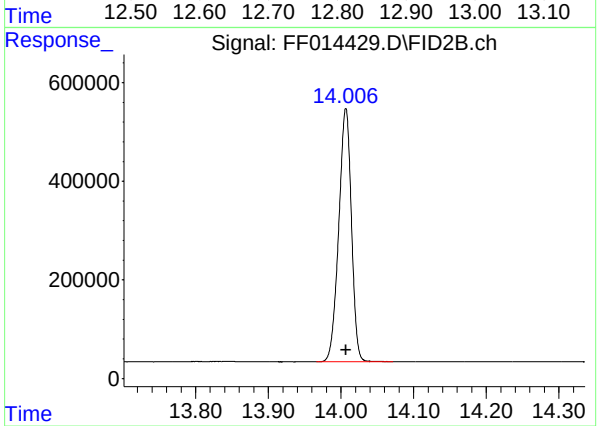
#6 N-OCTADECANE

R.T.: 11.499 min
Delta R.T.: 0.000 min
Response: 6249352
Conc: 50.00 ug/ml



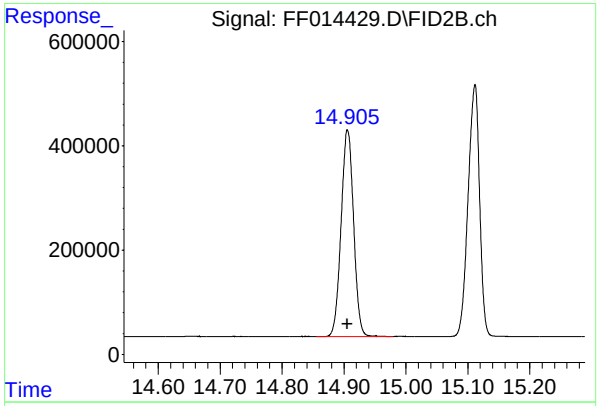
#7 N-EICOSANE

R.T.: 12.810 min
Delta R.T.: 0.000 min
Response: 6374459
Conc: 50.00 ug/ml



#8 N-DOCOSANE

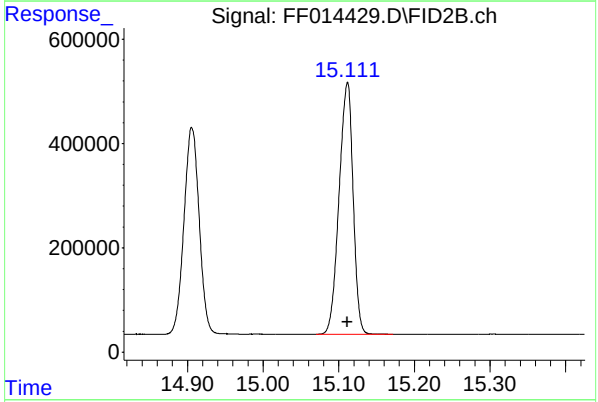
R.T.: 14.007 min
Delta R.T.: 0.000 min
Response: 6215558
Conc: 50.00 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

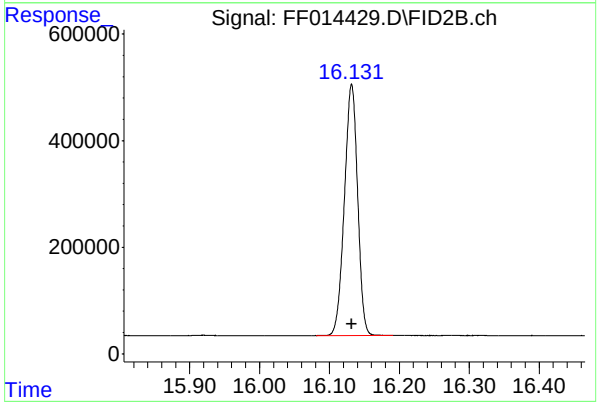
R.T.: 14.906 min
Delta R.T.: 0.000 min
Response: 5548714
Conc: 50.00 ug/ml

Instrument :
FID_F
ClientSampleId :
50 TRPH STD



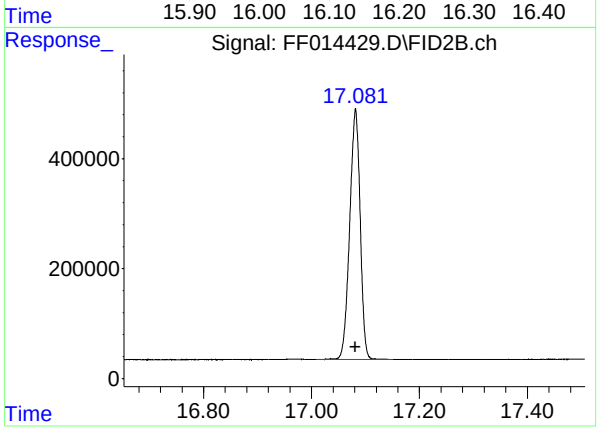
#10 N-TETRACOSANE

R.T.: 15.112 min
Delta R.T.: 0.000 min
Response: 6228213
Conc: 50.00 ug/ml



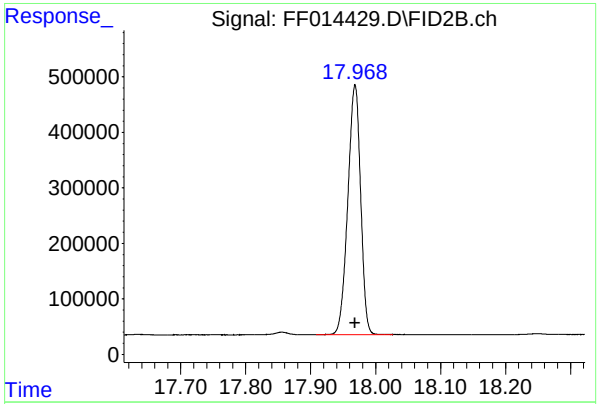
#11 N-HEXACOSANE

R.T.: 16.132 min
Delta R.T.: 0.000 min
Response: 6197452
Conc: 50.00 ug/ml



#12 N-OCTACOSANE

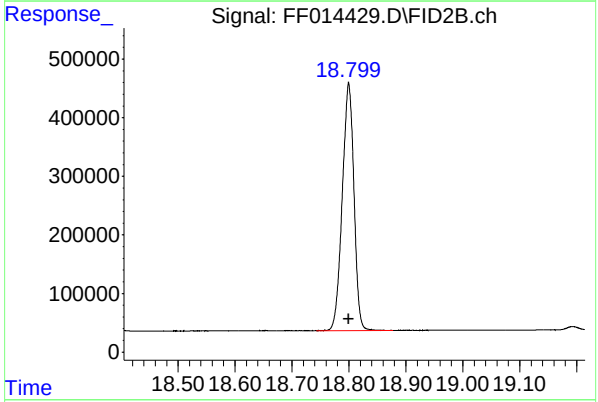
R.T.: 17.082 min
Delta R.T.: 0.000 min
Response: 6126332
Conc: 50.00 ug/ml



#13 N-TRIACONTANE

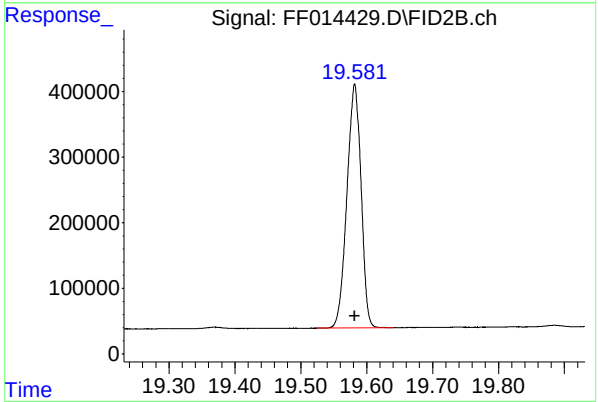
R.T.: 17.968 min
Delta R.T.: 0.000 min
Response: 6156859
Conc: 50.00 ug/ml

Instrument :
FID_F
ClientSampleId :
50 TRPH STD



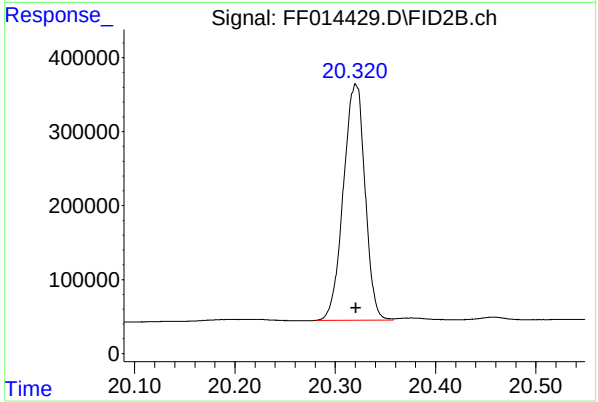
#14 N-DOTRIACONTANE

R.T.: 18.800 min
Delta R.T.: 0.000 min
Response: 6011429
Conc: 50.00 ug/ml



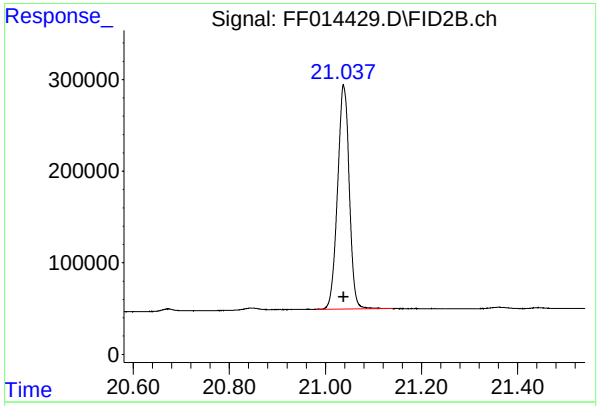
#15 N-TETRATRIACONTANE

R.T.: 19.582 min
Delta R.T.: 0.000 min
Response: 5548777
Conc: 50.00 ug/ml



#16 N-HEXATRIACONTANE

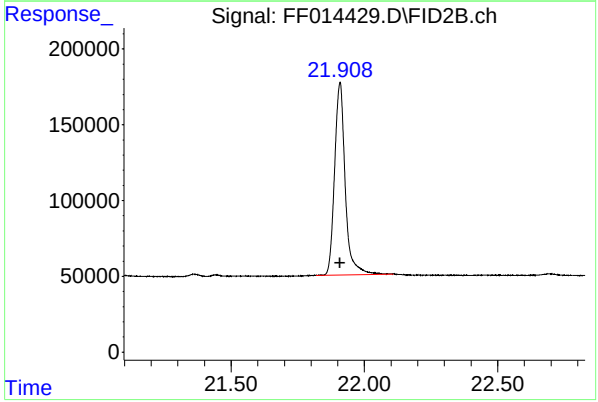
R.T.: 20.321 min
Delta R.T.: 0.000 min
Response: 4786498
Conc: 50.00 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.038 min
Delta R.T.: 0.000 min
Response: 4141874
Conc: 50.00 ug/ml

Instrument :
FID_F
ClientSampleId :
50 TRPH STD



#18 N-TETRACONTANE

R.T.: 21.909 min
Delta R.T.: 0.000 min
Response: 3512192
Conc: 50.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014429.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 08:16
Sample : 50 TRPH STD
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.950	1.912	2.044	BB	519624	5720619	89.74%	5.571%
2	4.458	4.418	4.529	BB	569147	5852042	91.80%	5.699%
3	6.625	6.588	6.703	BB	579349	5931994	93.06%	5.777%
4	8.451	8.416	8.548	BB	552078	6015381	94.37%	5.858%
5	10.058	10.020	10.155	BB	540731	6065324	95.15%	5.907%
6	11.499	11.458	11.583	BB	546881	6249352	98.04%	6.086%
7	12.810	12.769	12.881	BB	542054	6374459	100.00%	6.208%
8	14.007	13.966	14.072	BB	513491	6215558	97.51%	6.053%
9	14.906	14.855	14.979	BB	395793	5548714	87.05%	5.404%
10	15.112	15.070	15.172	BB	483457	6228213	97.71%	6.065%
11	16.132	16.081	16.191	BB	472073	6197452	97.22%	6.036%
12	17.082	17.008	17.151	BB	456543	6126332	96.11%	5.966%
13	17.968	17.908	18.027	BB	450608	6156859	96.59%	5.996%
14	18.800	18.743	18.878	BB	423059	6011429	94.30%	5.854%
15	19.582	19.523	19.640	BB	372118	5548777	87.05%	5.404%
16	20.321	20.281	20.358	BV	318279	4786498	75.09%	4.661%
17	21.038	20.980	21.140	BB	244917	4141874	64.98%	4.034%
18	21.909	21.819	22.107	BB	127261	3512192	55.10%	3.420%

Sum of corrected areas: 102683069

FF081624.M Fri Aug 16 16:08:55 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014430.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 08:47
Operator : YP\AJ
Sample : 20 TRPH STD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
20 TRPH STD

Integration File: autoint1.e
Quant Time: Aug 16 11:07:48 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:03:33 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	14.904	2278048	20.183 ug/ml
	Target Compounds			
1)	N-OCTANE	1.948	2371122	20.164 ug/ml
2)	N-DECANE	4.455	2398056	19.994 ug/ml
3)	N-DODECANE	6.623	2422563	19.925 ug/ml
4)	N-TETRADECANE	8.449	2443459	19.874 ug/ml
5)	N-HEXADECANE	10.055	2443584	19.775 ug/ml
6)	N-OCTADECANE	11.498	2539961	19.953 ug/ml
7)	N-EICOSANE	12.807	2607267	20.085 ug/ml
8)	N-DOCOSANE	14.005	2540898	20.103 ug/ml
10)	N-TETRACOSANE	15.108	2543607	20.106 ug/ml
11)	N-HEXACOSANE	16.129	2525115	20.076 ug/ml
12)	N-OCTACOSANE	17.079	2484449	20.036 ug/ml
13)	N-TRIACONTANE	17.965	2504818	20.096 ug/ml
14)	N-DOTRIACONTANE	18.797	2499676	20.366 ug/ml
15)	N-TETRATRIACONTANE	19.578	2413541	20.613 ug/ml
16)	N-HEXATRIACONTANE	20.317	2229409	20.961 ug/ml
17)	N-OCTATRIACONTANE	21.037	2103640	21.496 ug/ml
18)	N-TETRACONTANE	21.905	1827854	21.194 ug/ml

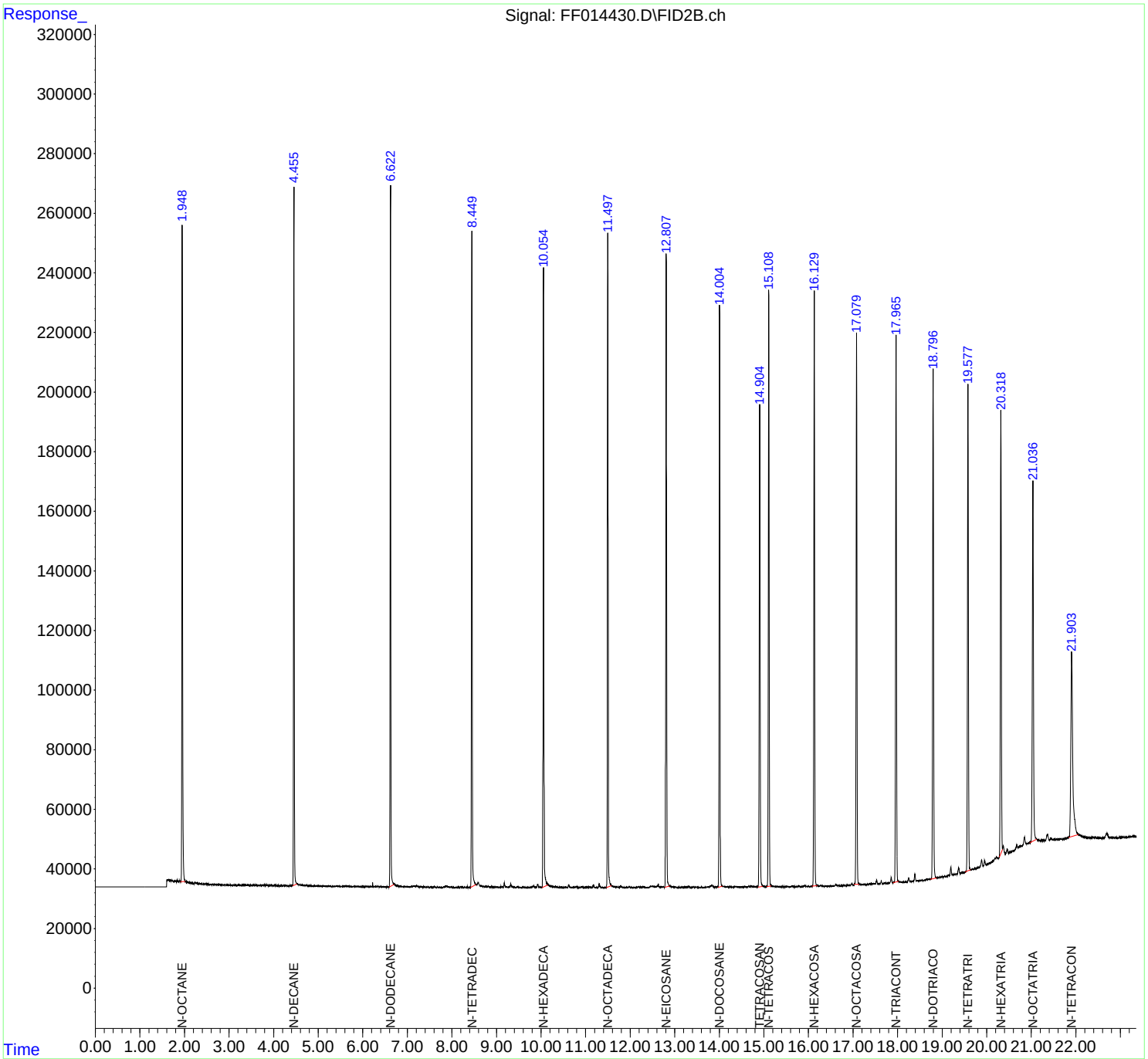
(f)=RT Delta > 1/2 Window (m)=manual int.

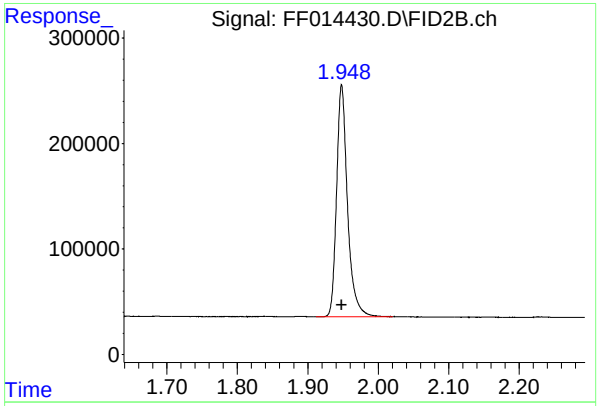
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014430.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 08:47
Operator : YP\AJ
Sample : 20 TRPH STD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
20 TRPH STD

Integration File: autoint1.e
Quant Time: Aug 16 11:07:48 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:03:33 2024
Response via : Initial Calibration
Integrator: ChemStation

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

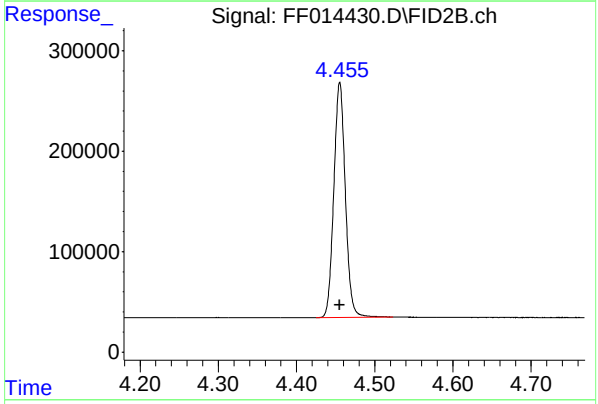




#1 N-OCTANE

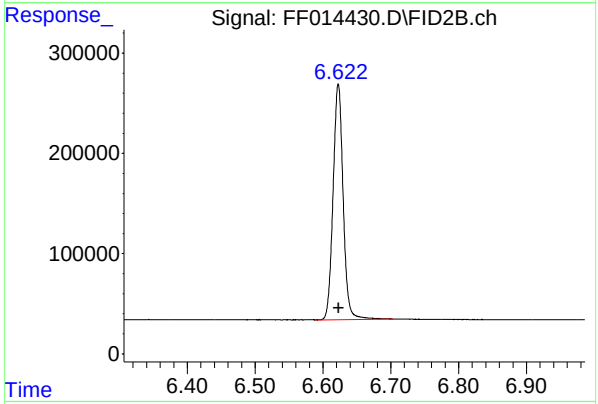
R.T.: 1.948 min
Delta R.T.: 0.000 min
Response: 2371122
Conc: 20.16 ug/ml

Instrument :
FID_F
ClientSampleId :
20 TRPH STD



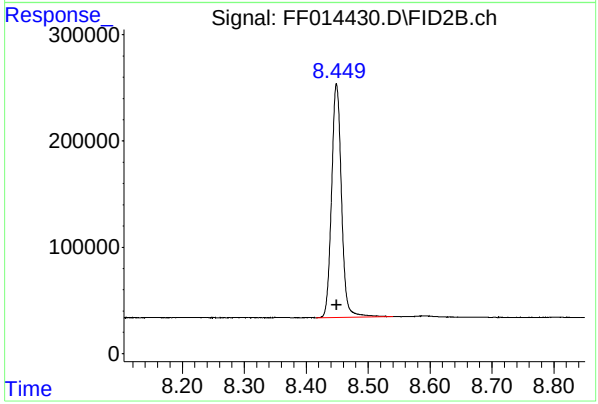
#2 N-DECANE

R.T.: 4.455 min
Delta R.T.: 0.000 min
Response: 2398056
Conc: 19.99 ug/ml



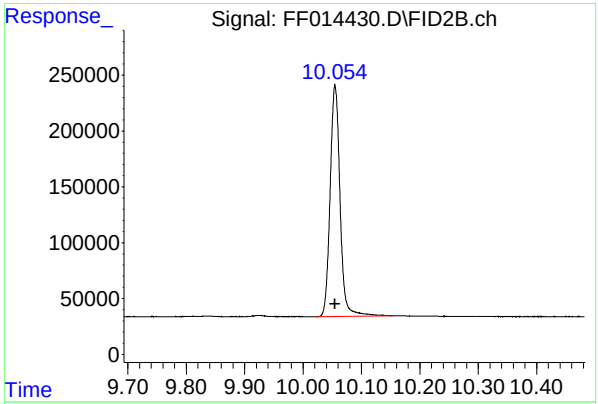
#3 N-DODECANE

R.T.: 6.623 min
Delta R.T.: 0.000 min
Response: 2422563
Conc: 19.93 ug/ml



#4 N-TETRADECANE

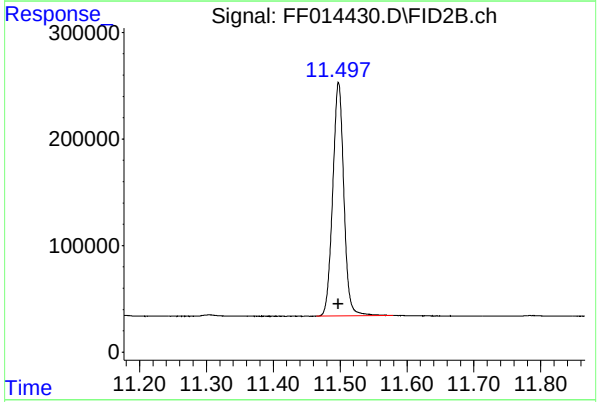
R.T.: 8.449 min
Delta R.T.: 0.000 min
Response: 2443459
Conc: 19.87 ug/ml



#5 N-HEXADECANE

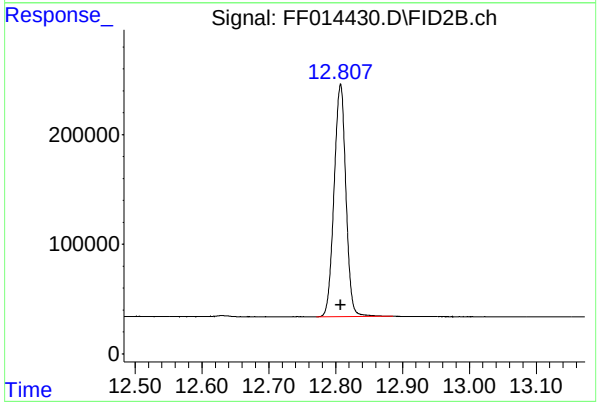
R.T.: 10.055 min
Delta R.T.: 0.000 min
Response: 2443584
Conc: 19.77 ug/ml

Instrument :
FID_F
ClientSampleId :
20 TRPH STD



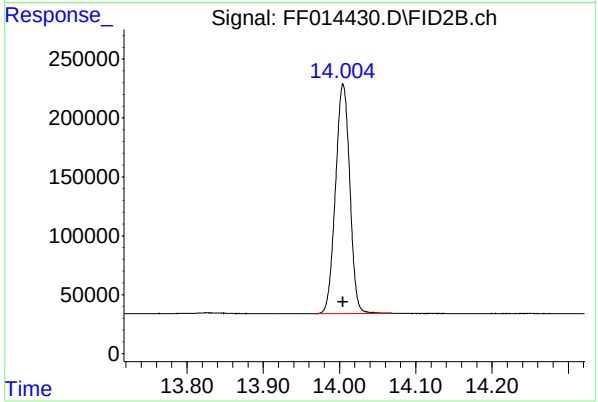
#6 N-OCTADECANE

R.T.: 11.498 min
Delta R.T.: 0.000 min
Response: 2539961
Conc: 19.95 ug/ml



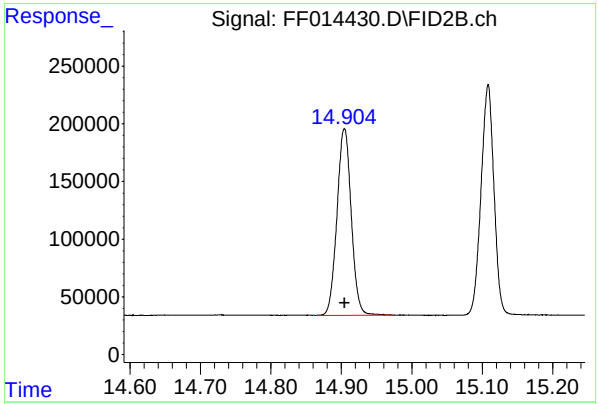
#7 N-EICOSANE

R.T.: 12.807 min
Delta R.T.: 0.000 min
Response: 2607267
Conc: 20.08 ug/ml



#8 N-DOCOSANE

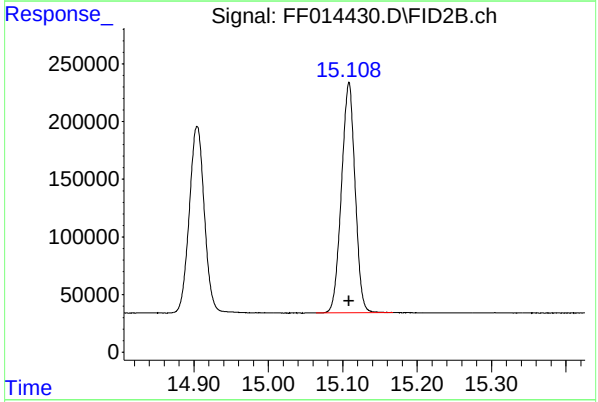
R.T.: 14.005 min
Delta R.T.: 0.000 min
Response: 2540898
Conc: 20.10 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

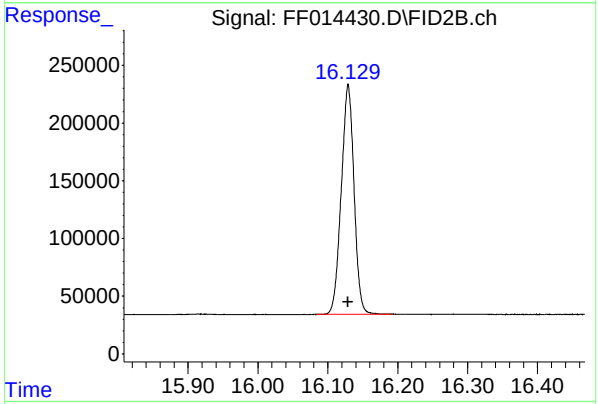
R.T.: 14.904 min
Delta R.T.: 0.000 min
Response: 2278048
Conc: 20.18 ug/ml

Instrument :
FID_F
ClientSampleId :
20 TRPH STD



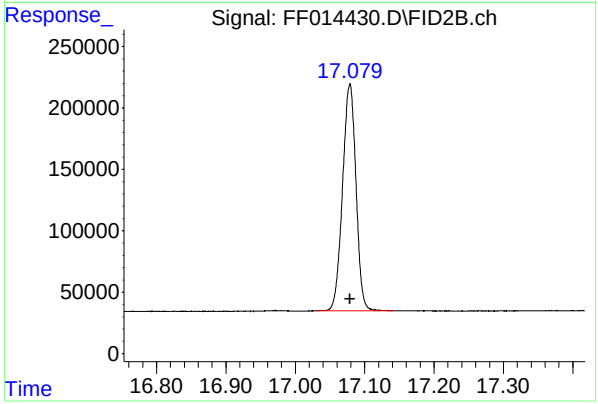
#10 N-TETRACOSANE

R.T.: 15.108 min
Delta R.T.: 0.000 min
Response: 2543607
Conc: 20.11 ug/ml



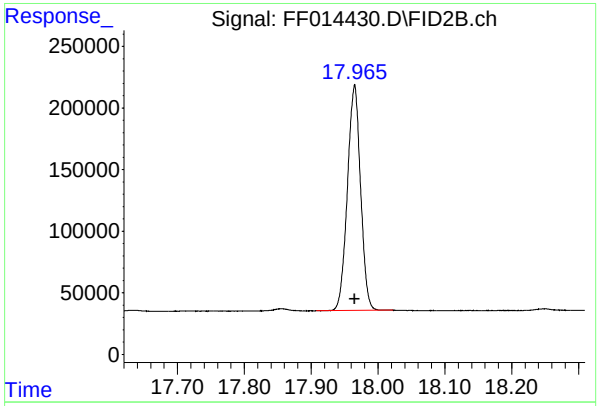
#11 N-HEXACOSANE

R.T.: 16.129 min
Delta R.T.: 0.000 min
Response: 2525115
Conc: 20.08 ug/ml



#12 N-OCTACOSANE

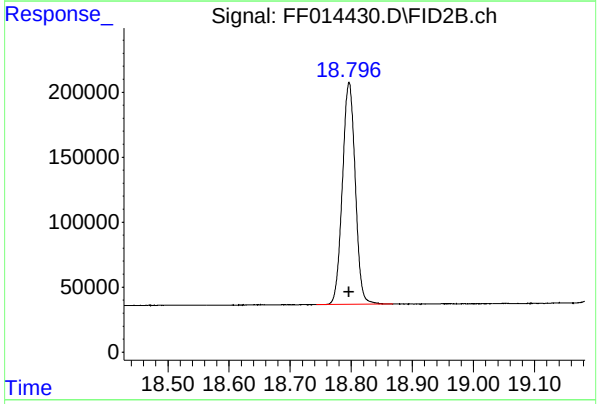
R.T.: 17.079 min
Delta R.T.: 0.000 min
Response: 2484449
Conc: 20.04 ug/ml



#13 N-TRIACONTANE

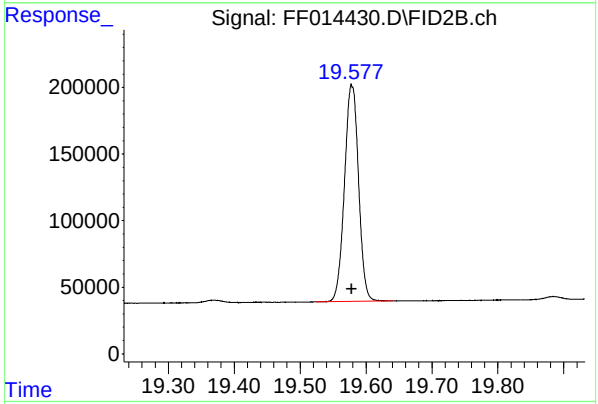
R.T.: 17.965 min
Delta R.T.: 0.000 min
Response: 2504818
Conc: 20.10 ug/ml

Instrument :
FID_F
ClientSampleId :
20 TRPH STD



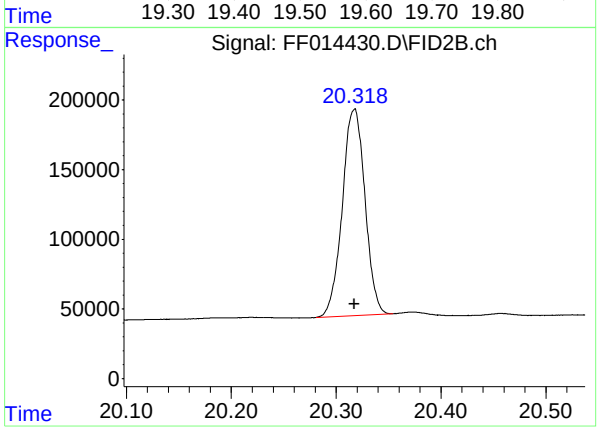
#14 N-DOTRIACONTANE

R.T.: 18.797 min
Delta R.T.: 0.000 min
Response: 2499676
Conc: 20.37 ug/ml



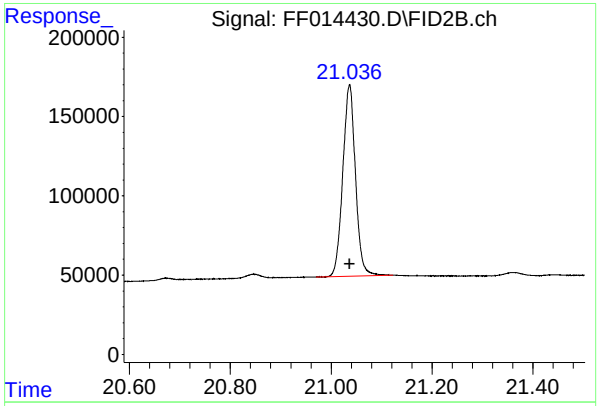
#15 N-TETRATRIACONTANE

R.T.: 19.578 min
Delta R.T.: 0.000 min
Response: 2413541
Conc: 20.61 ug/ml



#16 N-HEXATRIACONTANE

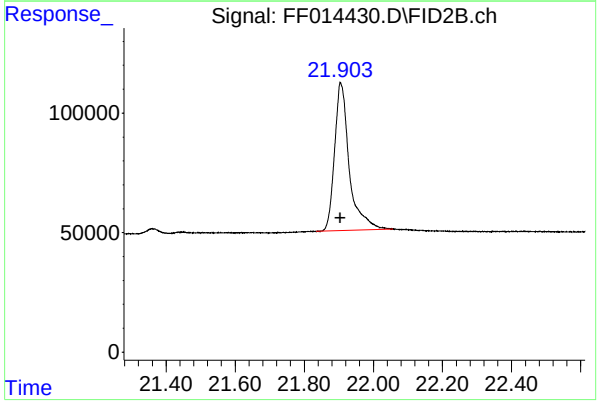
R.T.: 20.317 min
Delta R.T.: 0.000 min
Response: 2229409
Conc: 20.96 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.037 min
Delta R.T.: 0.000 min
Response: 2103640
Conc: 21.50 ug/ml

Instrument :
FID_F
ClientSampleId :
20 TRPH STD



#18 N-TETRACONTANE

R.T.: 21.905 min
Delta R.T.: 0.000 min
Response: 1827854
Conc: 21.19 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014430.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 08:47
Sample : 20 TRPH STD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.948	1.912	2.021	BB	220127	2371122	90.94%	5.492%
2	4.455	4.425	4.523	BB	234221	2398056	91.98%	5.554%
3	6.623	6.590	6.703	BB	235028	2422563	92.92%	5.611%
4	8.449	8.416	8.540	BB	219836	2443459	93.72%	5.659%
5	10.055	10.023	10.154	BB	207004	2443584	93.72%	5.659%
6	11.498	11.464	11.579	BB	219219	2539961	97.42%	5.883%
7	12.807	12.771	12.886	BB	212511	2607267	100.00%	6.039%
8	14.005	13.969	14.070	BB	194660	2540898	97.45%	5.885%
9	14.904	14.864	14.973	BB	161888	2278048	87.37%	5.276%
10	15.109	15.064	15.168	BB	200154	2543607	97.56%	5.891%
11	16.129	16.083	16.193	BB	199440	2525115	96.85%	5.848%
12	17.079	17.030	17.141	BB	185264	2484449	95.29%	5.754%
13	17.965	17.908	18.023	BB	183322	2504818	96.07%	5.801%
14	18.797	18.743	18.868	BB	170990	2499676	95.87%	5.789%
15	19.578	19.524	19.641	BB	161862	2413541	92.57%	5.590%
16	20.318	20.281	20.354	BV	148162	2229409	85.51%	5.163%
17	21.037	20.970	21.123	BB	120987	2103640	80.68%	4.872%
18	21.905	21.834	22.057	BB	62022	1827854	70.11%	4.233%

Sum of corrected areas: 43177065

FF081624.M Fri Aug 16 16:09:09 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014431.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 10:18
Operator : YP\AJ
Sample : 10 TRPH STD
Misc :
ALS Vial : 64 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
10 TRPH STD

Integration File: autoint1.e
Quant Time: Aug 16 11:09:23 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:03:33 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
9) S	TETRACOSANE-d50 (SURR...	14.904	1185922	10.375 ug/ml
Target Compounds				
1)	N-OCTANE	1.952	1229645	10.339 ug/ml
2)	N-DECANE	4.458	1210173	10.067 ug/ml
3)	N-DODECANE	6.624	1208987	9.958 ug/ml
4)	N-TETRADECANE	8.449	1217125	9.924 ug/ml
5)	N-HEXADECANE	10.055	1202358	9.796 ug/ml
6)	N-OCTADECANE	11.497	1286974	10.082 ug/ml
7)	N-EICOSANE	12.806	1346044	10.274 ug/ml
8)	N-DOCOSANE	14.004	1319673	10.327 ug/ml
10)	N-TETRACOSANE	15.107	1330872	10.385 ug/ml
11)	N-HEXACOSANE	16.128	1312729	10.324 ug/ml
12)	N-OCTACOSANE	17.079	1291828	10.310 ug/ml
13)	N-TRIACONTANE	17.965	1310943	10.383 ug/ml
14)	N-DOTRIACONTANE	18.797	1318141	10.545 ug/ml
15)	N-TETRATRIACONTANE	19.577	1246663	10.478 ug/ml
16)	N-HEXATRIACONTANE	20.318	1096962	10.234 ug/ml
17)	N-OCTATRIACONTANE	21.037	1020754	10.319 ug/ml
18)	N-TETRACONTANE	21.913	837698	9.783 ug/ml

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

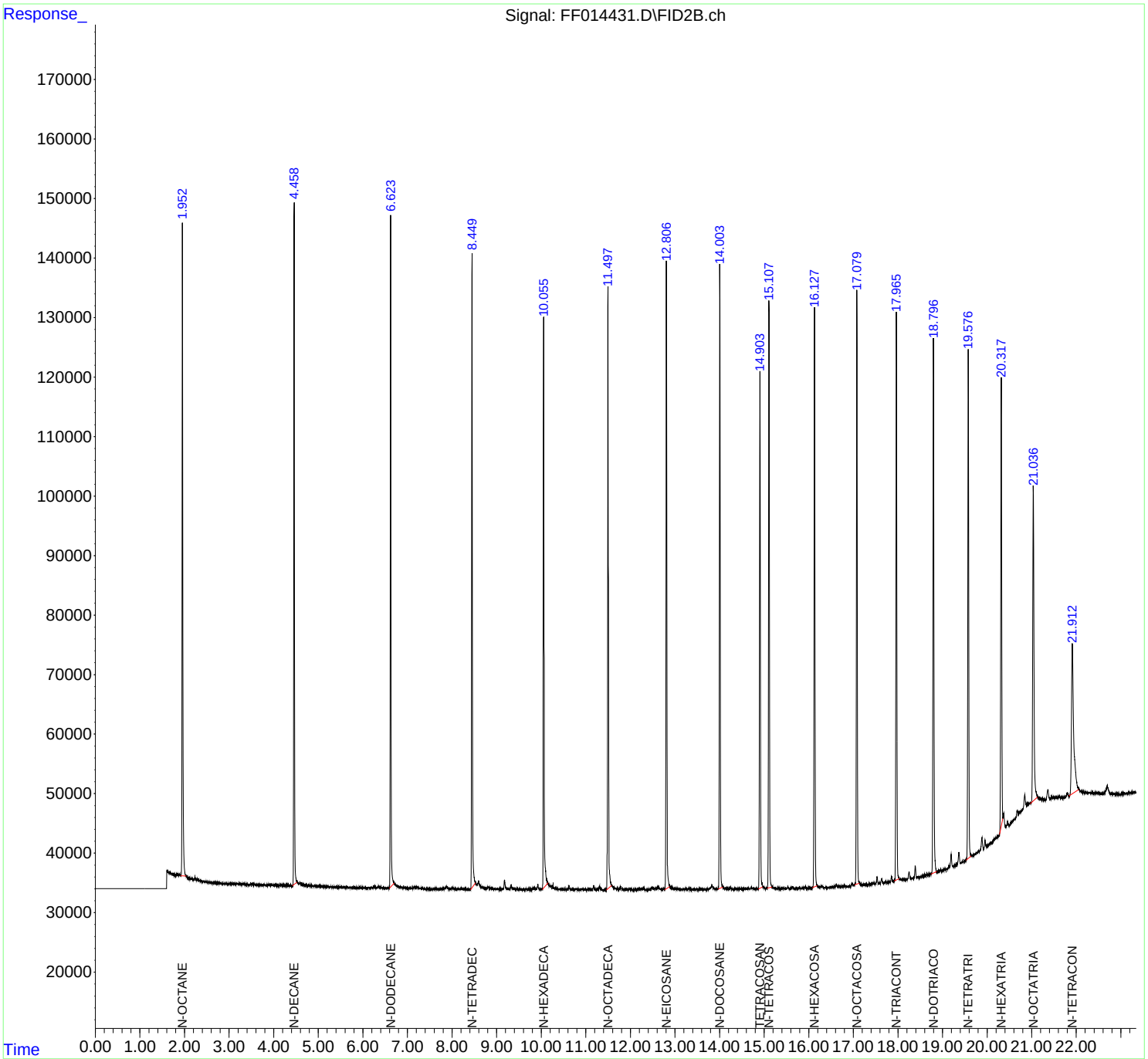
Quantitation Report (QT Reviewed)

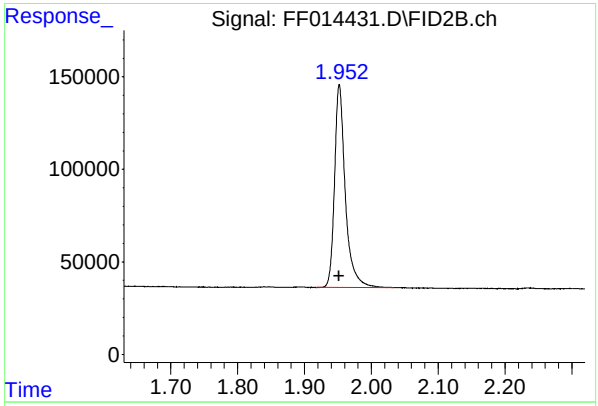
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014431.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 10:18
Operator : YP\AJ
Sample : 10 TRPH STD
Misc :
ALS Vial : 64 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
10 TRPH STD

Integration File: autoint1.e
Quant Time: Aug 16 11:09:23 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:03:33 2024
Response via : Initial Calibration
Integrator: ChemStation

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

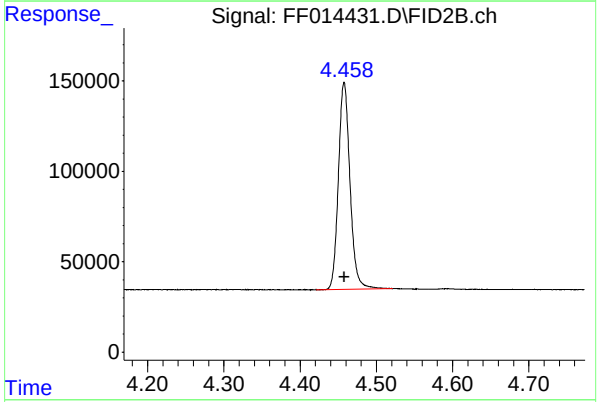




#1 N-OCTANE

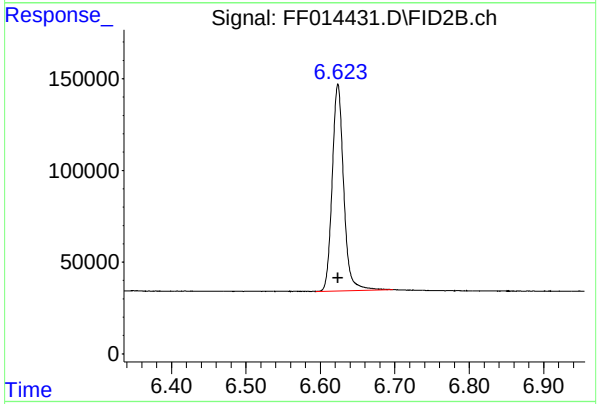
R.T.: 1.952 min
Delta R.T.: 0.000 min
Response: 1229645
Conc: 10.34 ug/ml

Instrument :
FID_F
ClientSampleId :
10 TRPH STD



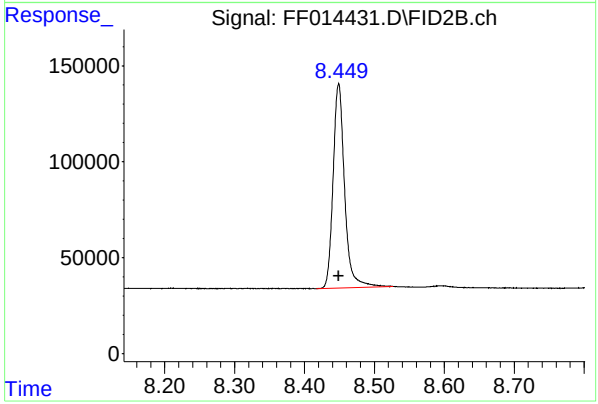
#2 N-DECANE

R.T.: 4.458 min
Delta R.T.: 0.000 min
Response: 1210173
Conc: 10.07 ug/ml



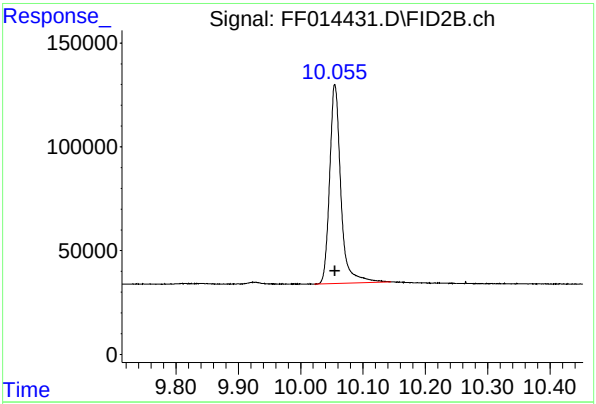
#3 N-DODECANE

R.T.: 6.624 min
Delta R.T.: 0.000 min
Response: 1208987
Conc: 9.96 ug/ml



#4 N-TETRADECANE

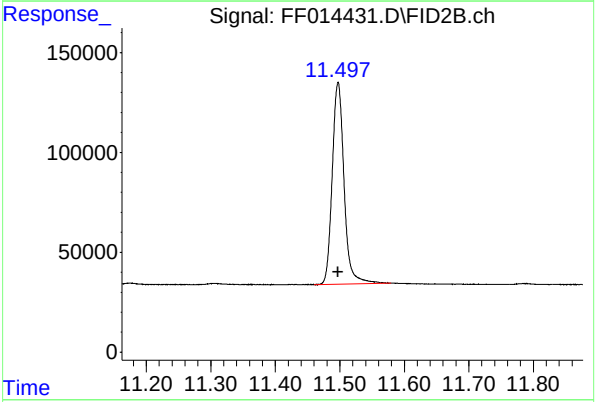
R.T.: 8.449 min
Delta R.T.: 0.000 min
Response: 1217125
Conc: 9.92 ug/ml



#5 N-HEXADECANE

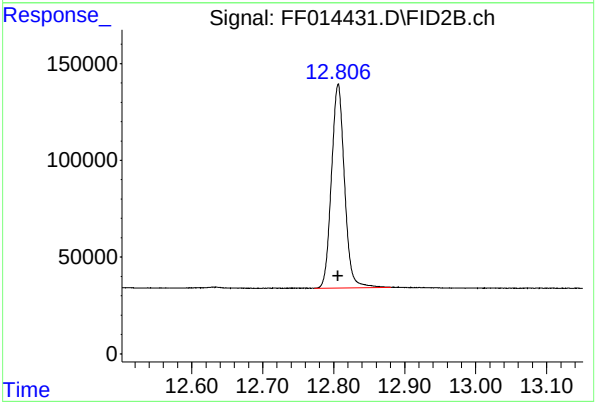
R.T.: 10.055 min
Delta R.T.: 0.000 min
Response: 1202358
Conc: 9.80 ug/ml

Instrument :
FID_F
ClientSampleId :
10 TRPH STD



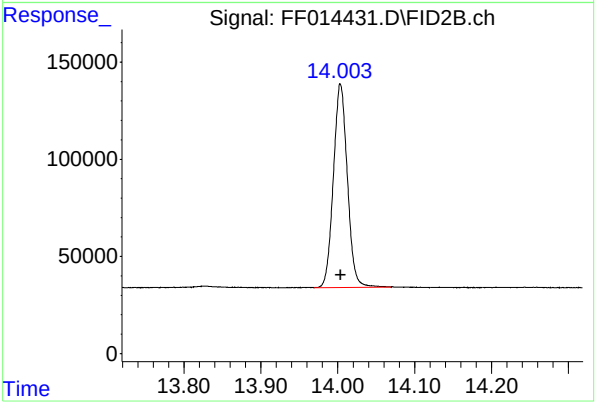
#6 N-OCTADECANE

R.T.: 11.497 min
Delta R.T.: 0.000 min
Response: 1286974
Conc: 10.08 ug/ml



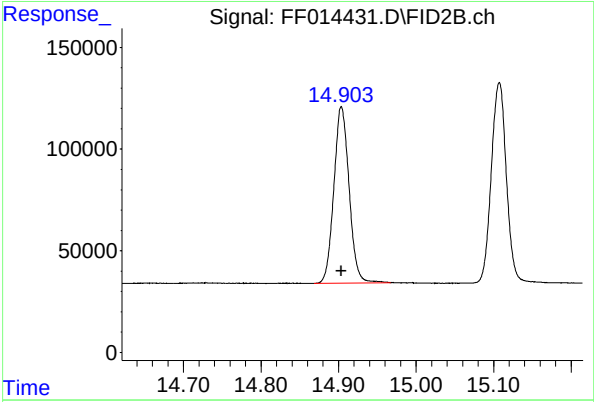
#7 N-EICOSANE

R.T.: 12.806 min
Delta R.T.: 0.000 min
Response: 1346044
Conc: 10.27 ug/ml



#8 N-DOCOSANE

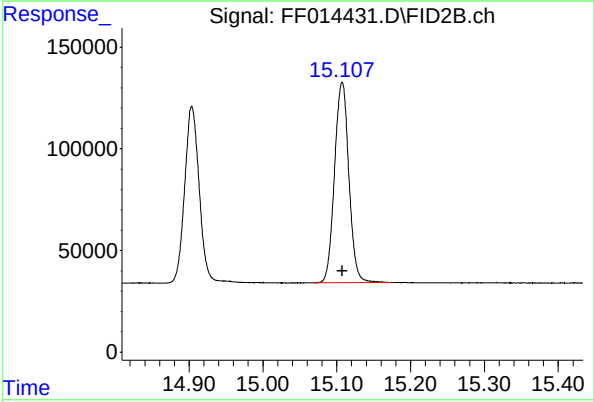
R.T.: 14.004 min
Delta R.T.: 0.000 min
Response: 1319673
Conc: 10.33 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

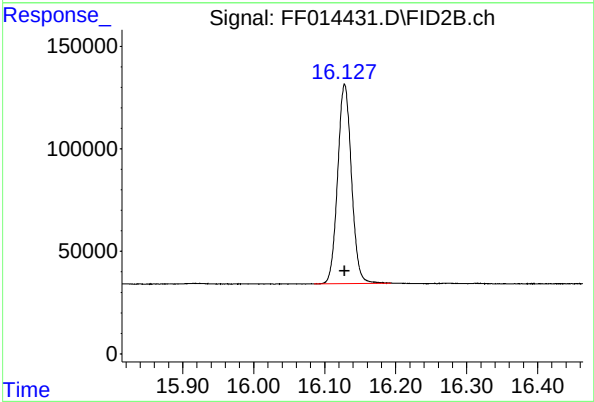
R.T.: 14.904 min
Delta R.T.: 0.000 min
Response: 1185922
Conc: 10.38 ug/ml

Instrument :
FID_F
ClientSampleId :
10 TRPH STD



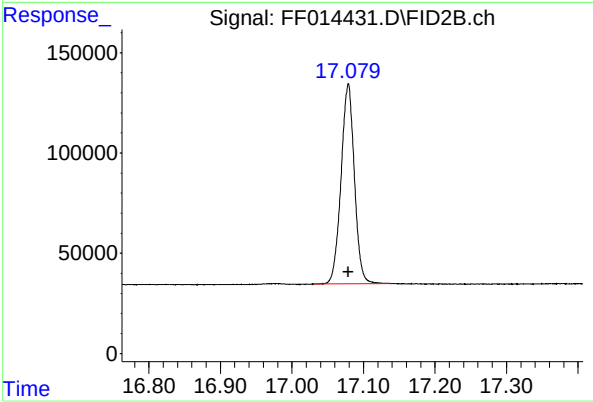
#10 N-TETRACOSANE

R.T.: 15.107 min
Delta R.T.: 0.000 min
Response: 1330872
Conc: 10.39 ug/ml



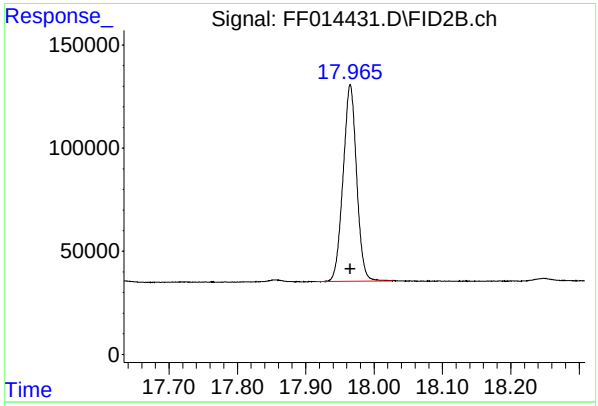
#11 N-HEXACOSANE

R.T.: 16.128 min
Delta R.T.: 0.000 min
Response: 1312729
Conc: 10.32 ug/ml



#12 N-OCTACOSANE

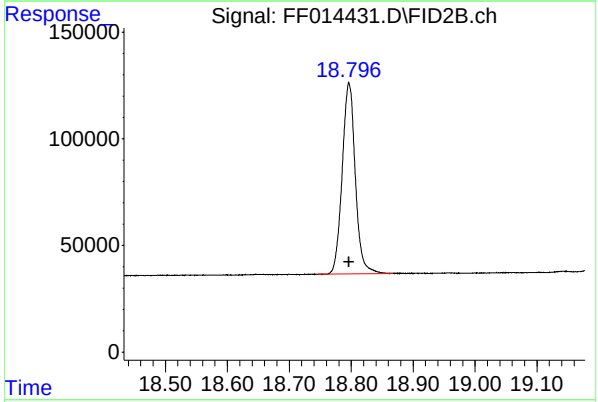
R.T.: 17.079 min
Delta R.T.: 0.000 min
Response: 1291828
Conc: 10.31 ug/ml



#13 N-TRIACONTANE

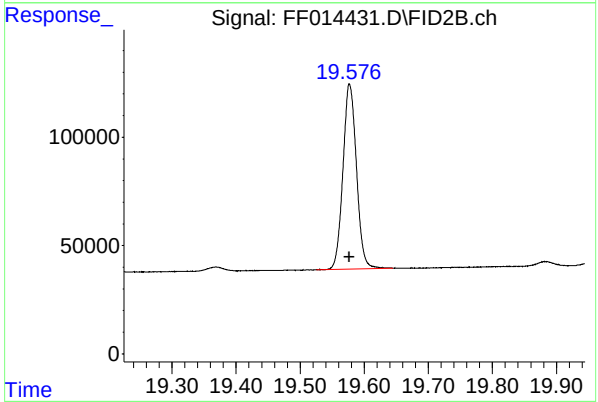
R.T.: 17.965 min
Delta R.T.: 0.000 min
Response: 1310943
Conc: 10.38 ug/ml

Instrument :
FID_F
ClientSampleId :
10 TRPH STD



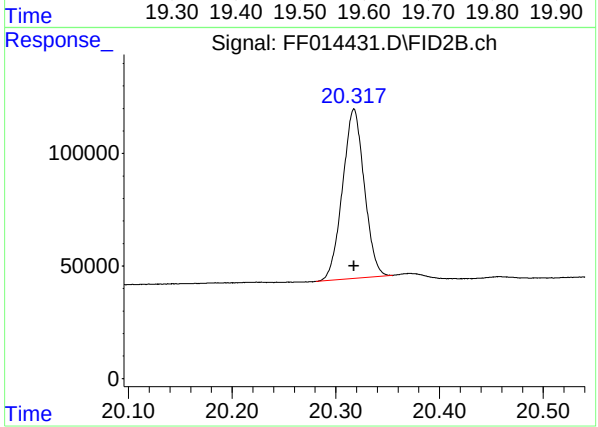
#14 N-DOTRIACONTANE

R.T.: 18.797 min
Delta R.T.: 0.000 min
Response: 1318141
Conc: 10.54 ug/ml



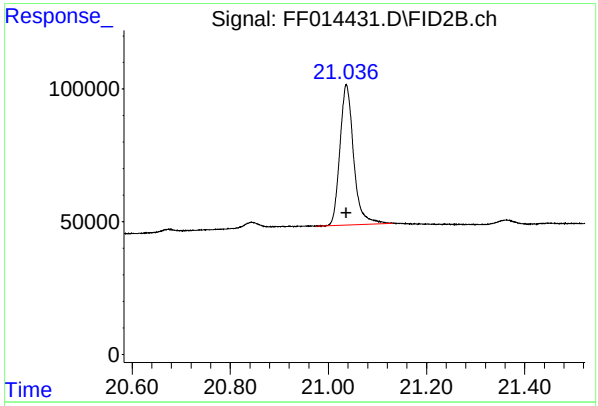
#15 N-TETRATRIACONTANE

R.T.: 19.577 min
Delta R.T.: 0.000 min
Response: 1246663
Conc: 10.48 ug/ml



#16 N-HEXATRIACONTANE

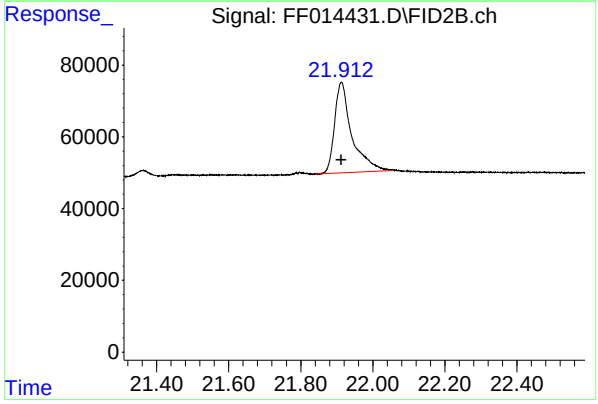
R.T.: 20.318 min
Delta R.T.: 0.000 min
Response: 1096962
Conc: 10.23 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.037 min
Delta R.T.: 0.000 min
Response: 1020754
Conc: 10.32 ug/ml

Instrument :
FID_F
ClientSampleId :
10 TRPH STD



#18 N-TETRACONTANE

R.T.: 21.913 min
Delta R.T.: 0.000 min
Response: 837698
Conc: 9.78 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014431.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 10:18
Sample : 10 TRPH STD
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.952	1.918	2.033	BB	109658	1229645	91.35%	5.596%
2	4.458	4.421	4.522	BB	114504	1210173	89.91%	5.507%
3	6.624	6.594	6.698	BB	112818	1208987	89.82%	5.502%
4	8.449	8.417	8.527	BB	106525	1217125	90.42%	5.539%
5	10.055	10.022	10.145	BB	95888	1202358	89.33%	5.472%
6	11.497	11.460	11.579	BB	101176	1286974	95.61%	5.857%
7	12.806	12.773	12.881	BB	105588	1346044	100.00%	6.126%
8	14.004	13.969	14.069	BB	104737	1319673	98.04%	6.006%
9	14.904	14.868	14.968	BB	86806	1185922	88.10%	5.397%
10	15.107	15.069	15.173	BB	98635	1330872	98.87%	6.057%
11	16.128	16.085	16.193	BB	97122	1312729	97.52%	5.974%
12	17.079	17.031	17.138	BB	99855	1291828	95.97%	5.879%
13	17.965	17.915	18.028	BB	95444	1310943	97.39%	5.966%
14	18.797	18.743	18.868	BB	89624	1318141	97.93%	5.999%
15	19.577	19.525	19.645	BB	85484	1246663	92.62%	5.673%
16	20.318	20.281	20.355	BV	75362	1096962	81.50%	4.992%
17	21.037	20.975	21.132	BB	52787	1020754	75.83%	4.645%
18	21.913	21.843	22.056	BB	25272	837698	62.23%	3.812%
			Sum of corrected areas:			21973490		

FF081624.M Fri Aug 16 16:09:25 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014432.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 10:50
Operator : YP\AJ
Sample : 5 TRPH STD
Misc :
ALS Vial : 65 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
5 TRPH STD

Integration File: autoint1.e
Quant Time: Aug 16 11:10:56 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:03:33 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
9) S	TETRACOSANE-d50 (SURR...	14.905	664789	5.632 ug/ml
Target Compounds				
1)	N-OCTANE	1.957	706280	5.724 ug/ml
2)	N-DECANE	4.457	681081	5.519 ug/ml
3)	N-DODECANE	6.622	671102	5.413 ug/ml
4)	N-TETRADECANE	8.449	685733	5.462 ug/ml
5)	N-HEXADECANE	10.055	634855	5.137 ug/ml
6)	N-OCTADECANE	11.497	695768	5.354 ug/ml
7)	N-EICOSANE	12.807	754611	5.590 ug/ml
8)	N-DOCOSANE	14.004	733333	5.574 ug/ml
10)	N-TETRACOSANE	15.108	745408	5.633 ug/ml
11)	N-HEXACOSANE	16.129	736703	5.616 ug/ml
12)	N-OCTACOSANE	17.079	722433	5.594 ug/ml
13)	N-TRIACONTANE	17.966	738179	5.655 ug/ml
14)	N-DOTRIACONTANE	18.797	782738	5.961 ug/ml
15)	N-TETRATRIACONTANE	19.580	693652	5.642 ug/ml
16)	N-HEXATRIACONTANE	20.320	627495	5.661 ug/ml
17)	N-OCTATRIACONTANE	21.042	556896	5.492 ug/ml
18)	N-TETRACONTANE	21.921	458875	5.283 ug/ml

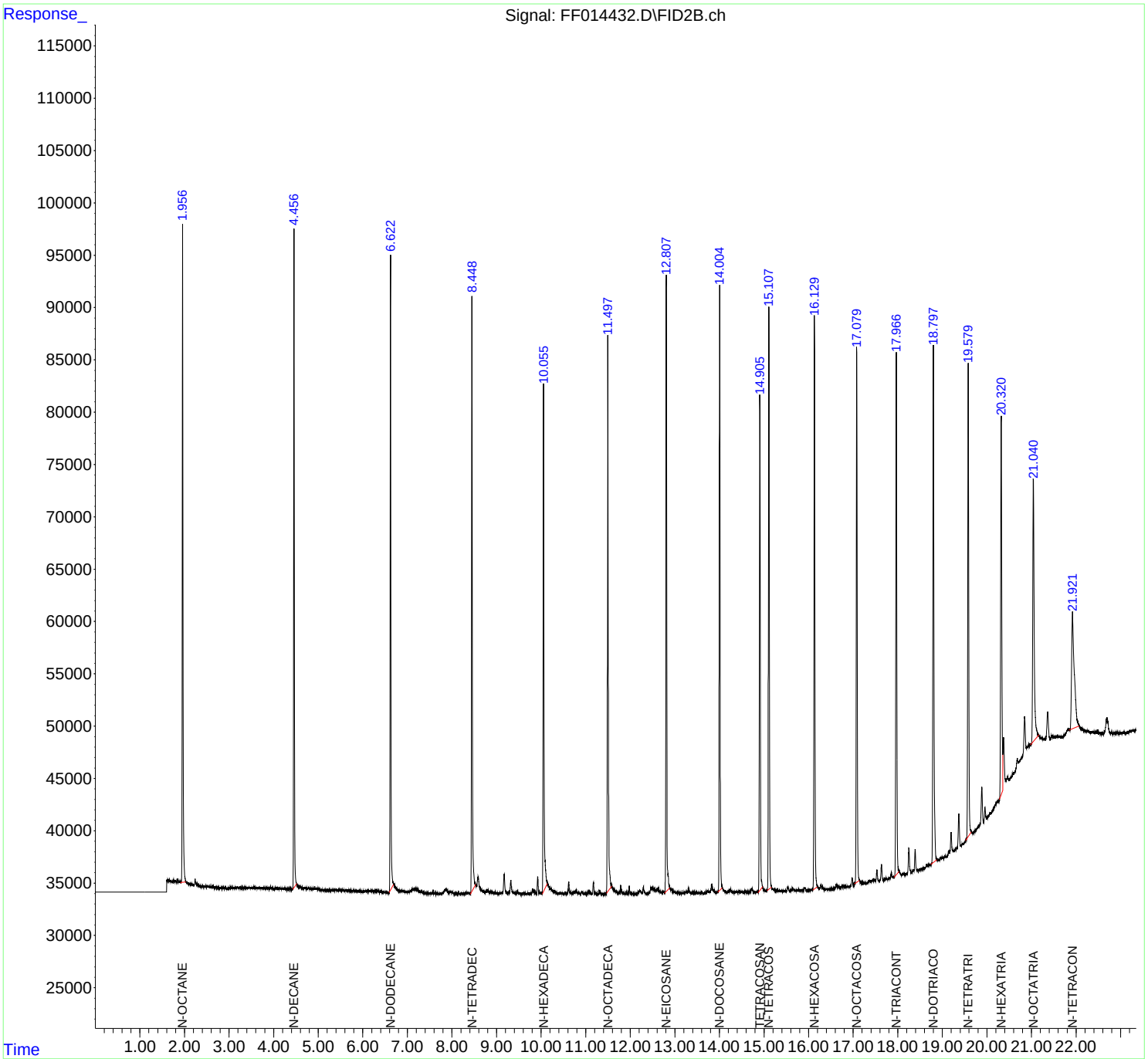
(f)=RT Delta > 1/2 Window (m)=manual int.

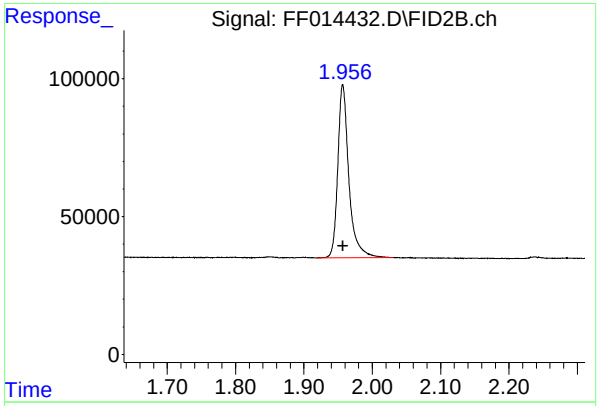
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014432.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 10:50
Operator : YP\AJ
Sample : 5 TRPH STD
Misc :
ALS Vial : 65 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
5 TRPH STD

Integration File: autoint1.e
Quant Time: Aug 16 11:10:56 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:03:33 2024
Response via : Initial Calibration
Integrator: ChemStation

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

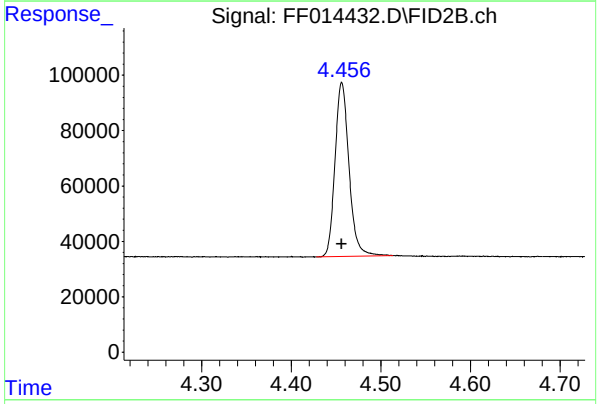




#1 N-OCTANE

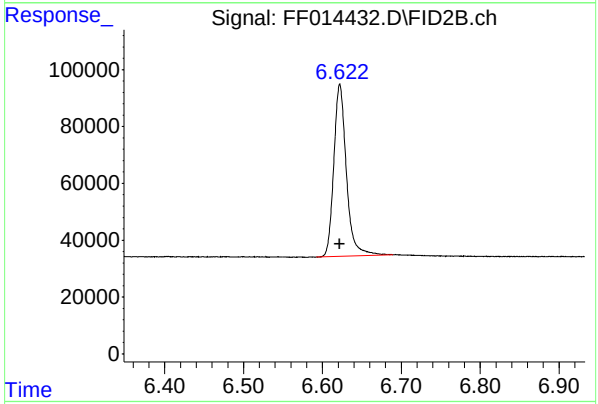
R.T.: 1.957 min
Delta R.T.: 0.000 min
Response: 706280
Conc: 5.72 ug/ml

Instrument :
FID_F
ClientSampleId :
5 TRPH STD



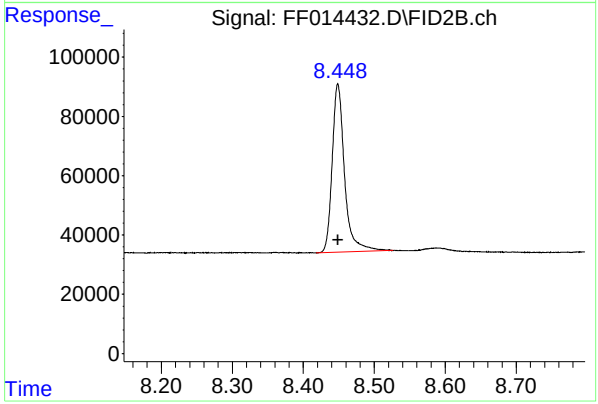
#2 N-DECANE

R.T.: 4.457 min
Delta R.T.: 0.000 min
Response: 681081
Conc: 5.52 ug/ml



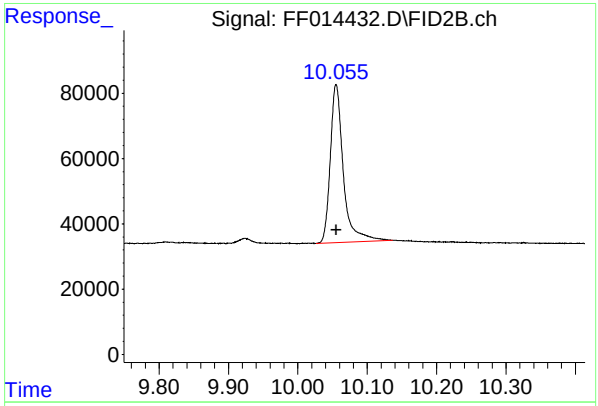
#3 N-DODECANE

R.T.: 6.622 min
Delta R.T.: 0.000 min
Response: 671102
Conc: 5.41 ug/ml



#4 N-TETRADECANE

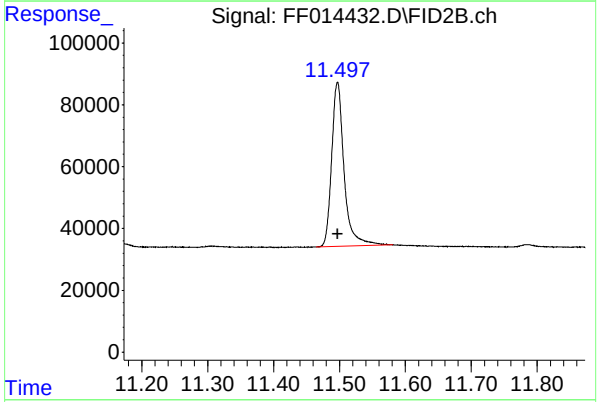
R.T.: 8.449 min
Delta R.T.: 0.000 min
Response: 685733
Conc: 5.46 ug/ml



#5 N-HEXADECANE

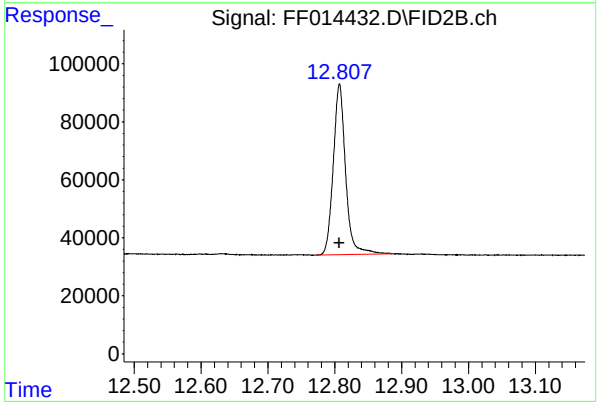
R.T.: 10.055 min
Delta R.T.: 0.000 min
Response: 634855
Conc: 5.14 ug/ml

Instrument :
FID_F
ClientSampleId :
5 TRPH STD



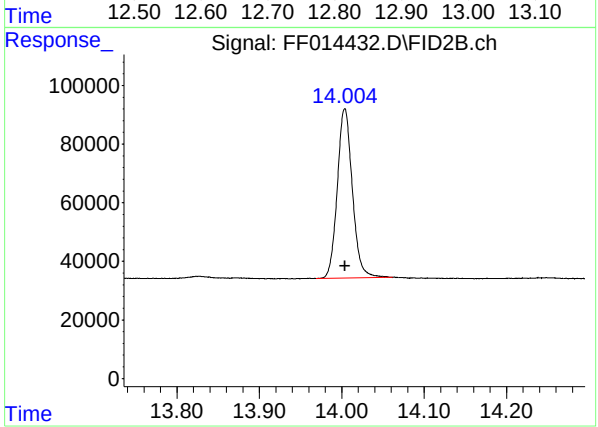
#6 N-OCTADECANE

R.T.: 11.497 min
Delta R.T.: 0.000 min
Response: 695768
Conc: 5.35 ug/ml



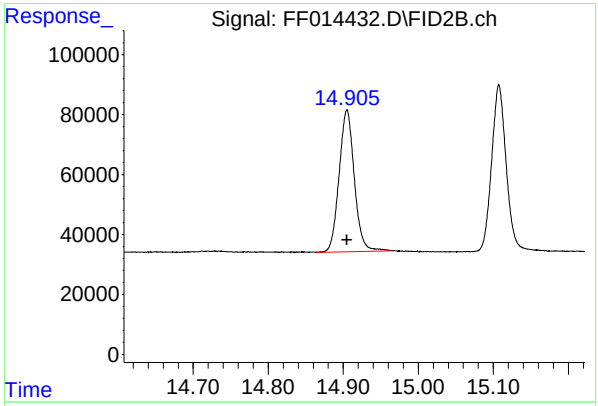
#7 N-EICOSANE

R.T.: 12.807 min
Delta R.T.: 0.000 min
Response: 754611
Conc: 5.59 ug/ml



#8 N-DOCOSANE

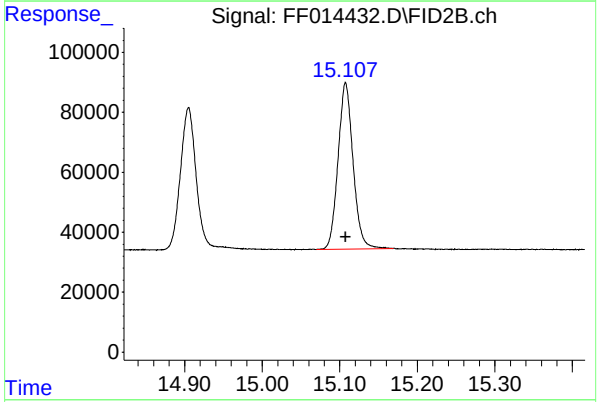
R.T.: 14.004 min
Delta R.T.: 0.000 min
Response: 733333
Conc: 5.57 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

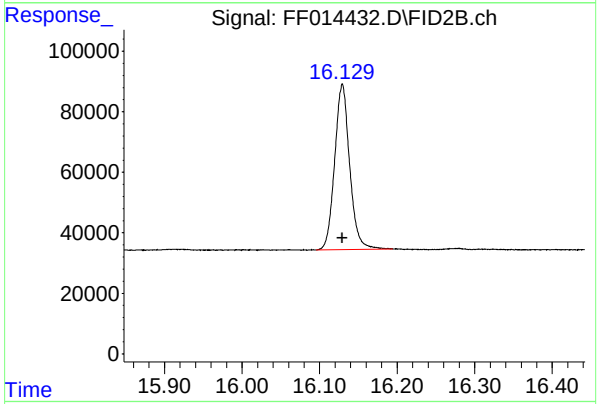
R.T.: 14.905 min
Delta R.T.: 0.000 min
Response: 664789
Conc: 5.63 ug/ml

Instrument :
FID_F
ClientSampleId :
5 TRPH STD



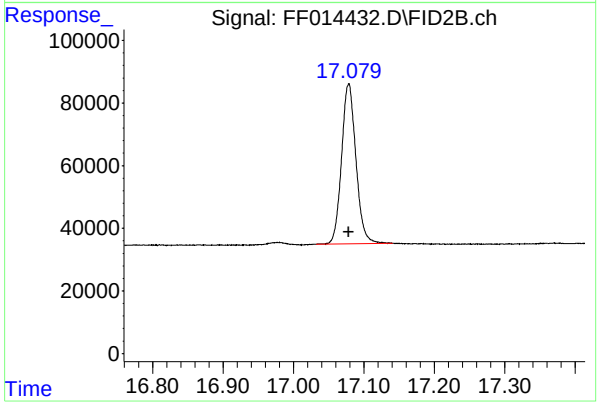
#10 N-TETRACOSANE

R.T.: 15.108 min
Delta R.T.: 0.000 min
Response: 745408
Conc: 5.63 ug/ml



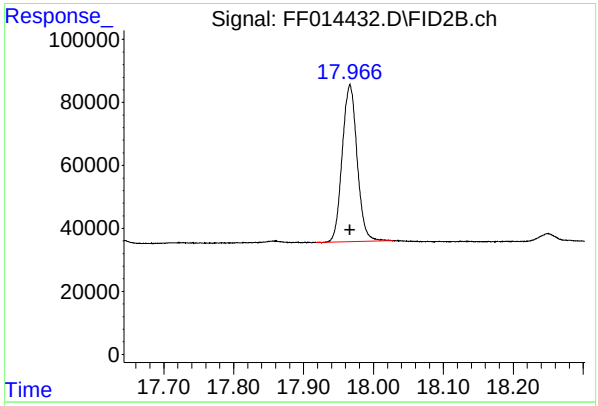
#11 N-HEXACOSANE

R.T.: 16.129 min
Delta R.T.: 0.000 min
Response: 736703
Conc: 5.62 ug/ml



#12 N-OCTACOSANE

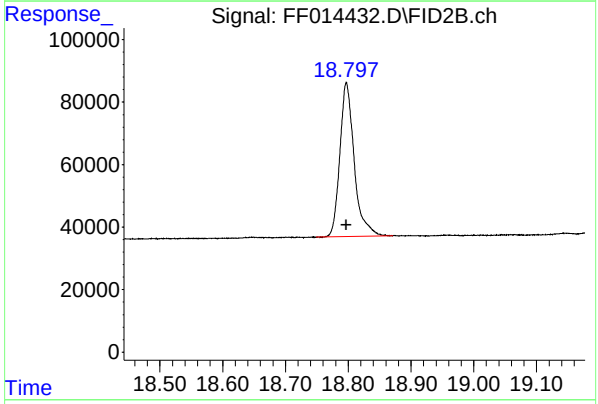
R.T.: 17.079 min
Delta R.T.: 0.000 min
Response: 722433
Conc: 5.59 ug/ml



#13 N-TRIACONTANE

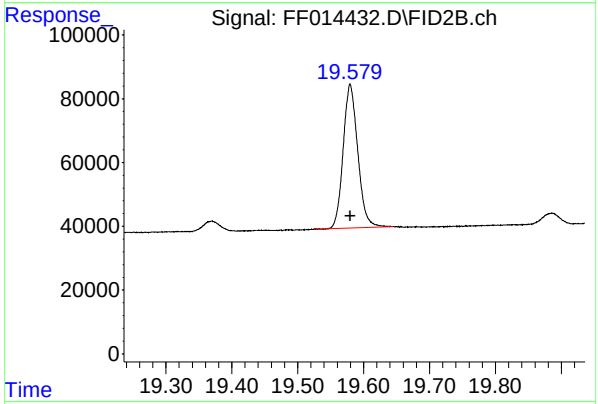
R.T.: 17.966 min
Delta R.T.: 0.000 min
Response: 738179
Conc: 5.66 ug/ml

Instrument :
FID_F
ClientSampleId :
5 TRPH STD



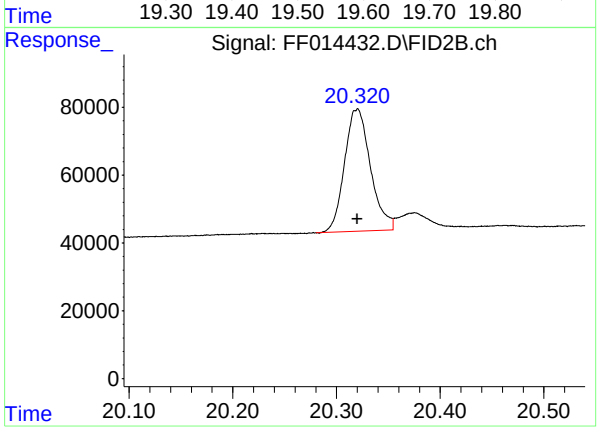
#14 N-DOTRIACONTANE

R.T.: 18.797 min
Delta R.T.: 0.000 min
Response: 782738
Conc: 5.96 ug/ml



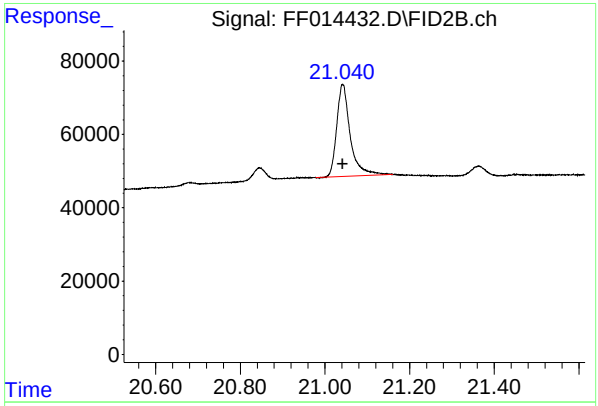
#15 N-TETRATRIACONTANE

R.T.: 19.580 min
Delta R.T.: 0.000 min
Response: 693652
Conc: 5.64 ug/ml



#16 N-HEXATRIACONTANE

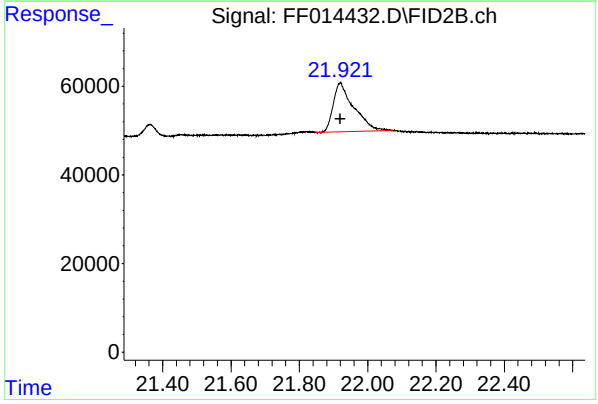
R.T.: 20.320 min
Delta R.T.: 0.000 min
Response: 627495
Conc: 5.66 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.042 min
Delta R.T.: 0.000 min
Response: 556896
Conc: 5.49 ug/ml

Instrument :
FID_F
ClientSampleId :
5 TRPH STD



#18 N-TETRACONTANE

R.T.: 21.921 min
Delta R.T.: 0.000 min
Response: 458875
Conc: 5.28 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014432.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 10:50
Sample : 5 TRPH STD
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.957	1.918	2.030	BB	62795	706280	90.23%	5.747%
2	4.457	4.428	4.514	BB	62920	681081	87.01%	5.542%
3	6.622	6.592	6.690	BB	60693	671102	85.74%	5.461%
4	8.449	8.418	8.526	BB	56816	685733	87.61%	5.580%
5	10.055	10.026	10.137	BB	48481	634855	81.11%	5.166%
6	11.497	11.465	11.581	BB	53155	695768	88.89%	5.661%
7	12.807	12.772	12.887	BB	58918	754611	96.41%	6.140%
8	14.004	13.969	14.062	BB	57763	733333	93.69%	5.967%
9	14.905	14.864	14.966	BB	47406	664789	84.93%	5.409%
10	15.108	15.070	15.169	BB	55634	745408	95.23%	6.065%
11	16.129	16.095	16.195	BB	54785	736703	94.12%	5.994%
12	17.079	17.032	17.141	BB	51138	722433	92.30%	5.878%
13	17.966	17.918	18.028	BB	49836	738179	94.31%	6.006%
14	18.797	18.749	18.871	BB	49418	782738	100.00%	6.369%
15	19.580	19.528	19.645	BB	45131	693652	88.62%	5.644%
16	20.320	20.280	20.355	BV	36192	627495	80.17%	5.106%
17	21.042	20.979	21.161	BB	25055	556896	71.15%	4.531%
18	21.921	21.849	22.074	BB	11143	458875	58.62%	3.734%

Sum of corrected areas: 12289931

FF081624.M Fri Aug 16 16:09:53 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014433.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 11:20
Operator : YP\AJ
Sample : FF081624ICV
Misc :
ALS Vial : 66 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
FF081624ICV

Integration File: autoint1.e
Quant Time: Aug 16 16:06:16 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	14.906	5540595	46.941 ug/ml
	Target Compounds			
1)	N-OCTANE	1.949	5856690	47.462 ug/ml
2)	N-DECANE	4.458	5955768	48.260 ug/ml
3)	N-DODECANE	6.625	6036416	48.691 ug/ml
4)	N-TETRADECANE	8.451	6084107	48.463 ug/ml
5)	N-HEXADECANE	10.057	6129383	49.597 ug/ml
6)	N-OCTADECANE	11.499	6295874	48.450 ug/ml
7)	N-EICOSANE	12.809	6402452	47.428 ug/ml
8)	N-DOCOSANE	14.007	6221153	47.286 ug/ml
10)	N-TETRACOSANE	15.110	6215966	46.970 ug/ml
11)	N-HEXACOSANE	16.131	6166468	47.004 ug/ml
12)	N-OCTACOSANE	17.080	6071580	47.018 ug/ml
13)	N-TRIACONTANE	17.967	6057552	46.406 ug/ml
14)	N-DOTRIACONTANE	18.799	5933902	45.188 ug/ml
15)	N-TETRATRIACONTANE	19.582	5778619	47.006 ug/ml
16)	N-HEXATRIACONTANE	20.319	5405930	48.766 ug/ml
17)	N-OCTATRIACONTANE	21.038	5111312	50.403 ug/ml
18)	N-TETRACONTANE	21.906	4582086	52.755 ug/ml

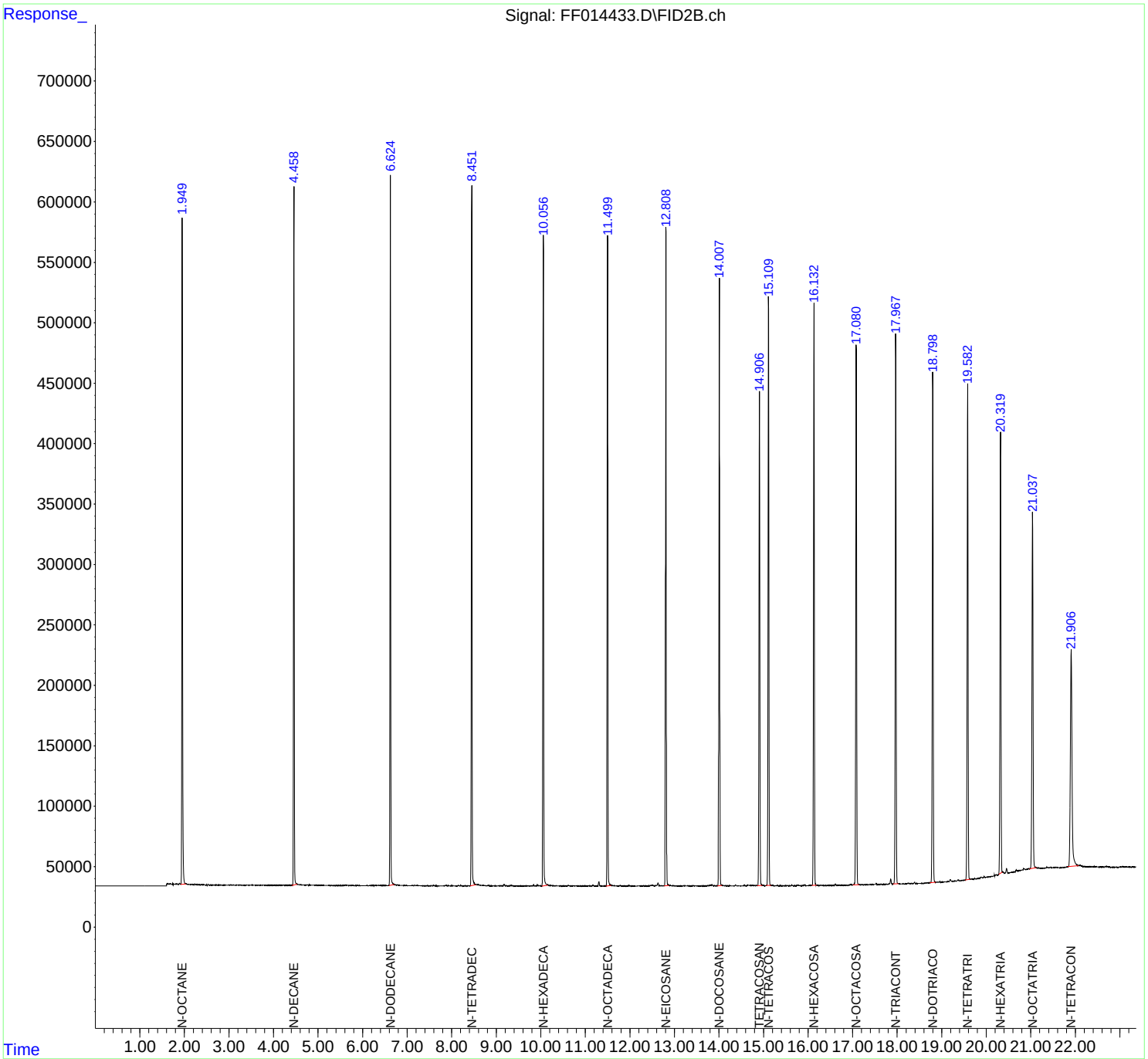
(f)=RT Delta > 1/2 Window (m)=manual int.

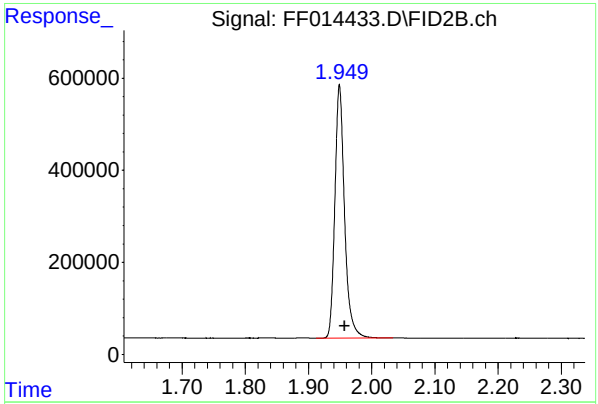
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014433.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 11:20
Operator : YP\AJ
Sample : FF081624ICV
Misc :
ALS Vial : 66 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
FF081624ICV

Integration File: autoint1.e
Quant Time: Aug 16 16:06:16 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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

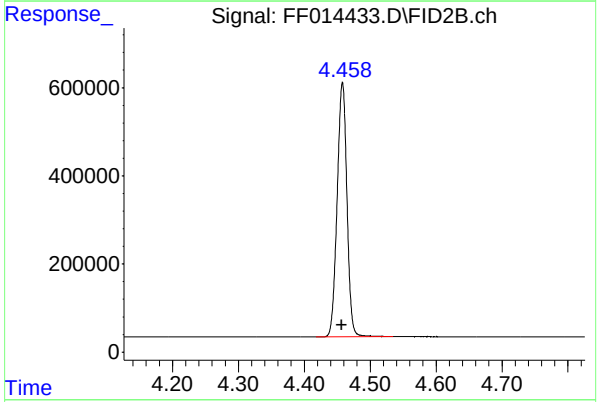




#1 N-OCTANE

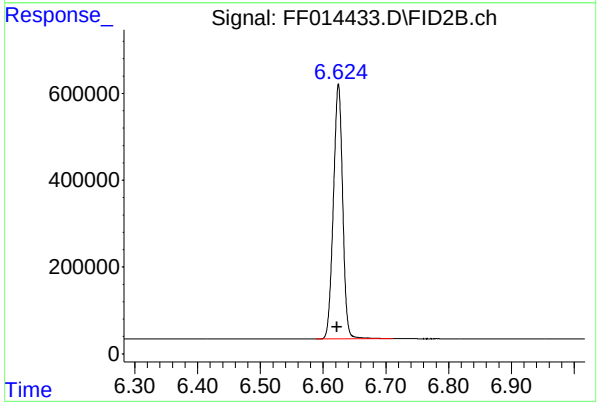
R.T.: 1.949 min
Delta R.T.: -0.008 min
Response: 5856690
Conc: 47.46 ug/ml

Instrument :
FID_F
ClientSampleId :
FF081624ICV



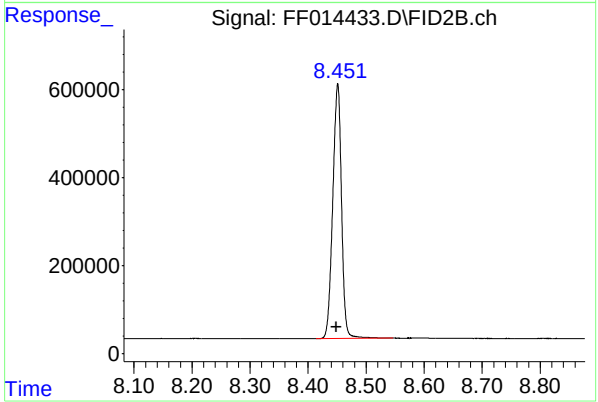
#2 N-DECANE

R.T.: 4.458 min
Delta R.T.: 0.001 min
Response: 5955768
Conc: 48.26 ug/ml



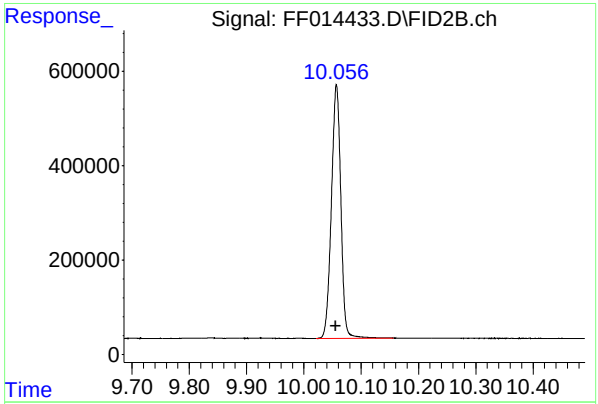
#3 N-DODECANE

R.T.: 6.625 min
Delta R.T.: 0.002 min
Response: 6036416
Conc: 48.69 ug/ml



#4 N-TETRADECANE

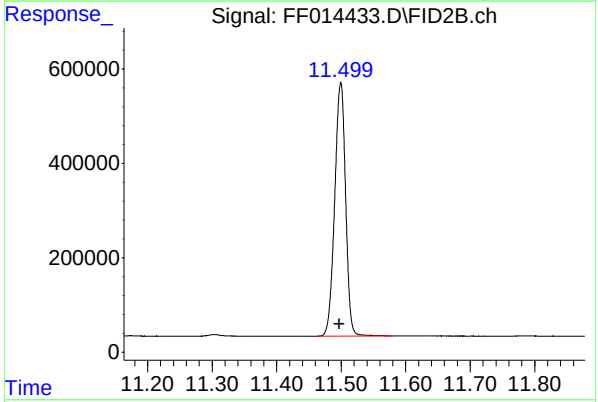
R.T.: 8.451 min
Delta R.T.: 0.002 min
Response: 6084107
Conc: 48.46 ug/ml



#5 N-HEXADECANE

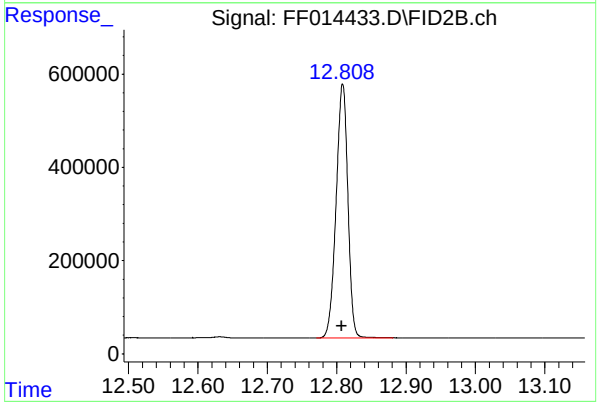
R.T.: 10.057 min
Delta R.T.: 0.002 min
Response: 6129383
Conc: 49.60 ug/ml

Instrument :
FID_F
ClientSampleId :
FF081624ICV



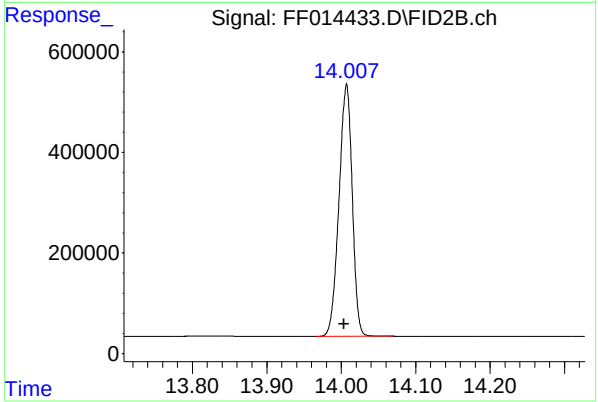
#6 N-OCTADECANE

R.T.: 11.499 min
Delta R.T.: 0.002 min
Response: 6295874
Conc: 48.45 ug/ml



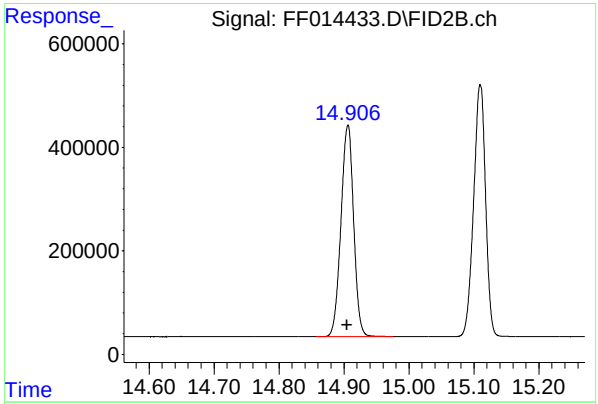
#7 N-EICOSANE

R.T.: 12.809 min
Delta R.T.: 0.002 min
Response: 6402452
Conc: 47.43 ug/ml



#8 N-DOCOSANE

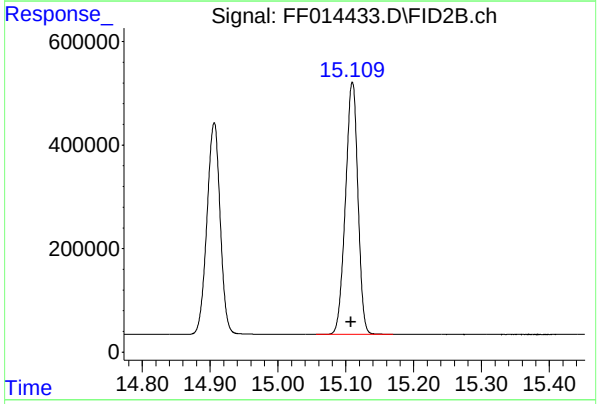
R.T.: 14.007 min
Delta R.T.: 0.003 min
Response: 6221153
Conc: 47.29 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

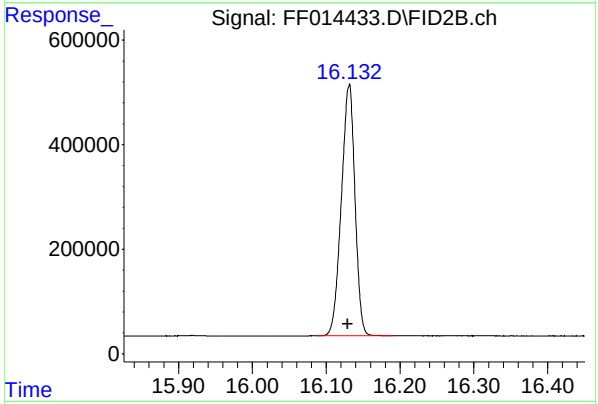
R.T.: 14.906 min
Delta R.T.: 0.001 min
Response: 5540595
Conc: 46.94 ug/ml

Instrument :
FID_F
ClientSampleId :
FF081624ICV



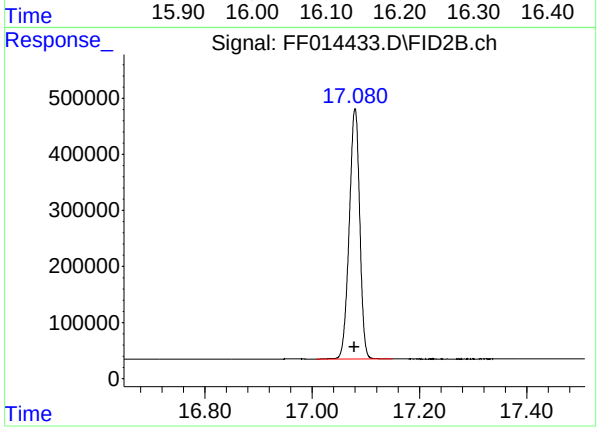
#10 N-TETRACOSANE

R.T.: 15.110 min
Delta R.T.: 0.002 min
Response: 6215966
Conc: 46.97 ug/ml



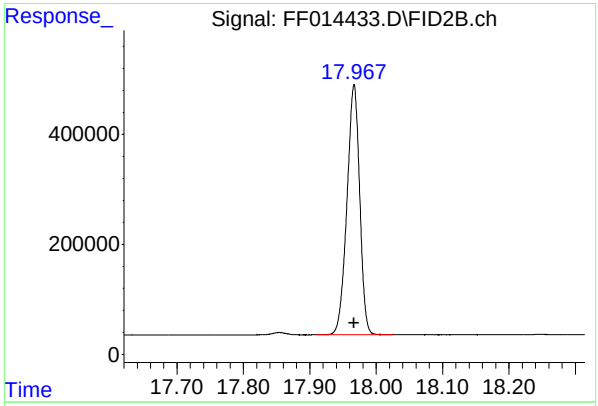
#11 N-HEXACOSANE

R.T.: 16.131 min
Delta R.T.: 0.002 min
Response: 6166468
Conc: 47.00 ug/ml



#12 N-OCTACOSANE

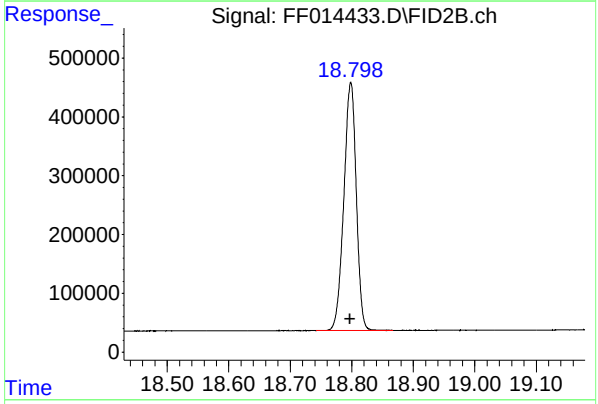
R.T.: 17.080 min
Delta R.T.: 0.001 min
Response: 6071580
Conc: 47.02 ug/ml



#13 N-TRIACONTANE

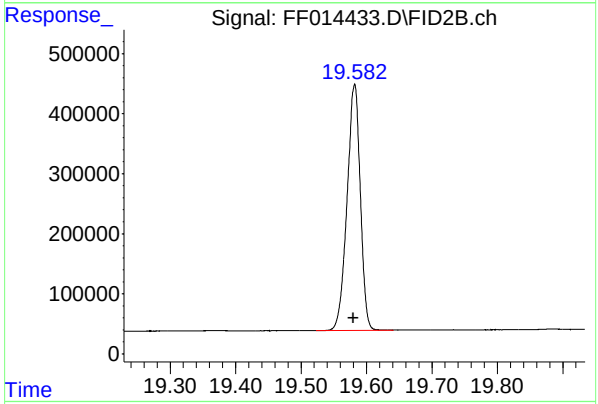
R.T.: 17.967 min
Delta R.T.: 0.000 min
Response: 6057552
Conc: 46.41 ug/ml

Instrument :
FID_F
ClientSampleId :
FF081624ICV



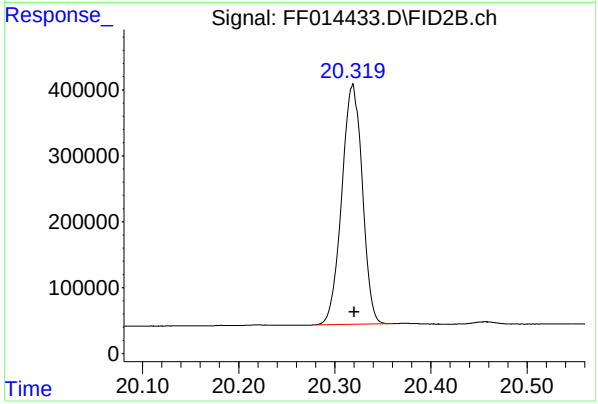
#14 N-DOTRIACONTANE

R.T.: 18.799 min
Delta R.T.: 0.002 min
Response: 5933902
Conc: 45.19 ug/ml



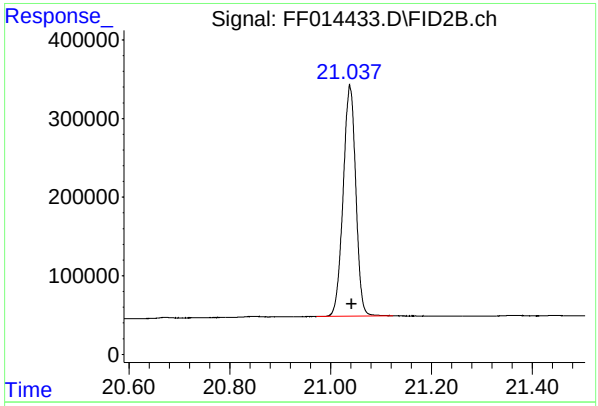
#15 N-TETRATRIACONTANE

R.T.: 19.582 min
Delta R.T.: 0.002 min
Response: 5778619
Conc: 47.01 ug/ml



#16 N-HEXATRIACONTANE

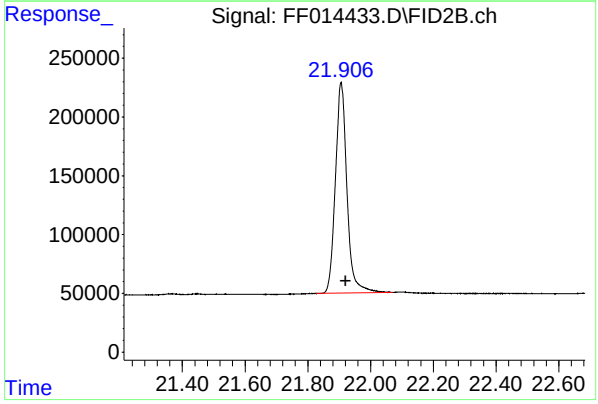
R.T.: 20.319 min
Delta R.T.: -0.002 min
Response: 5405930
Conc: 48.77 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.038 min
Delta R.T.: -0.004 min
Response: 5111312
Conc: 50.40 ug/ml

Instrument :
FID_F
ClientSampleId :
FF081624ICV



#18 N-TETRACONTANE

R.T.: 21.906 min
Delta R.T.: -0.015 min
Response: 4582086
Conc: 52.76 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF081624\
Data File : FF014433.D
Signal(s) : FID2B.ch
Acq On : 16 Aug 2024 11:20
Sample : FF081624ICV
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.949	1.912	2.034	BB	550396	5856690	91.48%	5.533%
2	4.458	4.418	4.535	BB	577461	5955768	93.02%	5.627%
3	6.625	6.589	6.711	BB	587491	6036416	94.28%	5.703%
4	8.451	8.414	8.546	BB	579285	6084107	95.03%	5.748%
5	10.057	10.021	10.155	BB	537546	6129383	95.73%	5.791%
6	11.500	11.461	11.580	BB	538102	6295874	98.34%	5.948%
7	12.809	12.770	12.881	BB	544223	6402452	100.00%	6.049%
8	14.007	13.966	14.070	BB	502326	6221153	97.17%	5.878%
9	14.906	14.857	14.975	BB	408757	5540595	86.54%	5.235%
10	15.110	15.056	15.170	BB	487234	6215966	97.09%	5.873%
11	16.131	16.086	16.190	BB	479056	6166468	96.31%	5.826%
12	17.080	17.007	17.150	BB	447216	6071580	94.83%	5.736%
13	17.967	17.910	18.025	BB	455532	6057552	94.61%	5.723%
14	18.799	18.742	18.867	BB	422104	5933902	92.68%	5.606%
15	19.582	19.523	19.640	BB	410370	5778619	90.26%	5.459%
16	20.319	20.280	20.360	BV	364049	5405930	84.44%	5.107%
17	21.038	20.971	21.124	BB	293933	5111312	79.83%	4.829%
18	21.906	21.826	22.071	BB	179480	4582086	71.57%	4.329%

Sum of corrected areas: 105845853

FF081624.M Fri Aug 16 16:07:59 2024

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: CHEM02

ProjectID: NJ Waste Water PT

Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG No.: P3845

DataFile: FF014470.D Analyst Name: YP\AJ Analyst Date: 09-10-2024

Conc. (PPM)	Area Count	RF	Average RF	%D
500	61539724	123079	128568	4.269

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014470.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 07:39
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Sep 11 01:30:38 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	14.899	5505457	46.644 ug/ml
	Target Compounds			
2)	N-DECANE	4.452	6018972	48.772 ug/ml
3)	N-DODECANE	6.619	6086428	49.095 ug/ml
4)	N-TETRADECANE	8.445	6145787	48.954 ug/ml
5)	N-HEXADECANE	10.051	6194735	50.126 ug/ml
6)	N-OCTADECANE	11.493	6348886	48.857 ug/ml
7)	N-EICOSANE	12.803	6423182	47.581 ug/ml
8)	N-DOCOSANE	14.000	6216614	47.251 ug/ml
10)	N-TETRACOSANE	15.103	6158316	46.535 ug/ml
11)	N-HEXACOSANE	16.122	6048634	46.106 ug/ml
12)	N-OCTACOSANE	17.072	5898170	45.675 ug/ml

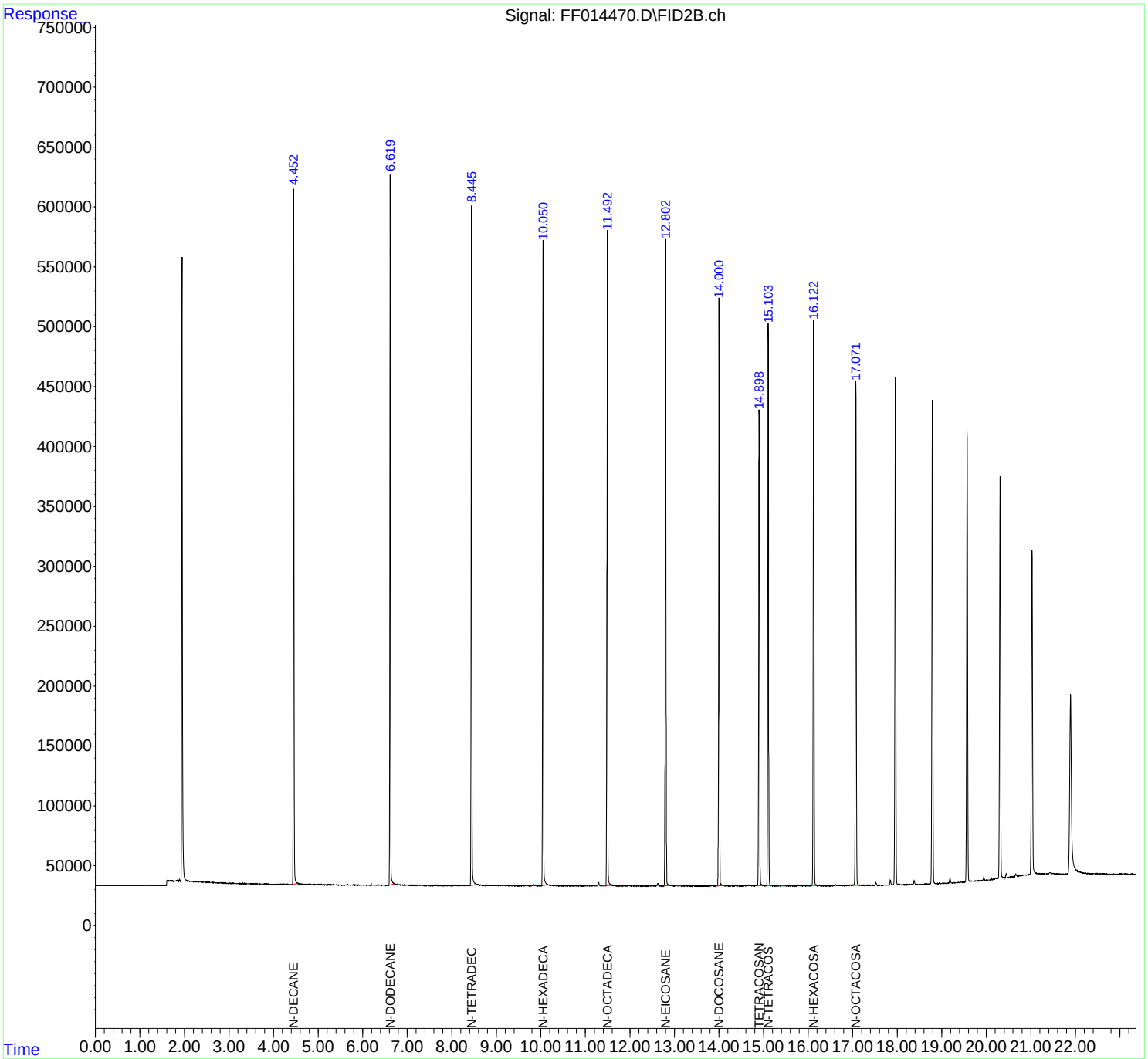
(f)=RT Delta > 1/2 Window (m)=manual int.

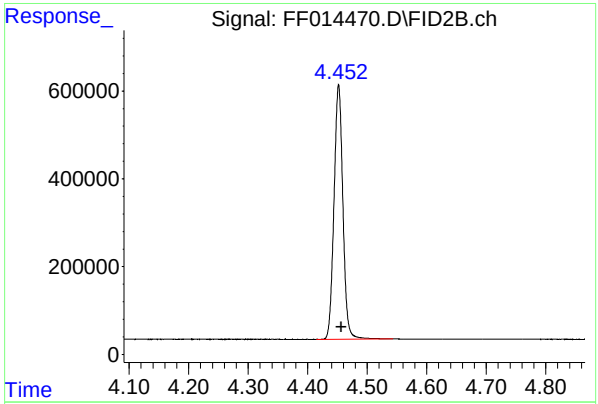
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014470.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 07:39
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Sep 11 01:30:38 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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

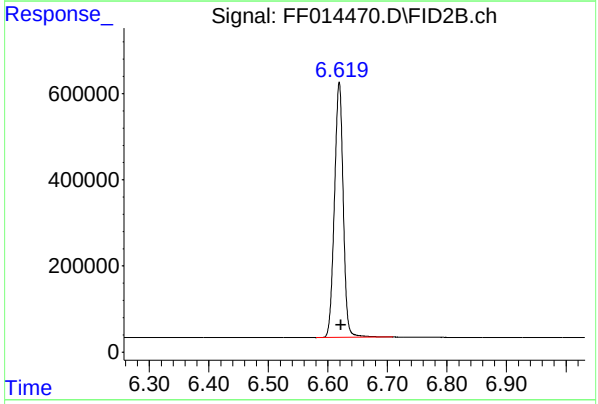




#2 N-DECANE

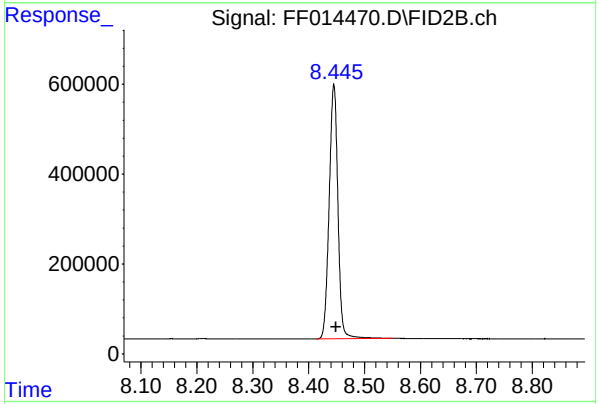
R.T.: 4.452 min
Delta R.T.: -0.004 min
Response: 6018972
Conc: 48.77 ug/ml

Instrument :
FID_F
ClientSampleId :
50 PPM TRPH STD



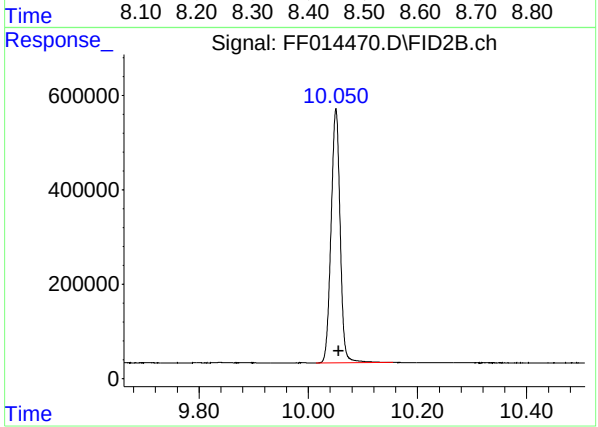
#3 N-DODECANE

R.T.: 6.619 min
Delta R.T.: -0.003 min
Response: 6086428
Conc: 49.09 ug/ml



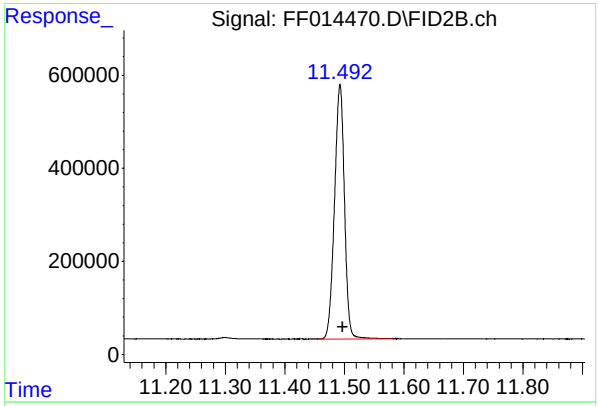
#4 N-TETRADECANE

R.T.: 8.445 min
Delta R.T.: -0.004 min
Response: 6145787
Conc: 48.95 ug/ml



#5 N-HEXADECANE

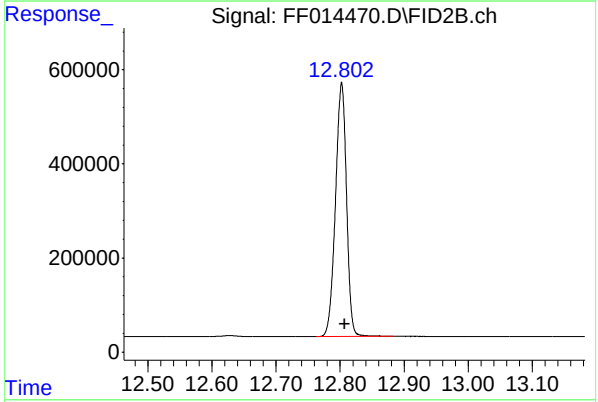
R.T.: 10.051 min
Delta R.T.: -0.005 min
Response: 6194735
Conc: 50.13 ug/ml



#6 N-OCTADECANE

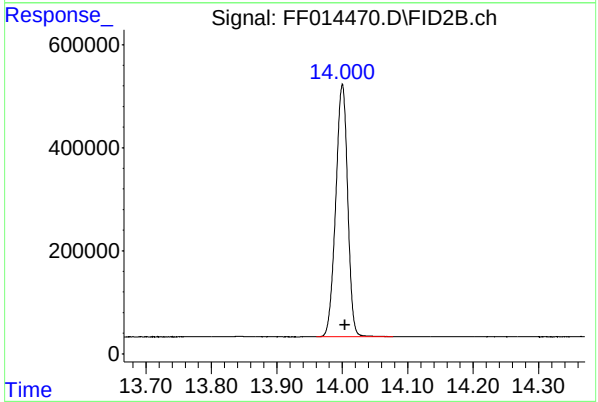
R.T.: 11.493 min
Delta R.T.: -0.004 min
Response: 6348886
Conc: 48.86 ug/ml

Instrument :
FID_F
ClientSampleId :
50 PPM TRPH STD



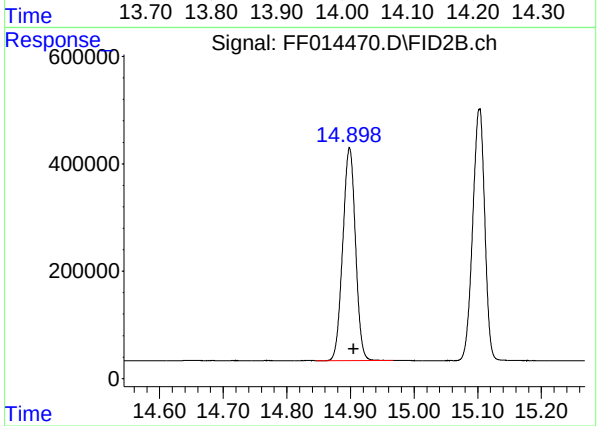
#7 N-EICOSANE

R.T.: 12.803 min
Delta R.T.: -0.004 min
Response: 6423182
Conc: 47.58 ug/ml



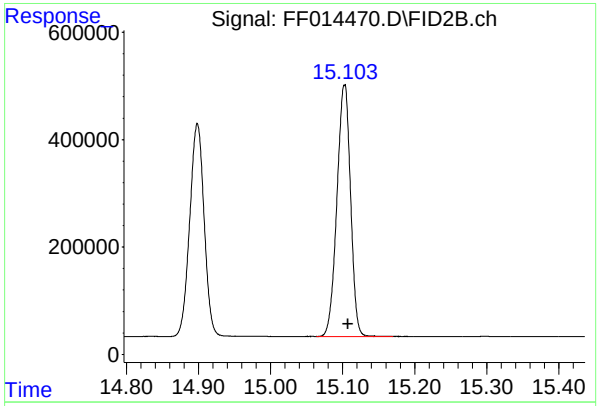
#8 N-DOCOSANE

R.T.: 14.000 min
Delta R.T.: -0.004 min
Response: 6216614
Conc: 47.25 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

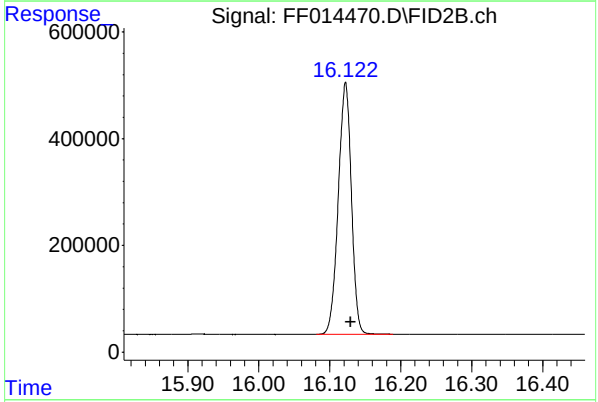
R.T.: 14.899 min
Delta R.T.: -0.006 min
Response: 5505457
Conc: 46.64 ug/ml



#10 N-TETRACOSANE

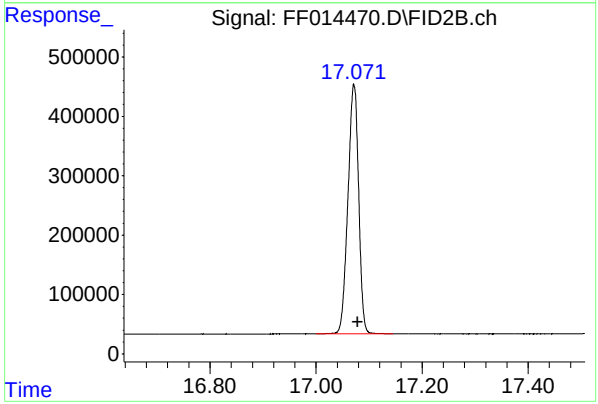
R.T.: 15.103 min
Delta R.T.: -0.005 mi
Response: 6158316
Conc: 46.53 ug/m

Instrument :
FID_F
ClientSampleId :
50 PPM TRPH STD



#11 N-HEXACOSANE

R.T.: 16.122 min
Delta R.T.: -0.007 min
Response: 6048634
Conc: 46.11 ug/ml



#12 N-OCTACOSANE

R.T.: 17.072 min
Delta R.T.: -0.007 min
Response: 5898170
Conc: 45.67 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014470.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 07:39
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.452	4.414	4.543	BB	579948	6018972	93.71%	8.977%
2	6.619	6.580	6.709	BB	592654	6086428	94.76%	9.078%
3	8.445	8.413	8.551	BB	566953	6145787	95.68%	9.167%
4	10.051	10.014	10.155	BB	538478	6194735	96.44%	9.240%
5	11.493	11.453	11.582	BB	546662	6348886	98.84%	9.470%
6	12.803	12.763	12.883	BB	540027	6423182	100.00%	9.580%
7	14.000	13.960	14.078	BB	490239	6216614	96.78%	9.272%
8	14.899	14.846	14.967	BB	397097	5505457	85.71%	8.212%
9	15.103	15.063	15.170	BB	467658	6158316	95.88%	9.185%
10	16.122	16.081	16.189	BB	472589	6048634	94.17%	9.022%
11	17.072	17.000	17.145	BB	418603	5898170	91.83%	8.797%

Sum of corrected areas: 67045180

FF081624.M Wed Sep 11 01:54:31 2024

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: CHEM02

ProjectID: NJ Waste Water PT

Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG No.: P3845

DataFile: FF014477.D Analyst Name: YP\AJ Analyst Date: 09-10-2024

Conc. (PPM)	Area Count	RF	Average RF	%D
500	62646393	125293	128568	2.547

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014477.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 12:08
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Sep 11 01:31:27 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	14.900	5610528	47.534 ug/ml
	Target Compounds			
2)	N-DECANE	4.453	6073216	49.211 ug/ml
3)	N-DODECANE	6.620	6173927	49.800 ug/ml
4)	N-TETRADECANE	8.446	6242598	49.726 ug/ml
5)	N-HEXADECANE	10.052	6304219	51.012 ug/ml
6)	N-OCTADECANE	11.493	6473464	49.816 ug/ml
7)	N-EICOSANE	12.803	6547542	48.503 ug/ml
8)	N-DOCOSANE	14.001	6336890	48.166 ug/ml
10)	N-TETRACOSANE	15.103	6276981	47.431 ug/ml
11)	N-HEXACOSANE	16.123	6178677	47.098 ug/ml
12)	N-OCTACOSANE	17.072	6038879	46.764 ug/ml

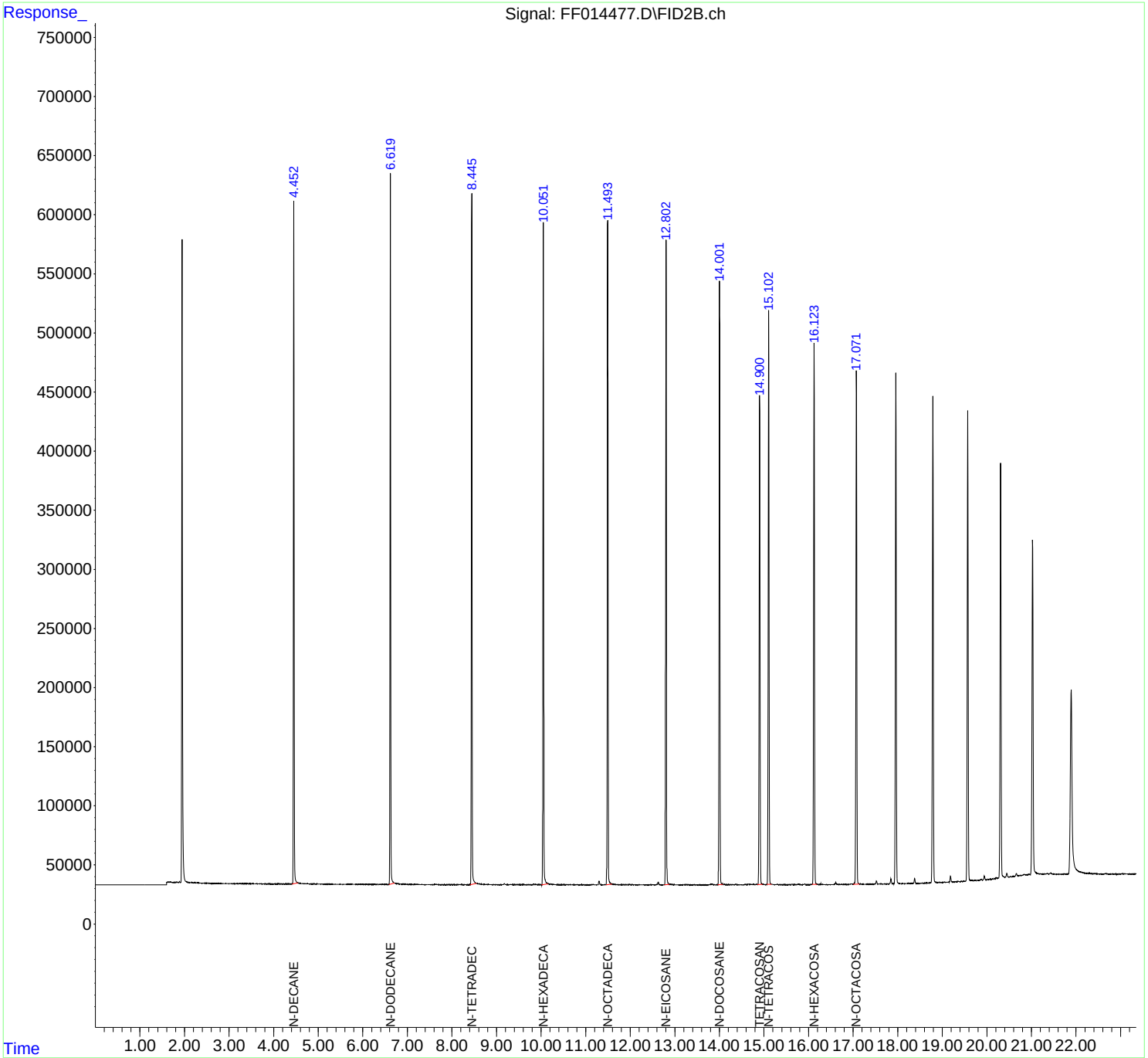
(f)=RT Delta > 1/2 Window (m)=manual int.

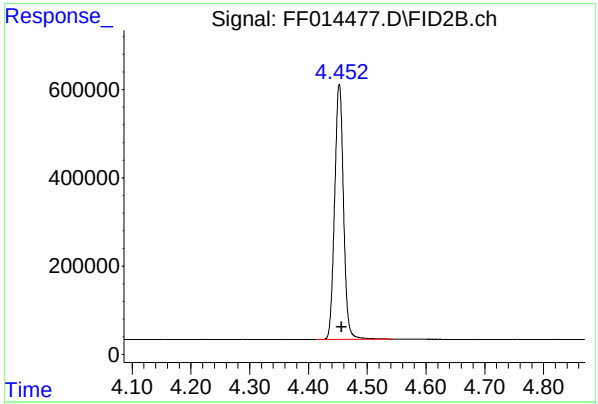
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014477.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 12:08
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Sep 11 01:31:27 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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

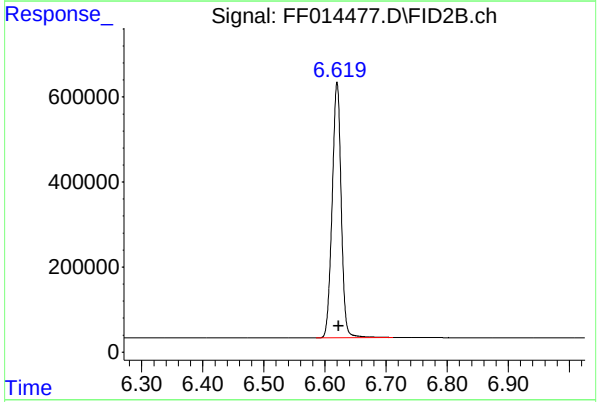




#2 N-DECANE

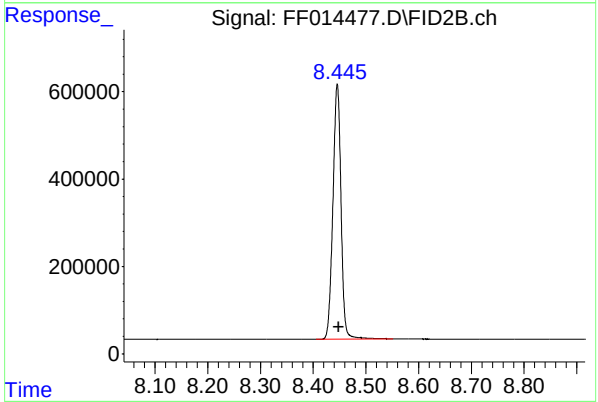
R.T.: 4.453 min
Delta R.T.: -0.004 min
Response: 6073216
Conc: 49.21 ug/ml

Instrument :
FID_F
ClientSampleId :
50 PPM TRPH STD



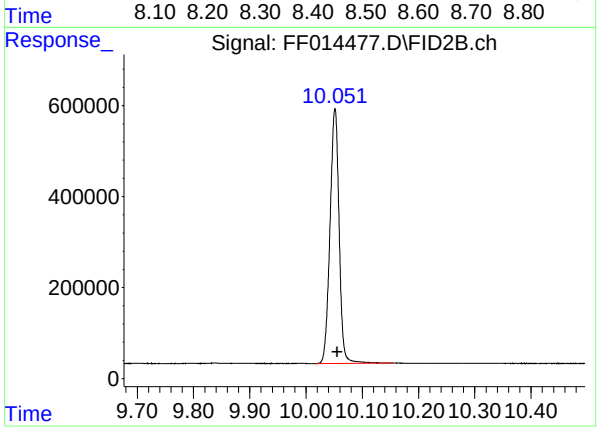
#3 N-DODECANE

R.T.: 6.620 min
Delta R.T.: -0.002 min
Response: 6173927
Conc: 49.80 ug/ml



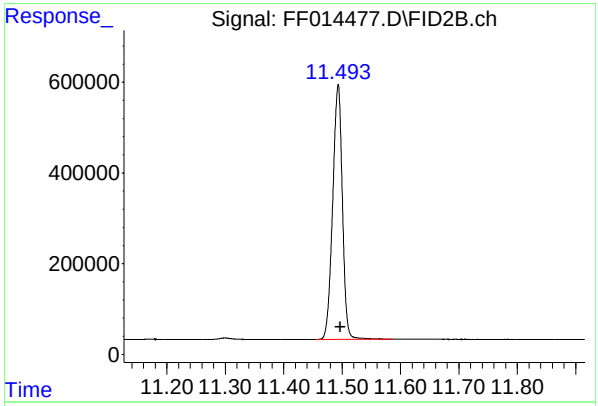
#4 N-TETRADECANE

R.T.: 8.446 min
Delta R.T.: -0.003 min
Response: 6242598
Conc: 49.73 ug/ml



#5 N-HEXADECANE

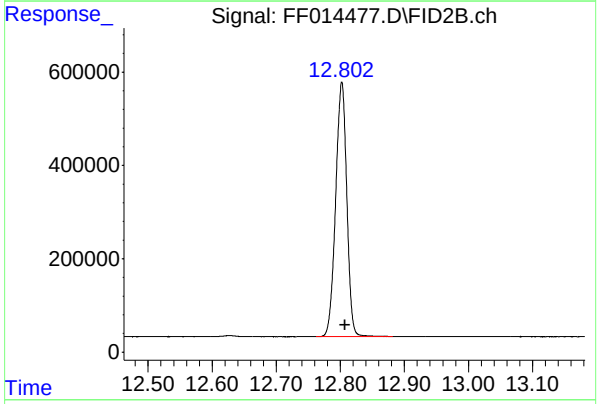
R.T.: 10.052 min
Delta R.T.: -0.004 min
Response: 6304219
Conc: 51.01 ug/ml



#6 N-OCTADECANE

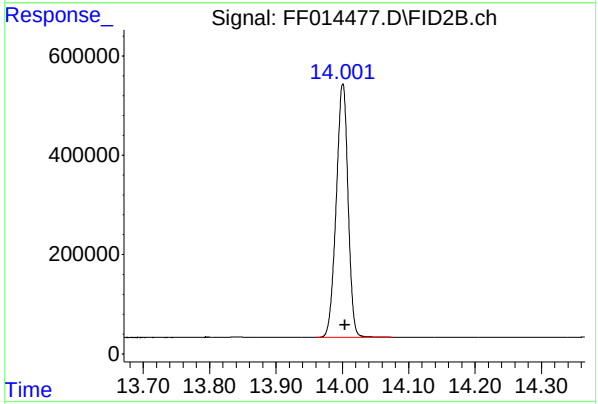
R.T.: 11.493 min
Delta R.T.: -0.004 min
Response: 6473464
Conc: 49.82 ug/ml

Instrument :
FID_F
ClientSampleId :
50 PPM TRPH STD



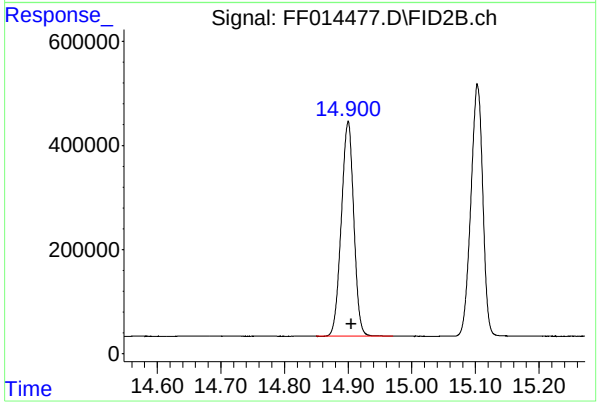
#7 N-EICOSANE

R.T.: 12.803 min
Delta R.T.: -0.005 min
Response: 6547542
Conc: 48.50 ug/ml



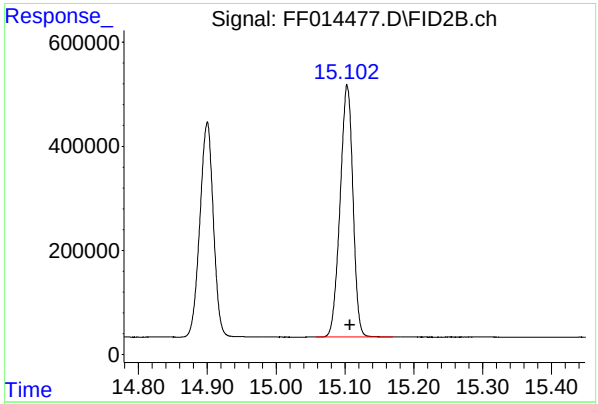
#8 N-DOCOSANE

R.T.: 14.001 min
Delta R.T.: -0.003 min
Response: 6336890
Conc: 48.17 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

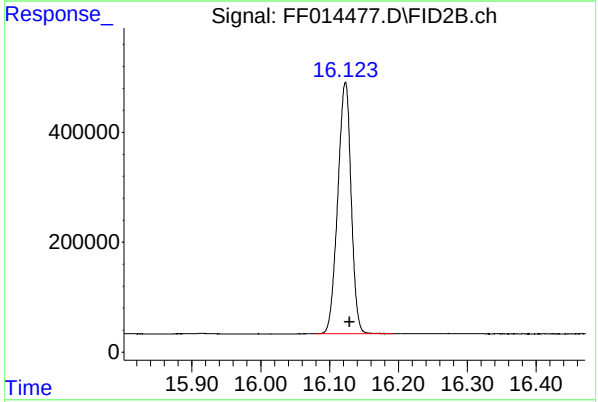
R.T.: 14.900 min
Delta R.T.: -0.005 min
Response: 5610528
Conc: 47.53 ug/ml



#10 N-TETRACOSANE

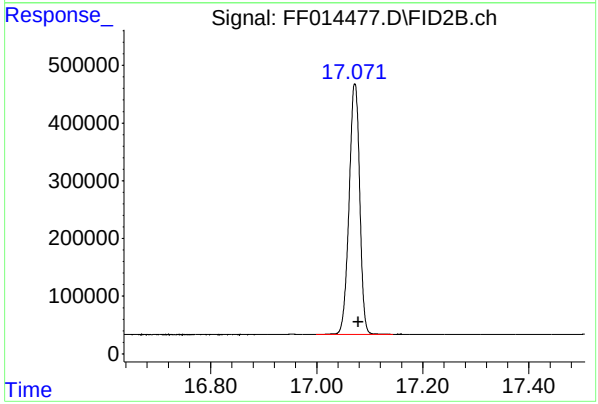
R.T.: 15.103 min
Delta R.T.: -0.004 min
Response: 6276981
Conc: 47.43 ug/ml

Instrument :
FID_F
ClientSampleId :
50 PPM TRPH STD



#11 N-HEXACOSANE

R.T.: 16.123 min
Delta R.T.: -0.006 min
Response: 6178677
Conc: 47.10 ug/ml



#12 N-OCTACOSANE

R.T.: 17.072 min
Delta R.T.: -0.007 min
Response: 6038879
Conc: 46.76 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014477.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 12:08
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.453	4.413	4.544	BB	577662	6073216	92.76%	8.898%
2	6.620	6.585	6.711	BB	601009	6173927	94.29%	9.045%
3	8.446	8.405	8.551	BB	584693	6242598	95.34%	9.146%
4	10.052	10.018	10.155	BB	560656	6304219	96.28%	9.236%
5	11.493	11.455	11.587	BB	562852	6473464	98.87%	9.484%
6	12.803	12.762	12.882	BB	545344	6547542	100.00%	9.592%
7	14.001	13.960	14.076	BB	510744	6336890	96.78%	9.284%
8	14.900	14.850	14.970	BB	413811	5610528	85.69%	8.220%
9	15.103	15.058	15.170	BB	481854	6276981	95.87%	9.196%
10	16.123	16.080	16.192	BB	457351	6178677	94.37%	9.052%
11	17.072	16.999	17.144	BB	433710	6038879	92.23%	8.847%

Sum of corrected areas: 68256919

FF081624.M Wed Sep 11 01:56:19 2024

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

Analytical Sequence

Client: Chemtech Consulting Group **SDG No.:** P3845

Project: NJ Waste Water PT **Instrument ID:** FID_F

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 **14.906**

EPA SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
PIBLK01	I.BLK01	10 Sep 2024 07:10	FF014469.D	14.897	
50 PPM TRPH STD	50 PPM TRPH STD	10 Sep 2024 07:39	FF014470.D	14.899	
PB163245BL	PB163245BL	10 Sep 2024 09:11	FF014473.D	14.902	
PB163245BS	PB163245BS	10 Sep 2024 09:40	FF014474.D	14.896	
RR-DIES-WP	P3845-19	10 Sep 2024 10:09	FF014475.D	14.820	
PIBLK02	I.BLK02	10 Sep 2024 11:38	FF014476.D	14.899	
50 PPM TRPH STD	50 PPM TRPH STD	10 Sep 2024 12:08	FF014477.D	14.900	

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

QC Limits	Lower Limit	Upper Limits
(± 0.10 minutes)	14.806	15.006

QC SAMPLE DATA

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Waste Water PT	Date Received:	
Client Sample ID:	PB163245BL	SDG No.:	P3845
Lab Sample ID:	PB163245BL	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
FF014473.D	1	09/09/24 10:07	09/10/24 9:11	PB163245

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	10.0	U	10.0	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	14.3		29 - 130	71%	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_F\Data\FF091024\
Data File : FF014473.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 09:11
Operator : YP\AJ
Sample : PB163245BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB163245BL

Integration File: autoint1.e
Quant Time: Sep 11 01:30:58 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	14.902	1686496	14.288 ug/ml
	Target Compounds			

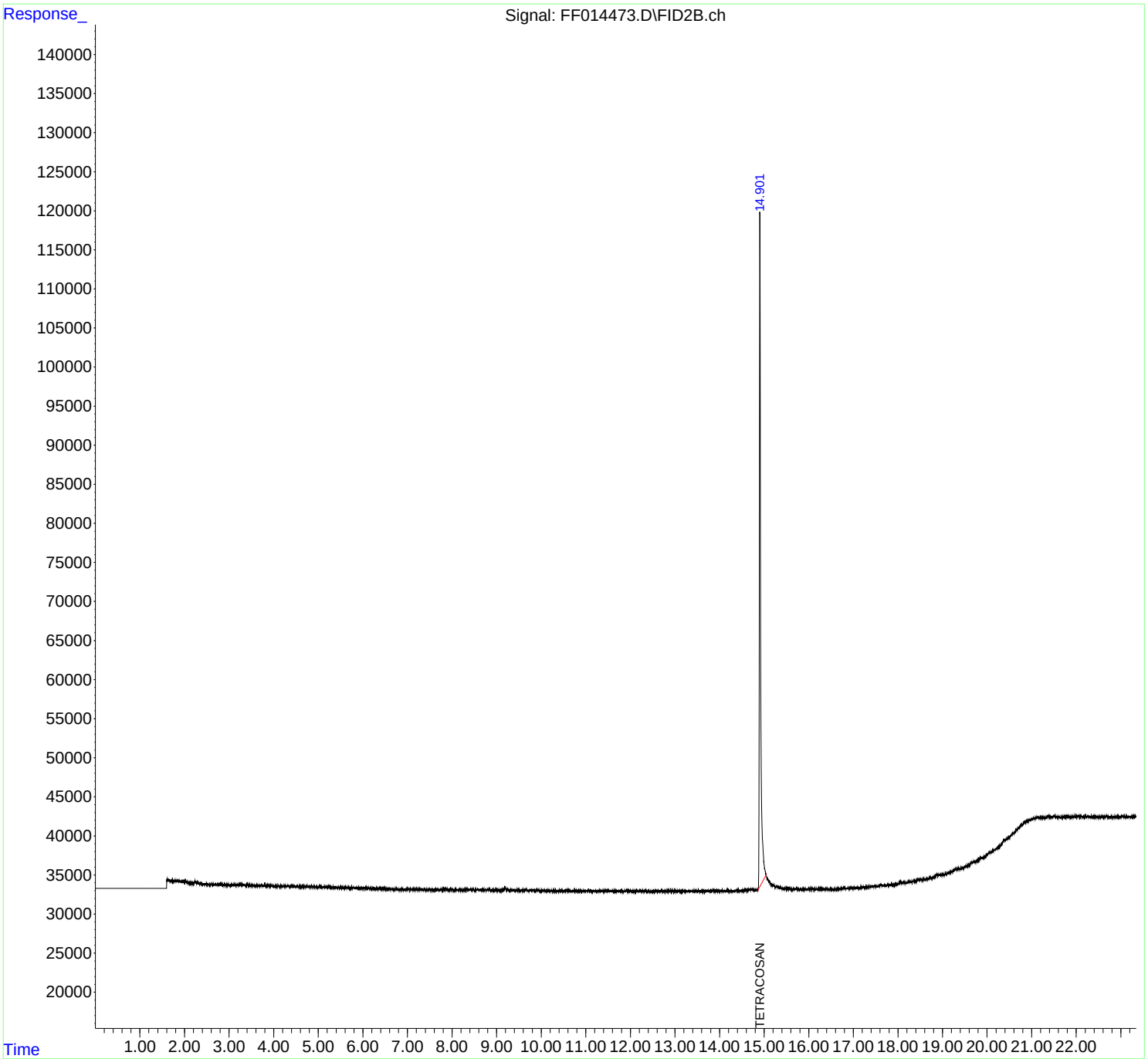
(f)=RT Delta > 1/2 Window (m)=manual int.

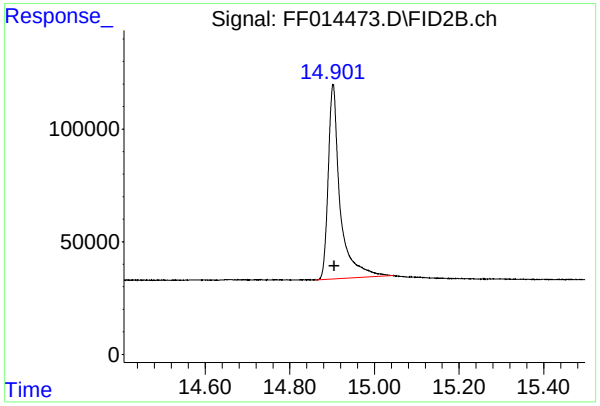
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014473.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 09:11
Operator : YP\AJ
Sample : PB163245BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB163245BL

Integration File: autoint1.e
Quant Time: Sep 11 01:30:58 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.902 min
Delta R.T.: -0.003 mi
Response: 1686496
Conc: 14.29 ug/m

Instrument :
FID_F
ClientSampleId :
PB163245BL

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014473.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 09:11
Sample : PB163245BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	14.902	14.862	15.044	BB	86171	1686496	100.00%	100.000%

Sum of corrected areas: 1686496

FF081624.M Wed Sep 11 01:55:16 2024

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	09/10/24
Project:	NJ Waste Water PT	Date Received:	09/10/24
Client Sample ID:	PIBLK-FF014469.D	SDG No.:	P3845
Lab Sample ID:	I.BLK-FF014469.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
FF014469.D	1		09/10/24	FF091024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	10.0	U	10.0	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	21.3		29 - 130	106%	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_F\Data\FF091024\
Data File : FF014469.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 07:10
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Sep 11 01:30:33 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
9)	S TETRACOSANE-d50 (SURR...	14.897	2510054	21.266	ug/ml
	Target Compounds				

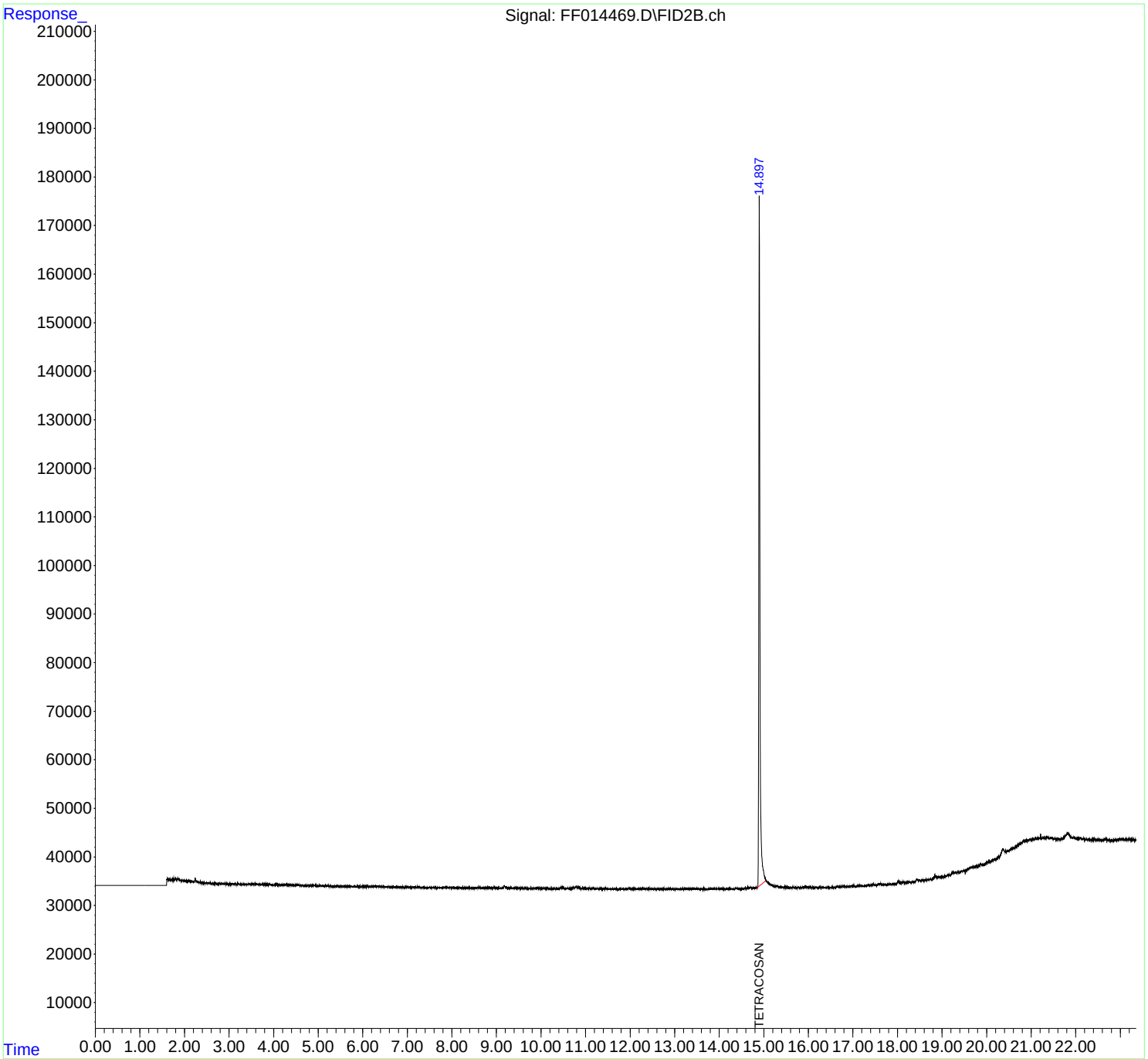
(f)=RT Delta > 1/2 Window (m)=manual int.

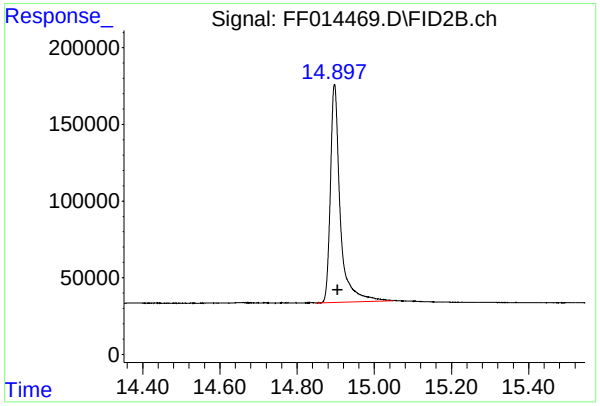
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014469.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 07:10
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Sep 11 01:30:33 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.897 min
Delta R.T.: -0.008 mi
Response: 2510054
Conc: 21.27 ug/m

Instrument :
FID_F
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014469.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 07:10
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	14.897	14.849	15.048	BB	142106	2510054	100.00%	100.000%

Sum of corrected areas: 2510054

FF081624.M Wed Sep 11 01:54:06 2024

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	09/10/24
Project:	NJ Waste Water PT	Date Received:	09/10/24
Client Sample ID:	PIBLK-FF014476.D	SDG No.:	P3845
Lab Sample ID:	I.BLK-FF014476.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
FF014476.D	1		09/10/24	FF091024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	10.0	U	10.0	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	16.2		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_F\Data\FF091024\
Data File : FF014476.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 11:38
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Sep 11 01:31:22 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	14.899	1916468	16.237 ug/ml
	Target Compounds			

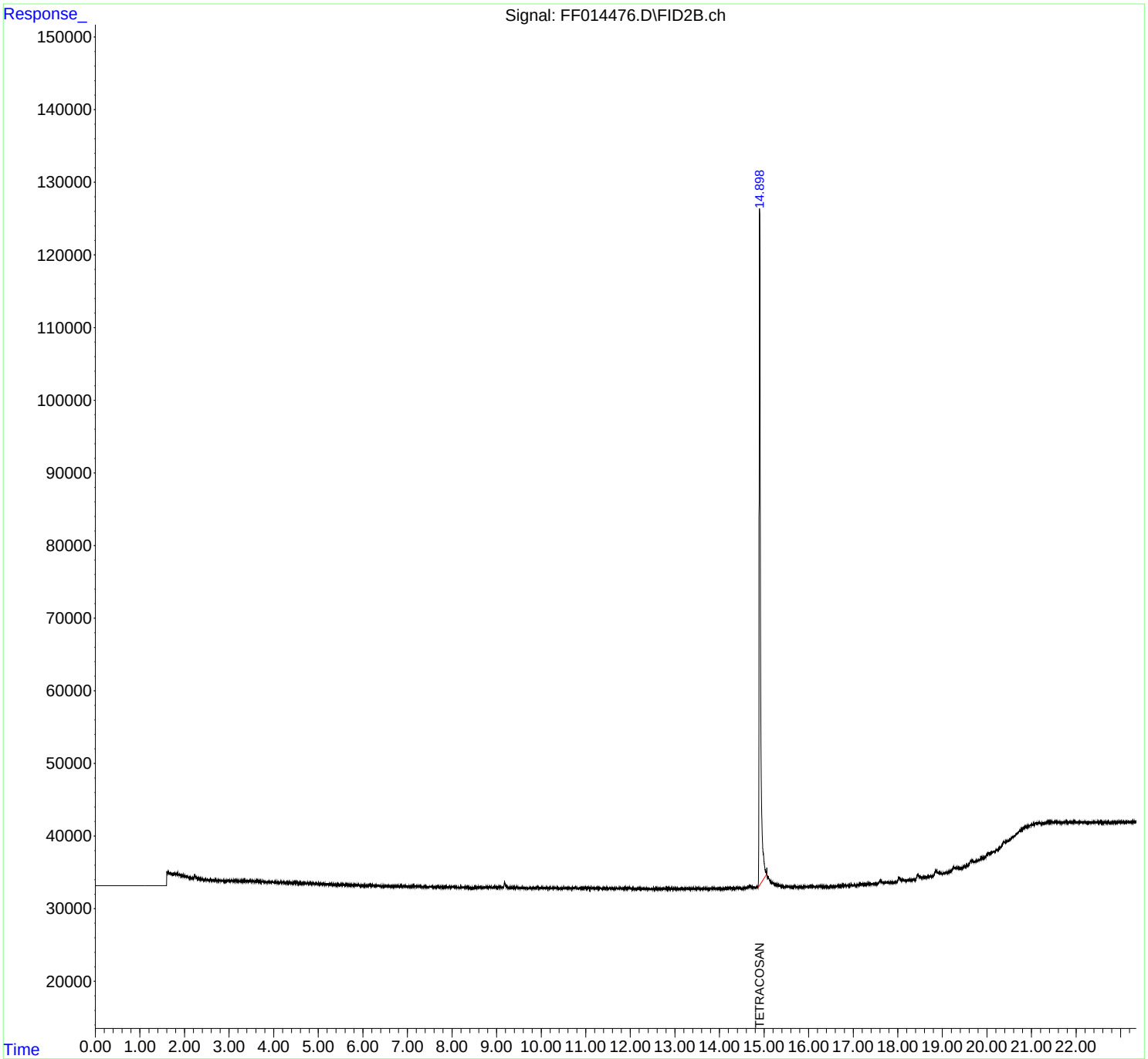
(f)=RT Delta > 1/2 Window (m)=manual int.

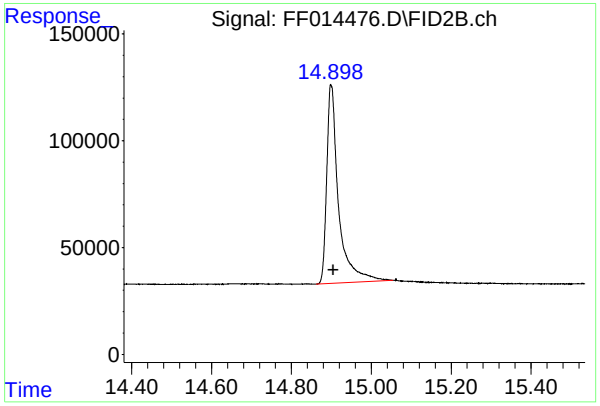
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014476.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 11:38
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Sep 11 01:31:22 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.899 min
Delta R.T.: -0.006 mi
Response: 1916468
Conc: 16.24 ug/m

Instrument :
FID_F
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014476.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 11:38
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	14.899	14.862	15.054	BB	92858	1916468	100.00%	100.000%
			Sum of corrected areas:			1916468		

FF081624.M Wed Sep 11 01:55:53 2024

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Waste Water PT	Date Received:	
Client Sample ID:	PB163245BS	SDG No.:	P3845
Lab Sample ID:	PB163245BS	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
FF014474.D	1	09/09/24 10:07	09/10/24 9:40	PB163245

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	194		10.0	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	17.2		29 - 130	86%	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_F\Data\FF091024\
Data File : FF014474.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 09:40
Operator : YP\AJ
Sample : PB163245BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB163245BS

Integration File: autoint1.e
Quant Time: Sep 11 01:31:05 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	14.896	2026509	17.169 ug/ml
	Target Compounds			
2)	N-DECANE	4.452	2349583	19.039 ug/ml
3)	N-DODECANE	6.618	2445430	19.725 ug/ml
4)	N-TETRADECANE	8.444	2401174	19.127 ug/ml
5)	N-HEXADECANE	10.049	2458754	19.895 ug/ml
6)	N-OCTADECANE	11.492	2609179	20.079 ug/ml
7)	N-EICOSANE	12.800	2587007	19.164 ug/ml
8)	N-DOCOSANE	13.998	2562975	19.481 ug/ml
10)	N-TETRACOSANE	15.099	2561891	19.359 ug/ml
11)	N-HEXACOSANE	16.120	2496850	19.032 ug/ml
12)	N-OCTACOSANE	17.068	2432811	18.839 ug/ml

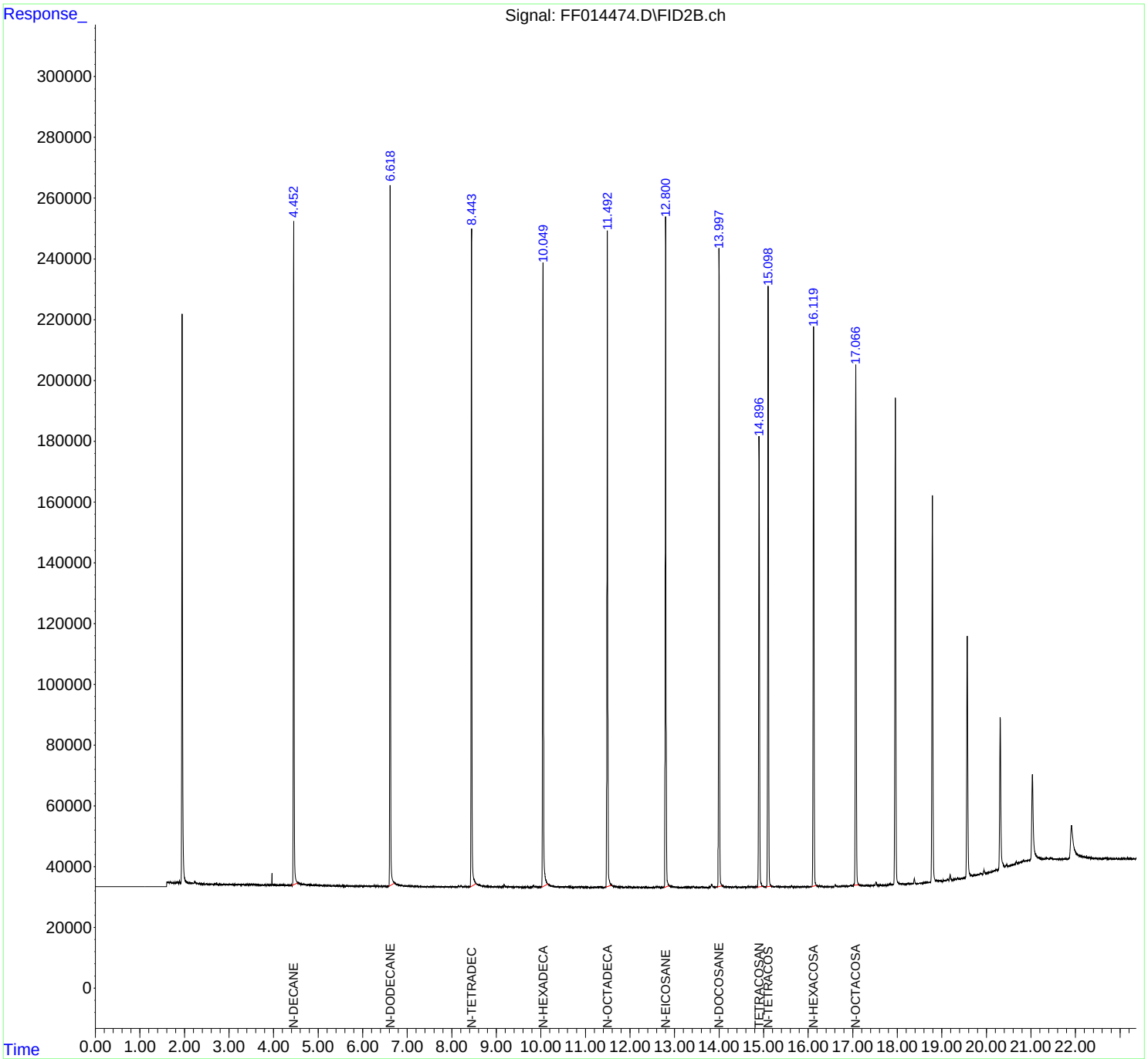
(f)=RT Delta > 1/2 Window (m)=manual int.

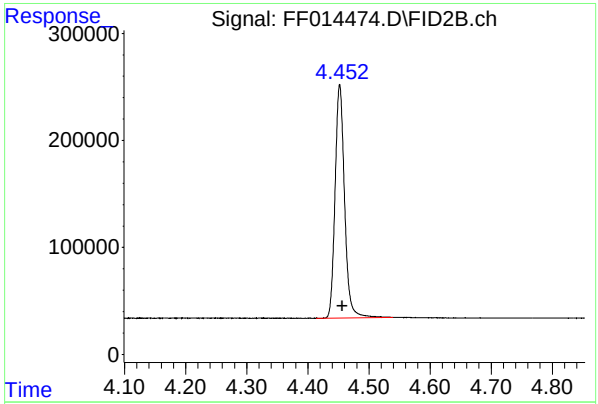
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014474.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 09:40
Operator : YP\AJ
Sample : PB163245BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB163245BS

Integration File: autoint1.e
Quant Time: Sep 11 01:31:05 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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

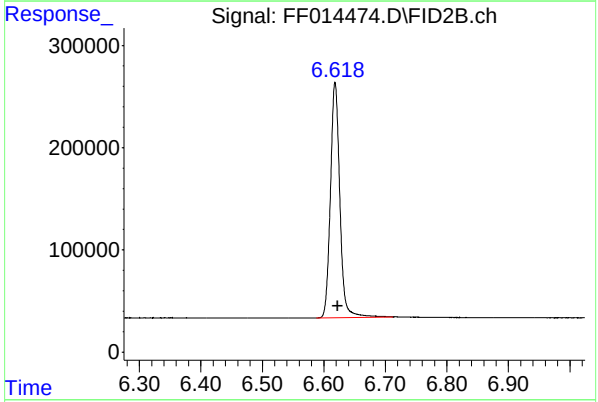




#2 N-DECANE

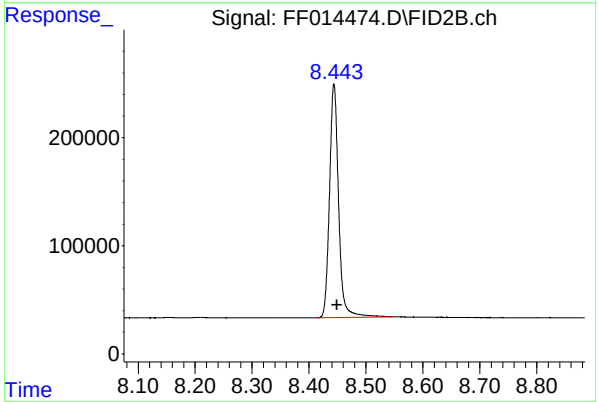
R.T.: 4.452 min
Delta R.T.: -0.004 min
Response: 2349583
Conc: 19.04 ug/ml

Instrument :
FID_F
ClientSampleId :
PB163245BS



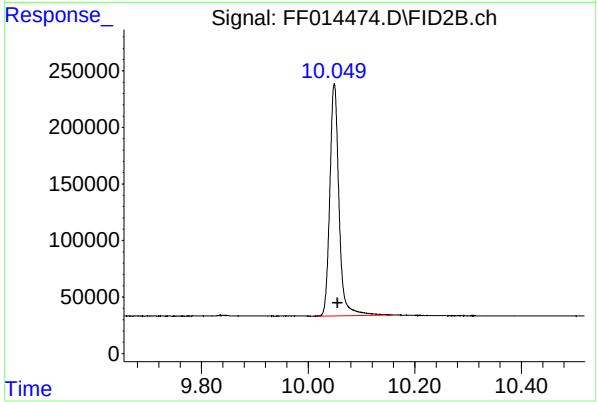
#3 N-DODECANE

R.T.: 6.618 min
Delta R.T.: -0.004 min
Response: 2445430
Conc: 19.73 ug/ml



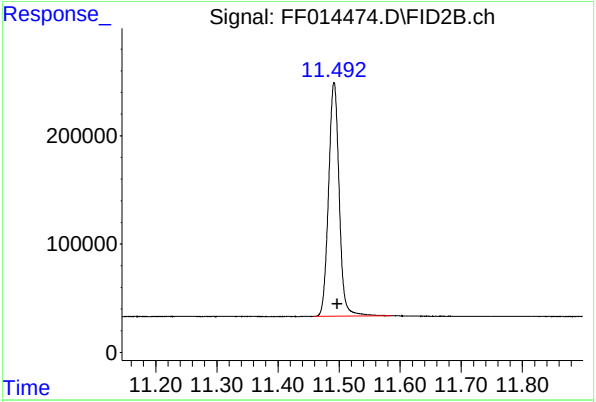
#4 N-TETRADECANE

R.T.: 8.444 min
Delta R.T.: -0.005 min
Response: 2401174
Conc: 19.13 ug/ml



#5 N-HEXADECANE

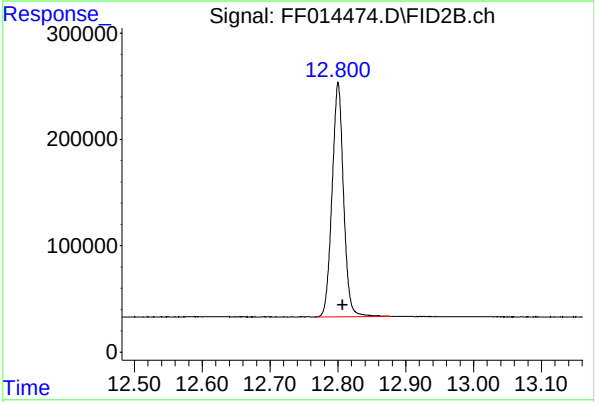
R.T.: 10.049 min
Delta R.T.: -0.006 min
Response: 2458754
Conc: 19.90 ug/ml



#6 N-OCTADECANE

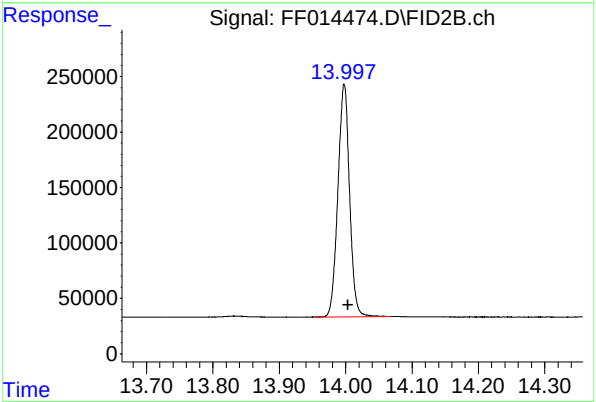
R.T.: 11.492 min
Delta R.T.: -0.005 min
Response: 2609179
Conc: 20.08 ug/ml

Instrument :
FID_F
ClientSampleId :
PB163245BS



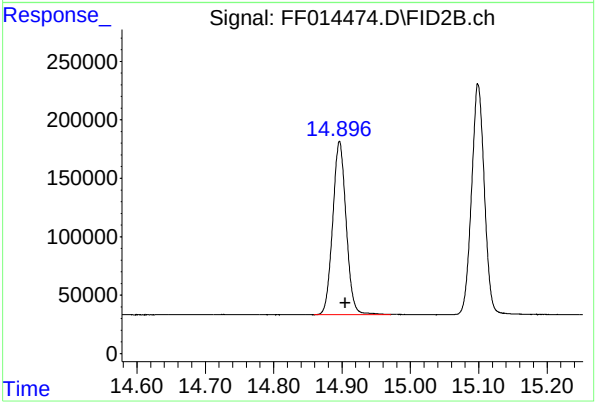
#7 N-EICOSANE

R.T.: 12.800 min
Delta R.T.: -0.007 min
Response: 2587007
Conc: 19.16 ug/ml



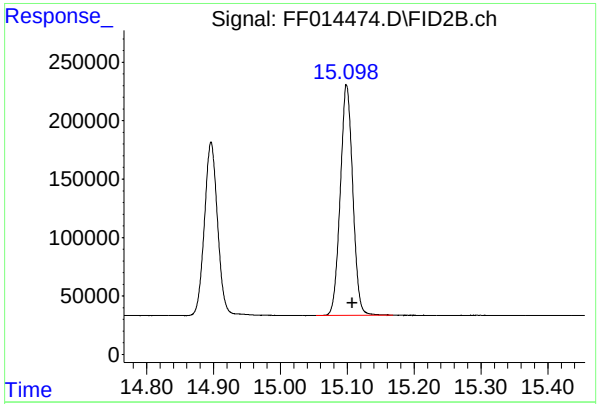
#8 N-DOCOSANE

R.T.: 13.998 min
Delta R.T.: -0.006 min
Response: 2562975
Conc: 19.48 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

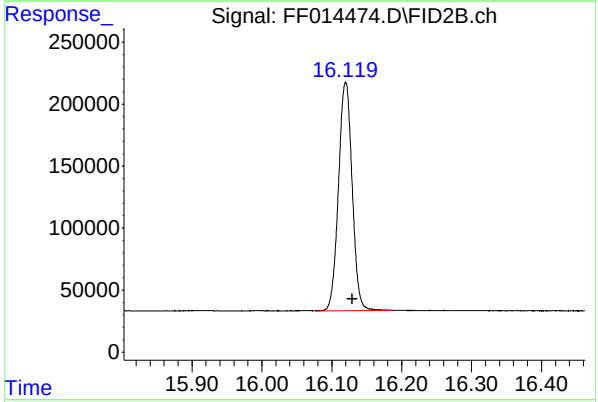
R.T.: 14.896 min
Delta R.T.: -0.009 min
Response: 2026509
Conc: 17.17 ug/ml



#10 N-TETRACOSANE

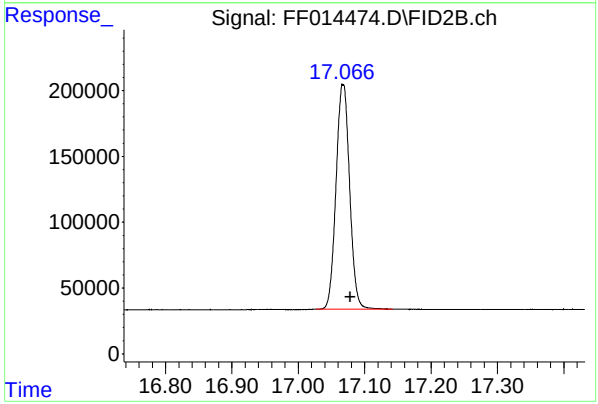
R.T.: 15.099 min
Delta R.T.: -0.009 min
Response: 2561891
Conc: 19.36 ug/ml

Instrument :
FID_F
ClientSampleId :
PB163245BS



#11 N-HEXACOSANE

R.T.: 16.120 min
Delta R.T.: -0.009 min
Response: 2496850
Conc: 19.03 ug/ml



#12 N-OCTACOSANE

R.T.: 17.068 min
Delta R.T.: -0.011 min
Response: 2432811
Conc: 18.84 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014474.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 09:40
Sample : PB163245BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.452	4.413	4.539	BB	218424	2349583	90.05%	8.724%
2	6.618	6.588	6.713	BB	230406	2445430	93.72%	9.080%
3	8.444	8.412	8.548	BB	216333	2401174	92.03%	8.916%
4	10.049	10.015	10.159	BB	205364	2458754	94.23%	9.129%
5	11.492	11.459	11.585	BB	215969	2609179	100.00%	9.688%
6	12.800	12.765	12.878	BB	219866	2587007	99.15%	9.606%
7	13.998	13.953	14.068	BB	209017	2562975	98.23%	9.516%
8	14.896	14.859	14.972	BB	148396	2026509	77.67%	7.524%
9	15.099	15.053	15.168	BB	196752	2561891	98.19%	9.512%
10	16.120	16.078	16.188	BB	183966	2496850	95.69%	9.271%
11	17.068	17.027	17.143	BB	170209	2432811	93.24%	9.033%

Sum of corrected areas: 26932162

FF081624.M Wed Sep 11 01:55:35 2024

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

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QCBatch ID # FF081624

Review By	yogesh	Review On	8/16/2024 11:25:39 AM		
Supervise By	Ankita	Supervise On	8/19/2024 9:59:48 AM		
SubDirectory	FF081624	HP Acquire Method		HP Processing Method	FF081624

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23611,PP23613,PP23614,PP23615,PP23616
CCC	
Internal Standard/PEM	
ICV/I.BLK	PP23612,PP23617
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FF014426.D	16 Aug 2024 06:48	YP\AJ	Ok
2	I.BLK	FF014427.D	16 Aug 2024 07:17	YP\AJ	Ok
3	100 TRPH STD	FF014428.D	16 Aug 2024 07:46	YP\AJ	Ok
4	50 TRPH STD	FF014429.D	16 Aug 2024 08:16	YP\AJ	Ok
5	20 TRPH STD	FF014430.D	16 Aug 2024 08:47	YP\AJ	Ok
6	10 TRPH STD	FF014431.D	16 Aug 2024 10:18	YP\AJ	Ok
7	5 TRPH STD	FF014432.D	16 Aug 2024 10:50	YP\AJ	Ok
8	FF081624ICV	FF014433.D	16 Aug 2024 11:20	YP\AJ	Ok

M : Manual Integration

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Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QCBatch ID # FF091024

Review By	yogesh	Review On	9/10/2024 11:15:53 AM		
Supervise By	Ankita	Supervise On	9/11/2024 11:23:30 AM		
SubDirectory	FF091024	HP Acquire Method		HP Processing Method	FF081624

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23611,PP23613,PP23614,PP23615,PP23616
CCC	PP23613
Internal Standard/PEM	
ICV/I.BLK	PP23612,PP23617
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FF014468.D	10 Sep 2024 06:41	YP\AJ	Ok
2	I.BLK	FF014469.D	10 Sep 2024 07:10	YP\AJ	Ok
3	50 PPM TRPH STD	FF014470.D	10 Sep 2024 07:39	YP\AJ	Ok
4	RT MARKER	FF014471.D	10 Sep 2024 08:08	YP\AJ	Ok
5	P3845-19	FF014472.D	10 Sep 2024 08:42	YP\AJ	Dilution
6	PB163245BL	FF014473.D	10 Sep 2024 09:11	YP\AJ	Ok
7	PB163245BS	FF014474.D	10 Sep 2024 09:40	YP\AJ	Ok
8	P3845-19	FF014475.D	10 Sep 2024 10:09	YP\AJ	Ok
9	I.BLK	FF014476.D	10 Sep 2024 11:38	YP\AJ	Ok
10	50 PPM TRPH STD	FF014477.D	10 Sep 2024 12:08	YP\AJ	Ok

M : Manual Integration

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Fax : 908 789 8922

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QCBatch ID # FF081624

Review By	yogesh	Review On	8/16/2024 11:25:39 AM		
Supervise By	Ankita	Supervise On	8/19/2024 9:59:48 AM		
SubDirectory	FF081624	HP Acquire Method		HP Processing Method	FF081624

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23611,PP23613,PP23614,PP23615,PP23616
CCC	
Internal Standard/PEM	
ICV/I.BLK	PP23612,PP23617
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FF014426.D	16 Aug 2024 06:48		YP\AJ	Ok
2	I.BLK		FF014427.D	16 Aug 2024 07:17		YP\AJ	Ok
3	100 TRPH STD		FF014428.D	16 Aug 2024 07:46		YP\AJ	Ok
4	50 TRPH STD		FF014429.D	16 Aug 2024 08:16		YP\AJ	Ok
5	20 TRPH STD		FF014430.D	16 Aug 2024 08:47		YP\AJ	Ok
6	10 TRPH STD		FF014431.D	16 Aug 2024 10:18		YP\AJ	Ok
7	5 TRPH STD		FF014432.D	16 Aug 2024 10:50		YP\AJ	Ok
8	FF081624ICV		FF014433.D	16 Aug 2024 11:20		YP\AJ	Ok

M : Manual Integration

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

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QCBatch ID # FF091024

Review By	yogesh	Review On	9/10/2024 11:15:53 AM		
Supervise By	Ankita	Supervise On	9/11/2024 11:23:30 AM		
SubDirectory	FF091024	HP Acquire Method		HP Processing Method	FF081624

STD. NAME	STD REF.#
Tune/Reschk	
Initial Calibration Stds	PP23611,PP23613,PP23614,PP23615,PP23616
CCC	PP23613
Internal Standard/PEM	
ICV/I.BLK	PP23612,PP23617
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FF014468.D	10 Sep 2024 06:41		YP\AJ	Ok
2	I.BLK		FF014469.D	10 Sep 2024 07:10		YP\AJ	Ok
3	50 PPM TRPH STD		FF014470.D	10 Sep 2024 07:39		YP\AJ	Ok
4	RT MARKER		FF014471.D	10 Sep 2024 08:08		YP\AJ	Ok
5	P3845-19		FF014472.D	10 Sep 2024 08:42	Need 5X dilution	YP\AJ	Dilution
6	PB163245BL		FF014473.D	10 Sep 2024 09:11		YP\AJ	Ok
7	PB163245BS		FF014474.D	10 Sep 2024 09:40		YP\AJ	Ok
8	P3845-19		FF014475.D	10 Sep 2024 10:09		YP\AJ	Ok
9	I.BLK		FF014476.D	10 Sep 2024 11:38		YP\AJ	Ok
10	50 PPM TRPH STD		FF014477.D	10 Sep 2024 12:08		YP\AJ	Ok

M : Manual Integration

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB163245

SOP ID:	M3510C,3580A-Extraction DRO-12				
Clean Up SOP #:	N/A			**Extraction Start Date :**	09/09/2024
Matrix :	Water			**Extraction Start Time :**	10:07
Weigh By:	N/A	**Extraction By:**	RS	**Extraction End Date :**	09/09/2024
Balance check:	N/A	**Filter By:**	RS	**Extraction End Time :**	15:10
Balance ID:	N/A	**pH Meter ID:**	N/A	**Concentration By:**	EH
pH Strip Lot#:	E3574	**Hood ID:**	4,6,7	**Supervisor By :**	rajesh

Extraction Method: ☑ Seperatory Funnel ☐ Continious Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☐ Soxhlet

Standared Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	20 PPM	PP23454
Surrogate	1.0ML	20 PPM	PP23518
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	E3790
Baked Na2SO4	N/A	EP2532
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# 2210673.

KD Bath ID:	Water bath -01	**Envap ID:**	NEVAP-02
KD Bath Temperature:	60 °C	**Envap Temperature:**	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
09/09/24	RP (Ext. Lab)	AJ / FCST PCM Lab
15:15	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB163245

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

Concentration Date: 09/09/2024

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB163245BL	PB163245BL	Diesel Range Organics	1000	6	RUPESH	rajesh	1			SEP-10
PB163245BS	PB163245BS	Diesel Range Organics	1000	6	RUPESH	rajesh	1			11
P3845-19	RR-DIES-WP	Diesel Range Organics	1000	6	RUPESH	rajesh	1			12

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

9/19/24

10 of 4
163245

WORKLIST(Hardcopy Internal Chain)

WorkList Name : P3845D **WorkList ID :** 183302 **Department :** Extraction **Date :** 09-09-2024 10:03:01

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P3845-19	RR-DIES-WP	Water	Diesel Range Organics	Cool 4 deg C	CHEM02	QA Of	09/03/2024	8015D

Date/Time 09/09/24 10:05
Raw Sample Received by: RJ (Sat Log)
Raw Sample Relinquished by: RM SM

Date/Time 09/09/24 10:20
Raw Sample Received by: RM SM
Raw Sample Relinquished by: RJ (Sat Log)

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Prep Standard - Chemical Standard Summary

Order ID : P3845

Test : Diesel Range Organics

Prepbatch ID : PB163245,

Sequence ID/Qc Batch ID: FF091024,

Standard ID :
EP2532,PP23454,PP23518,PP23611,PP23612,PP23613,PP23614,PP23615,PP23616,PP23617,

Chemical ID :
E3551,E3759,E3768,E3787,E3790,P11950,P11960,P13103,P13107,P13206,P13207,P13208,P13209,P13210,P13211,
P13217,P13218,

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Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2532	08/30/2024	01/03/2025	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 08/30/2024

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3609	20 PPM DRO SPIKE SOLUTION (RESTEK)	PP23454	06/10/2024	12/08/2024	Yogesh Patel	None	None	Ankita Jodhani 06/12/2024

FROM 1.00000ml of P11950 + 1.00000ml of P11960 + 48.00000ml of E3759 = Final Quantity: 50.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
147	20 PPM DRO Surrogate Spike Solution	PP23518	07/15/2024	01/08/2025	Yogesh Patel	None	None	Ankita Jodhani 07/16/2024

FROM 1.00000ml of P13206 + 1.00000ml of P13207 + 1.00000ml of P13208 + 1.00000ml of P13209 + 196.00000ml of E3768 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
433	100/100 PPM DRO (Restek)	PP23611	08/14/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani 08/19/2024

FROM 1.00000ml of P13103 + 1.00000ml of P13107 + 1.00000ml of P13210 + 7.00000ml of E3787 = Final Quantity: 10.000 ml

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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)	PP23612	08/14/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani 08/19/2024

FROM 1.00000ml of P13211 + 1.00000ml of P13217 + 1.00000ml of P13218 + 7.00000ml of E3787 = 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)	PP23613	08/15/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani 08/19/2024

FROM 0.50000ml of E3787 + 0.50000ml of PP23611 = Final Quantity: 1.000 ml

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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)	PP23614	08/15/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani 08/19/2024

FROM 0.80000ml of E3787 + 0.20000ml of PP23611 = 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)	PP23615	08/15/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani 08/19/2024

FROM 0.90000ml of E3787 + 0.10000ml of PP23611 = Final Quantity: 1.000 ml

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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)	PP23616	08/15/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani 08/19/2024

FROM 0.90000ml of E3787 + 0.10000ml of PP23613 = 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)	PP23617	08/15/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani 08/19/2024

FROM 0.50000ml of E3787 + 0.50000ml of PP23612 = Final Quantity: 1.000 ml

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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	01/03/2025	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)	24D1962005	12/08/2024	06/08/2024 / Rajesh	05/31/2024 / Rajesh	E3759

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)	24E2462004	01/08/2025	07/08/2024 / Rajesh	06/21/2024 / Rajesh	E3768

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)	24G0862022	02/13/2025	08/13/2024 / Rajesh	08/07/2024 / Rajesh	E3787

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)	24G0862022	02/26/2025	08/26/2024 / Rajesh	08/07/2024 / Rajesh	E3790

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0186840	12/10/2024	06/10/2024 / yogesh	07/11/2022 / Yogesh	P11950

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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	12/10/2024	06/10/2024 / yogesh	07/11/2022 / Yogesh	P11960

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0204859	02/14/2025	08/14/2024 / yogesh	01/12/2024 / Yogesh	P13103

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0204859	02/14/2025	08/14/2024 / yogesh	01/12/2024 / Yogesh	P13107

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	01/15/2025	07/15/2024 / yogesh	01/17/2024 / Ankita	P13206

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	01/15/2025	07/15/2024 / yogesh	01/17/2024 / Ankita	P13207

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	01/15/2025	07/15/2024 / yogesh	01/17/2024 / Ankita	P13208

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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	01/15/2025	07/15/2024 / yogesh	01/17/2024 / Ankita	P13209

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	02/14/2025	08/14/2024 / yogesh	01/17/2024 / Ankita	P13210

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	02/14/2025	08/14/2024 / yogesh	01/17/2024 / Ankita	P13211

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	P13217

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

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 RB 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.: 24D1962005
Manufactured Date: 2024-03-16
Expiration Date: 2025-06-15
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	8
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	≥ 99.8 %	99.9 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 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: USA
Packaging Site: Phillipsburg Mfg Ctr & DC
Manufacturer source batch: MG24C16563

E 3759

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

PO: PO1-8886 PRODUCT CODE: SHIP DATE: 6/21/2024

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

avantor™ | J.T.Baker

Material No.: 9266-A4
Batch No.: 24E2462004
Manufactured Date: 2024-04-10
Expiration Date: 2025-07-10
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	3
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	3
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	0.1 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: USA
Packaging Site: Phillipsburg Mfg Ctr & DC
Manufacturer source batch: MG24D10725

E 3768

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

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

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

avantor™ | J.T.Baker®

Material No.: 9266-A4
Batch No.: 24G0862022
Manufactured Date: 2024-06-05
Expiration Date: 2025-09-04
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	3
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	4
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	0.3 ppm
Titrable Acid (µeq/g)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	≤ 0.02 %	< 0.01 %

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

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC
Manufacturer source batch: MG24F05012

E 3787

J Croak

Jamie Croak
Director Quality Operations, Bioscience Production

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

avantor™ | J.T.Baker®

Material No.: 9266-A4
Batch No.: 24G0862022
Manufactured Date: 2024-06-05
Expiration Date: 2025-09-04
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	3
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	4
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	0.3 ppm
Titrable Acid (µeq/g)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	≤ 0.02 %	< 0.01 %

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

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC
Manufacturer source batch: MG24F05012

E 3790

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

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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
7.8
07/11/2

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

Description : Florida TRPH Standard

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

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

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

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

CERTIFIED VALUES

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

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

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

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

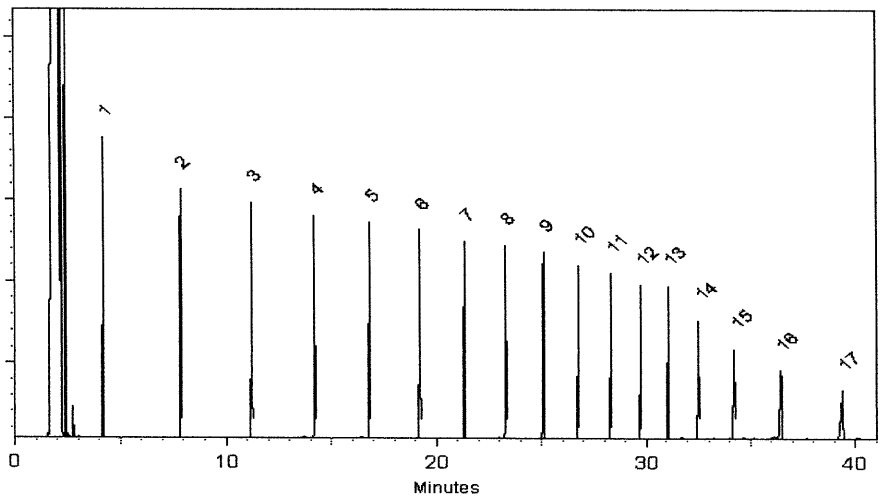
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Brittany Federinko - Operations Tech I

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

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

P11948
&
P11962
7.8
07/11/2

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

Description : Florida TRPH Standard

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

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

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

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

CERTIFIED VALUES

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

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

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

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

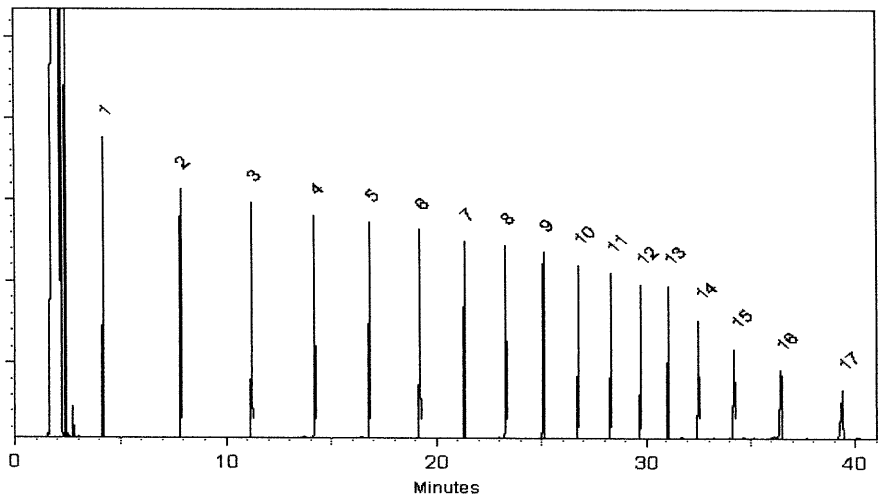
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Brittany Federinko - Operations Tech I

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

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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

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

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Florida TRPH Standard

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

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

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

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

P13103 → P13112 Y.P. 01/12/2024

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

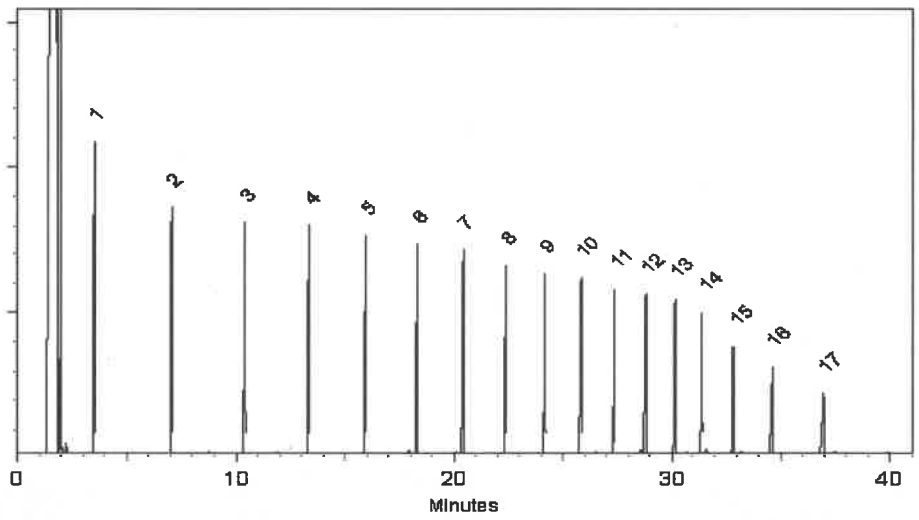
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Dakota Parson - Operations Technician I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 01-Dec-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

RESTEK

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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

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

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Florida TRPH Standard

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

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

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

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

P13103 → P13112 Y.P. 01/12/2024

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

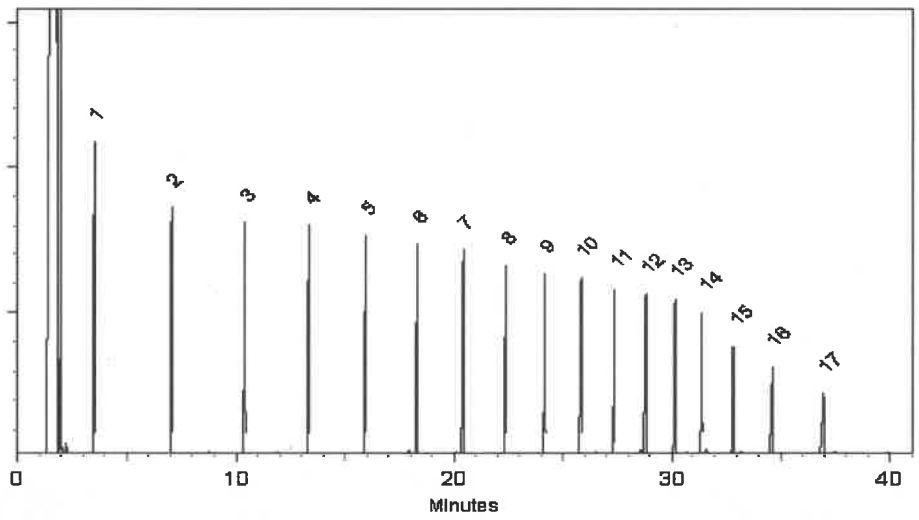
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Dakota Parson - Operations Technician I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 01-Dec-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

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www.absolutestandards.com

Certified Reference Material CRM

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https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

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

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

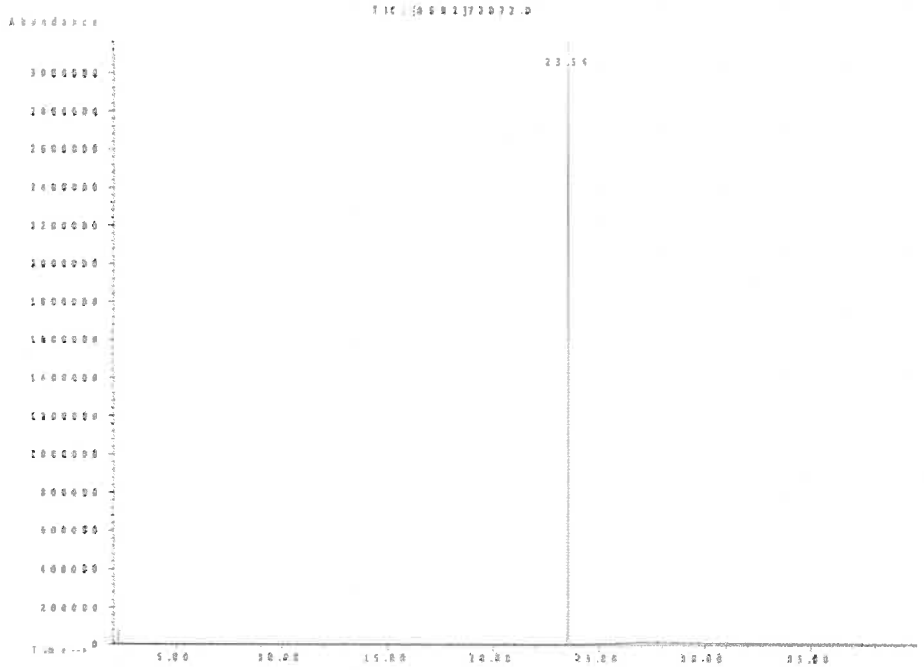
Expiration Date: 101132
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

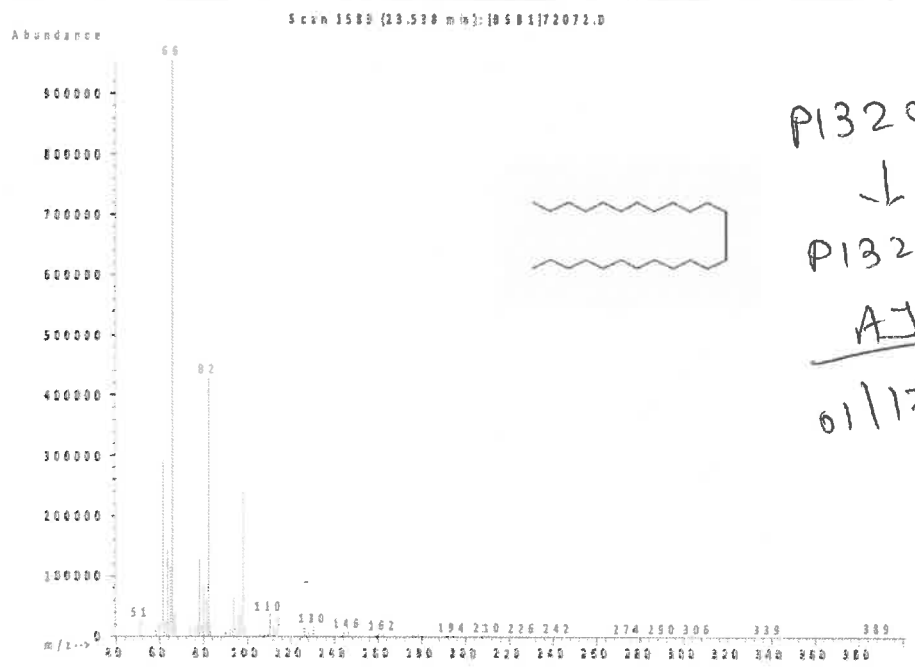
Weight(s) shown below were combined and diluted to (mL): 200.0 ± 0.058 Flask Uncertainty; 5E-05 Balance Uncertainty

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.





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P13214
AJ
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 certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

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CERTIFIED WEIGHT REPORT

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

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

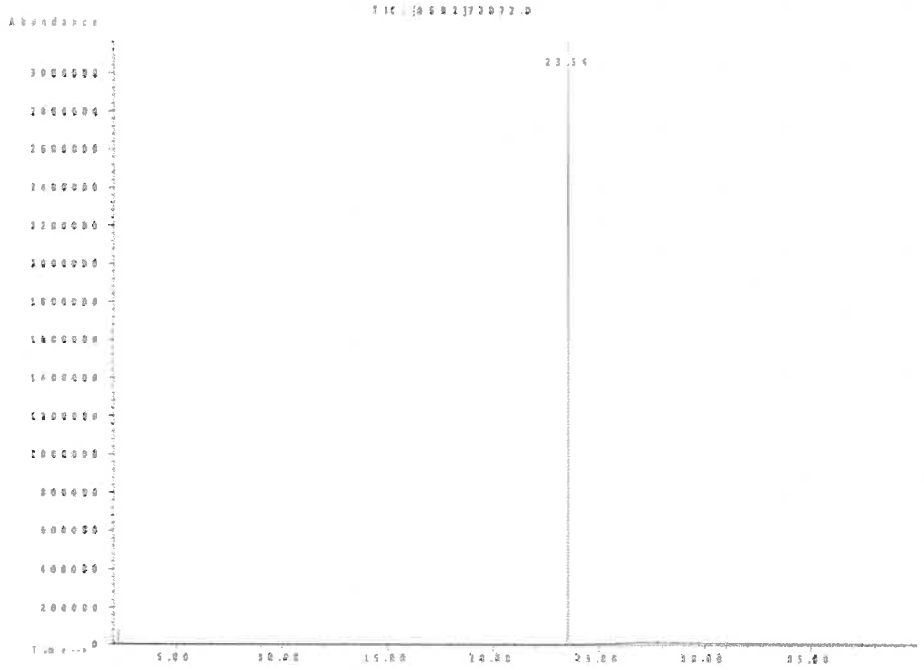
Expiration Date: 101132
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

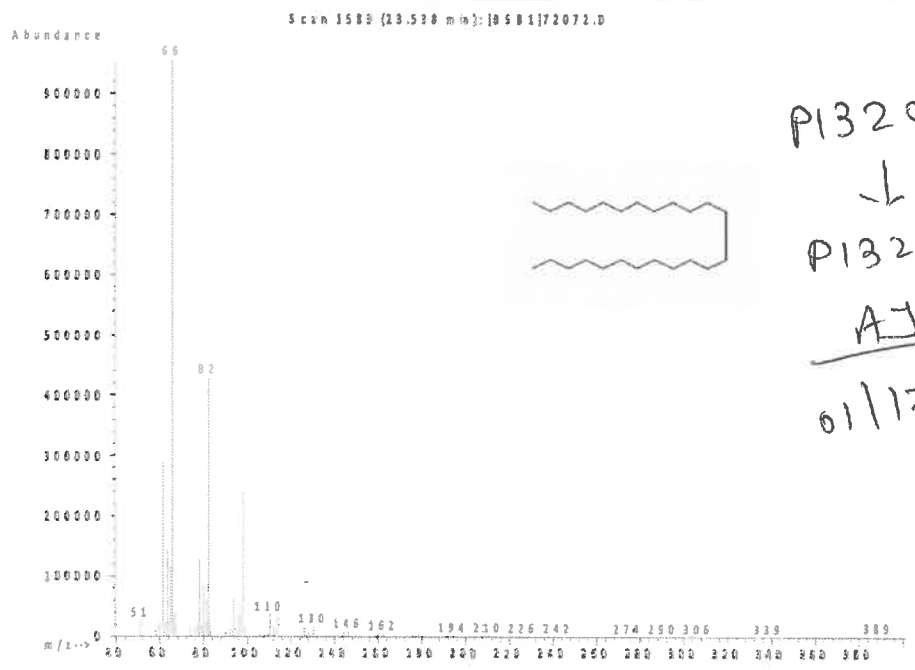
Weight(s) shown below were combined and diluted to (mL): 200.0 ± 0.058 Flask Uncertainty; 5E-05 Balance Uncertainty

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.





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01/17/24

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CERTIFIED WEIGHT REPORT

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

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

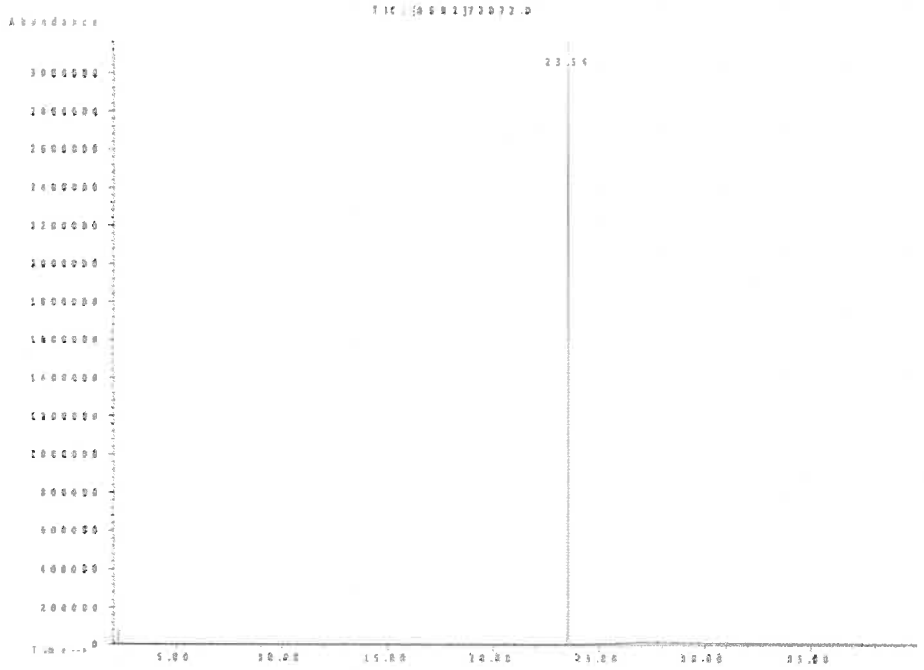
Expiration Date: 101132
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

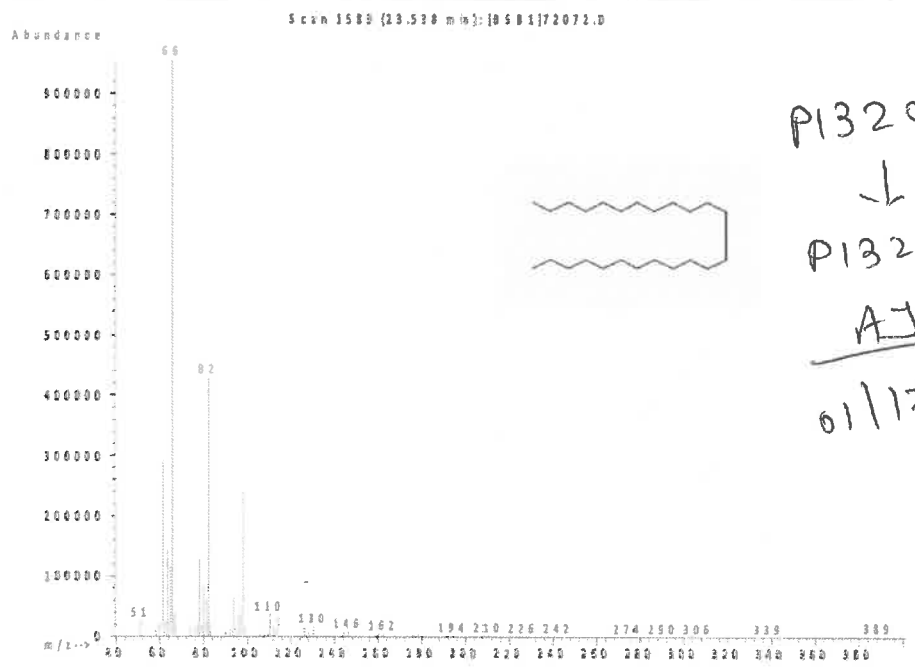
Weight(s) shown below were combined and diluted to (mL): 200.0 ± 0.058 Flask Uncertainty; 5E-05 Balance Uncertainty

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.





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01/17/24

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- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
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CERTIFIED WEIGHT REPORT

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

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

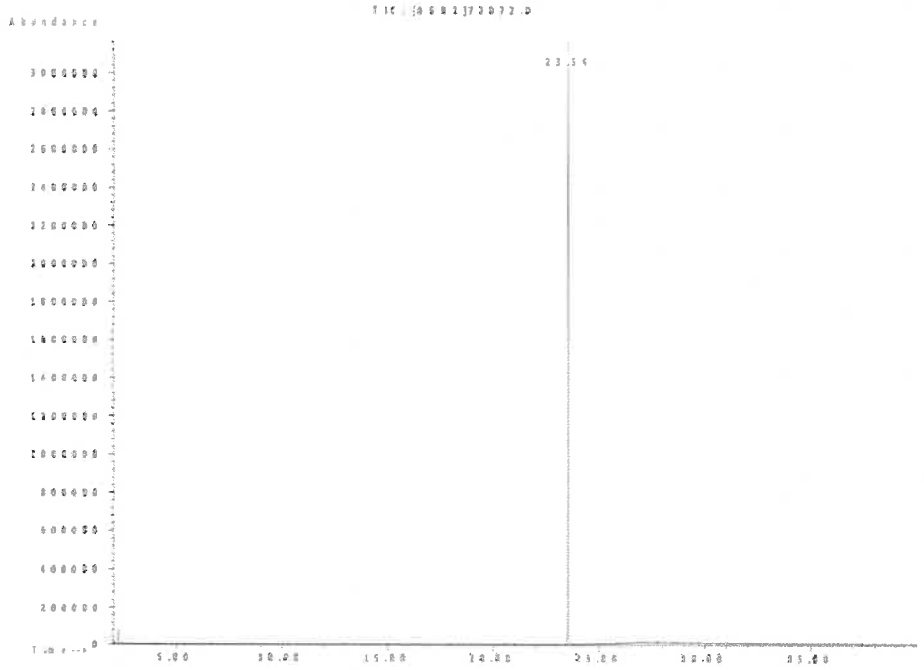
Expiration Date: 101132
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

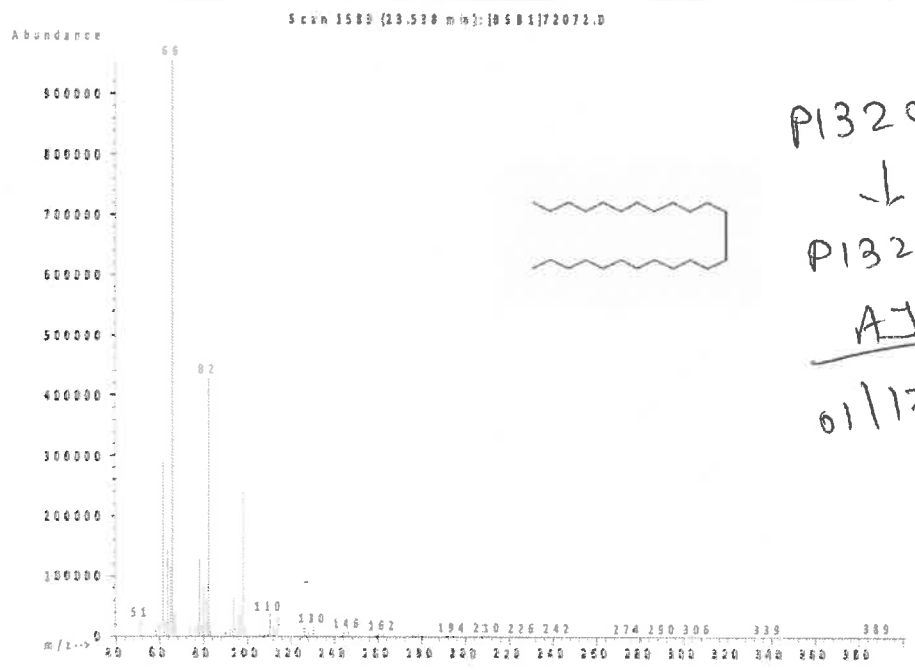
Weight(s) shown below were combined and diluted to (mL): 200.0 ± 0.058 Flask Uncertainty; 5E-05 Balance Uncertainty

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.





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01/17/24

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CERTIFIED WEIGHT REPORT

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

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

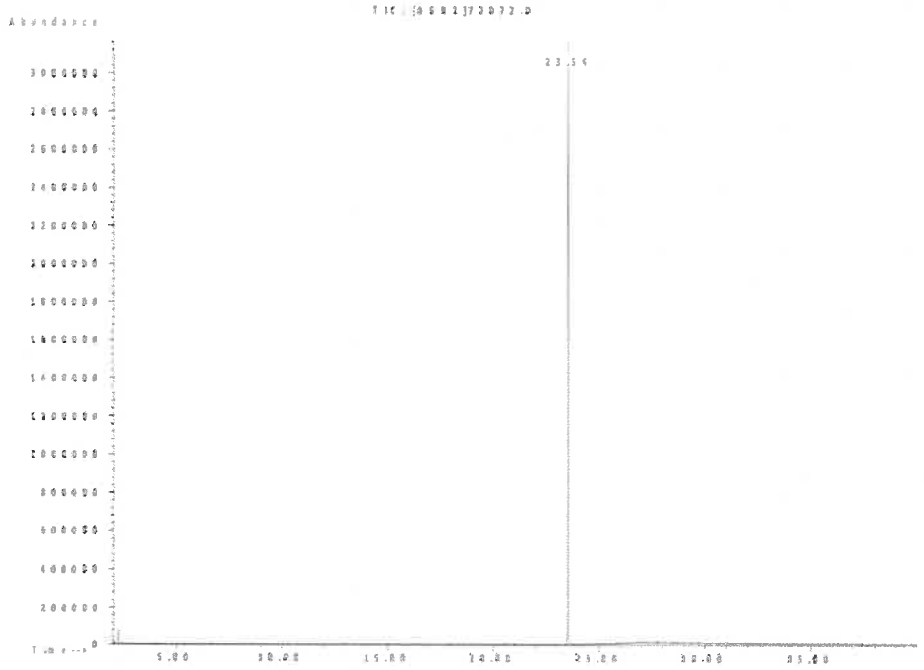
Expiration Date: 101132
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

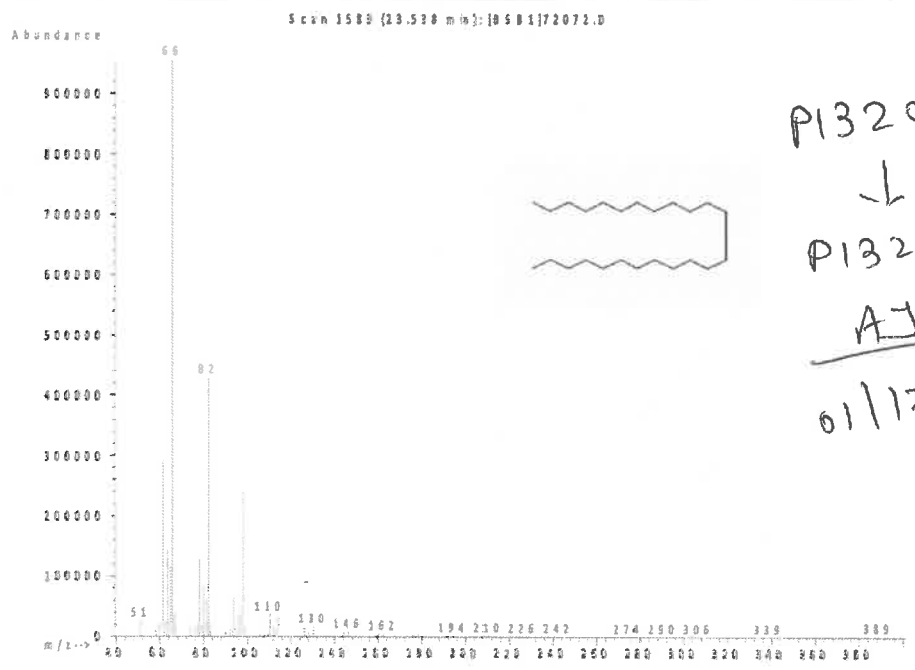
Weight(s) shown below were combined and diluted to (mL): 200.0 ± 0.058 Flask Uncertainty; 5E-05 Balance Uncertainty

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.





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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 certifed (+/-) 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.
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

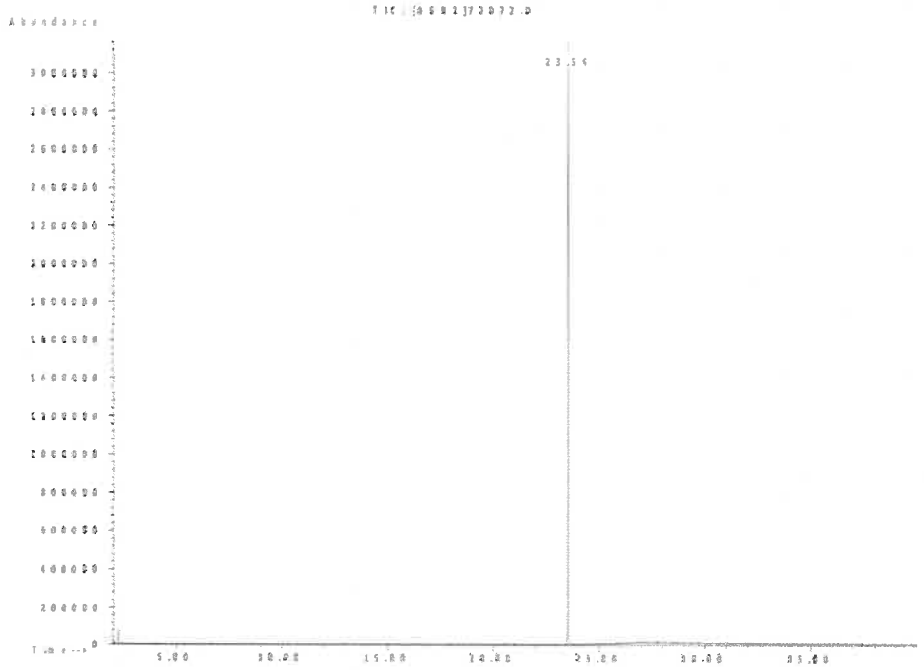
Expiration Date: 101132
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

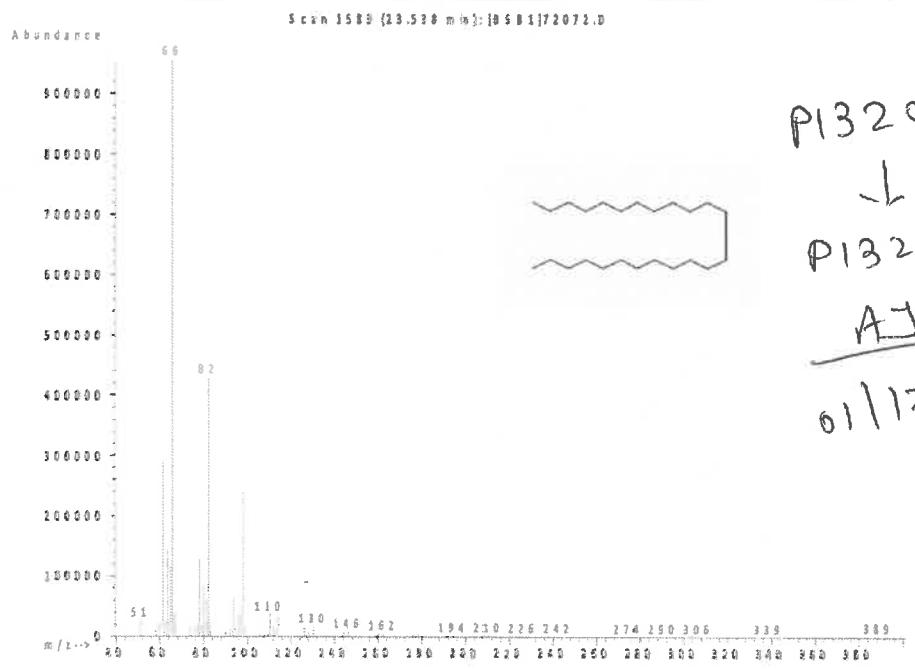
Weight(s) shown below were combined and diluted to (mL): 200.0 ± 0.058 Flask Uncertainty; 5E-05 Balance Uncertainty

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.





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P13214
AJ
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 certifed (+/-) 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 **Page 1 of 1**

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

P13215
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P13224

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.

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Certificate of Analysis

Rev 0 **Page 1 of 1**

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

P13215
↓
P13224

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.

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014472.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 08:42
Operator : YP\AJ
Sample : P3845-19
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
RR-DIES-WP

Integration File: autoint1.e
Quant Time: Sep 11 01:30:52 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.898	2217062	18.784 ug/ml
Target Compounds			

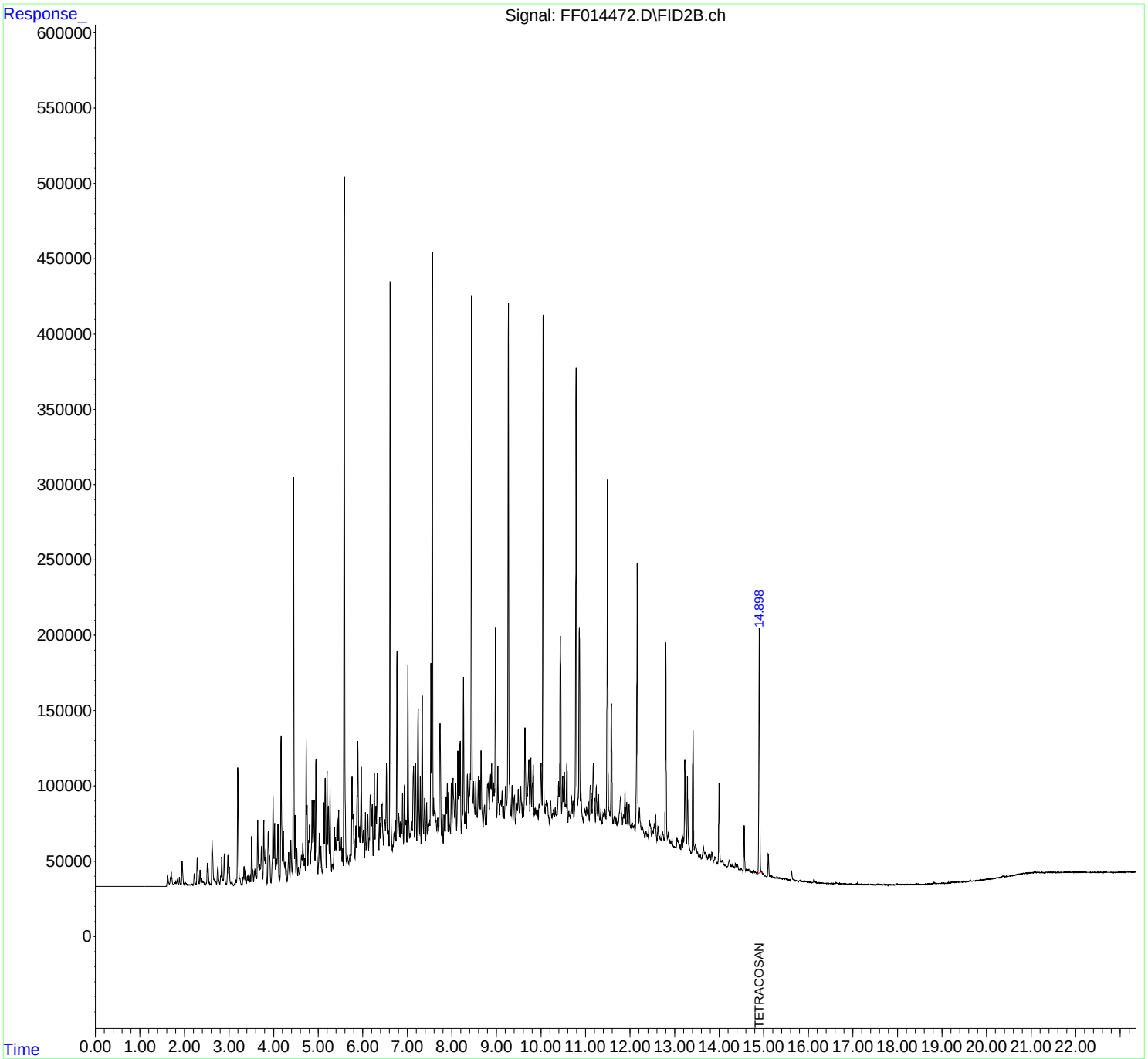
(f)=RT Delta > 1/2 Window (m)=manual int.

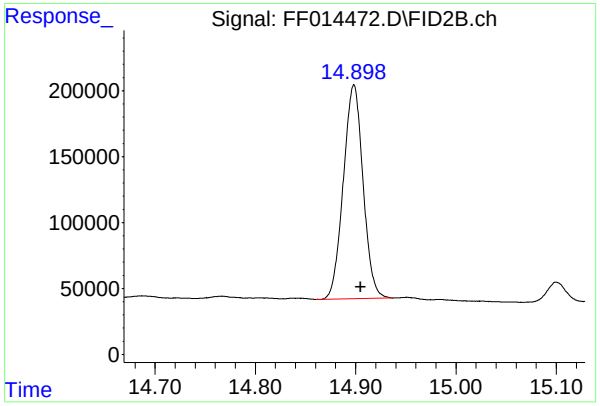
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014472.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 08:42
Operator : YP\AJ
Sample : P3845-19
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
RR-DIES-WP

Integration File: autoint1.e
Quant Time: Sep 11 01:30:52 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Quant Title :
QLast Update : Fri Aug 16 11:11:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.898 min
Delta R.T.: -0.007 mi
Response: 2217062
Conc: 18.78 ug/m

Instrument :
FID_F
ClientSampleId :
RR-DIES-WP

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF091024\
Data File : FF014472.D
Signal(s) : FID2B.ch
Acq On : 10 Sep 2024 08:42
Sample : P3845-19
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF081624.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.339	4.300	4.368	BV	19327	311490	4.47%	0.107%
2	4.387	4.368	4.414	VV	27410	412871	5.92%	0.141%
3	4.449	4.414	4.470	VV	268374	2985225	42.81%	1.022%
4	4.482	4.470	4.502	VV	43932	469881	6.74%	0.161%
5	4.522	4.502	4.542	VV	22000	302601	4.34%	0.104%
6	4.557	4.542	4.586	VV	9599	168392	2.42%	0.058%
7	4.625	4.586	4.641	VV	17449	385042	5.52%	0.132%
8	4.657	4.641	4.688	VV	25747	510522	7.32%	0.175%
9	4.701	4.688	4.713	VV	15313	182512	2.62%	0.062%
10	4.733	4.713	4.746	VV	94917	1045320	14.99%	0.358%
11	4.752	4.746	4.771	VV	50715	499469	7.16%	0.171%
12	4.790	4.771	4.796	VV	27576	329010	4.72%	0.113%
13	4.809	4.796	4.826	VV	37704	478845	6.87%	0.164%
14	4.864	4.826	4.880	VV	53894	938474	13.46%	0.321%
15	4.887	4.880	4.891	VV	26356	170816	2.45%	0.058%
16	4.910	4.891	4.930	VV	53774	828945	11.89%	0.284%
17	4.950	4.930	4.996	VV	81381	1289939	18.50%	0.441%
18	5.027	4.996	5.046	VV	32341	501645	7.19%	0.172%
19	5.062	5.046	5.088	VV	23557	370379	5.31%	0.127%
20	5.125	5.088	5.138	VV	52485	675621	9.69%	0.231%
21	5.158	5.138	5.181	VV	68502	1089180	15.62%	0.373%
22	5.200	5.181	5.215	VV	73334	846506	12.14%	0.290%
23	5.230	5.215	5.251	VV	50034	738753	10.60%	0.253%
24	5.267	5.251	5.303	VV	61200	867085	12.44%	0.297%
25	5.315	5.303	5.321	VV	10911	104667	1.50%	0.036%
26	5.329	5.321	5.341	VV	11188	125116	1.79%	0.043%
27	5.363	5.341	5.376	VV	36240	479569	6.88%	0.164%
28	5.387	5.376	5.402	VV	29665	381336	5.47%	0.130%
29	5.429	5.402	5.447	VV	41640	894717	12.83%	0.306%
30	5.461	5.447	5.476	VV	47467	593176	8.51%	0.203%
31	5.486	5.476	5.510	VV	25766	486288	6.97%	0.166%
32	5.523	5.510	5.537	VV	29077	367047	5.26%	0.126%
33	5.549	5.537	5.562	VV	21902	247990	3.56%	0.085%
34	5.587	5.562	5.633	VV	467779	5723198	82.08%	1.958%
35	5.645	5.633	5.650	VV	15678	148773	2.13%	0.051%
36	5.660	5.650	5.688	VV	16472	329336	4.72%	0.113%

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37	5.714	5.688	5.725	VV	17562	328929	4.72%	0.113%
38	5.737	5.725	5.742	VV	17768	160394	2.30%	0.055%
39	5.761	5.742	5.779	VV	69579	1023205	14.67%	0.350%
40	5.788	5.779	5.803	VV	45113	544363	7.81%	0.186%
41	5.809	5.803	5.828	VV	26808	316275	4.54%	0.108%
42	5.847	5.828	5.858	VV	37152	489938	7.03%	0.168%
43	5.891	5.858	5.917	VV	93323	1977737	28.36%	0.677%
44	5.926	5.917	5.937	VV	36738	392123	5.62%	0.134%
45	5.968	5.937	6.002	VV	76114	1710352	24.53%	0.585%
46	6.016	6.002	6.045	VV	34435	699592	10.03%	0.239%
47	6.063	6.045	6.078	VV	46071	618400	8.87%	0.212%
48	6.115	6.078	6.133	VV	44885	1028900	14.76%	0.352%
49	6.171	6.133	6.202	VV	57504	1695284	24.31%	0.580%
50	6.215	6.202	6.233	VV	51630	711982	10.21%	0.244%
51	6.262	6.233	6.278	VV	72393	1122791	16.10%	0.384%
52	6.298	6.278	6.310	VV	50330	819238	11.75%	0.280%
53	6.327	6.310	6.365	VV	72168	1487250	21.33%	0.509%
54	6.381	6.365	6.394	VV	42761	568302	8.15%	0.194%
55	6.406	6.394	6.414	VV	38983	443804	6.36%	0.152%
56	6.435	6.414	6.469	VV	51911	1270045	18.21%	0.435%
57	6.490	6.469	6.511	VV	41582	910282	13.06%	0.311%
58	6.534	6.511	6.555	VV	78431	1317853	18.90%	0.451%
59	6.568	6.555	6.593	VV	33791	736413	10.56%	0.252%
60	6.617	6.593	6.664	VV	398138	4900297	70.28%	1.677%
61	6.679	6.664	6.684	VV	24015	274226	3.93%	0.094%
62	6.705	6.684	6.718	VV	32591	582579	8.36%	0.199%
63	6.734	6.718	6.748	VV	40605	633765	9.09%	0.217%
64	6.770	6.748	6.791	VV	153009	2063890	29.60%	0.706%
65	6.806	6.791	6.830	VV	45825	915080	13.12%	0.313%
66	6.842	6.830	6.855	VV	40024	513544	7.37%	0.176%
67	6.870	6.855	6.882	VV	38779	560106	8.03%	0.192%
68	6.895	6.882	6.918	VV	59138	897246	12.87%	0.307%
69	6.940	6.918	6.968	VV	64555	1334776	19.14%	0.457%
70	6.976	6.968	6.991	VV	41262	495978	7.11%	0.170%
71	7.015	6.991	7.052	VV	143756	2280822	32.71%	0.780%
72	7.067	7.052	7.078	VV	32468	476806	6.84%	0.163%
73	7.094	7.078	7.114	VV	40082	790818	11.34%	0.271%
74	7.143	7.114	7.165	VV	77035	1698390	24.36%	0.581%
75	7.188	7.165	7.215	VV	78775	1508312	21.63%	0.516%
76	7.245	7.215	7.278	VV	114967	2463445	35.33%	0.843%
77	7.294	7.278	7.311	VV	69921	924249	13.26%	0.316%
78	7.337	7.311	7.368	VV	123570	2174014	31.18%	0.744%
79	7.393	7.368	7.414	VV	55867	1174407	16.84%	0.402%
80	7.434	7.414	7.451	VV	52860	886888	12.72%	0.303%
81	7.463	7.451	7.472	VV	38161	461779	6.62%	0.158%
82	7.501	7.472	7.510	VV	40123	860474	12.34%	0.294%
83	7.532	7.510	7.545	VV	145227	1851500	26.55%	0.634%
84	7.563	7.545	7.583	VV	418013	4720598	67.70%	1.615%
85	7.593	7.583	7.605	VV	55639	640042	9.18%	0.219%
86	7.611	7.605	7.622	VV	47635	485701	6.97%	0.166%
87	7.629	7.622	7.641	VV	44808	479349	6.87%	0.164%
88	7.648	7.641	7.664	VV	40869	523151	7.50%	0.179%
89	7.684	7.664	7.708	VV	42572	993145	14.24%	0.340%

90	7.736	7.708	7.768	VV	105292	2407784	34.53%	0.824%
91	7.784	7.768	7.809	VV	44986	887734	12.73%	0.304%
92	7.826	7.809	7.841	VV	44653	692531	9.93%	0.237%
93	7.845	7.841	7.855	VV	34428	301166	4.32%	0.103%
94	7.873	7.855	7.885	VV	56764	832051	11.93%	0.285%
95	7.899	7.885	7.915	VV	65724	953020	13.67%	0.326%
96	7.930	7.915	7.970	VV	59857	1384022	19.85%	0.474%
97	7.990	7.970	8.008	VV	65692	1114742	15.99%	0.381%
98	8.027	8.008	8.062	VV	69171	1786134	25.62%	0.611%
99	8.089	8.062	8.107	VV	65640	1364583	19.57%	0.467%
100	8.136	8.107	8.151	VV	87159	1554277	22.29%	0.532%
101	8.165	8.151	8.177	VV	91770	1154085	16.55%	0.395%
102	8.190	8.177	8.215	VV	93730	1424164	20.43%	0.487%
103	8.263	8.215	8.290	VV	136257	2870314	41.17%	0.982%
104	8.310	8.290	8.328	VV	46759	939434	13.47%	0.321%
105	8.350	8.328	8.373	VV	71790	1524280	21.86%	0.522%
106	8.388	8.373	8.400	VV	62772	953132	13.67%	0.326%
107	8.417	8.400	8.423	VV	72424	899715	12.90%	0.308%
108	8.444	8.423	8.467	VV	389601	4859056	69.69%	1.663%
109	8.491	8.467	8.521	VV	66943	1779392	25.52%	0.609%
110	8.540	8.521	8.572	VV	67359	1591673	22.83%	0.545%
111	8.596	8.572	8.611	VV	70390	1304871	18.71%	0.447%
112	8.623	8.611	8.638	VV	68092	944712	13.55%	0.323%
113	8.658	8.638	8.703	VV	87397	2223971	31.90%	0.761%
114	8.734	8.703	8.757	VV	51242	1440211	20.66%	0.493%
115	8.771	8.757	8.782	VV	44477	607740	8.72%	0.208%
116	8.801	8.782	8.807	VV	65102	849307	12.18%	0.291%
117	8.814	8.807	8.843	VV	65637	1249507	17.92%	0.428%
118	8.869	8.843	8.881	VV	71652	1436862	20.61%	0.492%
119	8.894	8.881	8.922	VV	78951	1593824	22.86%	0.545%
120	8.937	8.922	8.949	VV	65614	991280	14.22%	0.339%
121	8.983	8.949	9.008	VV	169488	3092164	44.35%	1.058%
122	9.034	9.008	9.048	VV	77264	1414221	20.28%	0.484%
123	9.056	9.048	9.071	VV	57532	720613	10.33%	0.247%
124	9.106	9.071	9.114	VV	54253	1349512	19.35%	0.462%
125	9.129	9.114	9.146	VV	60693	1014701	14.55%	0.347%
126	9.160	9.146	9.176	VV	50833	843924	12.10%	0.289%
127	9.209	9.176	9.228	VV	63972	1682469	24.13%	0.576%
128	9.270	9.228	9.331	VV	383806	6972571	100.00%	2.386%
129	9.353	9.331	9.376	VV	64621	1424951	20.44%	0.488%
130	9.406	9.376	9.430	VV	57684	1599747	22.94%	0.547%
131	9.466	9.430	9.478	VV	52528	1336149	19.16%	0.457%
132	9.492	9.478	9.526	VV	61924	1537347	22.05%	0.526%
133	9.550	9.526	9.582	VV	64124	1781520	25.55%	0.610%
134	9.597	9.582	9.612	VV	53901	860927	12.35%	0.295%
135	9.644	9.612	9.674	VV	102942	2568425	36.84%	0.879%
136	9.688	9.674	9.695	VV	59026	702081	10.07%	0.240%
137	9.729	9.695	9.751	VV	81554	2207337	31.66%	0.755%
138	9.774	9.751	9.793	VV	82827	1593520	22.85%	0.545%
139	9.827	9.793	9.855	VV	77769	2253892	32.33%	0.771%
140	9.870	9.855	9.885	VV	49553	861781	12.36%	0.295%
141	9.899	9.885	9.917	VV	47752	877488	12.58%	0.300%

142	9.928	9.917	9.940	VV	47523	647380	9.28%	0.222%
143	9.962	9.940	9.977	VV	52225	1076908	15.44%	0.369%
144	10.003	9.977	10.026	VV	79263	1877366	26.93%	0.642%
145	10.050	10.026	10.095	VV	376738	5615795	80.54%	1.922%
146	10.127	10.095	10.140	VV	54540	1396449	20.03%	0.478%
147	10.151	10.140	10.191	VV	52701	1410071	20.22%	0.483%
148	10.219	10.191	10.245	VV	54073	1529010	21.93%	0.523%
149	10.283	10.245	10.304	VV	48217	1608496	23.07%	0.550%
150	10.322	10.304	10.339	VV	49782	990282	14.20%	0.339%
151	10.360	10.339	10.367	VV	45956	771128	11.06%	0.264%
152	10.396	10.367	10.409	VV	67402	1406060	20.17%	0.481%
153	10.437	10.409	10.466	VV	163820	3360765	48.20%	1.150%
154	10.490	10.466	10.509	VV	70814	1513550	21.71%	0.518%
155	10.526	10.509	10.544	VV	73390	1308980	18.77%	0.448%
156	10.550	10.544	10.564	VV	51752	615181	8.82%	0.211%
157	10.582	10.564	10.607	VV	79080	1541181	22.10%	0.527%
158	10.624	10.607	10.662	VV	47393	1474869	21.15%	0.505%
159	10.682	10.662	10.702	VV	57179	1227362	17.60%	0.420%
160	10.718	10.702	10.741	VV	54045	1167091	16.74%	0.399%
161	10.790	10.741	10.823	VV	341804	5761276	82.63%	1.971%
162	10.861	10.823	10.887	VV	169893	3570575	51.21%	1.222%
163	10.899	10.887	10.952	VV	58509	1896363	27.20%	0.649%
164	10.983	10.952	11.010	VV	49053	1602441	22.98%	0.548%
165	11.023	11.010	11.038	VV	50810	798728	11.46%	0.273%
166	11.063	11.038	11.084	VV	53839	1332339	19.11%	0.456%
167	11.109	11.084	11.147	VV	64729	2102747	30.16%	0.720%
168	11.177	11.147	11.223	VV	79167	2705979	38.81%	0.926%
169	11.243	11.223	11.277	VV	64371	1660083	23.81%	0.568%
170	11.295	11.277	11.326	VV	58824	1422626	20.40%	0.487%
171	11.344	11.326	11.372	VV	47630	1201517	17.23%	0.411%
172	11.395	11.372	11.418	VV	45970	1201881	17.24%	0.411%
173	11.436	11.418	11.460	VV	48946	1158027	16.61%	0.396%
174	11.492	11.460	11.550	VV	268156	5057259	72.53%	1.731%
175	11.582	11.550	11.616	VV	118926	2783756	39.92%	0.953%
176	11.645	11.616	11.667	VV	44028	1264787	18.14%	0.433%
177	11.686	11.667	11.704	VV	42903	906928	13.01%	0.310%
178	11.731	11.704	11.736	VV	41837	779907	11.19%	0.267%
179	11.788	11.736	11.828	VV	56633	2611937	37.46%	0.894%
180	11.849	11.828	11.862	VV	45053	859742	12.33%	0.294%
181	11.887	11.862	11.907	VV	59850	1362198	19.54%	0.466%
182	11.924	11.907	11.955	VV	53518	1296730	18.60%	0.444%
183	11.976	11.955	12.015	VV	52347	1534793	22.01%	0.525%
184	12.045	12.015	12.075	VV	40021	1375746	19.73%	0.471%
185	12.093	12.075	12.112	VV	38403	821661	11.78%	0.281%
186	12.160	12.112	12.192	VV	212437	4165961	59.75%	1.426%
187	12.211	12.192	12.252	VV	49808	1537111	22.05%	0.526%
188	12.266	12.252	12.329	VV	38546	1607075	23.05%	0.550%
189	12.358	12.329	12.380	VV	34569	998744	14.32%	0.342%
190	12.397	12.380	12.409	VV	32064	539772	7.74%	0.185%
191	12.432	12.409	12.447	VV	41482	855187	12.27%	0.293%
192	12.451	12.447	12.485	VV	39163	809269	11.61%	0.277%
193	12.503	12.485	12.523	VV	34721	772944	11.09%	0.264%
194	12.542	12.523	12.555	VV	39419	701921	10.07%	0.240%

195	12.571	12.555	12.603	VV	45542	1059201	15.19%	0.362%
196	12.625	12.603	12.653	VV	37762	1001390	14.36%	0.343%
197	12.659	12.653	12.667	VV	30839	263667	3.78%	0.090%
198	12.670	12.667	12.679	VV	30874	216272	3.10%	0.074%
199	12.686	12.679	12.701	VV	29320	380595	5.46%	0.130%
200	12.721	12.701	12.761	VV	34516	1147046	16.45%	0.393%
201	12.800	12.761	12.839	VV	159791	2957909	42.42%	1.012%
202	12.859	12.839	12.899	VV	33946	1089656	15.63%	0.373%
203	12.911	12.899	12.922	VV	27862	377986	5.42%	0.129%
204	12.943	12.922	12.977	VV	29308	863594	12.39%	0.296%
205	12.982	12.977	13.005	VV	24554	412033	5.91%	0.141%
206	13.015	13.005	13.031	VV	24052	373589	5.36%	0.128%
207	13.053	13.031	13.108	VV	29914	1234136	17.70%	0.422%
208	13.124	13.108	13.138	VV	25727	446146	6.40%	0.153%
209	13.159	13.138	13.174	VV	28975	559198	8.02%	0.191%
210	13.192	13.174	13.203	VV	30591	472246	6.77%	0.162%
211	13.229	13.203	13.265	VV	82503	1764676	25.31%	0.604%
212	13.286	13.265	13.367	VV	71673	2038775	29.24%	0.698%
213	13.411	13.367	13.445	VV	101874	1992923	28.58%	0.682%
214	13.468	13.445	13.509	VV	25717	885897	12.71%	0.303%
215	13.515	13.509	13.537	VV	20798	325296	4.67%	0.111%
216	13.547	13.537	13.564	VV	18510	295370	4.24%	0.101%
217	13.578	13.564	13.607	VV	18791	458340	6.57%	0.157%
218	13.642	13.607	13.667	VV	24407	740272	10.62%	0.253%
219	13.674	13.667	13.679	VV	20548	149806	2.15%	0.051%
220	13.684	13.679	13.707	VV	20550	325154	4.66%	0.111%
221	13.718	13.707	13.737	VV	18761	322156	4.62%	0.110%
222	13.759	13.737	13.773	VV	19045	373807	5.36%	0.128%
223	13.792	13.773	13.811	VV	19582	406181	5.83%	0.139%
224	13.834	13.811	13.872	VV	20684	647445	9.29%	0.222%
225	13.904	13.872	13.963	VV	17629	842992	12.09%	0.288%
226	13.997	13.963	14.041	VV	66262	1320402	18.94%	0.452%
227	14.056	14.041	14.069	VV	15203	247675	3.55%	0.085%
228	14.071	14.069	14.074	VV	15084	45176	0.65%	0.015%
229	14.079	14.074	14.129	VV	15202	438731	6.29%	0.150%
230	14.143	14.129	14.148	VV	12352	136604	1.96%	0.047%
231	14.150	14.148	14.182	VV	12228	237231	3.40%	0.081%
232	14.225	14.182	14.254	VV	15716	582074	8.35%	0.199%
233	14.263	14.254	14.287	VV	12210	235890	3.38%	0.081%
234	14.293	14.287	14.315	VV	12105	193919	2.78%	0.066%
235	14.327	14.315	14.342	VV	11516	181030	2.60%	0.062%
236	14.361	14.342	14.397	VV	13460	394713	5.66%	0.135%
237	14.411	14.397	14.437	VV	12578	266883	3.83%	0.091%
238	14.452	14.437	14.461	VV	9494	136031	1.95%	0.047%
239	14.468	14.461	14.487	VV	9814	149198	2.14%	0.051%
240	14.496	14.487	14.532	VV	10203	245756	3.52%	0.084%
241	14.559	14.532	14.594	VV	38452	691783	9.92%	0.237%
242	14.622	14.594	14.644	VV	9780	277170	3.98%	0.095%
243	14.648	14.644	14.668	VV	9224	132087	1.89%	0.045%
244	14.688	14.668	14.716	VV	9504	250114	3.59%	0.086%
245	14.722	14.716	14.741	VV	7909	117591	1.69%	0.040%
246	14.767	14.741	14.798	VV	9294	281388	4.04%	0.096%

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247	14.804	14.798	14.827	VV	7994	135216	1.94%	0.046%
248	14.837	14.827	14.863	VV	7725	160228	2.30%	0.055%
249	14.898	14.863	14.942	VV	169822	2563882	36.77%	0.877%
250	14.951	14.942	14.977	VV	8413	160201	2.30%	0.055%
251	14.983	14.977	15.022	VV	6825	165048	2.37%	0.056%
252	15.026	15.022	15.068	VV	5531	140009	2.01%	0.048%
253	15.100	15.068	15.143	VV	19958	415267	5.96%	0.142%
254	15.157	15.143	15.170	VV	5235	82181	1.18%	0.028%
255	15.179	15.170	15.226	VV	5203	157264	2.26%	0.054%
256	15.235	15.226	15.244	VV	4310	45502	0.65%	0.016%
257	15.250	15.244	15.269	VV	4461	61260	0.88%	0.021%
258	15.294	15.269	15.335	VV	4740	167180	2.40%	0.057%
259	15.351	15.335	15.392	VV	4119	130808	1.88%	0.045%
260	15.402	15.392	15.408	VV	3520	31752	0.46%	0.011%
261	15.439	15.408	15.468	VV	3757	126009	1.81%	0.043%
262	15.488	15.468	15.507	VV	3842	81757	1.17%	0.028%
263	15.528	15.507	15.595	VV	3365	151258	2.17%	0.052%
264	15.622	15.595	15.700	VV	8820	256186	3.67%	0.088%
265	15.704	15.700	15.721	VV	2563	29085	0.42%	0.010%
266	15.735	15.721	15.747	VV	2214	33351	0.48%	0.011%
267	15.753	15.747	15.768	VV	2015	24579	0.35%	0.008%
268	15.774	15.768	15.782	VV	2028	15890	0.23%	0.005%
269	15.801	15.782	15.852	VV	2149	83499	1.20%	0.029%
270	15.858	15.852	15.865	VV	1880	14136	0.20%	0.005%
271	15.871	15.865	15.877	VV	1898	13200	0.19%	0.005%
272	15.883	15.877	15.907	VV	1869	31895	0.46%	0.011%
273	15.920	15.907	15.978	VV	2023	74522	1.07%	0.026%
274	15.993	15.978	16.035	VV	1584	46810	0.67%	0.016%
275	16.055	16.035	16.077	VV	1400	30217	0.43%	0.010%
276	16.084	16.077	16.095	VV	1148	11684	0.17%	0.004%
277	16.127	16.095	16.212	VV	3489	112288	1.61%	0.038%
278	16.217	16.212	16.234	VV	999	12349	0.18%	0.004%
279	16.238	16.234	16.280	VV	984	22557	0.32%	0.008%
280	16.295	16.280	16.334	VV	974	26031	0.37%	0.009%
281	16.335	16.334	16.357	VV	760	9659	0.14%	0.003%
282	16.362	16.357	16.372	VV	728	5523	0.08%	0.002%
283	16.377	16.372	16.405	VV	671	11339	0.16%	0.004%
284	16.421	16.405	16.427	VV	654	8103	0.12%	0.003%
285	16.437	16.427	16.472	VV	728	16668	0.24%	0.006%
286	16.481	16.472	16.488	VV	570	5013	0.07%	0.002%
287	16.496	16.488	16.504	VV	502	4480	0.06%	0.002%
288	16.510	16.504	16.532	VV	507	7417	0.11%	0.003%
289	16.544	16.532	16.587	VV	574	15202	0.22%	0.005%
290	16.616	16.587	16.668	VV	1156	36449	0.52%	0.012%
291	16.672	16.668	16.679	VV	513	3227	0.05%	0.001%
292	16.687	16.679	16.696	VV	519	4645	0.07%	0.002%
293	16.707	16.696	16.717	VV	492	4975	0.07%	0.002%
294	16.722	16.717	16.746	VV	385	6009	0.09%	0.002%
295	16.750	16.746	16.754	VV	372	1611	0.02%	0.001%
296	16.759	16.754	16.767	VV	396	2748	0.04%	0.001%
297	16.789	16.767	16.798	VV	569	8377	0.12%	0.003%
298	16.803	16.798	16.813	VV	470	3606	0.05%	0.001%
299	16.817	16.813	16.830	VV	425	3592	0.05%	0.001%

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300	16.834	16.830	16.854	VV	382	4000	0.06%	0.001%
301	16.859	16.854	16.877	VV	288	3482	0.05%	0.001%
302	16.881	16.877	16.899	VV	241	3122	0.04%	0.001%
303	16.906	16.899	16.912	VV	280	1953	0.03%	0.001%
304	16.915	16.912	16.922	VV	232	1212	0.02%	0.000%
305	16.927	16.922	16.948	VV	284	3159	0.05%	0.001%
306	16.966	16.948	16.976	VV	283	3704	0.05%	0.001%
307	16.982	16.976	17.060	VV	193	6135	0.09%	0.002%
308	17.086	17.060	17.145	VV	634	18221	0.26%	0.006%
309	17.151	17.145	17.176	VV	169	1408	0.02%	0.000%
			Sum of corrected areas:			292228758		

FF081624.M Wed Sep 11 01:58:44 2024

SHIPPING DOCUMENTS

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Packing List

Date	Order #
09/03/2024	318988

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

For terms and conditions of your order, please visit:
www.phenova.com/home/termsofsale

Ship To

Chemtech - NJ
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by: SJ
9/5/2024
9:50

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
240802-01	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
			PT-TMSET-WP	WP Trace Metals Set : (TM1, HG and SNTI)		
1	1	0	PT-TM1-WP	WP Trace Metals 1	WP0924	8259-04
1	1	0	PT-HG-WP	WP Mercury	WP0924	8259-05
1	1	0	PT-SNTI-WP	WP Tin & Titanium	WP0924	8259-38
1	1	0	PT-CR6-WP	WP Hexavalent Chromium	WP0924	8259-06
1	1	0	PT-DEM-WP	WP Demand	WP0924	8259-07
			PT-MINSET-WP	WP Minerals Set : (MIN1, MIN2 and COND)		
1	1	0	PT-MIN1-WP	WP Minerals 1 Only	WP0924	8259-08
1	1	0	PT-MIN2-WP	WP Minerals 2 Only	WP0924	8259-102
1	1	0	PT-COND-WP	WP Conductivity Only	WP0924	8259-72
1	1	0	PT-SOL-WP	WP Solids	WP0924	8259-09
			PT-NUTSET-WP	WP Nutrients Set : (NUT1, NUT2 and NUT3)		
1	1	0	PT-NUT1-WP	WP NUT1 Simple Nutrients Only	WP0924	8259-10
1	1	0	PT-NUT2-WP	WP NUT2 - Complex Nutrients	WP0924	8259-11
1	1	0	PT-NUT3-WP	WP NUT3 - Nitrite Only	WP0924	8259-69
1	1	0	PT-OGR1L-WP	WP Oil and Grease 1L	WP0924	8259-103
1	1	0	PT-CL-WP	WP Residual Chlorine	WP0924	8259-13
1	1	0	PT-PH-WP	WP pH	WP0924	8259-15
1	1	0	PT-CN-WP	WP Cyanide	WP0924	8259-14
1	1	0	PT-PHEN-WP	WP Phenolics	WP0924	8259-16

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Certified Reference Materials

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Golden, CO 80403

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Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

Packing List

Date	Order #
09/03/2024	318988

Ship To

Received by: SJ
9/5/2024
9:50

Chemtech - NJ
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

For terms and conditions of your order, please visit:
www.phenova.com/home/termsofsale

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
240802-01	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	PT-S2-WP	WP Sulfide	WP0924	8259-22
1	1	0	PT-SSOL-WP	WP Settleable Solids	WP0924	8259-17
1	1	0	PT-VSOL-WP	WP Volatile Solids	WP0924	8259-18
1	1	0	PT-TURB-WP	WP Turbidity	WP0924	8259-20
1	1	0	PT-SIO2-WP	WP Silica	WP0924	8259-21
1	1	0	PT-COL-WP	WP Color	WP0924	8259-51
1	1	0	PT-VOA-WP	WP Volatiles	WP0924	8259-26
1	1	0	PT-BN-WP	WP Base Neutrals	WP0924	8259-27
1	1	0	PT-ACIDS-WP	WP Acids	WP0924	8259-28
1	1	0	PT-PEST-WP	WP Pesticides	WP0924	8259-29
1	1	0	PT-CHLR-WP	WP Chlordane	WP0924	8259-30
1	1	0	PT-TXP-WP	WP Toxaphene	WP0924	8259-31
1	1	0	PT-PCBW-WP	WP PCBs in Water	WP0924	8259-32
1	1	0	PT-HERB-WP	WP Herbicides	WP0924	8259-36
1	1	0	RR-TPH1L-WP	WP TPH 1L	R39151	R39151-104
1	1	0	RR-PAH-WP	WP PAH-Low Level	R39151	R39151-37
1	1	0	RR-GAS-WP	WP Gasoline Range Organics	R39151	R39151-62
1	1	0	RR-DIES-WP	WP Diesel Range Organics	R39151	R39151-63
1	1	0	RR-8011-WP	WP EDB/DBCP/TCP	R39151	R39151-98
1	1	0	RR-TRIAZINE-WP	WP Triazine Pesticides	R39151	R39151-108

CHEMTECH 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 (L-A-B)	L2219
Maine	2024021
Maryland	296
New Hampshire	255423
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488