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

DATA PACKAGE

GC SEMI-VOLATILES

PROJECT NAME : NYCDDC SANTWOBR BROOKLYN BRIDGE BBMCR

RU2 ENGINEERING, LLC

2 Melinda Drive

Monroe Township, NJ - 08831

Phone No: 732-261-2236

ORDER ID : Q1242

ATTENTION : Rutu Manani

Laboratory Certification ID # 20012

Table Of Contents for Q1242

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Cover Page

Order ID : Q1242

Project ID : NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Client : RU2 Engineering, LLC

Lab Sample Number	Client Sample Number
Q1242-01	JPP-6.2-013025
Q1242-02	JPP-6.2-013025
Q1242-03	JPP-6.2-013025
Q1242-04	JPP-6.2-013025

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

Signature : APPROVED *By Nimisha Pandya, QA/QC Supervisor at 12:07 pm, Feb 14, 2025* Date: 2/7/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1242
Test Name: Diesel Range Organics

A. Number of Samples and Date of Receipt:
4 Solid samples were received on 01/30/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for Diesel Range Organics.

C. Analytical Techniques:
The analysis were performed on instrument FID_E. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224.The analysis of Diesel Range Organics was based on method 8015D and extraction was done based on method 3541.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Retention Times were acceptable for all samples.

The MS {Q1241-05MS} with File ID: FE052181.D recoveries met the requirements for all compounds except for DRO[-242%] due to sample matrix interference.

The MSD {Q1241-05MSD} with File ID: FE052182.D recoveries met the acceptable requirements except for DRO[-214%]due to sample matrix interference.

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

Samples JPP-6.2-013025 was diluted due to bad matrix, The above samples original run is reported as screening data in miscellaneous data.

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

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

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

Signature_____

APPROVED
By Nimisha Pandya, QA/QC Supervisor at 12:07 pm, Feb 14, 2025

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

DATA REPORTING QUALIFIERS- ORGANIC

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

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

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GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1242 MATRIX: Solid

METHOD: 8015D/3541

		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified.			✓
2.	Standard Summary Submitted.			✓
3.	Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis, 12 HOURS IF 8000 SERIES METHOD. The Initial Calibration met the requirements . The Continuous Calibration met the requirements .			✓
4.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
5.	Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			✓
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range. The MS {Q1241-05MS} with File ID: FE052181.D recoveries met the requirements for all compounds except for DRO[-242%] due to sample matrix interference. The MSD {Q1241-05MSD} with File ID: FE052182.D recoveries met the acceptable requirements except for DRO[-214%]due to sample matrix interference. The Blank Spike met requirements for all samples . The RPD met criteria .		✓	
7.	Retention Time Shift Meet Criteria (if applicable) Comments:			✓
8.	Extraction Holding Time Met If not met, list number of days exceeded for each sample:			✓

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GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

		NA	NO	YES
9.	Analysis Holding Time Met			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			

ADDITIONAL COMMENTS:

Samples JPP-6.2-013025 was diluted due to bad matrix, The above samples original run is reported as screening data in miscellaneous data.

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

QA REVIEW

REVIEWED

By Sohil Jodhani, QA/QC Director at 10:30 am, Feb 14, 2025

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1242

	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:** 02/07/2025

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LAB CHRONICLE

OrderID:	Q1242	**OrderDate:**	1/30/2025 3:02:00 PM
Client:	RU2 Engineering, LLC	**Project:**	NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Contact:	Rutu Manani	**Location:**	E11,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1242-01	**JPP-6.2-013025**	**SOIL**			**01/30/25**			**01/30/25**
			Diesel Range Organics	8015D		01/31/25	01/31/25	
			Gasoline Range Organics	8015D			01/31/25	
Q1242-04	**JPP-6.2-013025**	**TCLP**			**01/30/25**			**01/30/25**
			TCLP Herbicide	8151A		02/03/25	02/03/25	

QC SUMMARY

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SOIL DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Chemtech Client: RU2 Engineering, LLC

Lab Code: CHEM Case No.: Q1242 SAS No.: Q1242 SDG No.: Q1242

EPA SAMPLE NO.	S1 TETRACOSANE-d50	S2	S3	S4	TOT OUT
PIBLK-FE052167.D	90				0
PIBLK-FE052179.D	82				0
PIBLK-FE052189.D	87				0
PB166415BL	87				0
PB166415BS	94				0
JPP-5.3-013025MS	64				0
JPP-5.3-013025MSD	62				0
JPP-6.2-013025	56				0

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

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

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SOIL DIESEL RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** RU2 Engineering, LLC

Lab Code: CHEM **Cas No:** Q1242 **SAS No :** Q1242 **SDG No:** Q1242

Client SampleID : JPP-5.3-013025MS **Datafile:** FE052181.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
DRO	7453	168000	150000	-242%	*	68-131

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SOIL DIESEL RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** RU2 Engineering, LLC

Lab Code: CHEM **Cas No:** Q1242 **SAS No :** Q1242 **SDG No:** Q1242

Client SampleID : JPP-5.3-013025MSD **Datafile:** FE052182.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
DRO	7460	168000	152000	-214%	*	68-131

MS/MSD % Recovery RPD : 11.8

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

Lab Name: Chemtech **Client:** RU2 Engineering, LLC

Lab Code: CHEM **Cas No:** Q1242 **SAS No :** Q1242 **SDG No:** Q1242

Matrix Spike - EPA Sample No : PB166415BS **Datafile:** FE052172.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS
DRO	6660	0	6353	95	68-131

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4B
METHOD BLANK SUMMARY

EPA SAMPLE NO.
PB166415BL

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1242 SAS No.: Q1242 SDG NO.: Q1242

Lab File ID: FE052171.D Lab Sample ID: PB166415BL

Instrument ID: FE Date Extracted: 01/31/2025

Matrix: (soil/water) Soil Date Analyzed: 01/31/25

Level: (low/med) low Time Analyzed: 12:08

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166415BS	PB166415BS	FE052172.D	01/31/25
JPP-5.3-013025MS	Q1241-05MS	FE052181.D	01/31/25
JPP-5.3-013025MSD	Q1241-05MSD	FE052182.D	01/31/25
JPP-6.2-013025	Q1242-01	FE052188.D	01/31/25

COMMENTS:

Form IV

SAMPLE DATA

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-6.2-013025	SDG No.:	Q1242
Lab Sample ID:	Q1242-01	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	81.5 Decanted:
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE052188.D	10	01/31/25 08:50	01/31/25 20:42	PB166415

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	66000		2270	20400	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	1.11		37 - 130	56%	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_E\Data\FE013125\
Data File : FE052188.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 20:42
Operator : YP\AJ
Sample : Q1242-01 10X
Misc :
ALS Vial : 27 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
JPP-6.2-013025

Integration File: autoint1.e
Quant Time: Feb 03 00:14:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	15.299	110923	1.114 ug/ml
	Target Compounds			

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

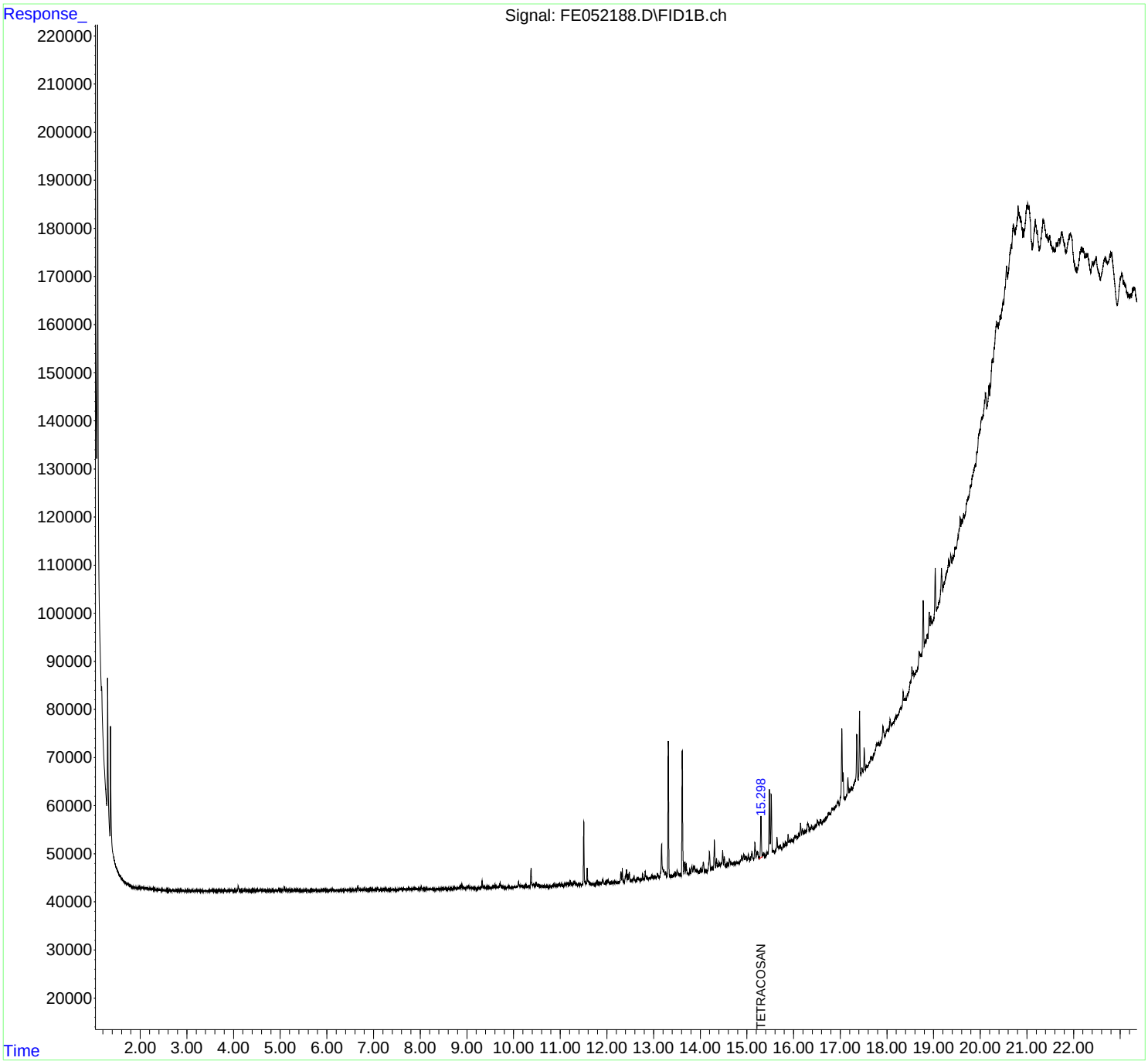
Quantitation Report (QT Reviewed)

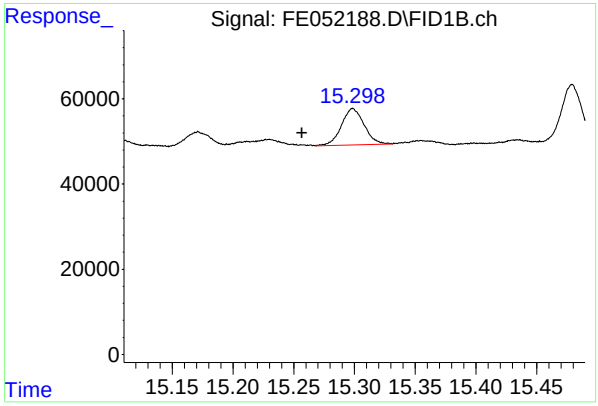
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052188.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 20:42
Operator : YP\AJ
Sample : Q1242-01 10X
Misc :
ALS Vial : 27 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
JPP-6.2-013025

Integration File: autoint1.e
Quant Time: Feb 03 00:14:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.:	15.299 min
Delta R.T.:	0.042 min
Response:	110923
Conc:	1.11 ug/ml

Instrument :
FID_E
ClientSampleId :
JPP-6.2-013025

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052188.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 20:42
Sample : Q1242-01 10X
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.887	4.882	4.892	PH	71	54	0.01%	0.000%
2	4.908	4.892	4.927	PH	172	431	0.10%	0.002%
3	4.943	4.927	4.957	PH	93	913	0.21%	0.005%
4	4.966	4.957	4.996	HH	254	2633	0.59%	0.015%
5	4.999	4.996	5.027	HH	150	1341	0.30%	0.008%
6	5.047	5.027	5.067	PH	122	1924	0.43%	0.011%
7	5.084	5.067	5.113	HH	858	8694	1.96%	0.050%
8	5.126	5.113	5.161	HH	308	3053	0.69%	0.018%
9	5.164	5.161	5.169	PH	135	295	0.07%	0.002%
10	5.190	5.169	5.205	PH	309	3448	0.78%	0.020%
11	5.215	5.205	5.246	HH	166	2174	0.49%	0.013%
12	5.250	5.246	5.257	HH	114	522	0.12%	0.003%
13	5.262	5.257	5.272	PH	173	523	0.12%	0.003%
14	5.282	5.272	5.288	HH	187	886	0.20%	0.005%
15	5.292	5.288	5.312	HH	104	941	0.21%	0.005%
16	5.314	5.312	5.327	HH	159	740	0.17%	0.004%
17	5.341	5.327	5.355	HH	277	1885	0.43%	0.011%
18	5.358	5.355	5.372	HH	166	849	0.19%	0.005%
19	5.388	5.372	5.396	HH	154	1273	0.29%	0.007%
20	5.403	5.396	5.410	HH	89	601	0.14%	0.003%
21	5.414	5.410	5.430	HH	118	609	0.14%	0.004%
22	5.434	5.430	5.447	HH	109	318	0.07%	0.002%
23	5.459	5.447	5.472	PH	121	703	0.16%	0.004%
24	5.480	5.472	5.499	PH	129	762	0.17%	0.004%
25	5.530	5.499	5.543	HH	94	486	0.11%	0.003%
26	5.548	5.543	5.552	PH	98	227	0.05%	0.001%
27	5.557	5.552	5.568	PH	132	265	0.06%	0.002%
28	5.601	5.568	5.605	PH	182	1246	0.28%	0.007%
29	5.611	5.605	5.622	PH	93	478	0.11%	0.003%
30	5.625	5.622	5.641	PH	60	628	0.14%	0.004%
31	5.657	5.641	5.667	HH	138	1012	0.23%	0.006%
32	5.673	5.667	5.700	HH	118	1046	0.24%	0.006%
33	5.705	5.700	5.716	PH	141	710	0.16%	0.004%
34	5.727	5.716	5.746	PH	107	901	0.20%	0.005%
35	5.762	5.746	5.793	PH	184	2397	0.54%	0.014%
36	5.806	5.793	5.832	PH	54	609	0.14%	0.004%

rteres

37	5.858	5.832	5.862	PH	116	777	0.18%	0.005%
38	5.866	5.862	5.871	PH	135	438	0.10%	0.003%
39	5.885	5.871	5.904	HH	186	3029	0.68%	0.018%
40	5.907	5.904	5.919	HH	143	902	0.20%	0.005%
41	5.936	5.919	5.940	HH	232	1682	0.38%	0.010%
42	5.963	5.940	5.992	HH	184	3541	0.80%	0.021%
43	6.025	5.992	6.049	HH	188	3891	0.88%	0.023%
44	6.052	6.049	6.057	HH	129	420	0.09%	0.002%
45	6.079	6.057	6.100	HH	300	4045	0.91%	0.023%
46	6.116	6.100	6.122	HH	311	2937	0.66%	0.017%
47	6.124	6.122	6.144	HH	359	1817	0.41%	0.011%
48	6.146	6.144	6.177	HH	104	1982	0.45%	0.011%
49	6.185	6.177	6.197	PH	156	1073	0.24%	0.006%
50	6.200	6.197	6.207	HH	106	548	0.12%	0.003%
51	6.213	6.207	6.220	HH	152	757	0.17%	0.004%
52	6.225	6.220	6.230	HH	171	638	0.14%	0.004%
53	6.234	6.230	6.242	HH	139	568	0.13%	0.003%
54	6.264	6.242	6.276	HH	227	2797	0.63%	0.016%
55	6.282	6.276	6.312	HH	206	2867	0.65%	0.017%
56	6.333	6.312	6.342	HH	205	1469	0.33%	0.009%
57	6.379	6.342	6.385	PH	217	2589	0.58%	0.015%
58	6.397	6.385	6.415	HH	235	2767	0.62%	0.016%
59	6.440	6.415	6.470	PH	189	3218	0.73%	0.019%
60	6.492	6.470	6.517	PH	153	3118	0.70%	0.018%
61	6.530	6.517	6.545	PH	110	1414	0.32%	0.008%
62	6.559	6.545	6.581	HH	306	3626	0.82%	0.021%
63	6.588	6.581	6.627	HH	183	4196	0.95%	0.024%
64	6.665	6.627	6.691	HH	949	14920	3.37%	0.087%
65	6.699	6.691	6.727	HH	229	3729	0.84%	0.022%
66	6.739	6.727	6.758	HH	248	3082	0.70%	0.018%
67	6.800	6.758	6.842	HH	519	11456	2.59%	0.066%
68	6.857	6.842	6.915	HH	229	8404	1.90%	0.049%
69	6.935	6.915	6.955	HH	314	5089	1.15%	0.030%
70	6.971	6.955	6.982	HH	254	3919	0.88%	0.023%
71	6.988	6.982	7.005	HH	275	2875	0.65%	0.017%
72	7.010	7.005	7.065	HH	304	7949	1.79%	0.046%
73	7.090	7.065	7.152	HH	546	14509	3.28%	0.084%
74	7.164	7.152	7.192	HH	191	4964	1.12%	0.029%
75	7.207	7.192	7.222	HH	244	3567	0.81%	0.021%
76	7.241	7.222	7.289	HH	417	9228	2.08%	0.054%
77	7.300	7.289	7.352	HH	208	6875	1.55%	0.040%
78	7.376	7.352	7.402	HH	311	6286	1.42%	0.036%
79	7.421	7.402	7.437	HH	305	5147	1.16%	0.030%
80	7.445	7.437	7.470	HH	258	4102	0.93%	0.024%
81	7.516	7.470	7.536	HH	260	8699	1.96%	0.050%
82	7.553	7.536	7.570	HH	312	5381	1.22%	0.031%
83	7.590	7.570	7.599	HH	370	5429	1.23%	0.031%
84	7.628	7.599	7.644	HH	375	8168	1.84%	0.047%
85	7.658	7.644	7.687	HH	364	8027	1.81%	0.047%
86	7.700	7.687	7.724	HH	381	6382	1.44%	0.037%
87	7.743	7.724	7.779	HH	630	13607	3.07%	0.079%
88	7.801	7.779	7.849	HH	459	14166	3.20%	0.082%
89	7.880	7.849	7.935	HH	619	19775	4.47%	0.115%

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90	7.941	7.935	7.947	HH	384	2219	0.50%	0.013%
91	7.956	7.947	7.970	HH	399	4368	0.99%	0.025%
92	8.022	7.970	8.132	HH	909	38874	8.78%	0.225%
93	8.143	8.132	8.182	HH	361	8855	2.00%	0.051%
94	8.194	8.182	8.207	HH	359	4795	1.08%	0.028%
95	8.216	8.207	8.280	HH	359	11653	2.63%	0.068%
96	8.283	8.280	8.305	HH	280	3406	0.77%	0.020%
97	8.319	8.305	8.329	HH	278	3792	0.86%	0.022%
98	8.341	8.329	8.362	HH	346	6279	1.42%	0.036%
99	8.373	8.362	8.387	HH	364	5011	1.13%	0.029%
100	8.398	8.387	8.414	HH	390	5070	1.14%	0.029%
101	8.426	8.414	8.449	HH	405	7574	1.71%	0.044%
102	8.473	8.449	8.490	HH	570	11288	2.55%	0.065%
103	8.502	8.490	8.517	HH	458	6376	1.44%	0.037%
104	8.534	8.517	8.565	HH	479	11187	2.53%	0.065%
105	8.591	8.565	8.617	HH	430	11762	2.66%	0.068%
106	8.628	8.617	8.640	HH	457	5986	1.35%	0.035%
107	8.650	8.640	8.695	HH	532	13766	3.11%	0.080%
108	8.720	8.695	8.739	HH	694	14177	3.20%	0.082%
109	8.743	8.739	8.757	HH	624	5614	1.27%	0.033%
110	8.764	8.757	8.774	HH	463	4650	1.05%	0.027%
111	8.796	8.774	8.827	HH	608	16782	3.79%	0.097%
112	8.845	8.827	8.862	HH	821	14272	3.22%	0.083%
113	8.893	8.862	8.967	HH	1459	47868	10.81%	0.278%
114	9.033	8.967	9.063	HH	945	39666	8.96%	0.230%
115	9.083	9.063	9.107	HH	617	14055	3.17%	0.082%
116	9.121	9.107	9.174	HH	549	19515	4.41%	0.113%
117	9.181	9.174	9.212	HH	515	10454	2.36%	0.061%
118	9.326	9.212	9.347	HH	2099	57831	13.06%	0.335%
119	9.364	9.347	9.412	HH	859	27518	6.21%	0.160%
120	9.428	9.412	9.465	HH	860	23200	5.24%	0.135%
121	9.476	9.465	9.498	HH	802	12681	2.86%	0.074%
122	9.563	9.498	9.580	HH	934	34732	7.84%	0.201%
123	9.598	9.580	9.667	HH	1237	43620	9.85%	0.253%
124	9.710	9.667	9.755	HH	1525	50110	11.32%	0.291%
125	9.772	9.755	9.845	HH	869	38005	8.58%	0.220%
126	9.885	9.845	9.909	HH	886	26910	6.08%	0.156%
127	9.920	9.909	9.955	HH	800	18627	4.21%	0.108%
128	9.970	9.955	9.987	HH	737	12948	2.92%	0.075%
129	10.019	9.987	10.044	HH	837	25678	5.80%	0.149%
130	10.107	10.044	10.153	HH	1937	67481	15.24%	0.391%
131	10.182	10.153	10.210	HH	1105	31927	7.21%	0.185%
132	10.227	10.210	10.240	HH	892	15082	3.41%	0.087%
133	10.258	10.240	10.302	HH	1239	35500	8.02%	0.206%
134	10.321	10.302	10.346	HH	1011	23736	5.36%	0.138%
135	10.374	10.346	10.408	HH	4737	73745	16.65%	0.428%
136	10.425	10.408	10.457	HH	1456	34097	7.70%	0.198%
137	10.484	10.457	10.512	HH	1744	41801	9.44%	0.242%
138	10.526	10.512	10.574	HH	1345	39110	8.83%	0.227%
139	10.596	10.574	10.635	HH	976	32304	7.29%	0.187%
140	10.653	10.635	10.672	HH	999	19886	4.49%	0.115%
141	10.679	10.672	10.740	HH	926	33782	7.63%	0.196%

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142	10.772	10.740	10.809	HH	931	34233	7.73%	0.199%
143	10.845	10.809	10.859	HH	1267	30852	6.97%	0.179%
144	10.871	10.859	10.909	HH	1203	32273	7.29%	0.187%
145	10.920	10.909	10.930	HH	1048	13587	3.07%	0.079%
146	10.955	10.930	10.965	HH	1298	24212	5.47%	0.140%
147	10.981	10.965	11.003	HH	1491	28448	6.42%	0.165%
148	11.023	11.003	11.056	HH	1487	37083	8.37%	0.215%
149	11.100	11.056	11.119	HH	1351	43883	9.91%	0.255%
150	11.154	11.119	11.195	HH	1673	61497	13.89%	0.357%
151	11.217	11.195	11.249	HH	2056	48454	10.94%	0.281%
152	11.267	11.249	11.277	HH	1524	23233	5.25%	0.135%
153	11.297	11.277	11.325	HH	1830	46846	10.58%	0.272%
154	11.334	11.325	11.360	HH	1547	28225	6.37%	0.164%
155	11.370	11.360	11.384	HH	1277	17024	3.84%	0.099%
156	11.398	11.384	11.414	HH	1346	22905	5.17%	0.133%
157	11.432	11.414	11.459	HH	1394	33843	7.64%	0.196%
158	11.505	11.459	11.552	HH	14348	212348	47.95%	1.232%
159	11.580	11.552	11.655	HH	4706	128791	29.08%	0.747%
160	11.673	11.655	11.700	HH	1506	37389	8.44%	0.217%
161	11.711	11.700	11.742	HH	1394	33792	7.63%	0.196%
162	11.748	11.742	11.765	HH	1324	18705	4.22%	0.108%
163	11.787	11.765	11.830	HH	2042	63082	14.24%	0.366%
164	11.848	11.830	11.880	HH	1659	45465	10.27%	0.264%
165	11.915	11.880	11.954	HH	2476	78968	17.83%	0.458%
166	12.028	11.954	12.069	HH	2325	121676	27.48%	0.706%
167	12.092	12.069	12.124	HH	1875	54831	12.38%	0.318%
168	12.154	12.124	12.170	HH	1944	49367	11.15%	0.286%
169	12.186	12.170	12.211	HH	1820	42488	9.59%	0.246%
170	12.253	12.211	12.270	HH	1813	61642	13.92%	0.358%
171	12.301	12.270	12.317	HH	3862	75092	16.96%	0.436%
172	12.332	12.317	12.367	HH	4593	84606	19.11%	0.491%
173	12.371	12.367	12.377	HH	1902	11682	2.64%	0.068%
174	12.419	12.377	12.435	HH	4377	102580	23.16%	0.595%
175	12.450	12.435	12.463	HH	3376	48032	10.85%	0.279%
176	12.480	12.463	12.502	HH	3801	68262	15.41%	0.396%
177	12.517	12.502	12.529	HH	2220	33169	7.49%	0.192%
178	12.579	12.529	12.607	HH	3080	110406	24.93%	0.640%
179	12.615	12.607	12.642	HH	2154	44353	10.02%	0.257%
180	12.661	12.642	12.684	HH	2770	61629	13.92%	0.357%
181	12.694	12.684	12.727	HH	2411	58124	13.13%	0.337%
182	12.764	12.727	12.787	HH	3556	94027	21.23%	0.545%
183	12.821	12.787	12.894	HH	4077	177948	40.18%	1.032%
184	12.915	12.894	12.932	HH	2749	60165	13.59%	0.349%
185	12.960	12.932	12.978	HH	3191	78020	17.62%	0.453%
186	12.994	12.978	13.005	HH	2935	44806	10.12%	0.260%
187	13.015	13.005	13.030	HH	2875	43426	9.81%	0.252%
188	13.041	13.030	13.062	HH	2822	52566	11.87%	0.305%
189	13.085	13.062	13.121	HH	3535	109277	24.68%	0.634%
190	13.174	13.121	13.207	HH	9616	249567	56.36%	1.448%
191	13.217	13.207	13.245	HH	4327	88939	20.08%	0.516%
192	13.258	13.245	13.292	HH	3938	94983	21.45%	0.551%
193	13.315	13.292	13.357	HH	31016	412527	93.15%	2.393%
194	13.377	13.357	13.390	HH	3114	59979	13.54%	0.348%

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195	13.409	13.390	13.427	HH	3223	67682	15.28%	0.393%
196	13.460	13.427	13.480	HH	3875	108624	24.53%	0.630%
197	13.505	13.480	13.530	HH	4222	110451	24.94%	0.641%
198	13.539	13.530	13.552	HH	3516	44079	9.95%	0.256%
199	13.564	13.552	13.589	HH	3440	72112	16.28%	0.418%
200	13.615	13.589	13.650	HH	29051	426727	96.36%	2.475%
201	13.667	13.650	13.682	HH	5938	92855	20.97%	0.539%
202	13.697	13.682	13.755	HH	5633	179337	40.50%	1.040%
203	13.781	13.755	13.799	HH	4174	99675	22.51%	0.578%
204	13.819	13.799	13.838	HH	4981	103957	23.47%	0.603%
205	13.855	13.838	13.867	HH	4882	78937	17.83%	0.458%
206	13.875	13.867	13.898	HH	5133	85129	19.22%	0.494%
207	13.910	13.898	13.925	HH	4308	66955	15.12%	0.388%
208	13.934	13.925	13.984	HH	4150	138894	31.36%	0.806%
209	14.007	13.984	14.042	HH	4603	148591	33.55%	0.862%
210	14.066	14.042	14.092	HH	5834	145574	32.87%	0.844%
211	14.101	14.092	14.140	HH	4173	117130	26.45%	0.679%
212	14.196	14.140	14.237	HH	8175	304552	68.77%	1.766%
213	14.257	14.237	14.276	HH	5041	110546	24.96%	0.641%
214	14.302	14.276	14.325	HH	10427	199769	45.11%	1.159%
215	14.347	14.325	14.369	HH	6633	145748	32.91%	0.845%
216	14.407	14.369	14.425	HH	5862	182788	41.28%	1.060%
217	14.451	14.425	14.458	HH	5794	110771	25.01%	0.642%
218	14.478	14.458	14.498	HH	8260	161494	36.47%	0.937%
219	14.515	14.498	14.544	HH	7010	158754	35.85%	0.921%
220	14.587	14.544	14.607	HH	5757	203418	45.93%	1.180%
221	14.630	14.607	14.659	HH	6474	184629	41.69%	1.071%
222	14.669	14.659	14.682	HH	5753	77879	17.59%	0.452%
223	14.695	14.682	14.710	HH	5735	95334	21.53%	0.553%
224	14.724	14.710	14.732	HH	5692	72769	16.43%	0.422%
225	14.743	14.732	14.760	HH	5696	95356	21.53%	0.553%
226	14.786	14.760	14.820	HH	5953	209438	47.29%	1.215%
227	14.930	14.910	14.952	HH	7626	174299	39.36%	1.011%
228	14.979	14.952	15.005	HH	7137	216258	48.83%	1.254%
229	15.029	15.005	15.070	HH	7652	268365	60.60%	1.557%
230	15.108	15.070	15.147	HH	8142	324577	73.29%	1.883%
231	15.171	15.147	15.197	HH	9995	244656	55.25%	1.419%
232	15.230	15.197	15.267	HH	8176	309753	69.95%	1.797%
233	15.299	15.267	15.332	HH	15422	380891	86.01%	2.209%
234	15.355	15.332	15.384	HH	7917	231454	52.27%	1.342%
235	15.434	15.384	15.450	HH	8064	296878	67.04%	1.722%
236	15.479	15.450	15.499	HH	21064	383616	86.63%	2.225%
237	15.521	15.499	15.549	HH	20093	391372	88.38%	2.270%
238	15.562	15.549	15.580	HH	8303	155762	35.17%	0.903%
239	15.587	15.580	15.605	HH	8156	120869	27.29%	0.701%
240	15.644	15.605	15.685	HH	10978	442843	100.00%	2.569%
241	15.716	15.685	15.747	HH	9524	333733	75.36%	1.936%
242	15.778	15.747	15.807	HH	9689	334413	75.51%	1.940%
243	15.827	15.807	15.855	HH	10192	282603	63.82%	1.639%
244	15.882	15.855	15.904	HH	11680	306027	69.10%	1.775%
245	15.922	15.904	15.937	HH	10464	206146	46.55%	1.196%
246	15.962	15.937	15.984	HH	10580	289613	65.40%	1.680%

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247	16.022	15.984	16.037	HH	11437	344722	77.84%	1.999%
248	16.046	16.037	16.089	HH	11309	345349	77.98%	2.003%
249	16.111	16.089	16.126	HH	11658	258667	58.41%	1.500%
250	16.148	16.126	16.172	HH	14004	344038	77.69%	1.995%
251	16.188	16.172	16.222	HH	12878	367032	82.88%	2.129%
252	16.238	16.222	16.259	HH	12587	269866	60.94%	1.565%

Sum of corrected areas: 17241098

FE012325.M Mon Feb 03 02:43:25 2025

CALIBRATION SUMMARY

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

DIESEL RANGE ORGANICS INITIAL CALIBRATION SUMMARY

Lab Name: Chemtech Contract: RUTW01

ProjectID: NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Lab Code: CHEM Case No.: Q1242 SAS No.: Q1242 SDG No.: Q1242

Calibration Sequence : FE012325		Test : Diesel Range Organics	
Concentration (PPM)	**Area Count**	**Reference Factor**	**File ID**
1000	100840417	100840	FE052027.D
500	49711032	99422	FE052028.D
200	20907011	104535	FE052029.D
100	11272495	112725	FE052030.D
50	5669298	113386	FE052031.D
AVG RF : 106182	**% RSD : 6.169**		**AVG RT : 15.2554**

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052027.D
Signal(s) : FID1B.ch
Acq On : 23 Jan 2025 22:06
Operator : YP\AJ
Sample : 100 TRPH STD
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
100 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 24 03:01:18 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:00:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	15.260	9326838	100.174 ug/ml
	Target Compounds			
1)	N-OCTANE	2.414	8352750	103.369 ug/ml
2)	N-DECANE	4.910	8964173	103.553 ug/ml
3)	N-DODECANE	7.039	9720116	103.116 ug/ml
4)	N-TETRADECANE	8.845	9800969	102.624 ug/ml
5)	N-HEXADECANE	10.439	10191868	102.144 ug/ml
6)	N-OCTADECANE	11.873	10670149	101.681 ug/ml
7)	N-EICOSANE	13.174	10511987	101.149 ug/ml
8)	N-DOCOSANE	14.367	10414135	100.677 ug/ml
10)	N-TETRACOSANE	15.465	10358861	100.274 ug/ml
11)	N-HEXACOSANE	16.482	10187153	100.078 ug/ml
12)	N-OCTACOSANE	17.429	10021006	99.509 ug/ml
13)	N-TRIACONTANE	18.313	9878203	99.283 ug/ml
14)	N-DOTRIACONTANE	19.143	9582276	99.145 ug/ml
15)	N-TETRATRIACONTANE	19.925	8712926	100.310 ug/ml
16)	N-HEXATRIACONTANE	20.662	7584514	101.793 ug/ml
17)	N-OCTATRIACONTANE	21.449	7106830	103.214 ug/ml
18)	N-TETRACONTANE	22.450	7068311	105.034 ug/ml

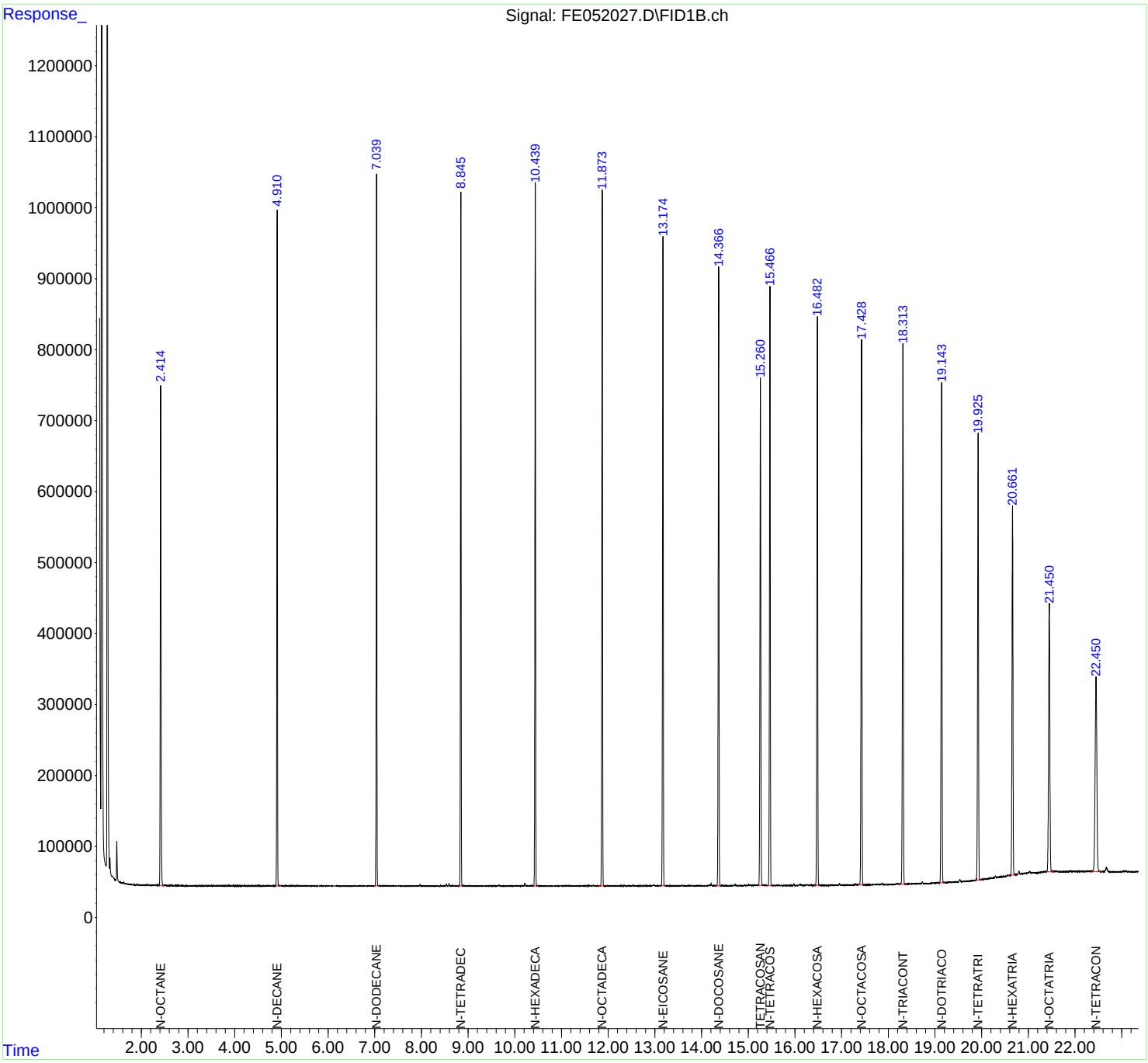
(f)=RT Delta > 1/2 Window (m)=manual int.

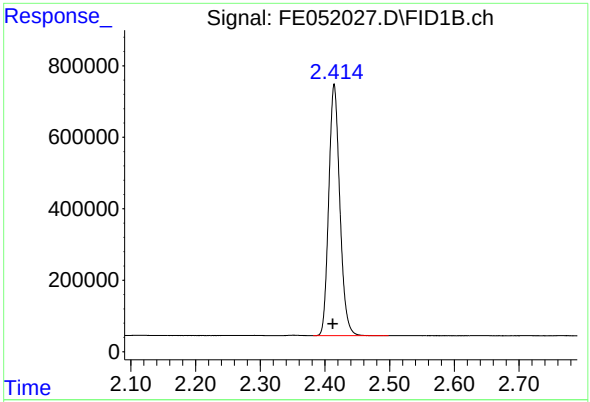
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052027.D
Signal(s) : FID1B.ch
Acq On : 23 Jan 2025 22:06
Operator : YP\AJ
Sample : 100 TRPH STD
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
100 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 24 03:01:18 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:00:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

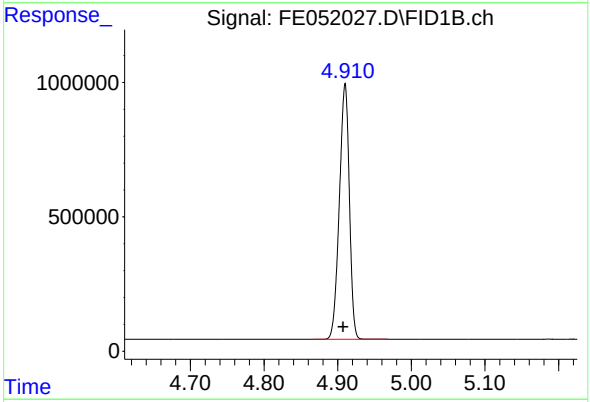




#1 N-OCTANE

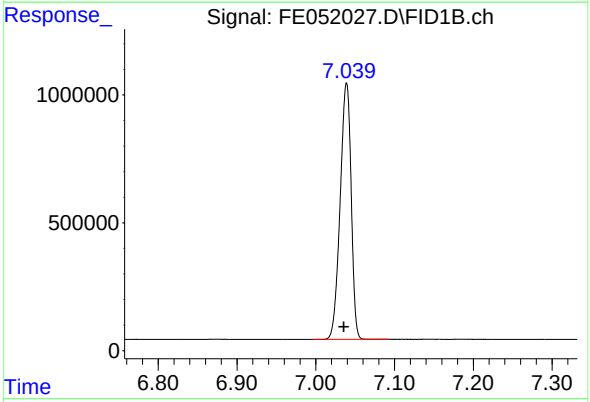
R.T.: 2.414 min
Delta R.T.: 0.002 min
Response: 8352750
Conc: 103.37 ug/ml

Instrument :
FID_E
ClientSampleId :
100 TRPH STD



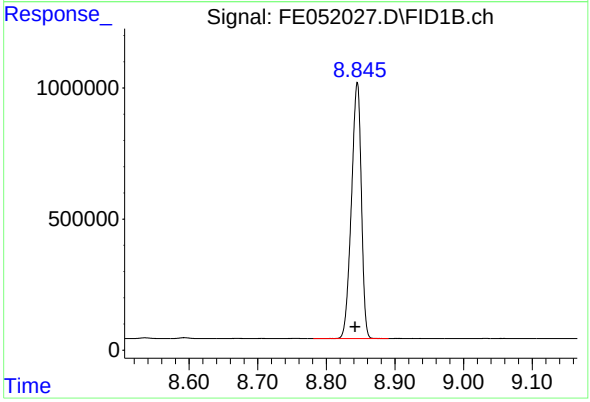
#2 N-DECANE

R.T.: 4.910 min
Delta R.T.: 0.003 min
Response: 8964173
Conc: 103.55 ug/ml



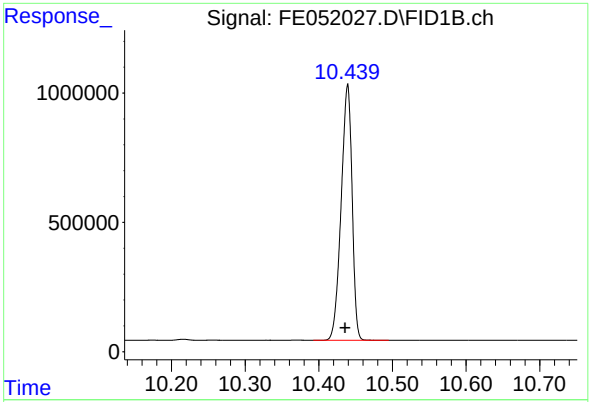
#3 N-DODECANE

R.T.: 7.039 min
Delta R.T.: 0.003 min
Response: 9720116
Conc: 103.12 ug/ml



#4 N-TETRADECANE

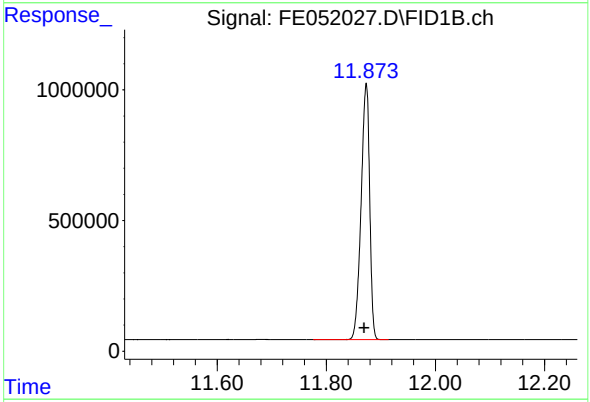
R.T.: 8.845 min
Delta R.T.: 0.003 min
Response: 9800969
Conc: 102.62 ug/ml



#5 N-HEXADECANE

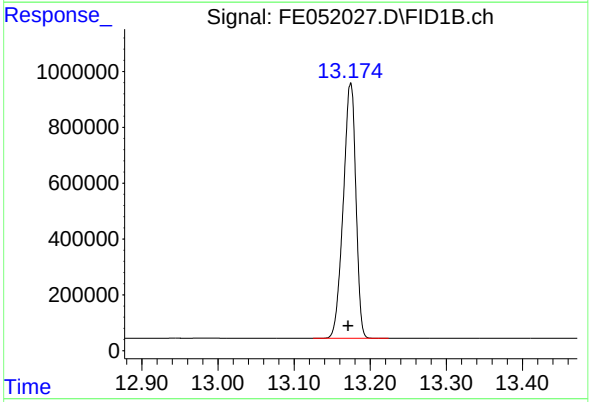
R.T.: 10.439 min
Delta R.T.: 0.004 min
Response: 10191868
Conc: 102.14 ug/ml

Instrument :
FID_E
ClientSampleId :
100 TRPH STD



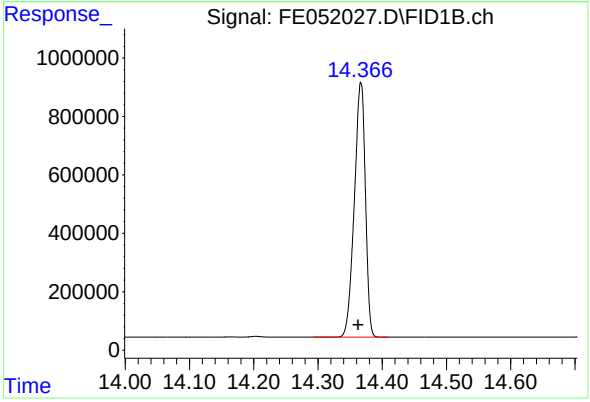
#6 N-OCTADECANE

R.T.: 11.873 min
Delta R.T.: 0.004 min
Response: 10670149
Conc: 101.68 ug/ml



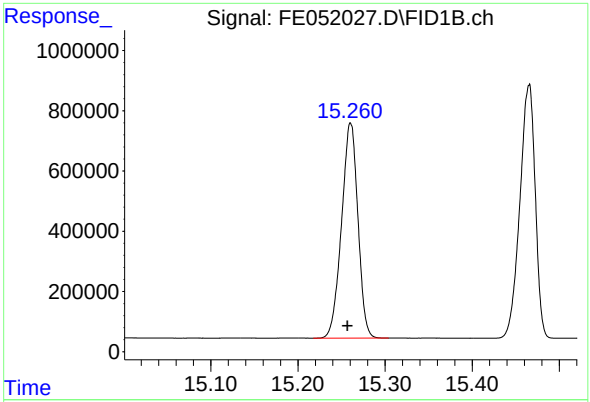
#7 N-EICOSANE

R.T.: 13.174 min
Delta R.T.: 0.003 min
Response: 10511987
Conc: 101.15 ug/ml



#8 N-DOCOSANE

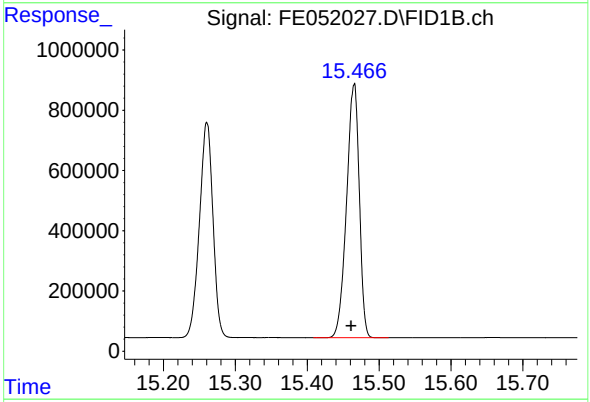
R.T.: 14.367 min
Delta R.T.: 0.004 min
Response: 10414135
Conc: 100.68 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

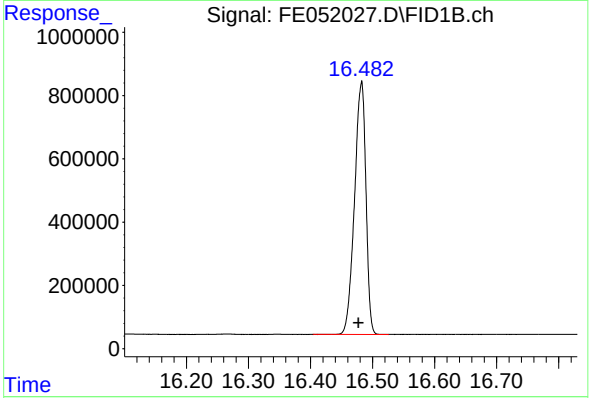
R.T.: 15.260 min
Delta R.T.: 0.003 min
Response: 9326838
Conc: 100.17 ug/ml

Instrument :
FID_E
ClientSampleId :
100 TRPH STD



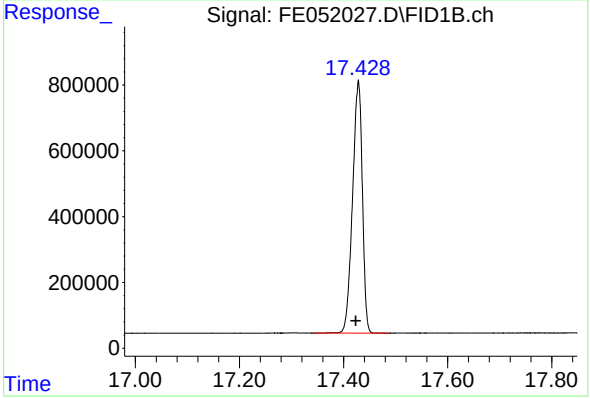
#10 N-TETRACOSANE

R.T.: 15.465 min
Delta R.T.: 0.004 min
Response: 10358861
Conc: 100.27 ug/ml



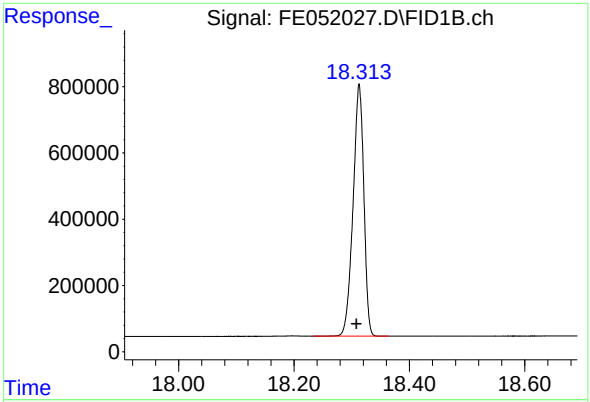
#11 N-HEXACOSANE

R.T.: 16.482 min
Delta R.T.: 0.005 min
Response: 10187153
Conc: 100.08 ug/ml



#12 N-OCTACOSANE

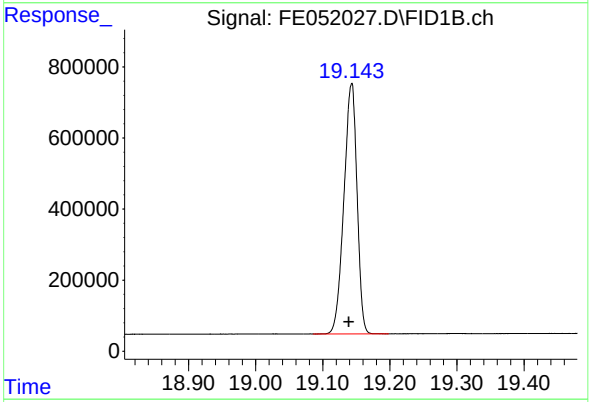
R.T.: 17.429 min
Delta R.T.: 0.005 min
Response: 10021006
Conc: 99.51 ug/ml



#13 N-TRIACONTANE

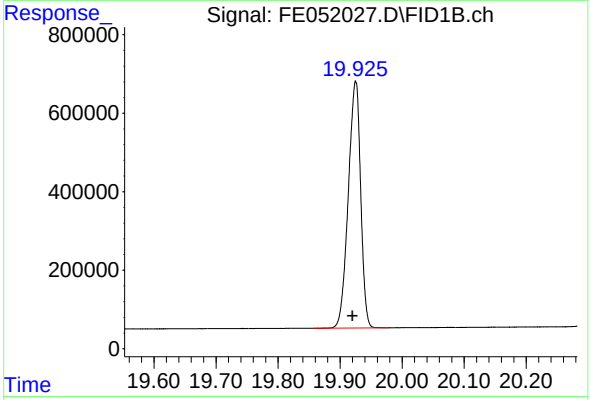
R.T.: 18.313 min
Delta R.T.: 0.005 min
Response: 9878203
Conc: 99.28 ug/ml

Instrument :
FID_E
ClientSampleId :
100 TRPH STD



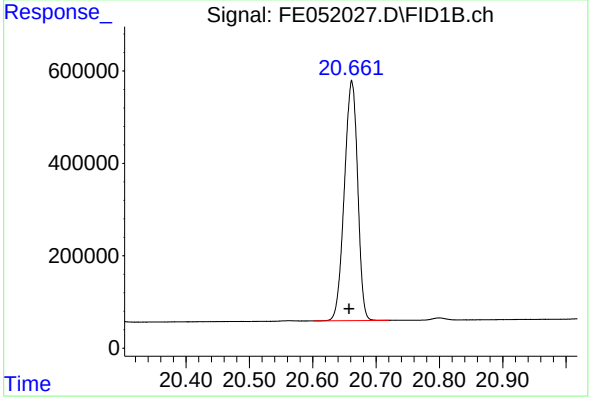
#14 N-DOTRIACONTANE

R.T.: 19.143 min
Delta R.T.: 0.004 min
Response: 9582276
Conc: 99.15 ug/ml



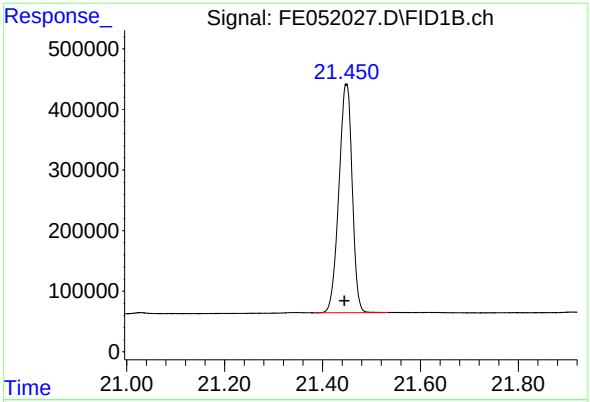
#15 N-TETRATRIACONTANE

R.T.: 19.925 min
Delta R.T.: 0.005 min
Response: 8712926
Conc: 100.31 ug/ml



#16 N-HEXATRIACONTANE

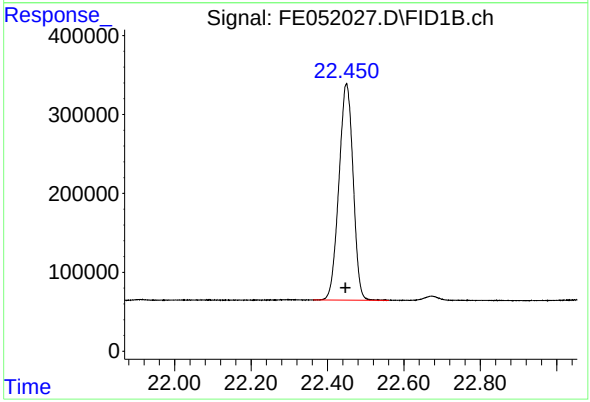
R.T.: 20.662 min
Delta R.T.: 0.004 min
Response: 7584514
Conc: 101.79 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.449 min
Delta R.T.: 0.004 min
Response: 7106830
Conc: 103.21 ug/ml

Instrument :
FID_E
ClientSampleId :
100 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.450 min
Delta R.T.: 0.002 min
Response: 7068311
Conc: 105.03 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052027.D
Signal(s) : FID1B.ch
Acq On : 23 Jan 2025 22:06
Sample : 100 TRPH STD
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.414	2.382	2.498	PB	704049	8352750	78.28%	4.959%
2	4.910	4.867	4.969	BB	951340	8964173	84.01%	5.321%
3	7.039	6.997	7.092	BB	1002810	9720116	91.10%	5.770%
4	8.845	8.781	8.891	BV	977530	9800969	91.85%	5.818%
5	10.439	10.392	10.495	BB	989021	10191868	95.52%	6.050%
6	11.873	11.776	11.914	BB	979790	10670149	100.00%	6.334%
7	13.174	13.125	13.224	BB	912737	10511987	98.52%	6.240%
8	14.367	14.292	14.410	BB	871499	10414135	97.60%	6.182%
9	15.260	15.217	15.304	PV	713126	9326838	87.41%	5.537%
10	15.465	15.408	15.513	BB	842402	10358861	97.08%	6.149%
11	16.482	16.404	16.526	BB	799959	10187153	95.47%	6.047%
12	17.429	17.342	17.487	BB	765387	10021006	93.92%	5.949%
13	18.313	18.233	18.364	BB	762184	9878203	92.58%	5.864%
14	19.143	19.086	19.198	BB	704937	9582276	89.80%	5.688%
15	19.925	19.857	19.978	BV	629323	8712926	81.66%	5.172%
16	20.662	20.601	20.720	BB	519502	7584514	71.08%	4.502%
17	21.449	21.381	21.535	BB	375187	7106830	66.60%	4.219%
18	22.450	22.362	22.560	BB	274238	7068311	66.24%	4.196%

Sum of corrected areas: 168453064

FE012325.M Fri Jan 24 03:17:50 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052028.D
Signal(s) : FID1B.ch
Acq On : 23 Jan 2025 23:06
Operator : YP\AJ
Sample : 50 TRPH STD
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
50 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 24 03:01:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:00:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	15.257	4655317	50.000 ug/ml
	Target Compounds			
1)	N-OCTANE	2.412	4040248	50.000 ug/ml
2)	N-DECANE	4.907	4328284	50.000 ug/ml
3)	N-DODECANE	7.036	4713212	50.000 ug/ml
4)	N-TETRADECANE	8.842	4775185	50.000 ug/ml
5)	N-HEXADECANE	10.436	4988963	50.000 ug/ml
6)	N-OCTADECANE	11.869	5246868	50.000 ug/ml
7)	N-EICOSANE	13.171	5196311	50.000 ug/ml
8)	N-DOCOSANE	14.362	5172075	50.000 ug/ml
10)	N-TETRACOSANE	15.461	5165286	50.000 ug/ml
11)	N-HEXACOSANE	16.477	5089619	50.000 ug/ml
12)	N-OCTACOSANE	17.424	5035229	50.000 ug/ml
13)	N-TRIACONTANE	18.308	4974786	50.000 ug/ml
14)	N-DOTRIACONTANE	19.139	4832453	50.000 ug/ml
15)	N-TETRATRIACONTANE	19.920	4342985	50.000 ug/ml
16)	N-HEXATRIACONTANE	20.657	3725450	50.000 ug/ml
17)	N-OCTATRIACONTANE	21.445	3442776	50.000 ug/ml
18)	N-TETRACONTANE	22.447	3364772	50.000 ug/ml

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

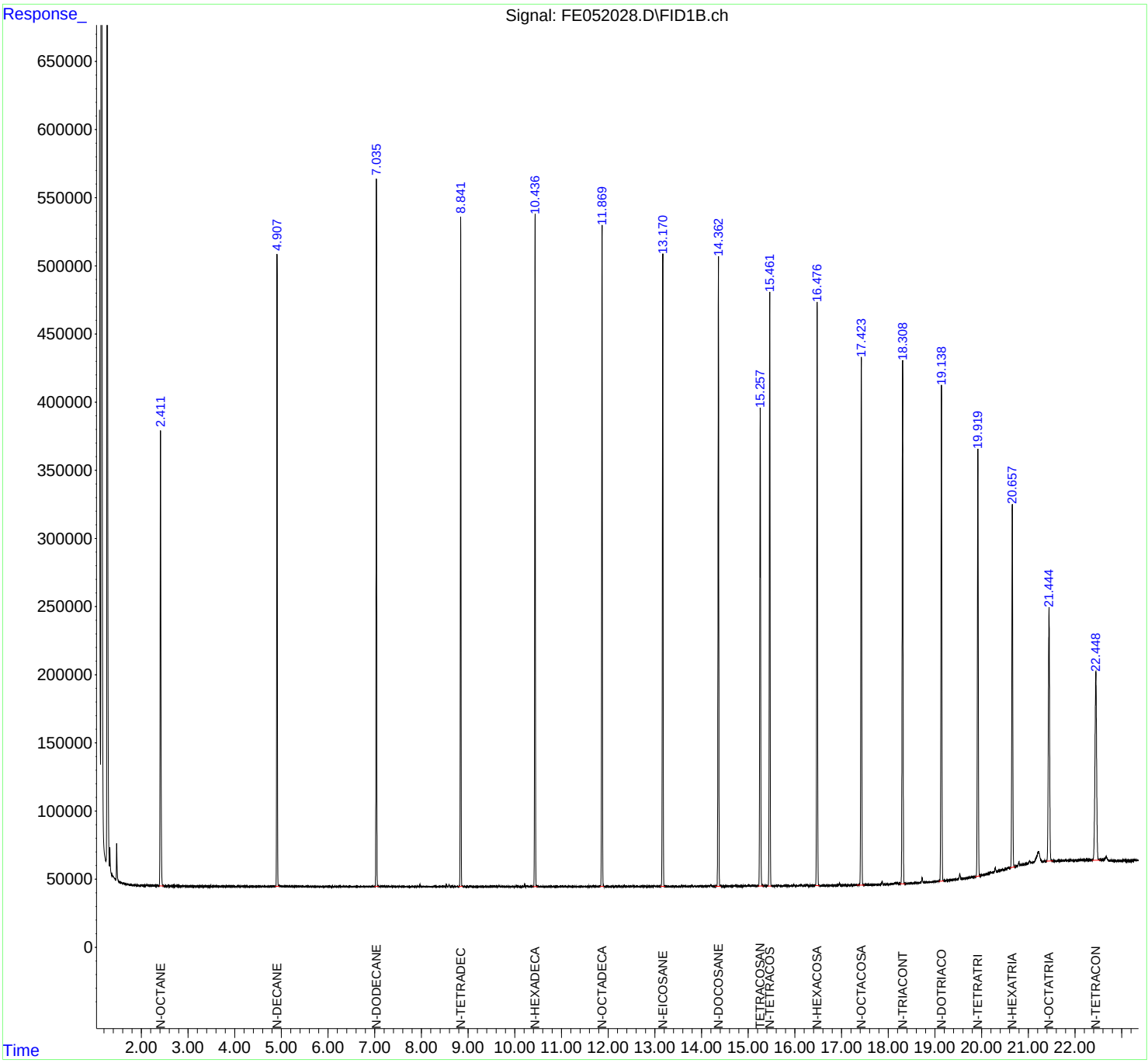
Quantitation Report (QT Reviewed)

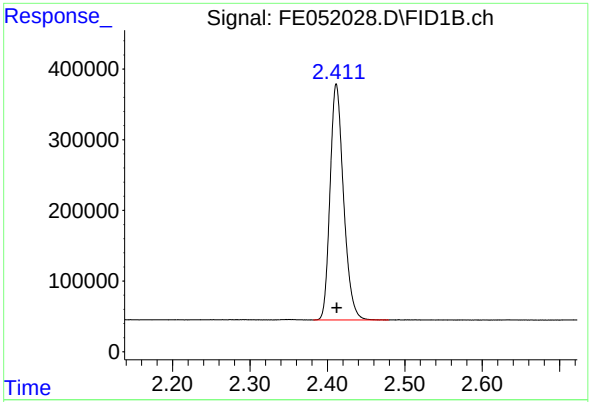
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052028.D
Signal(s) : FID1B.ch
Acq On : 23 Jan 2025 23:06
Operator : YP\AJ
Sample : 50 TRPH STD
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
50 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 24 03:01:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:00:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

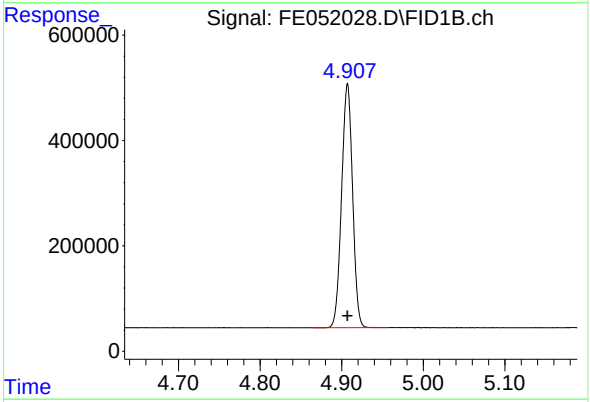




#1 N-OCTANE

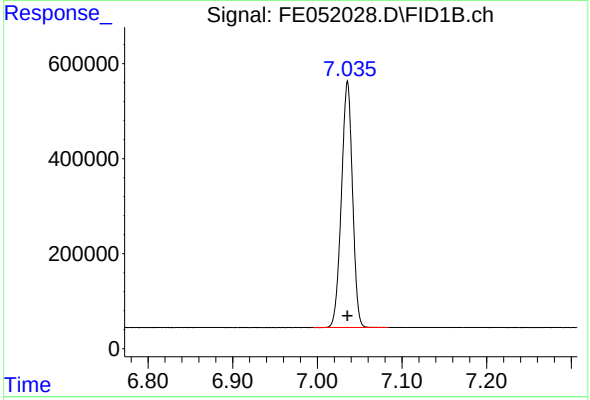
R.T.: 2.412 min
Delta R.T.: 0.000 min
Response: 4040248
Conc: 50.00 ug/ml

Instrument :
FID_E
ClientSampleId :
50 TRPH STD



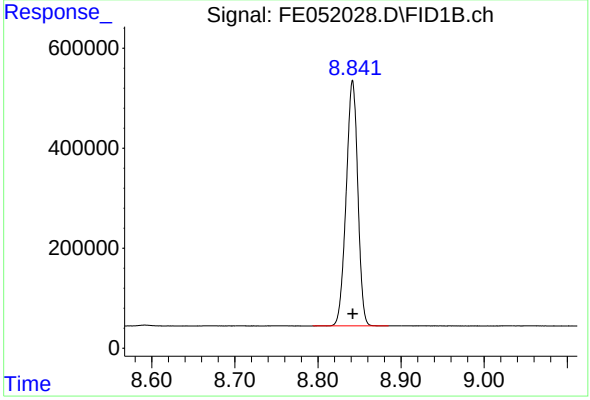
#2 N-DECANE

R.T.: 4.907 min
Delta R.T.: 0.000 min
Response: 4328284
Conc: 50.00 ug/ml



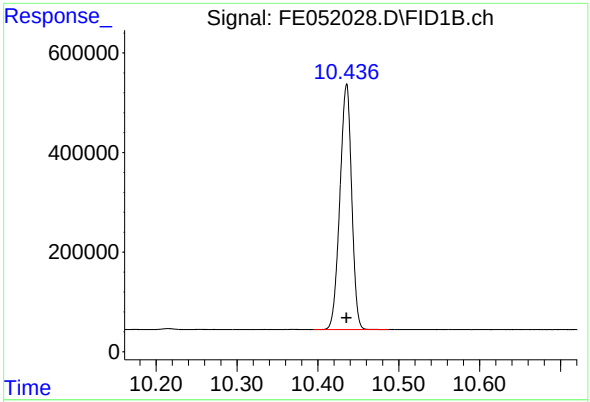
#3 N-DODECANE

R.T.: 7.036 min
Delta R.T.: 0.000 min
Response: 4713212
Conc: 50.00 ug/ml



#4 N-TETRADECANE

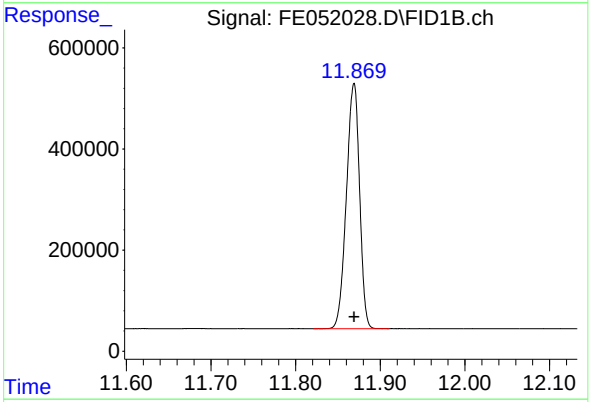
R.T.: 8.842 min
Delta R.T.: 0.000 min
Response: 4775185
Conc: 50.00 ug/ml



#5 N-HEXADECANE

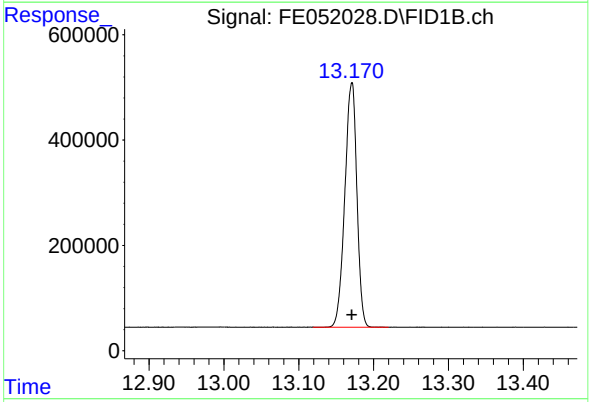
R.T.: 10.436 min
Delta R.T.: 0.000 min
Response: 4988963
Conc: 50.00 ug/ml

Instrument :
FID_E
ClientSampleId :
50 TRPH STD



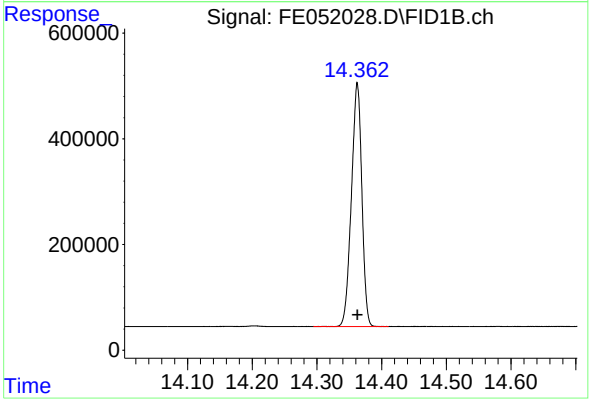
#6 N-OCTADECANE

R.T.: 11.869 min
Delta R.T.: 0.000 min
Response: 5246868
Conc: 50.00 ug/ml



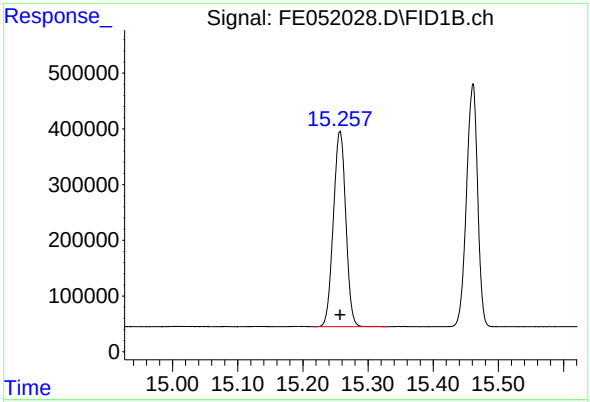
#7 N-EICOSANE

R.T.: 13.171 min
Delta R.T.: 0.000 min
Response: 5196311
Conc: 50.00 ug/ml



#8 N-DOCOSANE

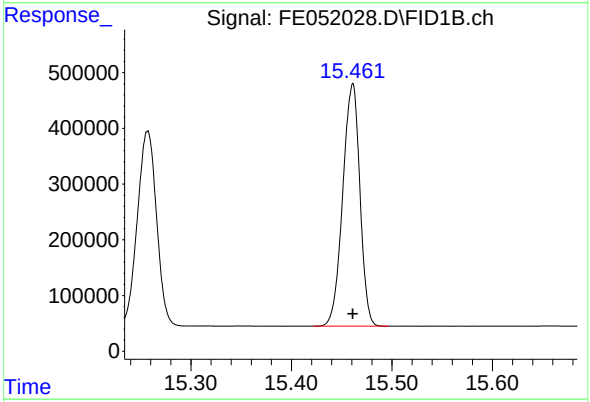
R.T.: 14.362 min
Delta R.T.: 0.000 min
Response: 5172075
Conc: 50.00 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

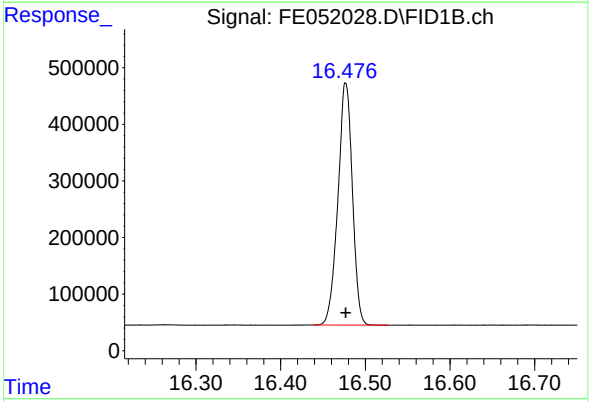
R.T.: 15.257 min
Delta R.T.: 0.000 min
Response: 4655317
Conc: 50.00 ug/ml

Instrument :
FID_E
ClientSampleId :
50 TRPH STD



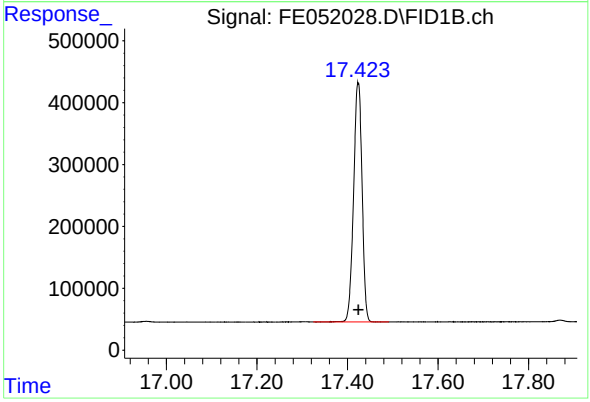
#10 N-TETRACOSANE

R.T.: 15.461 min
Delta R.T.: 0.000 min
Response: 5165286
Conc: 50.00 ug/ml



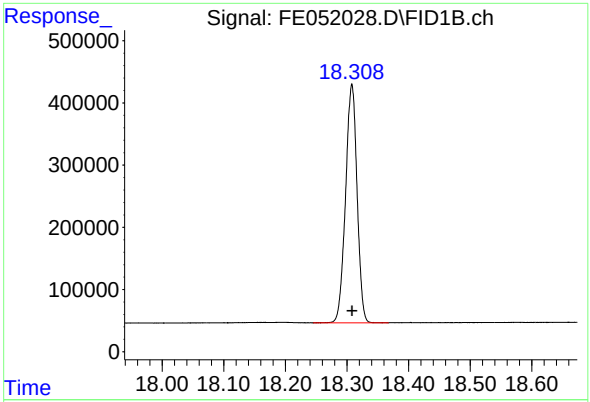
#11 N-HEXACOSANE

R.T.: 16.477 min
Delta R.T.: 0.000 min
Response: 5089619
Conc: 50.00 ug/ml



#12 N-OCTACOSANE

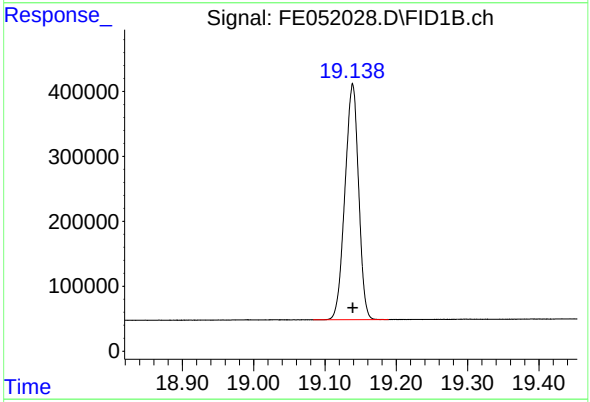
R.T.: 17.424 min
Delta R.T.: 0.000 min
Response: 5035229
Conc: 50.00 ug/ml



#13 N-TRIACONTANE

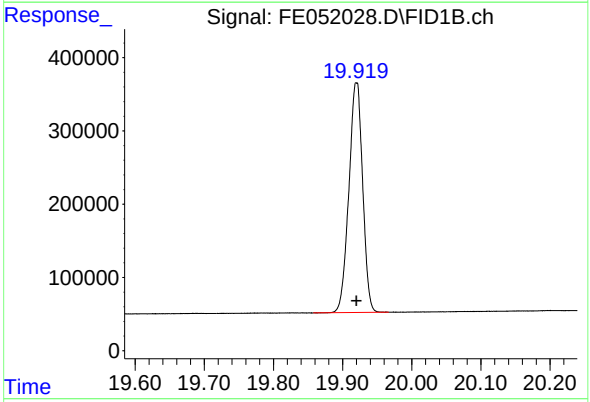
R.T.: 18.308 min
Delta R.T.: 0.000 min
Response: 4974786
Conc: 50.00 ug/ml

Instrument :
FID_E
ClientSampleId :
50 TRPH STD



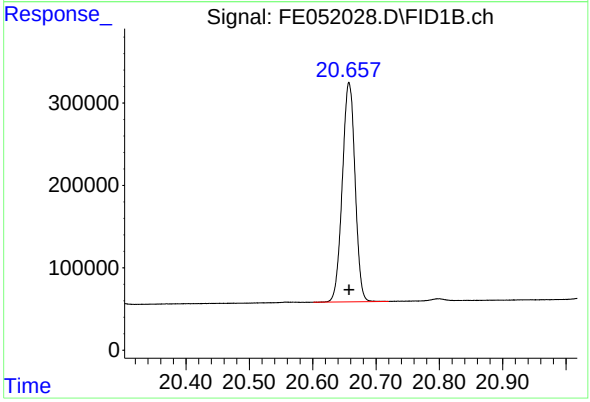
#14 N-DOTRIACONTANE

R.T.: 19.139 min
Delta R.T.: 0.000 min
Response: 4832453
Conc: 50.00 ug/ml



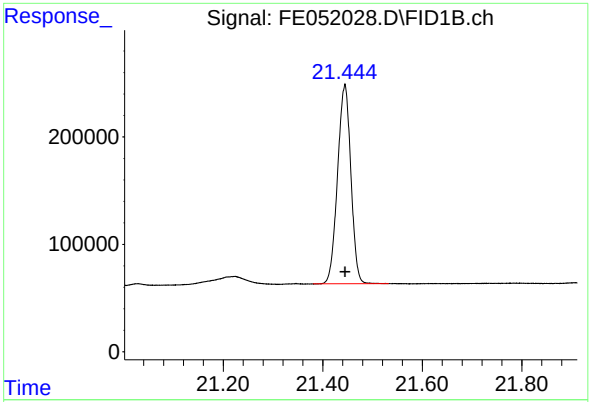
#15 N-TETRATRIACONTANE

R.T.: 19.920 min
Delta R.T.: 0.000 min
Response: 4342985
Conc: 50.00 ug/ml



#16 N-HEXATRIACONTANE

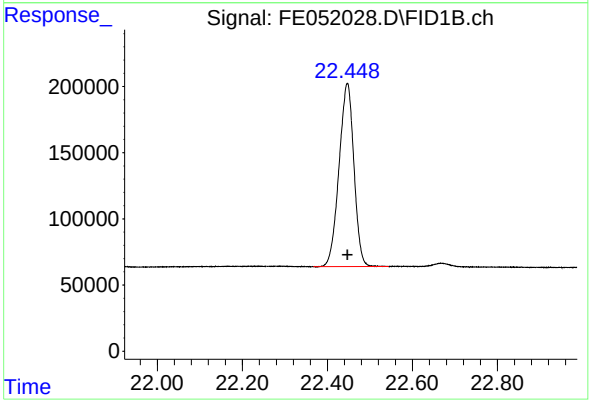
R.T.: 20.657 min
Delta R.T.: 0.000 min
Response: 3725450
Conc: 50.00 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.445 min
Delta R.T.: 0.000 min
Response: 3442776
Conc: 50.00 ug/ml

Instrument :
FID_E
ClientSampleId :
50 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.447 min
Delta R.T.: 0.000 min
Response: 3364772
Conc: 50.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052028.D
Signal(s) : FID1B.ch
Acq On : 23 Jan 2025 23:06
Sample : 50 TRPH STD
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.412	2.382	2.479	BB	334007	4040248	77.00%	4.863%
2	4.907	4.865	4.957	BB	463698	4328284	82.49%	5.209%
3	7.036	6.995	7.084	BB	518684	4713212	89.83%	5.672%
4	8.842	8.794	8.885	BB	491118	4775185	91.01%	5.747%
5	10.436	10.394	10.487	BB	493549	4988963	95.08%	6.004%
6	11.869	11.821	11.910	BB	485508	5246868	100.00%	6.315%
7	13.171	13.119	13.220	BB	464348	5196311	99.04%	6.254%
8	14.362	14.294	14.411	BB	460694	5172075	98.57%	6.225%
9	15.257	15.216	15.332	BV	349212	4655317	88.73%	5.603%
10	15.461	15.422	15.497	BB	435610	5165286	98.45%	6.217%
11	16.477	16.438	16.527	BB	427488	5089619	97.00%	6.125%
12	17.424	17.324	17.491	BB	386262	5035229	95.97%	6.060%
13	18.308	18.245	18.367	BB	384042	4974786	94.81%	5.987%
14	19.139	19.083	19.189	BB	362886	4832453	92.10%	5.816%
15	19.920	19.857	19.967	BB	313315	4342985	82.77%	5.227%
16	20.657	20.601	20.720	BV	266273	3725450	71.00%	4.484%
17	21.445	21.381	21.532	BB	186220	3442776	65.62%	4.143%
18	22.447	22.367	22.544	BB	138429	3364772	64.13%	4.050%
			Sum of corrected areas:			83089819		

FE012325.M Fri Jan 24 03:18:33 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052029.D
Signal(s) : FID1B.ch
Acq On : 23 Jan 2025 23:36
Operator : YP\AJ
Sample : 20 TRPH STD
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 24 03:01:57 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:00:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	15.254	1967122	21.128 ug/ml
	Target Compounds			
1)	N-OCTANE	2.412	1671507	20.686 ug/ml
2)	N-DECANE	4.906	1790386	20.682 ug/ml
3)	N-DODECANE	7.034	1959669	20.789 ug/ml
4)	N-TETRADECANE	8.840	1996208	20.902 ug/ml
5)	N-HEXADECANE	10.433	2090226	20.949 ug/ml
6)	N-OCTADECANE	11.866	2202071	20.985 ug/ml
7)	N-EICOSANE	13.168	2188908	21.062 ug/ml
8)	N-DOCOSANE	14.360	2186141	21.134 ug/ml
10)	N-TETRACOSANE	15.457	2185765	21.158 ug/ml
11)	N-HEXACOSANE	16.475	2160412	21.224 ug/ml
12)	N-OCTACOSANE	17.421	2147225	21.322 ug/ml
13)	N-TRIACONTANE	18.305	2136983	21.478 ug/ml
14)	N-DOTRIACONTANE	19.136	2078753	21.508 ug/ml
15)	N-TETRATRIACONTANE	19.918	1833911	21.113 ug/ml
16)	N-HEXATRIACONTANE	20.657	1534108	20.590 ug/ml
17)	N-OCTATRIACONTANE	21.439	1367415	19.859 ug/ml
18)	N-TETRACONTANE	22.440	1309204	19.455 ug/ml

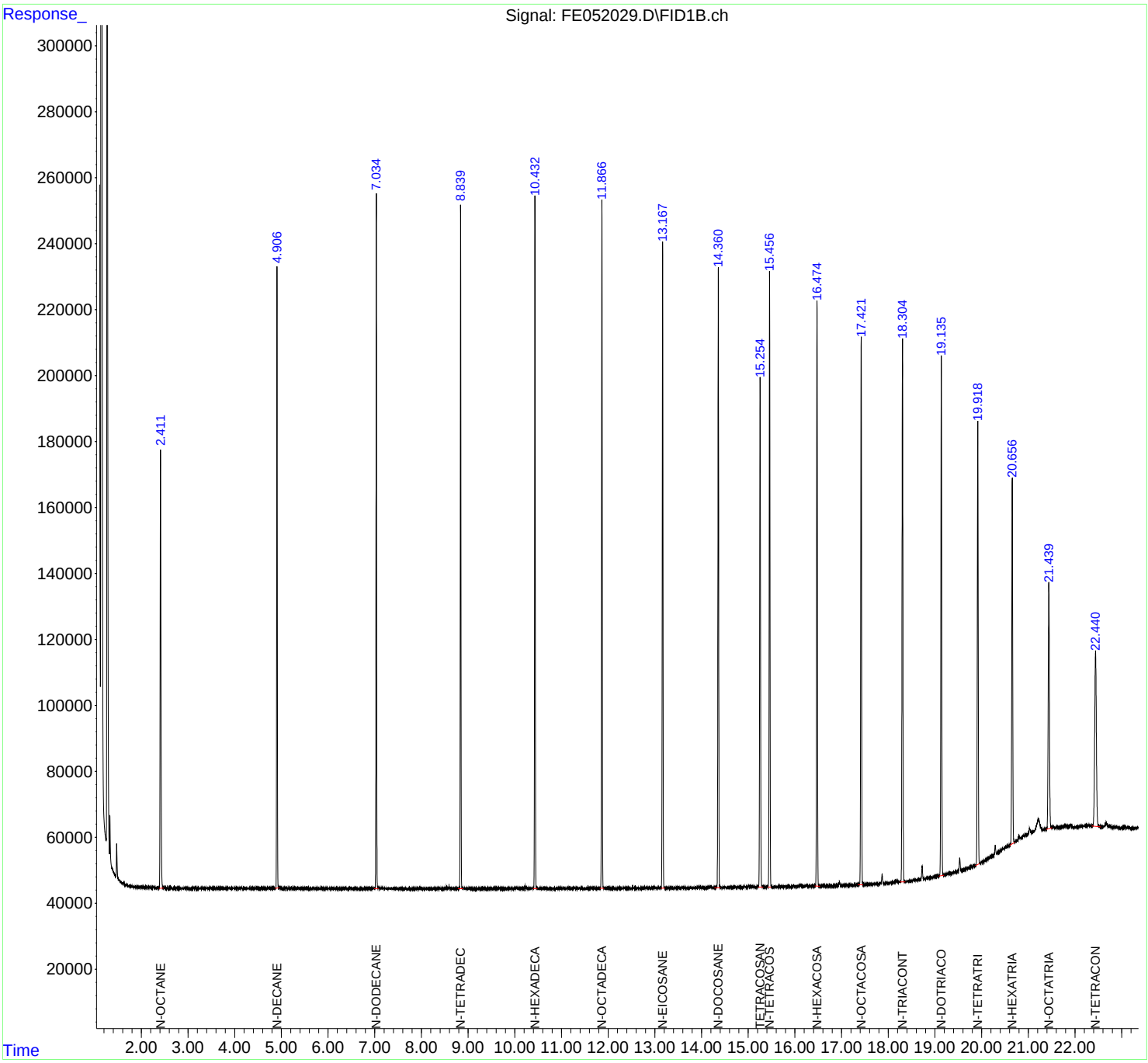
(f)=RT Delta > 1/2 Window (m)=manual int.

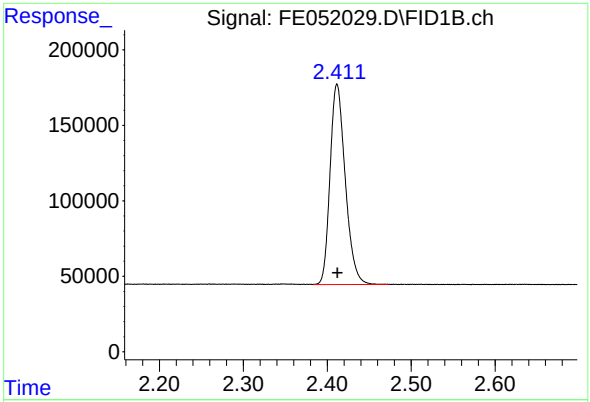
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052029.D
Signal(s) : FID1B.ch
Acq On : 23 Jan 2025 23:36
Operator : YP\AJ
Sample : 20 TRPH STD
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 24 03:01:57 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:00:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

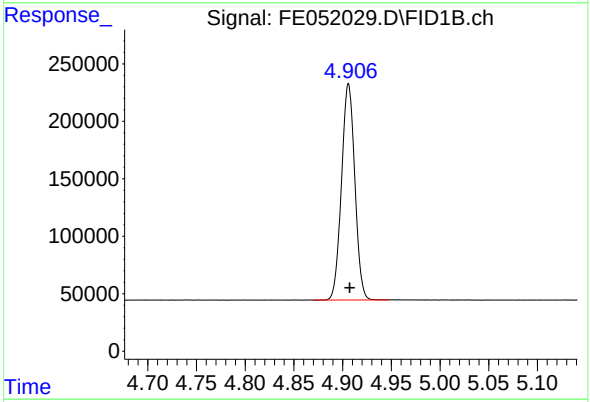




#1 N-OCTANE

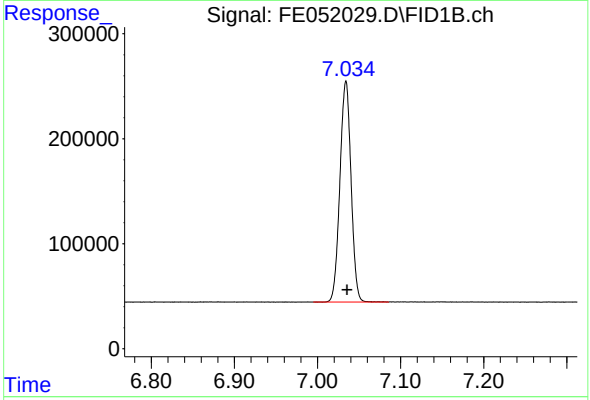
R.T.: 2.412 min
Delta R.T.: 0.000 min
Response: 1671507
Conc: 20.69 ug/ml

Instrument :
FID_E
ClientSampleId :
20 TRPH STD



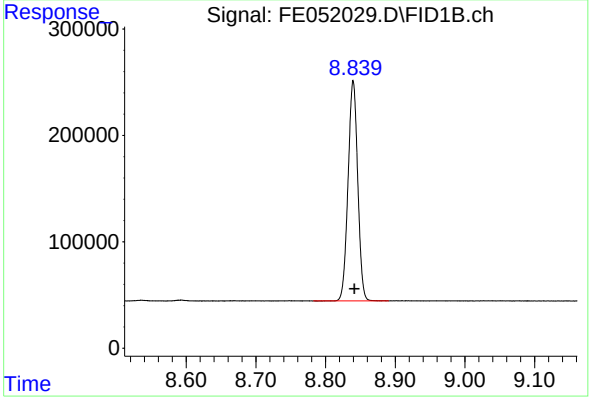
#2 N-DECANE

R.T.: 4.906 min
Delta R.T.: -0.001 min
Response: 1790386
Conc: 20.68 ug/ml



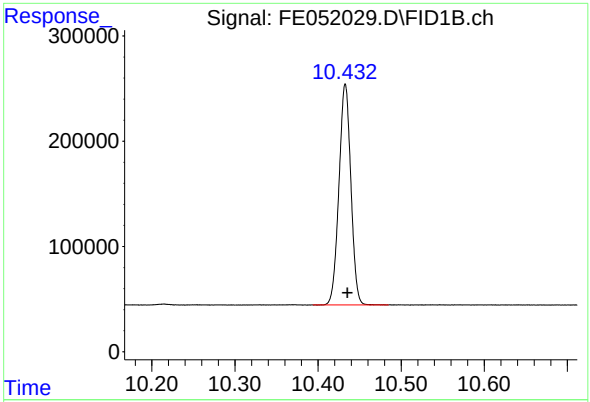
#3 N-DODECANE

R.T.: 7.034 min
Delta R.T.: -0.001 min
Response: 1959669
Conc: 20.79 ug/ml



#4 N-TETRADECANE

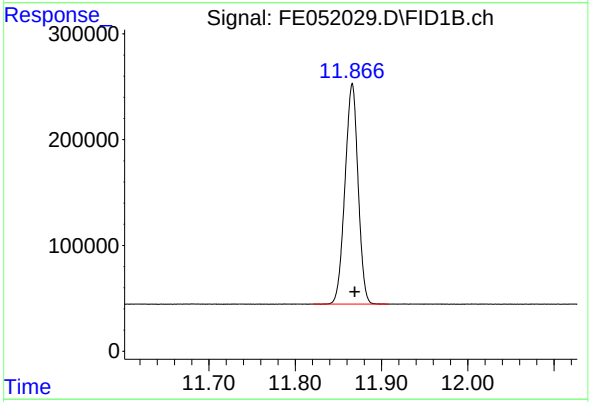
R.T.: 8.840 min
Delta R.T.: -0.002 min
Response: 1996208
Conc: 20.90 ug/ml



#5 N-HEXADECANE

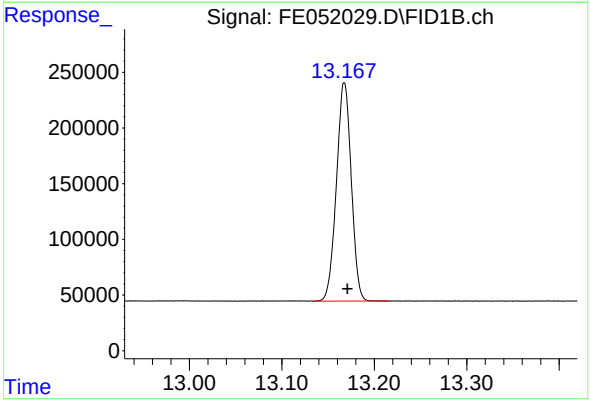
R.T.: 10.433 min
Delta R.T.: -0.003 min
Response: 2090226
Conc: 20.95 ug/ml

Instrument :
FID_E
ClientSampleId :
20 TRPH STD



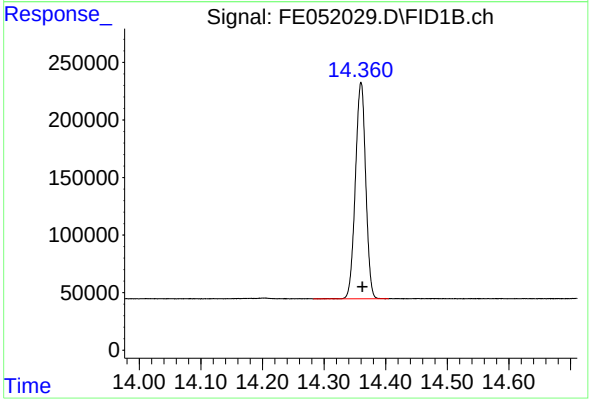
#6 N-OCTADECANE

R.T.: 11.866 min
Delta R.T.: -0.003 min
Response: 2202071
Conc: 20.98 ug/ml



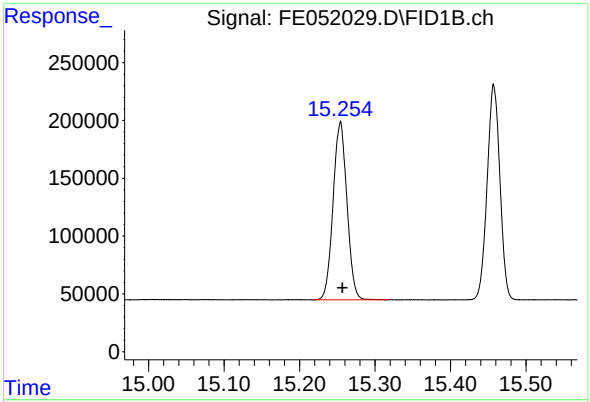
#7 N-EICOSANE

R.T.: 13.168 min
Delta R.T.: -0.003 min
Response: 2188908
Conc: 21.06 ug/ml



#8 N-DOCOSANE

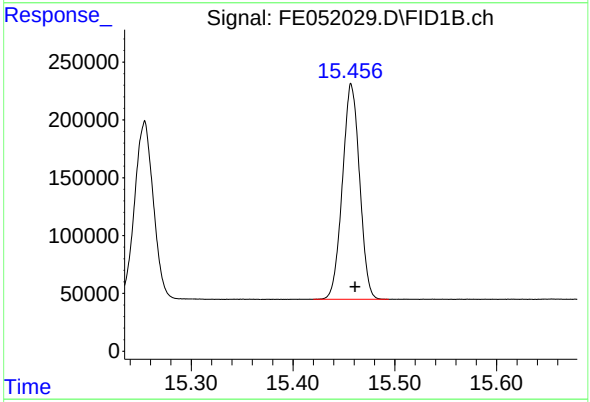
R.T.: 14.360 min
Delta R.T.: -0.002 min
Response: 2186141
Conc: 21.13 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

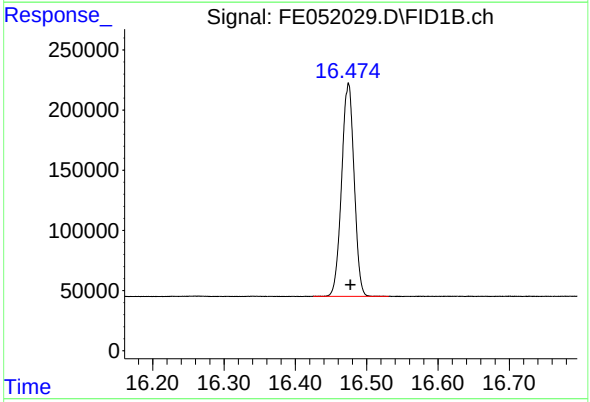
R.T.: 15.254 min
Delta R.T.: -0.003 min
Response: 1967122
Conc: 21.13 ug/ml

Instrument :
FID_E
ClientSampleId :
20 TRPH STD



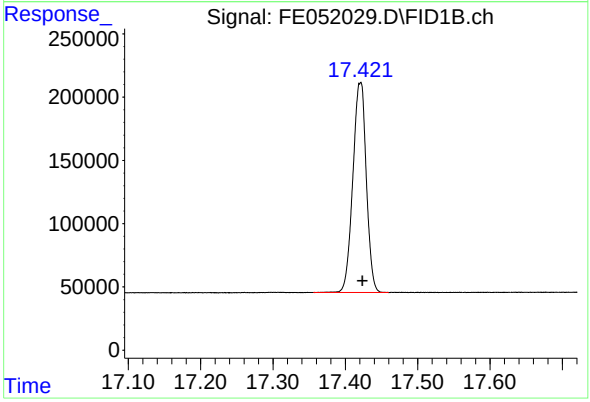
#10 N-TETRACOSANE

R.T.: 15.457 min
Delta R.T.: -0.004 min
Response: 2185765
Conc: 21.16 ug/ml



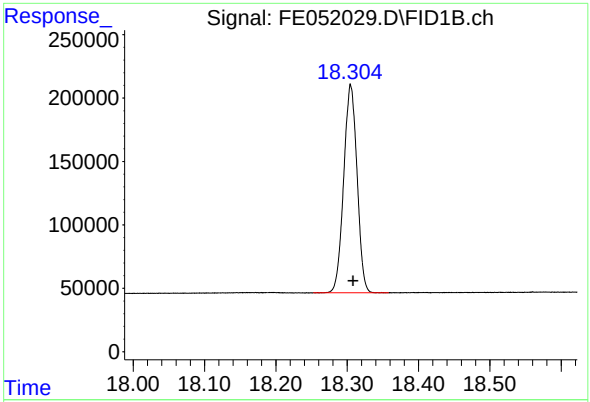
#11 N-HEXACOSANE

R.T.: 16.475 min
Delta R.T.: -0.002 min
Response: 2160412
Conc: 21.22 ug/ml



#12 N-OCTACOSANE

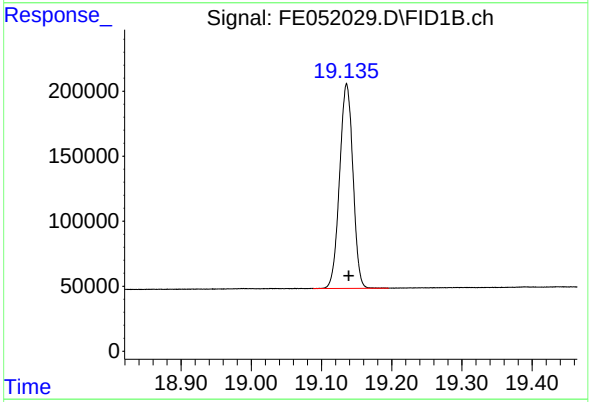
R.T.: 17.421 min
Delta R.T.: -0.003 min
Response: 2147225
Conc: 21.32 ug/ml



#13 N-TRIACONTANE

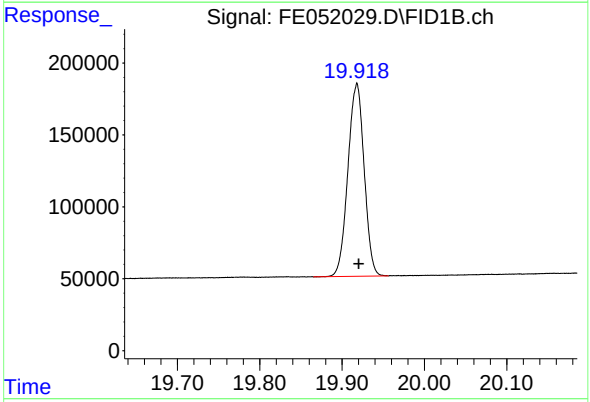
R.T.: 18.305 min
Delta R.T.: -0.003 min
Response: 2136983
Conc: 21.48 ug/ml

Instrument :
FID_E
ClientSampleId :
20 TRPH STD



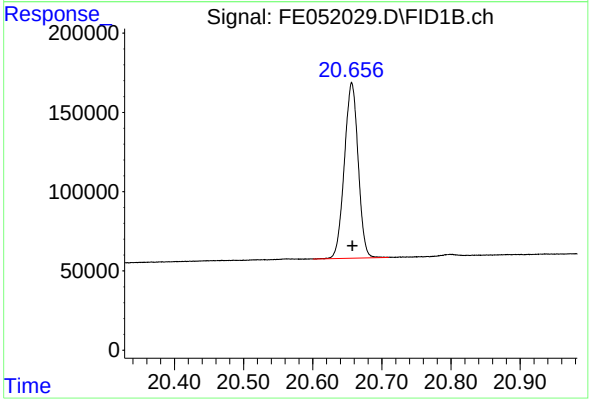
#14 N-DOTRIACONTANE

R.T.: 19.136 min
Delta R.T.: -0.003 min
Response: 2078753
Conc: 21.51 ug/ml



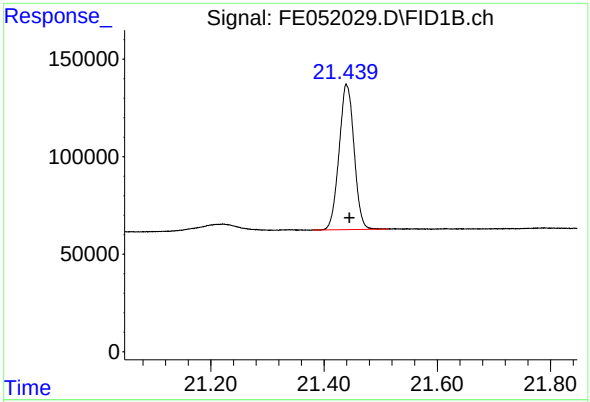
#15 N-TETRATRIACONTANE

R.T.: 19.918 min
Delta R.T.: -0.002 min
Response: 1833911
Conc: 21.11 ug/ml



#16 N-HEXATRIACONTANE

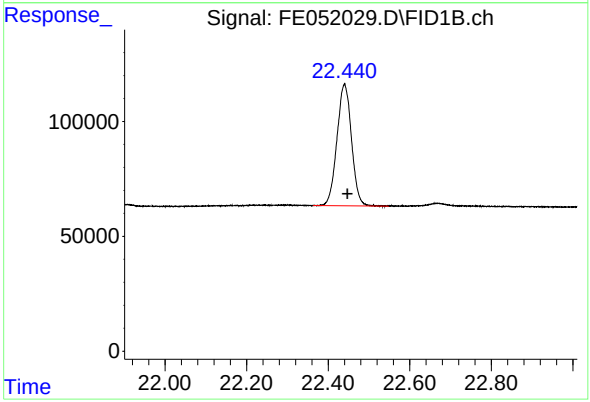
R.T.: 20.657 min
Delta R.T.: 0.000 min
Response: 1534108
Conc: 20.59 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.439 min
Delta R.T.: -0.005 min
Response: 1367415
Conc: 19.86 ug/ml

Instrument :
FID_E
ClientSampleId :
20 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.440 min
Delta R.T.: -0.007 min
Response: 1309204
Conc: 19.45 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052029.D
Signal(s) : FID1B.ch
Acq On : 23 Jan 2025 23:36
Sample : 20 TRPH STD
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.412	2.383	2.473	BB	132906	1671507	75.91%	4.802%
2	4.906	4.870	4.947	BB	188470	1790386	81.30%	5.144%
3	7.034	6.995	7.086	BB	210395	1959669	88.99%	5.630%
4	8.840	8.782	8.891	BB	206958	1996208	90.65%	5.735%
5	10.433	10.394	10.485	BB	210083	2090226	94.92%	6.005%
6	11.866	11.821	11.908	BB	209078	2202071	100.00%	6.327%
7	13.168	13.134	13.216	BB	196057	2188908	99.40%	6.289%
8	14.360	14.282	14.405	BB	188088	2186141	99.28%	6.281%
9	15.254	15.218	15.318	BB	154122	1967122	89.33%	5.652%
10	15.457	15.420	15.494	BB	185791	2185765	99.26%	6.280%
11	16.475	16.425	16.531	BB	177131	2160412	98.11%	6.207%
12	17.421	17.356	17.460	BB	165726	2147225	97.51%	6.169%
13	18.305	18.252	18.358	BB	163835	2136983	97.04%	6.140%
14	19.136	19.088	19.196	BB	157435	2078753	94.40%	5.972%
15	19.918	19.865	19.957	BB	134470	1833911	83.28%	5.269%
16	20.657	20.601	20.710	BB	110823	1534108	69.67%	4.408%
17	21.439	21.381	21.514	BB	74580	1367415	62.10%	3.929%
18	22.440	22.363	22.548	BB	53116	1309204	59.45%	3.761%
			Sum of corrected areas:			34806015		

FE012325.M Fri Jan 24 03:19:04 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052030.D
Signal(s) : FID1B.ch
Acq On : 24 Jan 2025 00:06
Operator : YP\AJ
Sample : 10 TRPH STD
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
10 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 24 03:02:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:00:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	15.253	1061033	11.396 ug/ml
	Target Compounds			
1)	N-OCTANE	2.412	889828	11.012 ug/ml
2)	N-DECANE	4.906	959030	11.079 ug/ml
3)	N-DODECANE	7.033	1052037	11.161 ug/ml
4)	N-TETRADECANE	8.839	1077547	11.283 ug/ml
5)	N-HEXADECANE	10.432	1131977	11.345 ug/ml
6)	N-OCTADECANE	11.865	1193205	11.371 ug/ml
7)	N-EICOSANE	13.167	1184917	11.402 ug/ml
8)	N-DOCOSANE	14.358	1182709	11.434 ug/ml
10)	N-TETRACOSANE	15.456	1180708	11.429 ug/ml
11)	N-HEXACOSANE	16.473	1163260	11.428 ug/ml
12)	N-OCTACOSANE	17.419	1147105	11.391 ug/ml
13)	N-TRIACONTANE	18.304	1137270	11.430 ug/ml
14)	N-DOTRIACONTANE	19.134	1110748	11.493 ug/ml
15)	N-TETRATRIACONTANE	19.915	1019077	11.732 ug/ml
16)	N-HEXATRIACONTANE	20.653	911856	12.238 ug/ml
17)	N-OCTATRIACONTANE	21.439	859350	12.480 ug/ml
18)	N-TETRACONTANE	22.441	882539	13.114 ug/ml

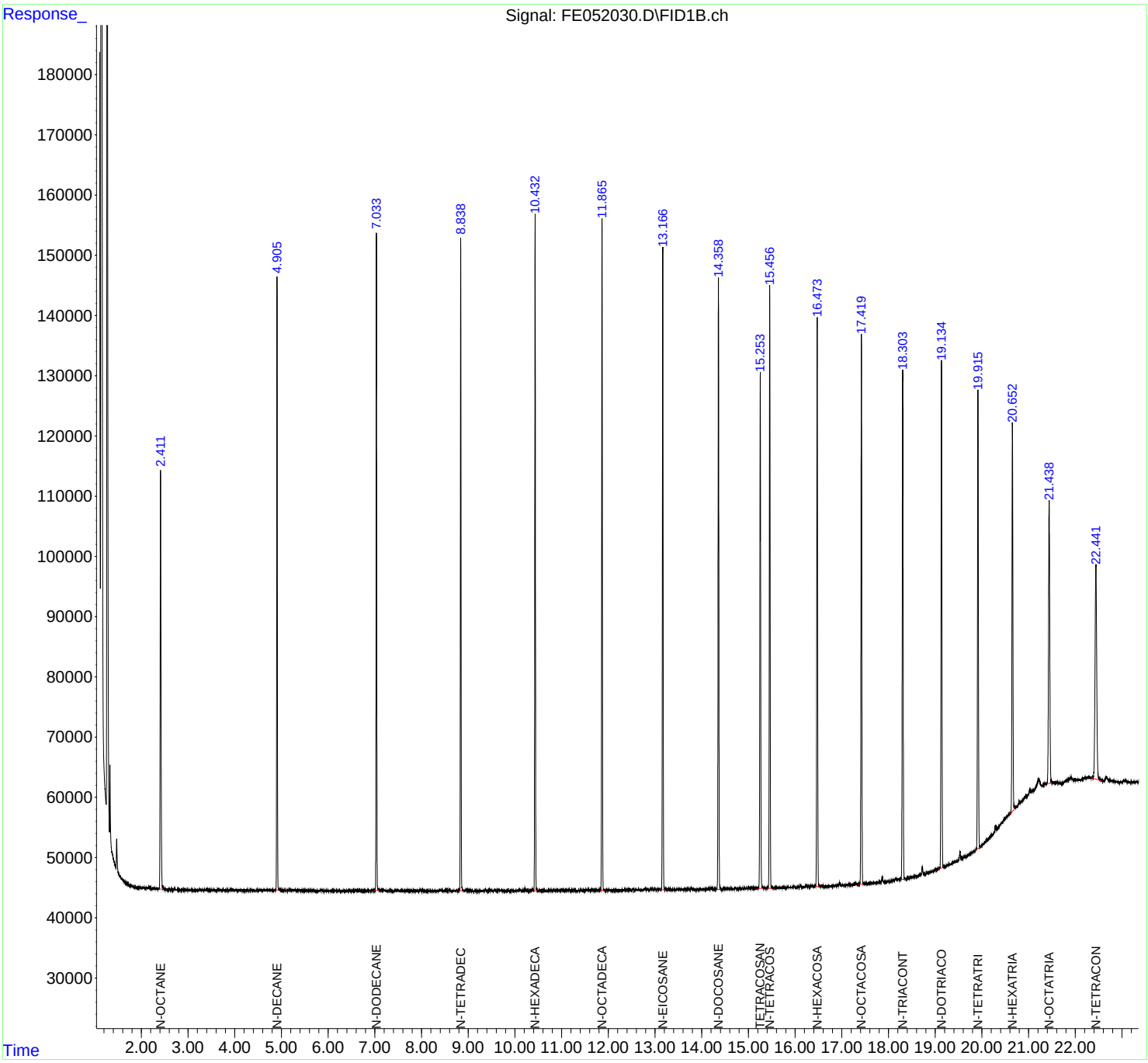
(f)=RT Delta > 1/2 Window (m)=manual int.

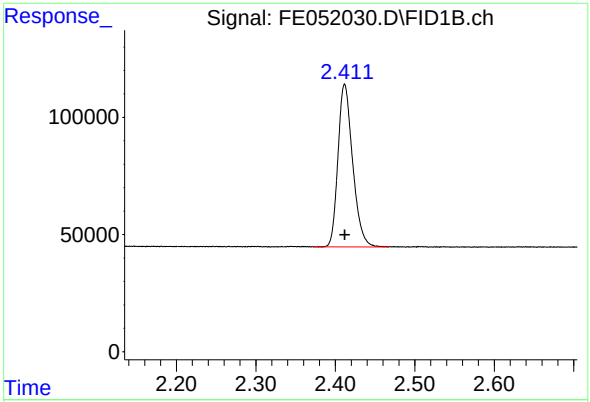
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052030.D
Signal(s) : FID1B.ch
Acq On : 24 Jan 2025 00:06
Operator : YP\AJ
Sample : 10 TRPH STD
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
10 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 24 03:02:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:00:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

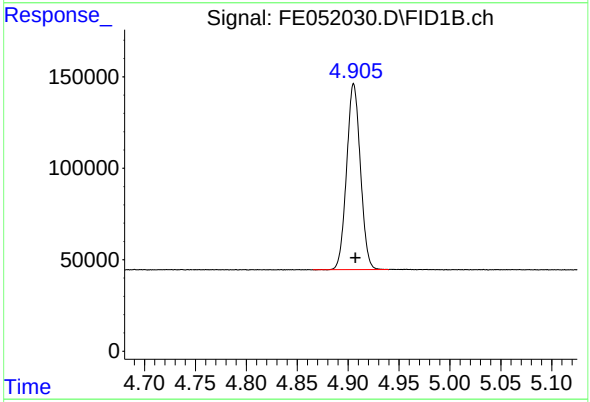




#1 N-OCTANE

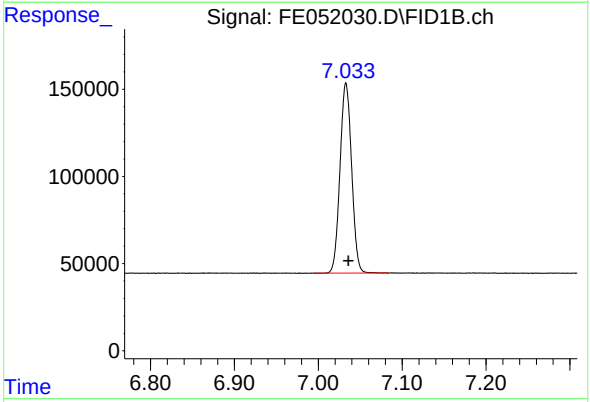
R.T.: 2.412 min
Delta R.T.: 0.000 min
Response: 889828
Conc: 11.01 ug/ml

Instrument :
FID_E
ClientSampleId :
10 TRPH STD



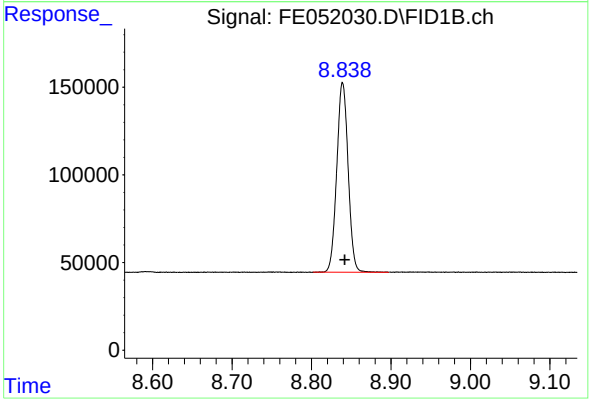
#2 N-DECANE

R.T.: 4.906 min
Delta R.T.: -0.002 min
Response: 959030
Conc: 11.08 ug/ml



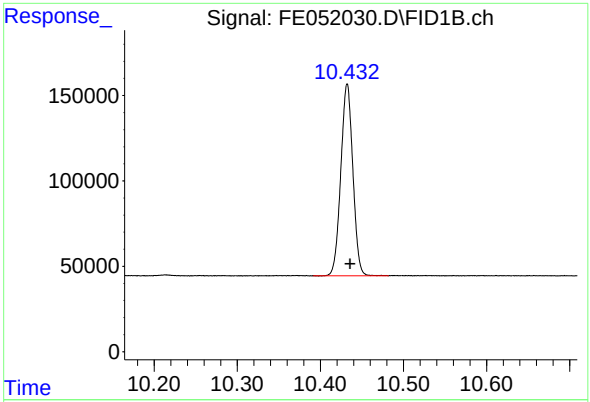
#3 N-DODECANE

R.T.: 7.033 min
Delta R.T.: -0.003 min
Response: 1052037
Conc: 11.16 ug/ml



#4 N-TETRADECANE

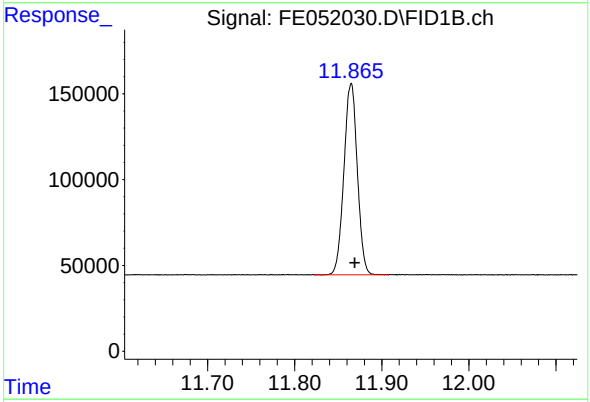
R.T.: 8.839 min
Delta R.T.: -0.003 min
Response: 1077547
Conc: 11.28 ug/ml



#5 N-HEXADECANE

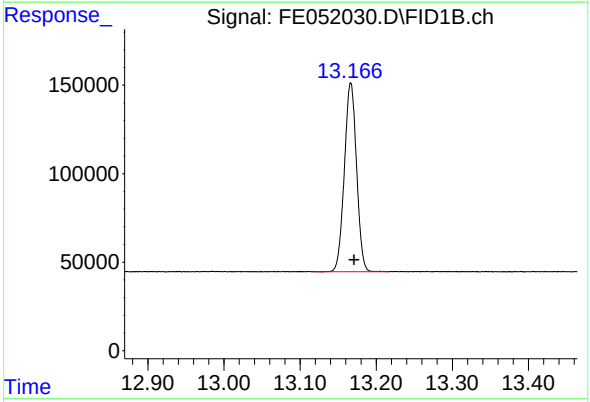
R.T.: 10.432 min
Delta R.T.: -0.003 min
Response: 1131977
Conc: 11.34 ug/ml

Instrument :
FID_E
ClientSampleId :
10 TRPH STD



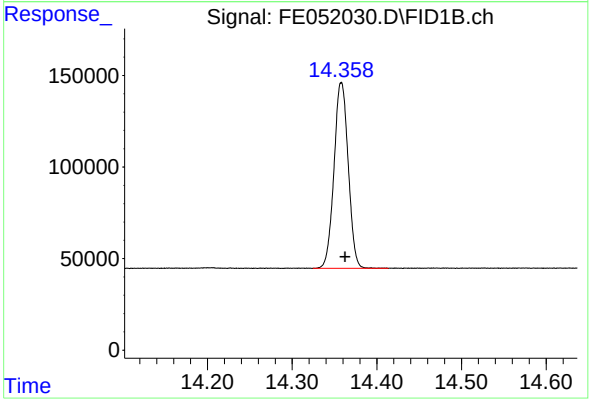
#6 N-OCTADECANE

R.T.: 11.865 min
Delta R.T.: -0.004 min
Response: 1193205
Conc: 11.37 ug/ml



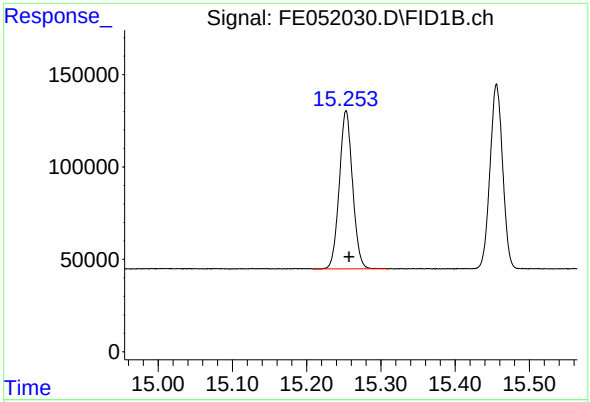
#7 N-EICOSANE

R.T.: 13.167 min
Delta R.T.: -0.004 min
Response: 1184917
Conc: 11.40 ug/ml



#8 N-DOCOSANE

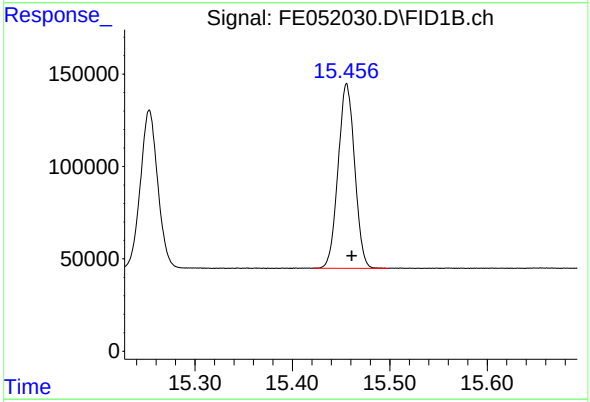
R.T.: 14.358 min
Delta R.T.: -0.004 min
Response: 1182709
Conc: 11.43 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

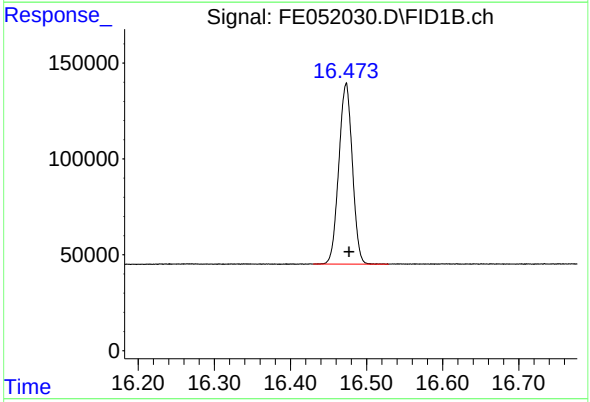
R.T.: 15.253 min
Delta R.T.: -0.004 min
Response: 1061033
Conc: 11.40 ug/ml

Instrument :
FID_E
ClientSampleId :
10 TRPH STD



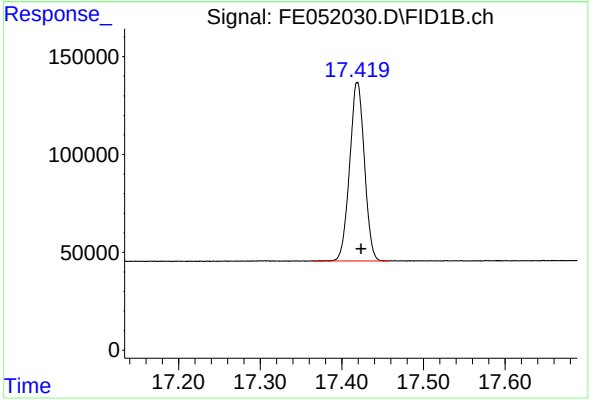
#10 N-TETRACOSANE

R.T.: 15.456 min
Delta R.T.: -0.005 min
Response: 1180708
Conc: 11.43 ug/ml



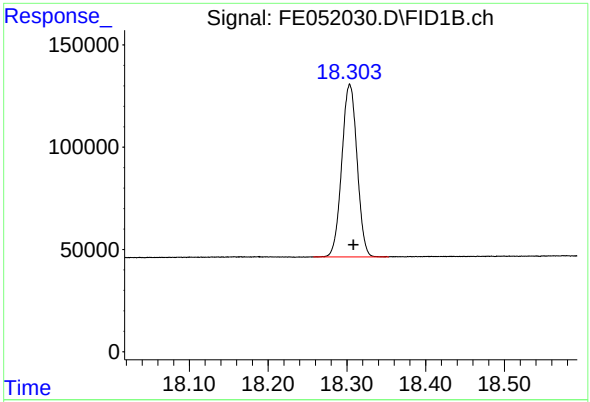
#11 N-HEXACOSANE

R.T.: 16.473 min
Delta R.T.: -0.004 min
Response: 1163260
Conc: 11.43 ug/ml



#12 N-OCTACOSANE

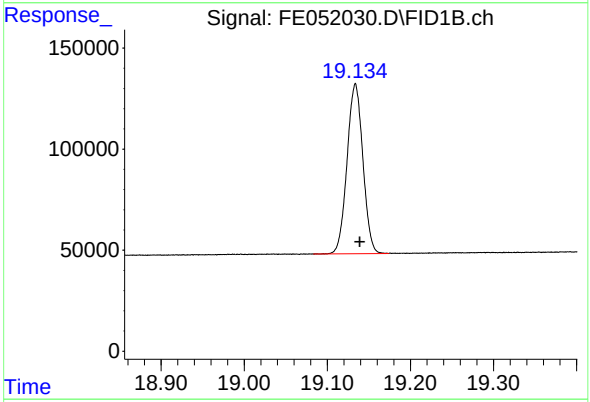
R.T.: 17.419 min
Delta R.T.: -0.005 min
Response: 1147105
Conc: 11.39 ug/ml



#13 N-TRIACONTANE

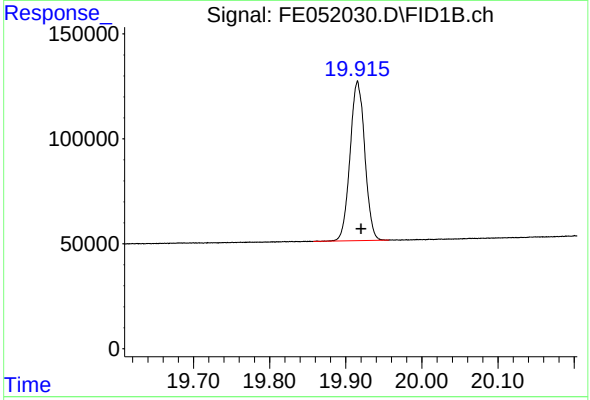
R.T.: 18.304 min
Delta R.T.: -0.004 min
Response: 1137270
Conc: 11.43 ug/ml

Instrument :
FID_E
ClientSampleId :
10 TRPH STD



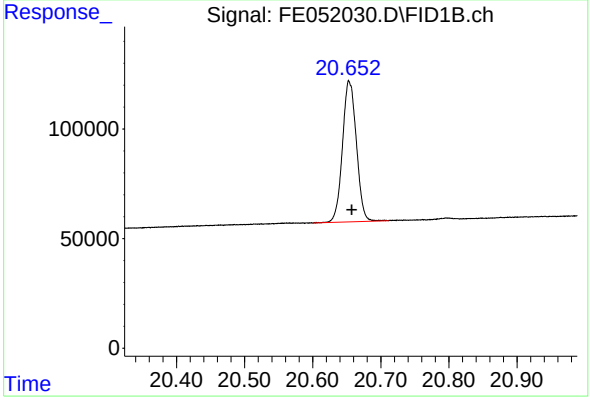
#14 N-DOTRIACONTANE

R.T.: 19.134 min
Delta R.T.: -0.005 min
Response: 1110748
Conc: 11.49 ug/ml



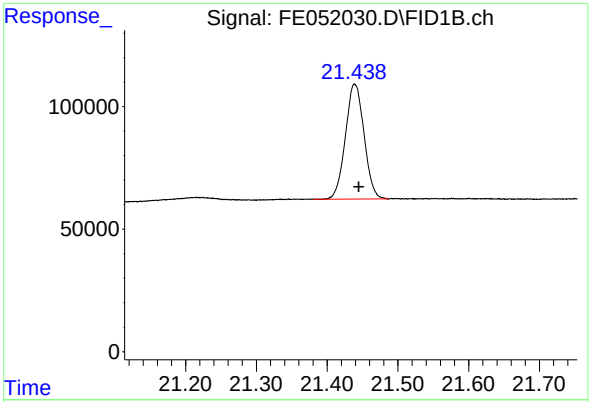
#15 N-TETRATRIACONTANE

R.T.: 19.915 min
Delta R.T.: -0.005 min
Response: 1019077
Conc: 11.73 ug/ml



#16 N-HEXATRIACONTANE

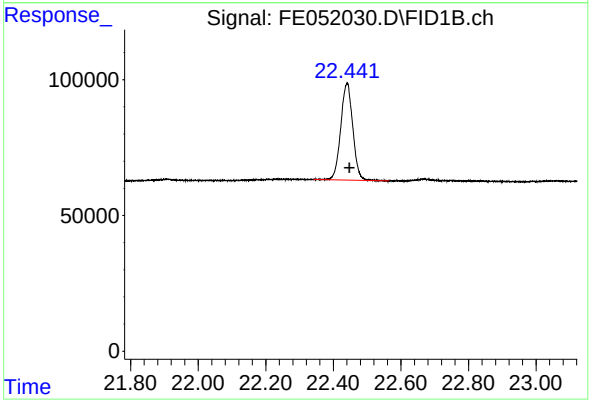
R.T.: 20.653 min
Delta R.T.: -0.004 min
Response: 911856
Conc: 12.24 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.439 min
Delta R.T.: -0.006 min
Response: 859350
Conc: 12.48 ug/ml

Instrument :
FID_E
ClientSampleId :
10 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.441 min
Delta R.T.: -0.006 min
Response: 882539
Conc: 13.11 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052030.D
Signal(s) : FID1B.ch
Acq On : 24 Jan 2025 00:06
Sample : 10 TRPH STD
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.412	2.372	2.467	BB	69493	889828	74.57%	4.648%
2	4.906	4.866	4.940	BB	101609	959030	80.37%	5.010%
3	7.033	6.994	7.084	BB	109120	1052037	88.17%	5.495%
4	8.839	8.802	8.897	BB	108235	1077547	90.31%	5.629%
5	10.432	10.391	10.482	BB	112372	1131977	94.87%	5.913%
6	11.865	11.821	11.908	BB	111538	1193205	100.00%	6.233%
7	13.167	13.117	13.216	BB	106724	1184917	99.31%	6.189%
8	14.358	14.325	14.414	BB	101224	1182709	99.12%	6.178%
9	15.253	15.209	15.311	BB	85655	1061033	88.92%	5.542%
10	15.456	15.421	15.499	BB	100063	1180708	98.95%	6.167%
11	16.473	16.430	16.529	BB	94113	1163260	97.49%	6.076%
12	17.419	17.365	17.457	BB	91106	1147105	96.14%	5.992%
13	18.304	18.257	18.353	BB	84490	1137270	95.31%	5.941%
14	19.134	19.083	19.174	BB	84307	1110748	93.09%	5.802%
15	19.915	19.857	19.956	BB	76197	1019077	85.41%	5.323%
16	20.653	20.601	20.711	BB	64297	911856	76.42%	4.763%
17	21.439	21.380	21.487	BV	46908	859350	72.02%	4.489%
18	22.441	22.340	22.563	BV	35571	882539	73.96%	4.610%
			Sum of corrected areas:			19144194		

FE012325.M Fri Jan 24 03:19:32 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052031.D
Signal(s) : FID1B.ch
Acq On : 24 Jan 2025 00:36
Operator : YP\AJ
Sample : 5 TRPH STD
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
5 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 24 03:02:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:00:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	15.253	535796	5.755 ug/ml
	Target Compounds			
1)	N-OCTANE	2.412	447517	5.538 ug/ml
2)	N-DECANE	4.906	479458	5.539 ug/ml
3)	N-DODECANE	7.033	524622	5.565 ug/ml
4)	N-TETRADECANE	8.839	538294	5.636 ug/ml
5)	N-HEXADECANE	10.432	566935	5.682 ug/ml
6)	N-OCTADECANE	11.864	597723	5.696 ug/ml
7)	N-EICOSANE	13.166	599565	5.769 ug/ml
8)	N-DOCOSANE	14.358	599958	5.800 ug/ml
10)	N-TETRACOSANE	15.456	594003	5.750 ug/ml
11)	N-HEXACOSANE	16.473	585191	5.749 ug/ml
12)	N-OCTACOSANE	17.418	583549	5.795 ug/ml
13)	N-TRIACONTANE	18.303	588228	5.912 ug/ml
14)	N-DOTRIACONTANE	19.133	573000	5.929 ug/ml
15)	N-TETRATRIACONTANE	19.915	509659	5.868 ug/ml
16)	N-HEXATRIACONTANE	20.654	427588	5.739 ug/ml
17)	N-OCTATRIACONTANE	21.439	394101	5.724 ug/ml
18)	N-TETRACONTANE	22.438	382667	5.686 ug/ml

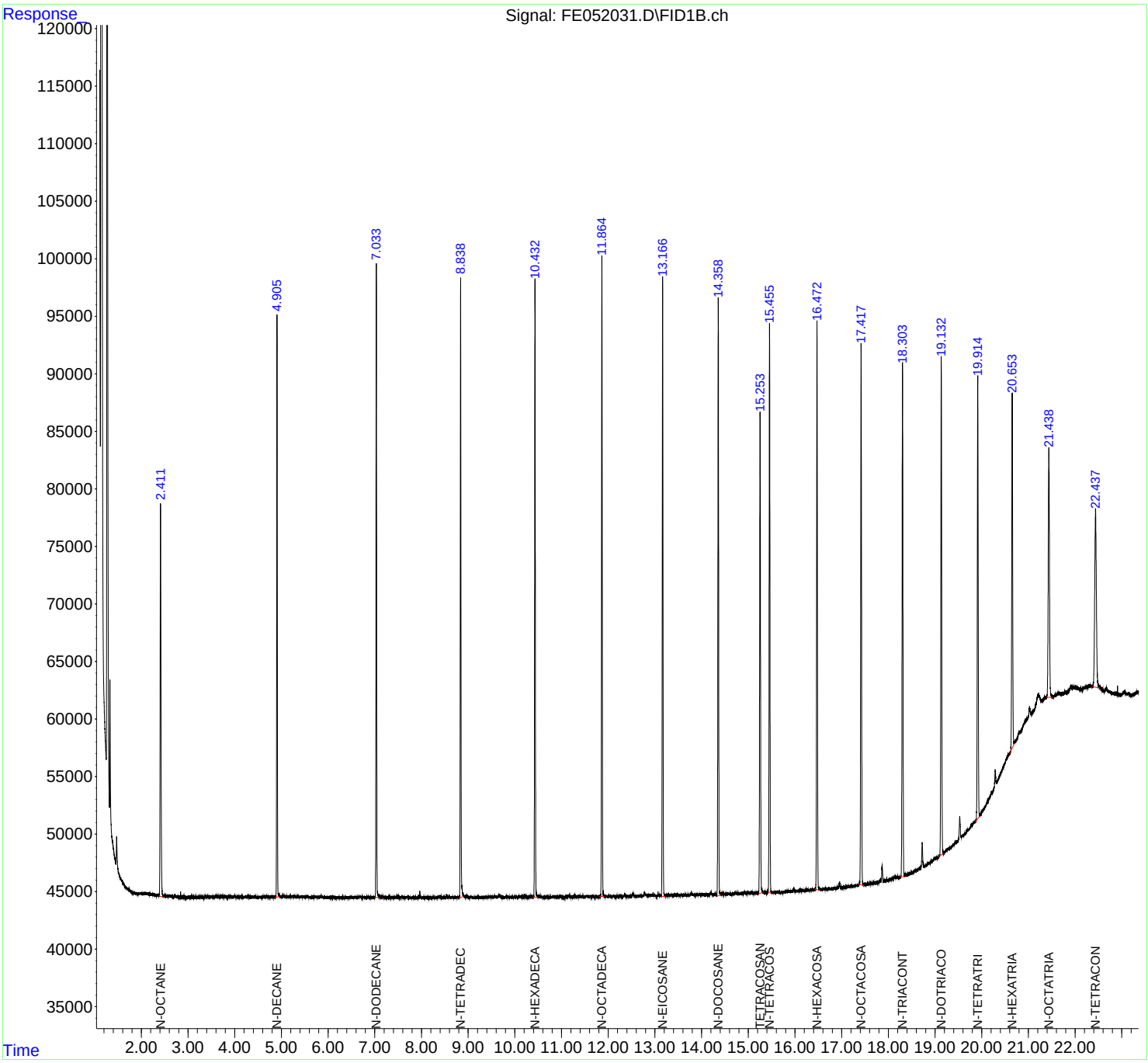
(f)=RT Delta > 1/2 Window (m)=manual int.

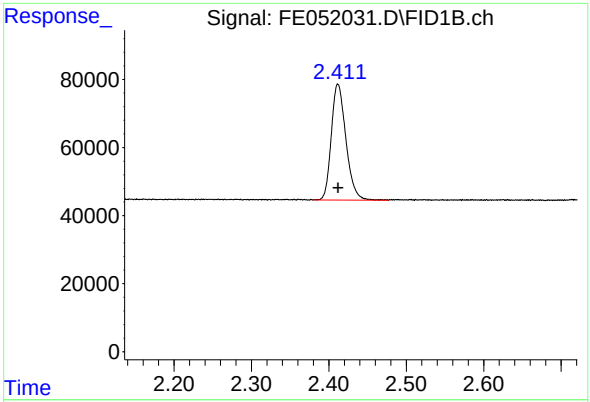
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052031.D
Signal(s) : FID1B.ch
Acq On : 24 Jan 2025 00:36
Operator : YP\AJ
Sample : 5 TRPH STD
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
5 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 24 03:02:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:00:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

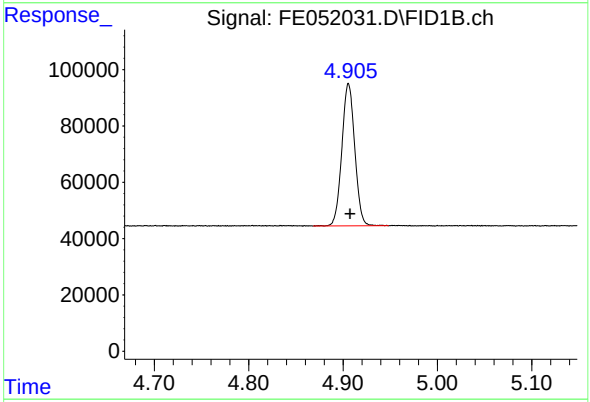




#1 N-OCTANE

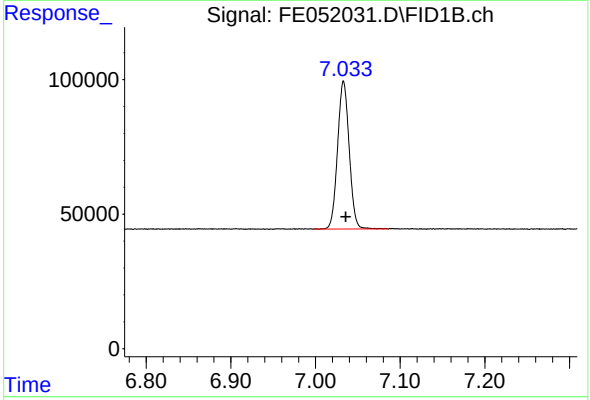
R.T.: 2.412 min
Delta R.T.: 0.000 min
Response: 447517
Conc: 5.54 ug/ml

Instrument :
FID_E
ClientSampleId :
5 TRPH STD



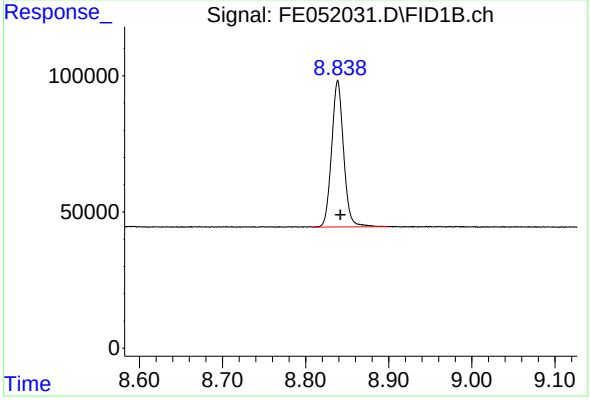
#2 N-DECANE

R.T.: 4.906 min
Delta R.T.: -0.001 min
Response: 479458
Conc: 5.54 ug/ml



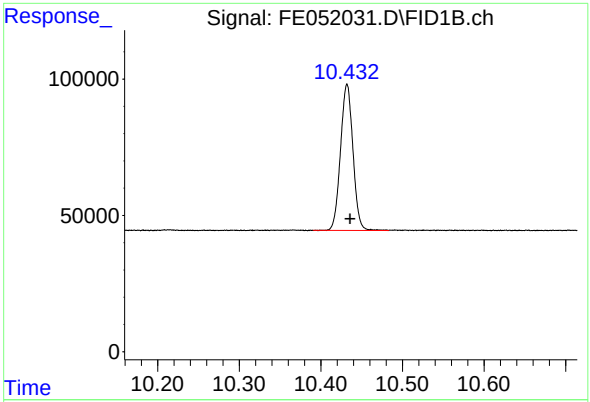
#3 N-DODECANE

R.T.: 7.033 min
Delta R.T.: -0.003 min
Response: 524622
Conc: 5.57 ug/ml



#4 N-TETRADECANE

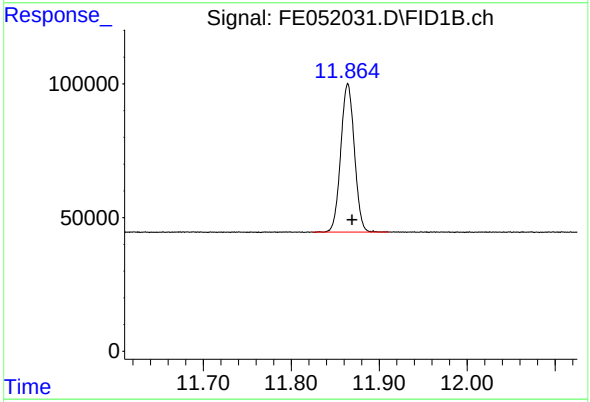
R.T.: 8.839 min
Delta R.T.: -0.003 min
Response: 538294
Conc: 5.64 ug/ml



#5 N-HEXADECANE

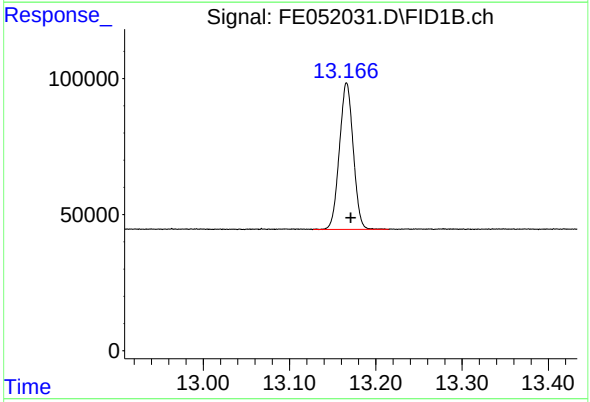
R.T.: 10.432 min
Delta R.T.: -0.003 min
Response: 566935
Conc: 5.68 ug/ml

Instrument :
FID_E
ClientSampleId :
5 TRPH STD



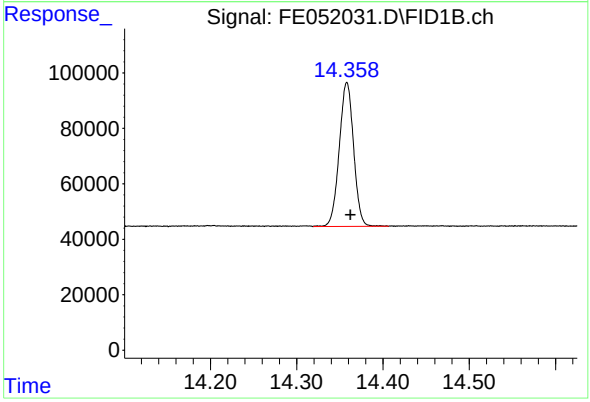
#6 N-OCTADECANE

R.T.: 11.864 min
Delta R.T.: -0.005 min
Response: 597723
Conc: 5.70 ug/ml



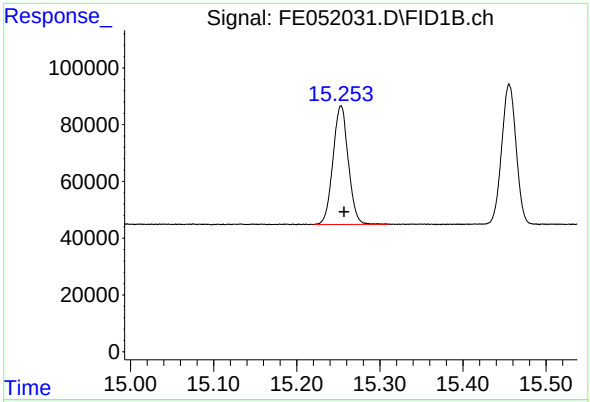
#7 N-EICOSANE

R.T.: 13.166 min
Delta R.T.: -0.005 min
Response: 599565
Conc: 5.77 ug/ml



#8 N-DOCOSANE

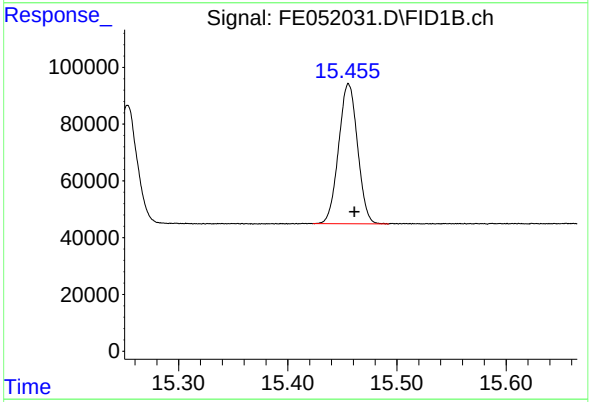
R.T.: 14.358 min
Delta R.T.: -0.004 min
Response: 599958
Conc: 5.80 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

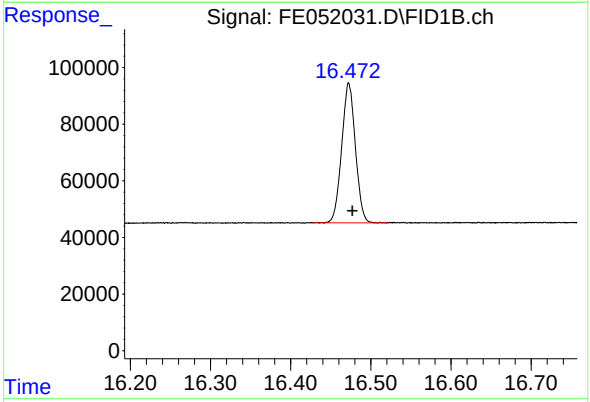
R.T.: 15.253 min
Delta R.T.: -0.004 min
Response: 535796
Conc: 5.75 ug/ml

Instrument :
FID_E
ClientSampleId :
5 TRPH STD



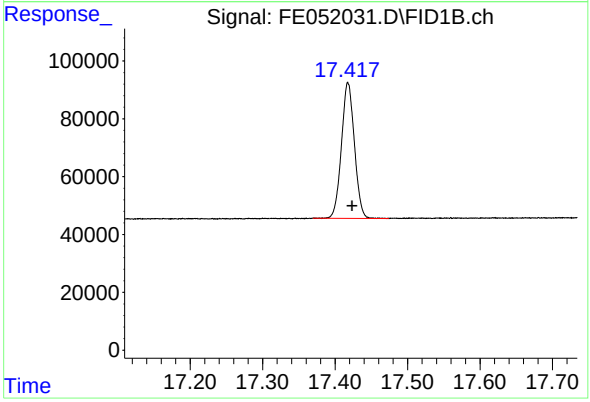
#10 N-TETRACOSANE

R.T.: 15.456 min
Delta R.T.: -0.005 min
Response: 594003
Conc: 5.75 ug/ml



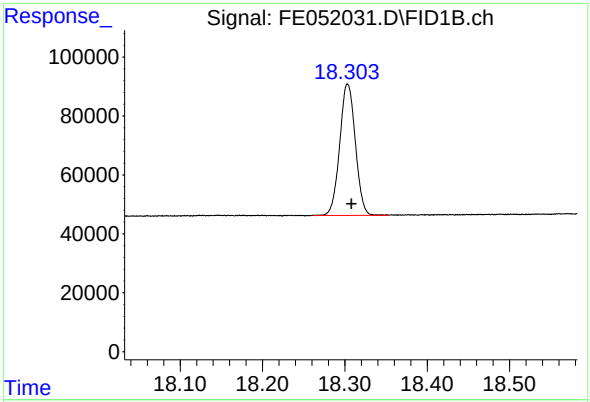
#11 N-HEXACOSANE

R.T.: 16.473 min
Delta R.T.: -0.004 min
Response: 585191
Conc: 5.75 ug/ml



#12 N-OCTACOSANE

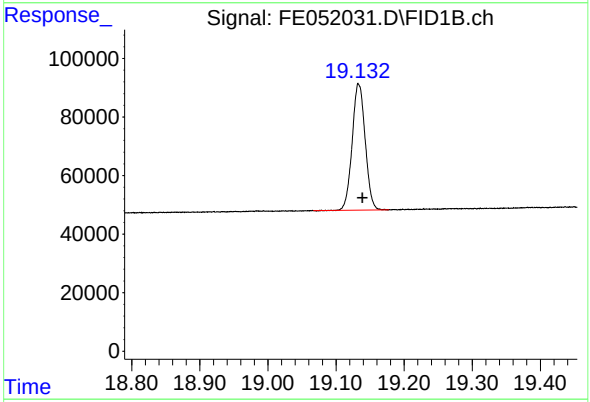
R.T.: 17.418 min
Delta R.T.: -0.006 min
Response: 583549
Conc: 5.79 ug/ml



#13 N-TRIACONTANE

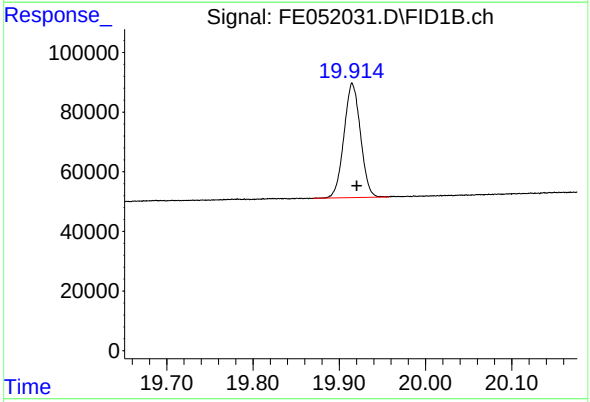
R.T.: 18.303 min
Delta R.T.: -0.005 min
Response: 588228
Conc: 5.91 ug/ml

Instrument :
FID_E
ClientSampleId :
5 TRPH STD



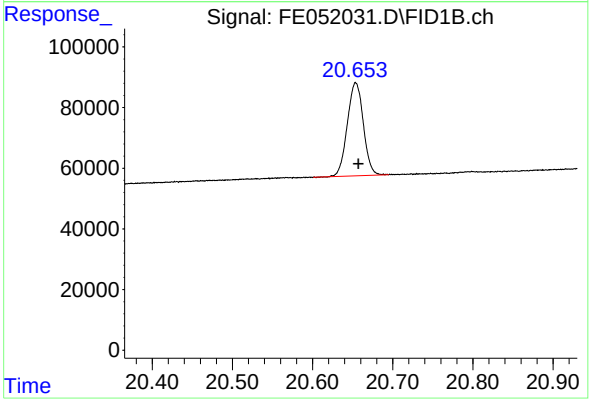
#14 N-DOTRIACONTANE

R.T.: 19.133 min
Delta R.T.: -0.006 min
Response: 573000
Conc: 5.93 ug/ml



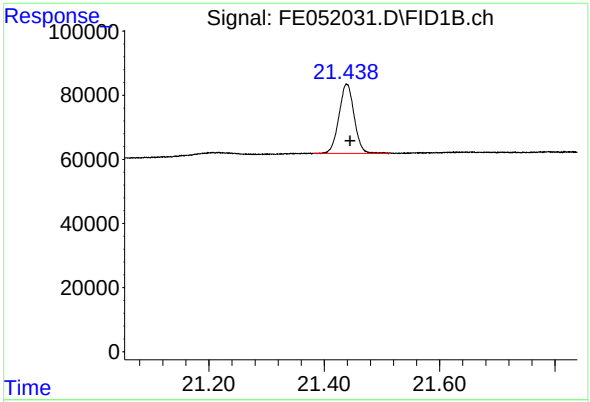
#15 N-TETRATRIACONTANE

R.T.: 19.915 min
Delta R.T.: -0.005 min
Response: 509659
Conc: 5.87 ug/ml



#16 N-HEXATRIACONTANE

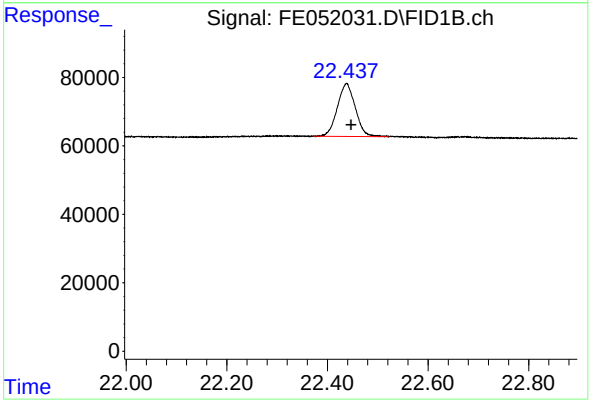
R.T.: 20.654 min
Delta R.T.: -0.004 min
Response: 427588
Conc: 5.74 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.439 min
Delta R.T.: -0.006 min
Response: 394101
Conc: 5.72 ug/ml

Instrument :
FID_E
ClientSampleId :
5 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.438 min
Delta R.T.: -0.009 min
Response: 382667
Conc: 5.69 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052031.D
Signal(s) : FID1B.ch
Acq On : 24 Jan 2025 00:36
Sample : 5 TRPH STD
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.412	2.380	2.477	BB	34060	447517	74.59%	4.697%
2	4.906	4.868	4.948	BB	50588	479458	79.92%	5.032%
3	7.033	6.997	7.086	BB	55038	524622	87.44%	5.506%
4	8.839	8.809	8.900	BB	53958	538294	89.72%	5.650%
5	10.432	10.391	10.483	BB	53629	566935	94.50%	5.950%
6	11.864	11.825	11.911	BB	55566	597723	99.63%	6.273%
7	13.166	13.127	13.215	BB	53796	599565	99.93%	6.293%
8	14.358	14.319	14.406	BB	51982	599958	100.00%	6.297%
9	15.253	15.220	15.311	BB	41765	535796	89.31%	5.623%
10	15.456	15.423	15.492	BB	49424	594003	99.01%	6.234%
11	16.473	16.428	16.522	BB	49428	585191	97.54%	6.142%
12	17.418	17.370	17.474	BB	46813	583549	97.26%	6.125%
13	18.303	18.261	18.353	BB	44585	588228	98.04%	6.174%
14	19.133	19.066	19.177	BB	42966	573000	95.51%	6.014%
15	19.915	19.870	19.957	BB	38416	509659	84.95%	5.349%
16	20.654	20.601	20.695	BB	30739	427588	71.27%	4.488%
17	21.439	21.381	21.511	BB	21574	394101	65.69%	4.136%
18	22.438	22.371	22.521	BB	15521	382667	63.78%	4.016%
			Sum of corrected areas:			9527854		

FE012325.M Fri Jan 24 03:20:00 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052032.D
Signal(s) : FID1B.ch
Acq On : 24 Jan 2025 01:06
Operator : YP\AJ
Sample : FE012325ICV
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
FE012325ICV

Integration File: autoint1.e
Quant Time: Jan 24 03:09:02 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	15.256	4666211	46.850 ug/ml
	Target Compounds			
1)	N-OCTANE	2.412	3991003	46.799 ug/ml
2)	N-DECANE	4.906	4296957	46.959 ug/ml
3)	N-DODECANE	7.035	4687706	46.917 ug/ml
4)	N-TETRADECANE	8.841	4758083	46.764 ug/ml
5)	N-HEXADECANE	10.434	4984676	46.779 ug/ml
6)	N-OCTADECANE	11.868	5255597	46.874 ug/ml
7)	N-EICOSANE	13.169	5213798	46.811 ug/ml
8)	N-DOCOSANE	14.361	5190938	46.752 ug/ml
10)	N-TETRACOSANE	15.459	5183378	46.861 ug/ml
11)	N-HEXACOSANE	16.476	5097911	46.766 ug/ml
12)	N-OCTACOSANE	17.423	5031236	46.612 ug/ml
13)	N-TRIACONTANE	18.307	4962414	46.248 ug/ml
14)	N-DOTRIACONTANE	19.138	4809025	46.056 ug/ml
15)	N-TETRATRIACONTANE	19.918	4322160	46.027 ug/ml
16)	N-HEXATRIACONTANE	20.656	3695277	45.760 ug/ml
17)	N-OCTATRIACONTANE	21.442	3418238	45.815 ug/ml
18)	N-TETRACONTANE	22.445	3353522	45.536 ug/ml

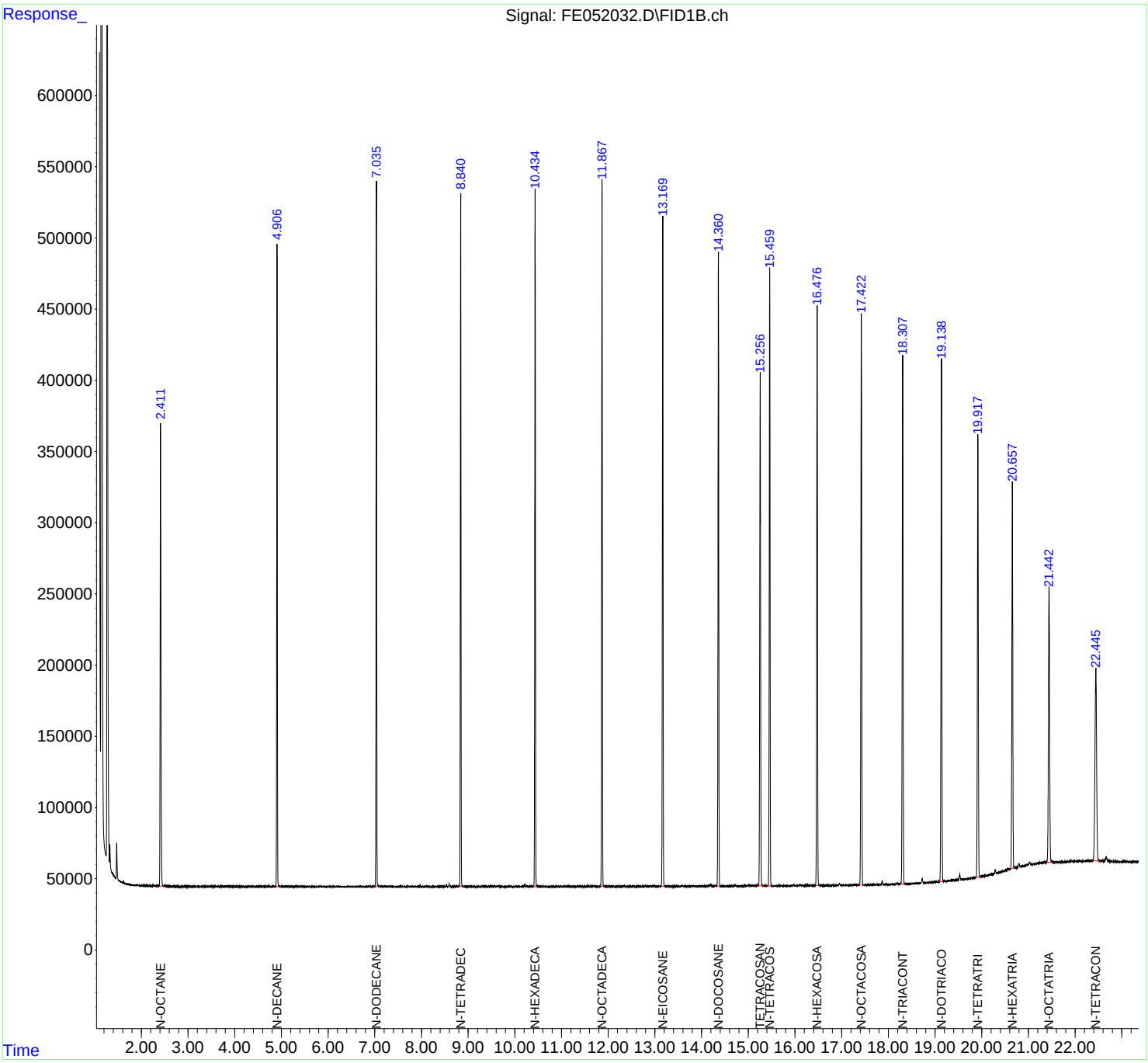
(f)=RT Delta > 1/2 Window (m)=manual int.

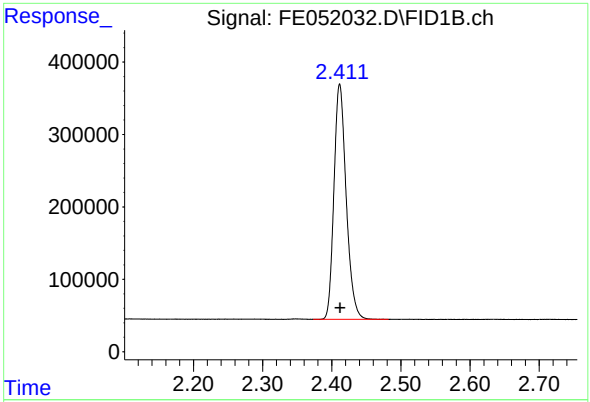
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052032.D
Signal(s) : FID1B.ch
Acq On : 24 Jan 2025 01:06
Operator : YP\AJ
Sample : FE012325ICV
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
FE012325ICV

Integration File: autoint1.e
Quant Time: Jan 24 03:09:02 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

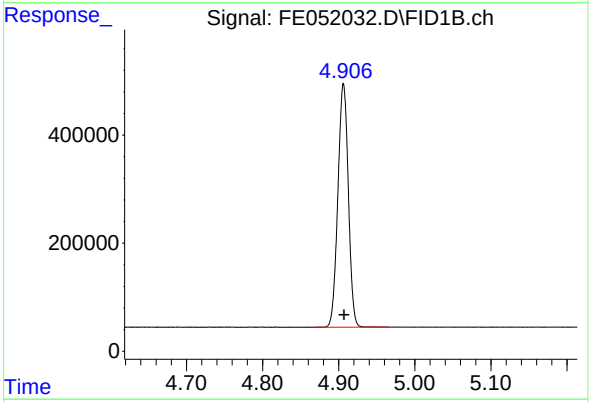




#1 N-OCTANE

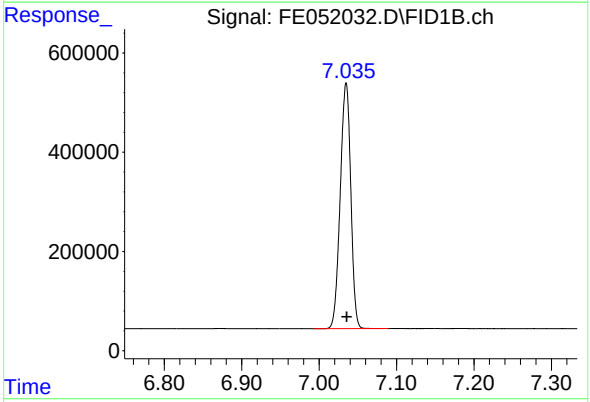
R.T.: 2.412 min
Delta R.T.: 0.000 min
Response: 3991003
Conc: 46.80 ug/ml

Instrument :
FID_E
ClientSampleId :
FE012325ICV



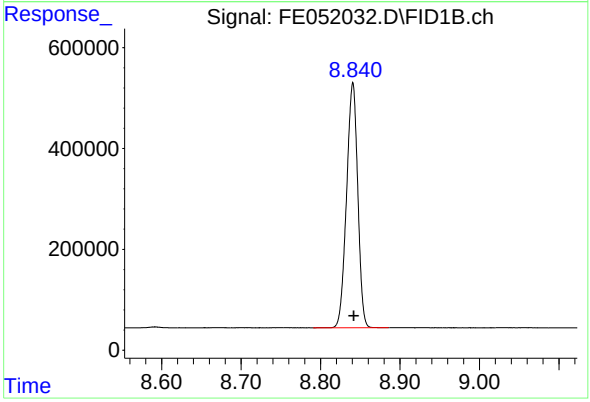
#2 N-DECANE

R.T.: 4.906 min
Delta R.T.: 0.000 min
Response: 4296957
Conc: 46.96 ug/ml



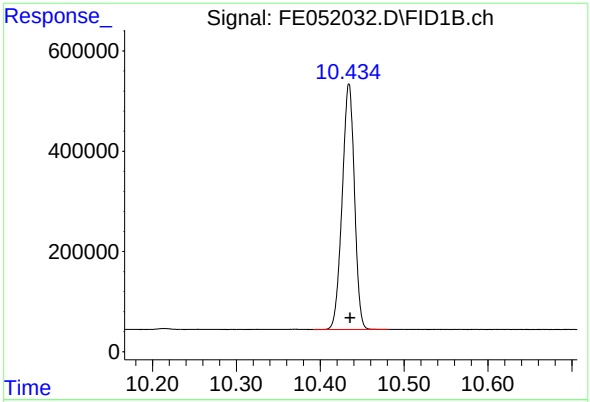
#3 N-DODECANE

R.T.: 7.035 min
Delta R.T.: 0.000 min
Response: 4687706
Conc: 46.92 ug/ml



#4 N-TETRADECANE

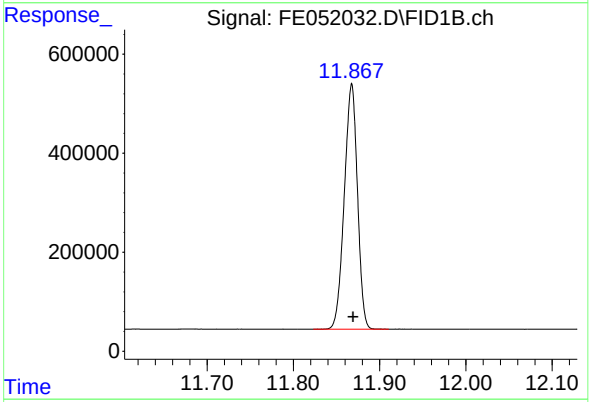
R.T.: 8.841 min
Delta R.T.: -0.001 min
Response: 4758083
Conc: 46.76 ug/ml



#5 N-HEXADECANE

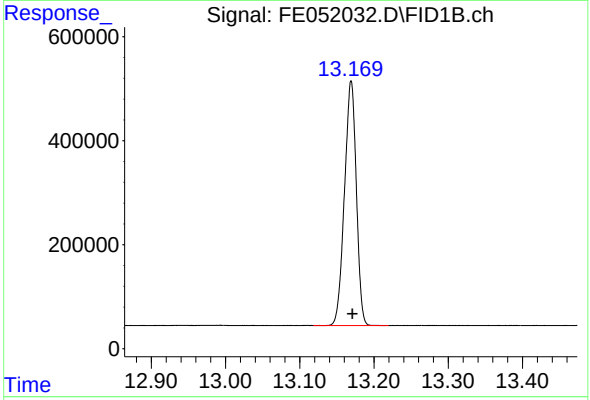
R.T.: 10.434 min
Delta R.T.: -0.001 min
Response: 4984676
Conc: 46.78 ug/ml

Instrument :
FID_E
ClientSampleId :
FE012325ICV



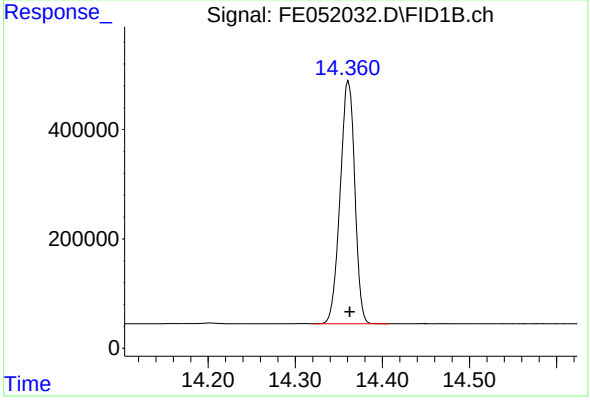
#6 N-OCTADECANE

R.T.: 11.868 min
Delta R.T.: -0.001 min
Response: 5255597
Conc: 46.87 ug/ml



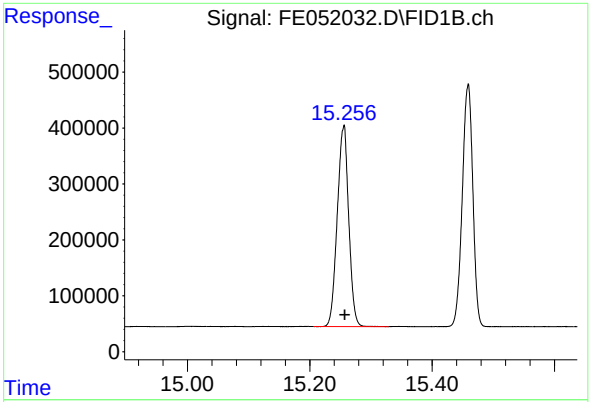
#7 N-EICOSANE

R.T.: 13.169 min
Delta R.T.: -0.002 min
Response: 5213798
Conc: 46.81 ug/ml



#8 N-DOCOSANE

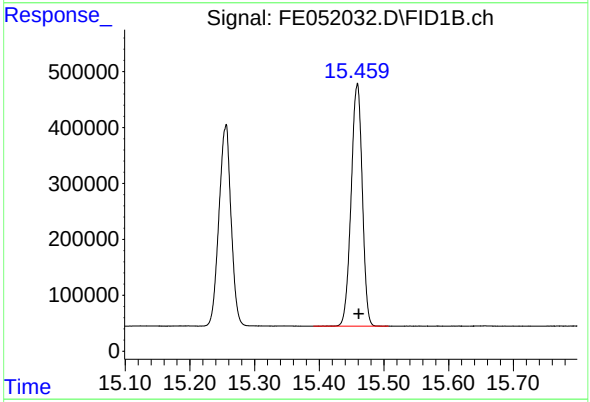
R.T.: 14.361 min
Delta R.T.: -0.002 min
Response: 5190938
Conc: 46.75 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

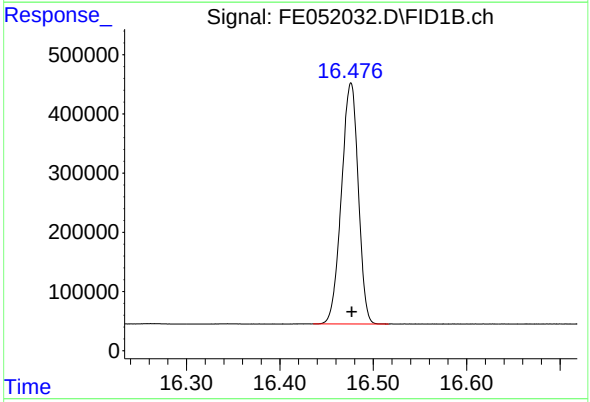
R.T.: 15.256 min
Delta R.T.: -0.001 min
Response: 4666211
Conc: 46.85 ug/ml

Instrument :
FID_E
ClientSampleId :
FE012325ICV



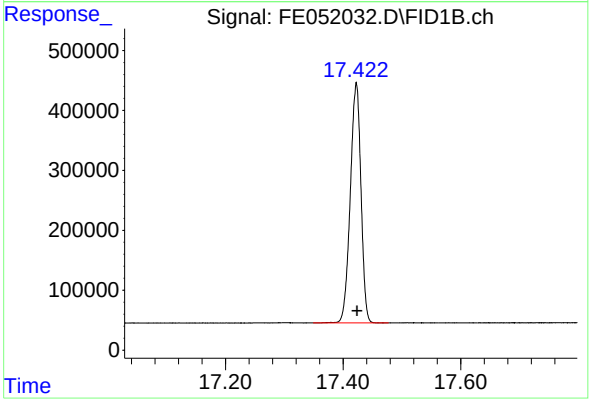
#10 N-TETRACOSANE

R.T.: 15.459 min
Delta R.T.: -0.002 min
Response: 5183378
Conc: 46.86 ug/ml



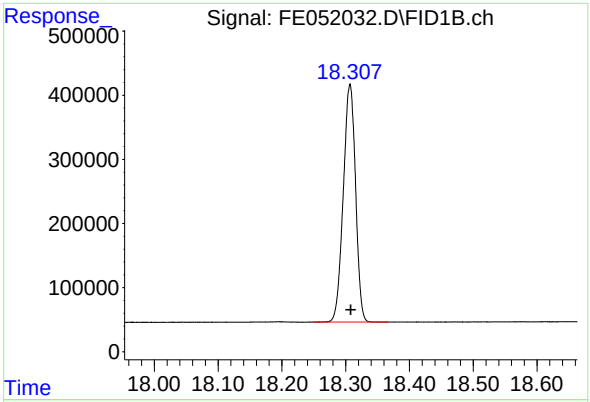
#11 N-HEXACOSANE

R.T.: 16.476 min
Delta R.T.: 0.000 min
Response: 5097911
Conc: 46.77 ug/ml



#12 N-OCTACOSANE

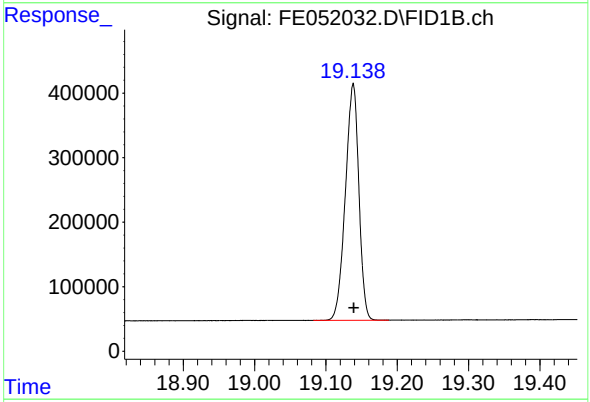
R.T.: 17.423 min
Delta R.T.: -0.001 min
Response: 5031236
Conc: 46.61 ug/ml



#13 N-TRIACONTANE

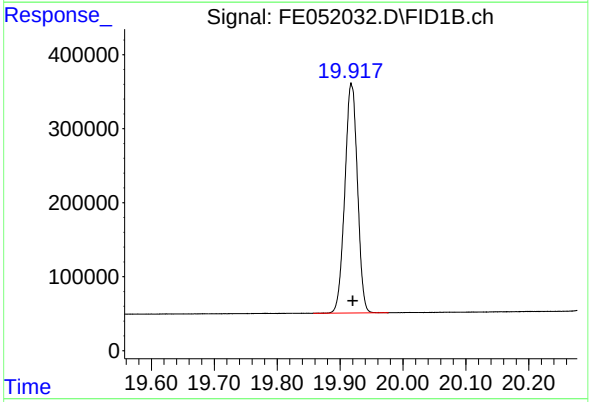
R.T.: 18.307 min
Delta R.T.: -0.001 min
Response: 4962414
Conc: 46.25 ug/ml

Instrument :
FID_E
ClientSampleId :
FE012325ICV



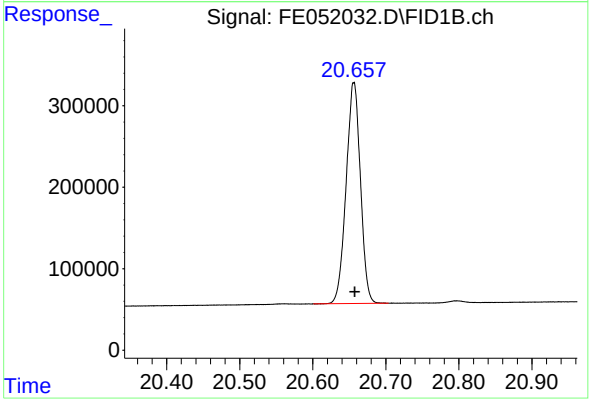
#14 N-DOTRIACONTANE

R.T.: 19.138 min
Delta R.T.: 0.000 min
Response: 4809025
Conc: 46.06 ug/ml



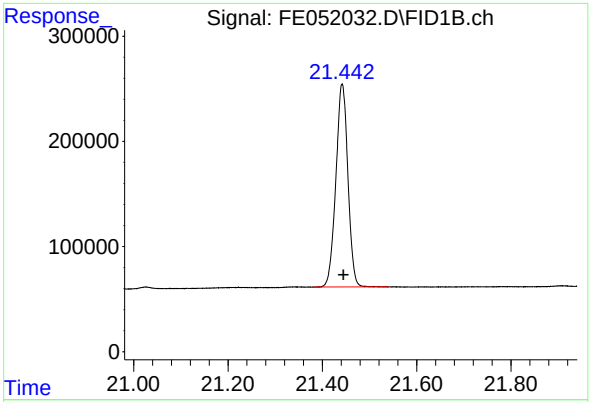
#15 N-TETRATRIACONTANE

R.T.: 19.918 min
Delta R.T.: -0.002 min
Response: 4322160
Conc: 46.03 ug/ml



#16 N-HEXATRIACONTANE

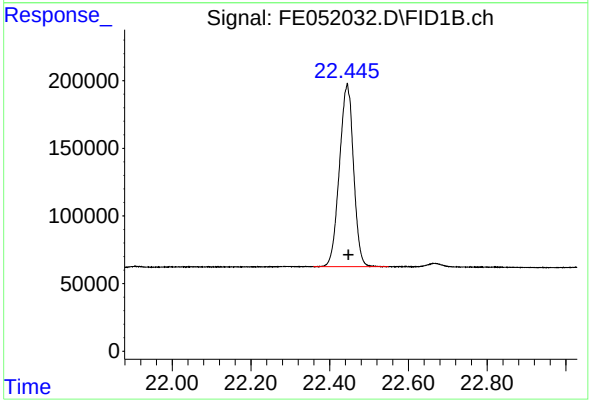
R.T.: 20.656 min
Delta R.T.: -0.001 min
Response: 3695277
Conc: 45.76 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.442 min
Delta R.T.: -0.003 min
Response: 3418238
Conc: 45.81 ug/ml

Instrument :
FID_E
ClientSampleId :
FE012325ICV



#18 N-TETRACONTANE

R.T.: 22.445 min
Delta R.T.: -0.003 min
Response: 3353522
Conc: 45.54 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE012325\
Data File : FE052032.D
Signal(s) : FID1B.ch
Acq On : 24 Jan 2025 01:06
Sample : FE012325ICV
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.412	2.373	2.482	BB	325149	3991003	75.94%	4.813%
2	4.906	4.866	4.966	BB	450862	4296957	81.76%	5.182%
3	7.035	6.992	7.090	BB	495564	4687706	89.19%	5.653%
4	8.841	8.791	8.886	BB	486321	4758083	90.53%	5.738%
5	10.434	10.391	10.481	BB	490371	4984676	94.85%	6.012%
6	11.868	11.823	11.911	BB	496666	5255597	100.00%	6.338%
7	13.169	13.118	13.220	BB	470899	5213798	99.20%	6.288%
8	14.361	14.321	14.407	BB	444530	5190938	98.77%	6.260%
9	15.256	15.206	15.329	BB	358694	4666211	88.79%	5.627%
10	15.459	15.391	15.507	BB	433536	5183378	98.63%	6.251%
11	16.476	16.436	16.516	BB	407354	5097911	97.00%	6.148%
12	17.423	17.349	17.477	BB	400863	5031236	95.73%	6.068%
13	18.307	18.249	18.367	BB	371955	4962414	94.42%	5.985%
14	19.138	19.082	19.188	BB	366172	4809025	91.50%	5.800%
15	19.918	19.857	19.977	BB	309597	4322160	82.24%	5.213%
16	20.656	20.601	20.704	BB	270798	3695277	70.31%	4.457%
17	21.442	21.381	21.541	BB	193087	3418238	65.04%	4.122%
18	22.445	22.358	22.550	BB	135556	3353522	63.81%	4.044%
			Sum of corrected areas:			82918129		

FE012325.M Fri Jan 24 03:20:42 2025

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

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: RUTW01

ProjectID: NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Lab Code: CHEM Case No.: Q1242 SAS No.: Q1242 SDG No.: Q1242

DataFile: FE052168.D Analyst Name: YP\AJ Analyst Date: 01-31-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	48882662	97765	106182	7.927

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052168.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 10:26
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 99 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Feb 03 00:07:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	15.275	4578853	45.973 ug/ml
	Target Compounds			
2)	N-DECANE	4.934	4273136	46.699 ug/ml
3)	N-DODECANE	7.061	4628141	46.321 ug/ml
4)	N-TETRADECANE	8.865	4676456	45.961 ug/ml
5)	N-HEXADECANE	10.457	4890327	45.893 ug/ml
6)	N-OCTADECANE	11.889	5152055	45.951 ug/ml
7)	N-EICOSANE	13.190	5111168	45.890 ug/ml
8)	N-DOCOSANE	14.381	5088936	45.834 ug/ml
10)	N-TETRACOSANE	15.479	5083452	45.958 ug/ml
11)	N-HEXACOSANE	16.494	5012750	45.984 ug/ml
12)	N-OCTACOSANE	17.440	4966241	46.010 ug/ml

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

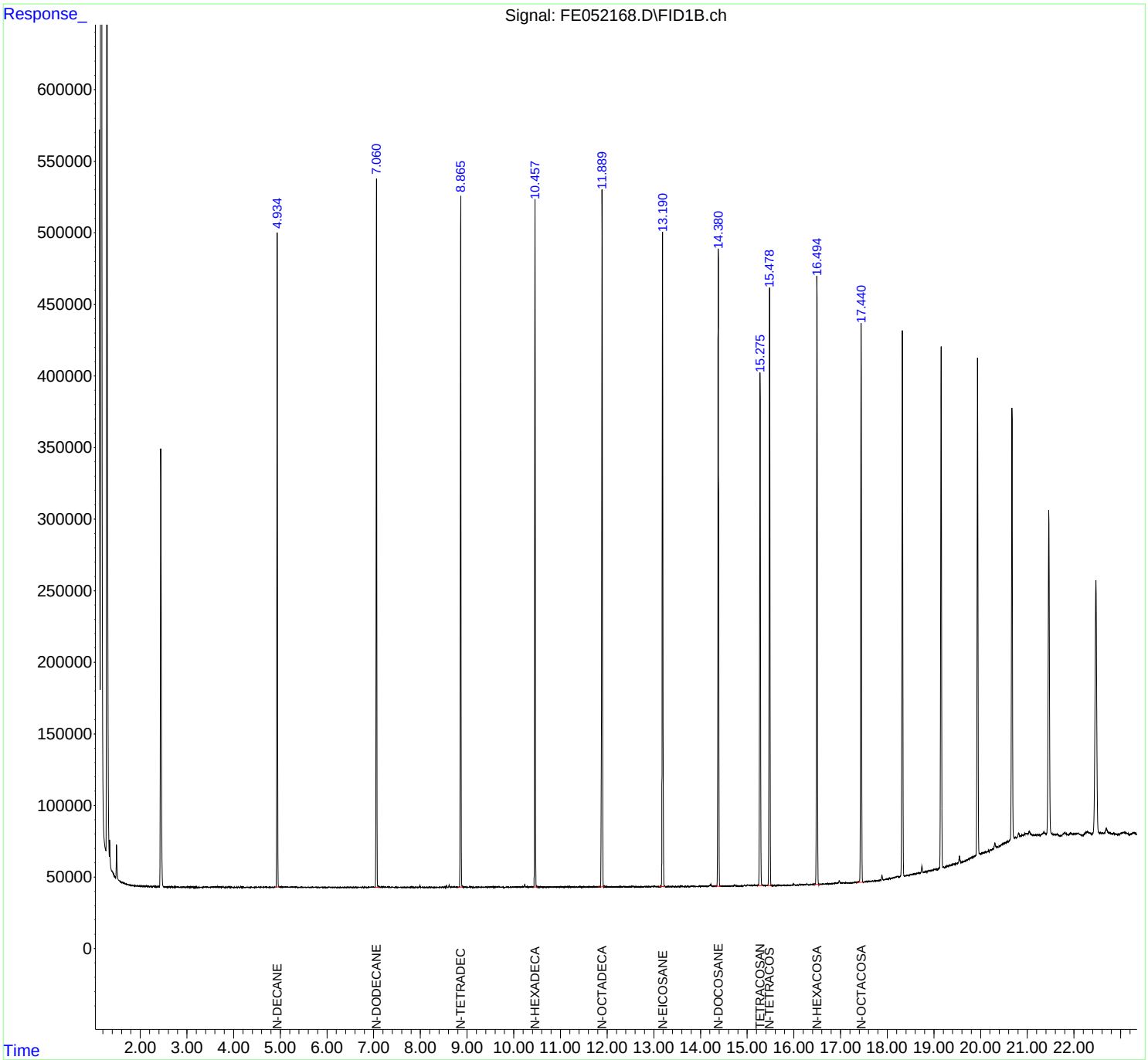
Quantitation Report (QT Reviewed)

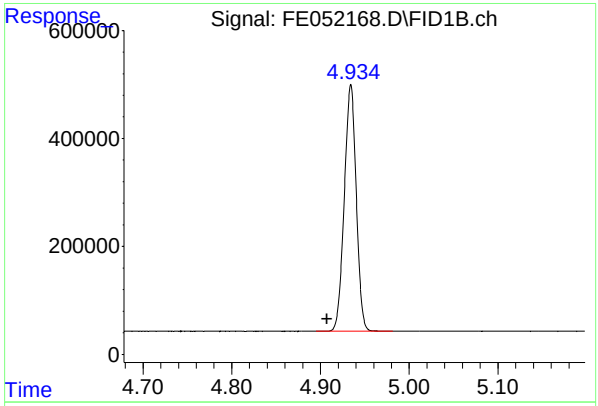
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052168.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 10:26
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 99 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Feb 03 00:07:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

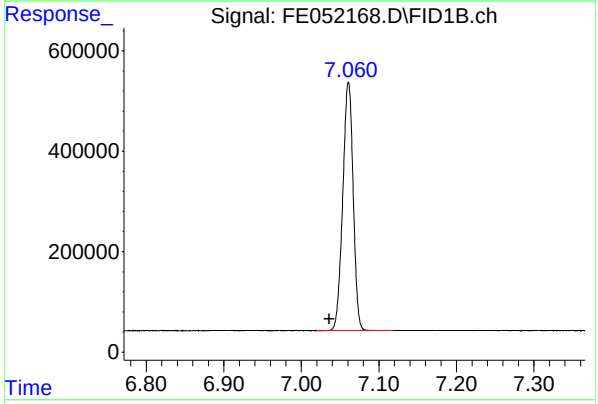




#2 N-DECANE

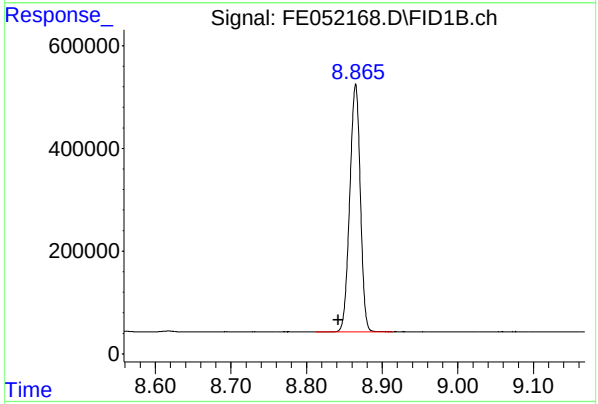
R.T.: 4.934 min
Delta R.T.: 0.027 min
Response: 4273136
Conc: 46.70 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM TRPH STD



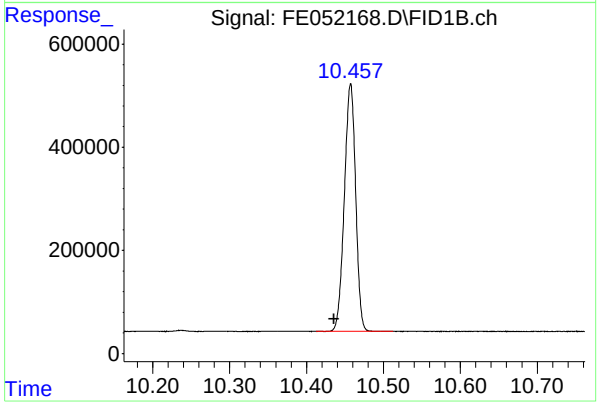
#3 N-DODECANE

R.T.: 7.061 min
Delta R.T.: 0.025 min
Response: 4628141
Conc: 46.32 ug/ml



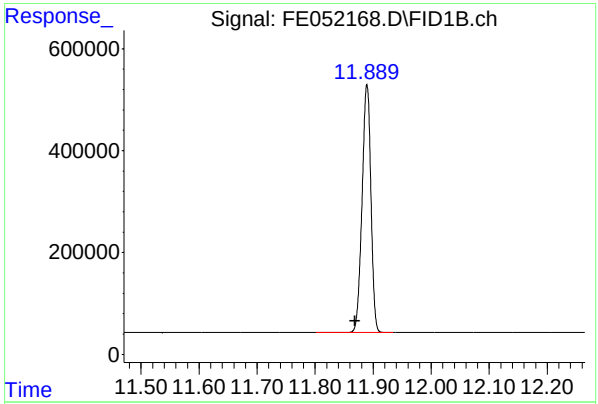
#4 N-TETRADECANE

R.T.: 8.865 min
Delta R.T.: 0.023 min
Response: 4676456
Conc: 45.96 ug/ml



#5 N-HEXADECANE

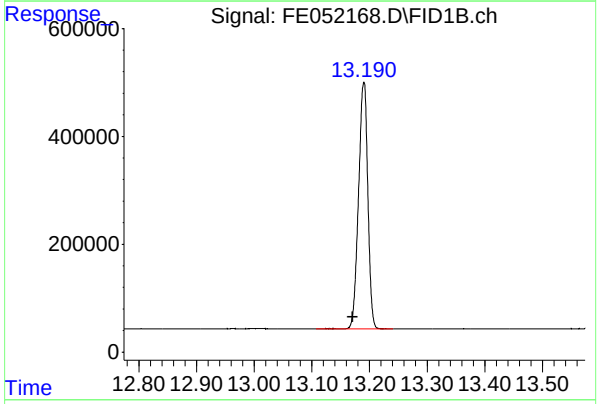
R.T.: 10.457 min
Delta R.T.: 0.022 min
Response: 4890327
Conc: 45.89 ug/ml



#6 N-OCTADECANE

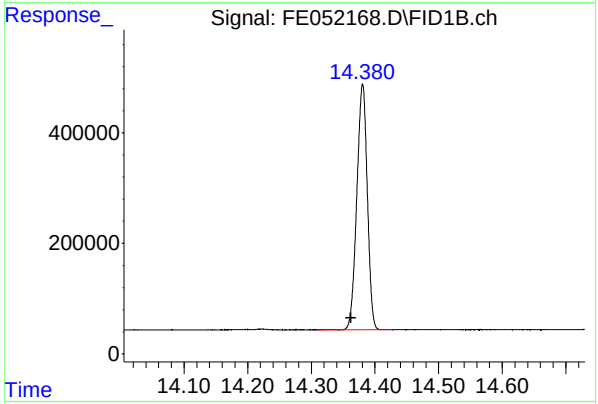
R.T.: 11.889 min
Delta R.T.: 0.020 min
Response: 5152055
Conc: 45.95 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM TRPH STD



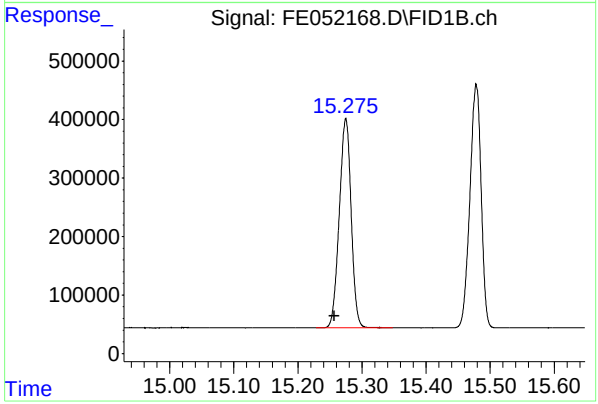
#7 N-EICOSANE

R.T.: 13.190 min
Delta R.T.: 0.019 min
Response: 5111168
Conc: 45.89 ug/ml



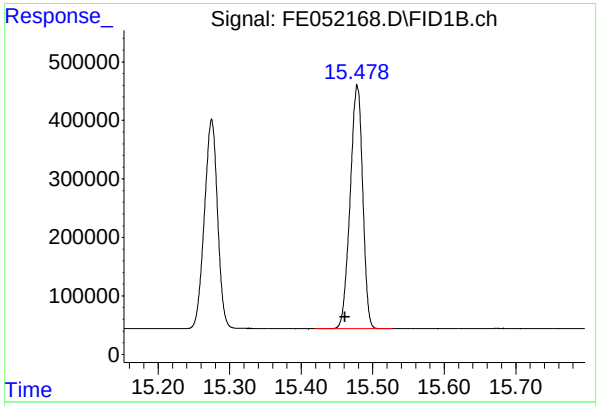
#8 N-DOCOSANE

R.T.: 14.381 min
Delta R.T.: 0.018 min
Response: 5088936
Conc: 45.83 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

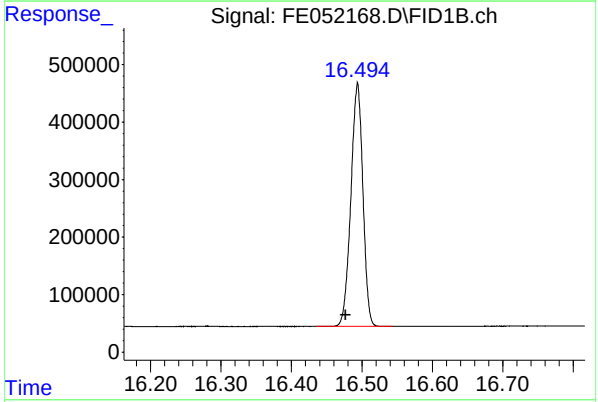
R.T.: 15.275 min
Delta R.T.: 0.018 min
Response: 4578853
Conc: 45.97 ug/ml



#10 N-TETRACOSANE

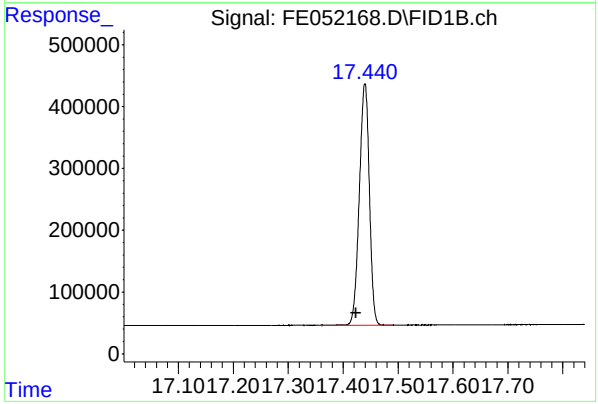
R.T.: 15.479 min
Delta R.T.: 0.017 min
Response: 5083452
Conc: 45.96 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM TRPH STD



#11 N-HEXACOSANE

R.T.: 16.494 min
Delta R.T.: 0.017 min
Response: 5012750
Conc: 45.98 ug/ml



#12 N-OCTACOSANE

R.T.: 17.440 min
Delta R.T.: 0.016 min
Response: 4966241
Conc: 46.01 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052168.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 10:26
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 99 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.934	4.895	4.982	BB	456654	4273136	82.94%	7.993%
2	7.061	7.019	7.118	BB	494802	4628141	89.83%	8.657%
3	8.865	8.812	8.914	BB	482694	4676456	90.77%	8.747%
4	10.457	10.412	10.512	BB	480202	4890327	94.92%	9.147%
5	11.889	11.802	11.934	BB	485820	5152055	100.00%	9.637%
6	13.190	13.107	13.241	BB	457572	5111168	99.21%	9.560%
7	14.381	14.307	14.428	BB	444784	5088936	98.77%	9.519%
8	15.275	15.228	15.348	BV	358328	4578853	88.87%	8.565%
9	15.479	15.421	15.528	BB	416344	5083452	98.67%	9.509%
10	16.494	16.435	16.544	BB	424362	5012750	97.30%	9.376%
11	17.440	17.351	17.491	BB	389525	4966241	96.39%	9.289%
			Sum of corrected areas:			53461515		

FE012325.M Mon Feb 03 02:02:42 2025

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Fax : 908 789 8922

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: RUTW01

ProjectID: NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Lab Code: CHEM Case No.: Q1242 SAS No.: Q1242 SDG No.: Q1242

DataFile: FE052180.D Analyst Name: YP\AJ Analyst Date: 01-31-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	46710313	93421	106182	12.018

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052180.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 16:40
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 99 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 03 01:35:46 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_E
ClientSampleId :
50 PPM TRPH STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
9)	S TETRACOSANE-d50 (SURR...	15.299	4338284	43.558	ug/mlm
	Target Compounds				
2)	N-DECANE	4.966	4142020	45.266	ug/ml
3)	N-DODECANE	7.091	4467752	44.715	ug/ml
4)	N-TETRADECANE	8.893	4500991	44.237	ug/ml
5)	N-HEXADECANE	10.485	4687325	43.988	ug/ml
6)	N-OCTADECANE	11.916	4920557	43.886	ug/ml
7)	N-EICOSANE	13.216	4863865	43.669	ug/ml
8)	N-DOCOSANE	14.407	4819958	43.411	ug/ml
10)	N-TETRACOSANE	15.504	4835161	43.713	ug/ml
11)	N-HEXACOSANE	16.518	4750373	43.578	ug/ml
12)	N-OCTACOSANE	17.464	4722311	43.750	ug/mlm

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052180.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 16:40
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 99 Sample Multiplier: 1

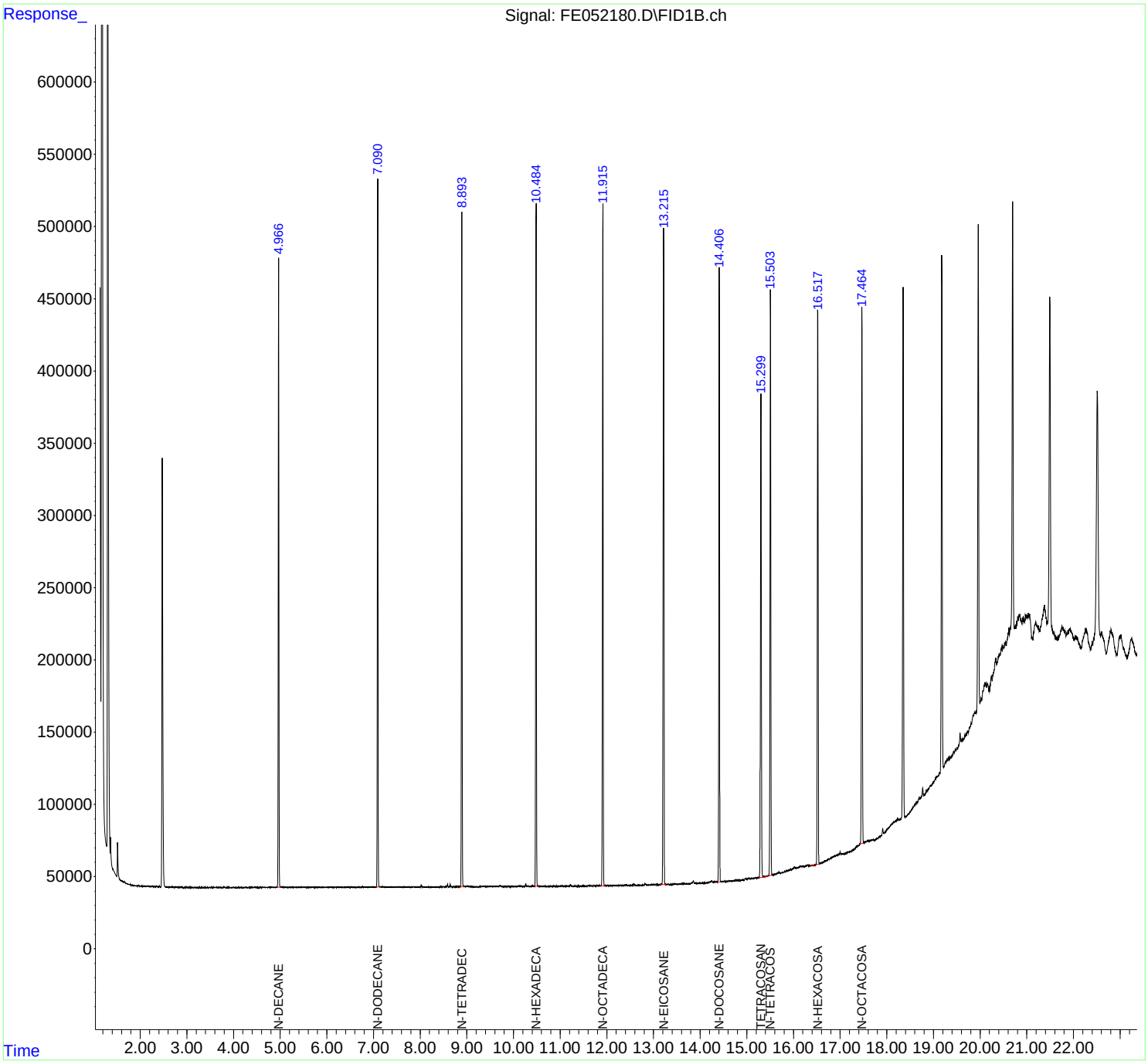
Integration File: autoint1.e
Quant Time: Feb 03 01:35:46 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

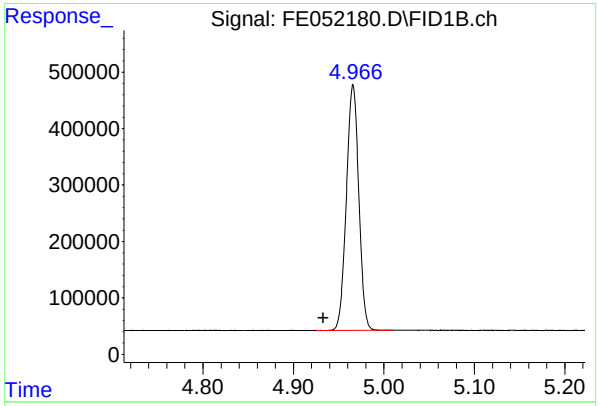
Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_E
ClientSampleId :
50 PPM TRPH STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025





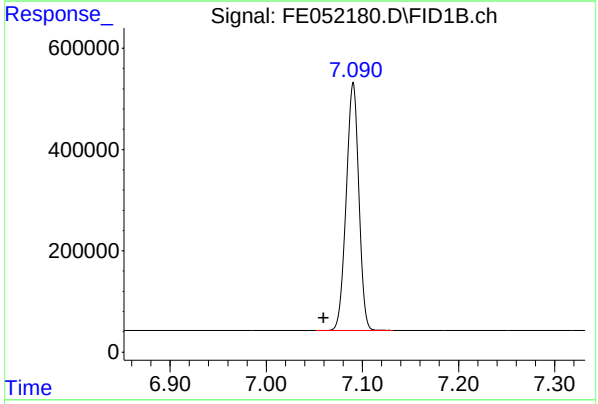
#2 N-DECANE

R.T.: 4.966 min
Delta R.T.: 0.033 min
Response: 4142020
Conc: 45.27 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM TRPH STD

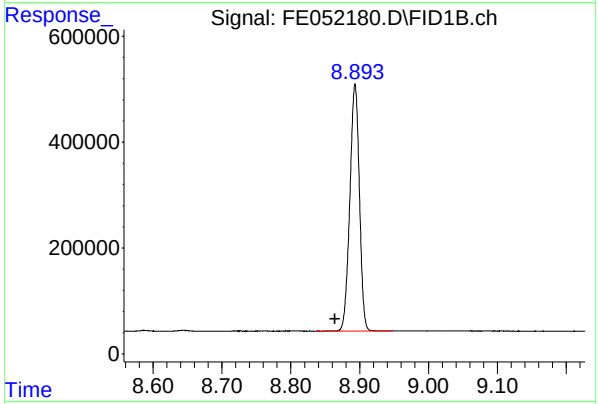
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025



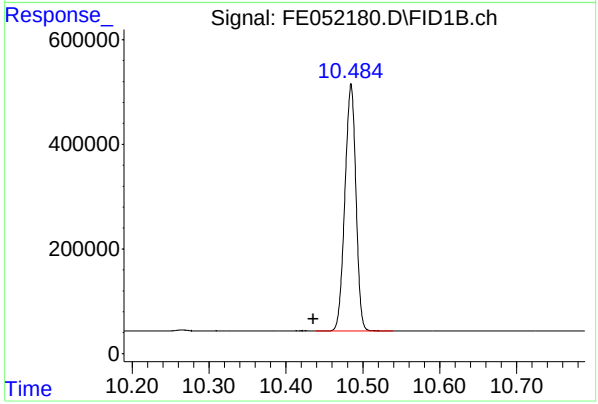
#3 N-DODECANE

R.T.: 7.091 min
Delta R.T.: 0.031 min
Response: 4467752
Conc: 44.72 ug/ml



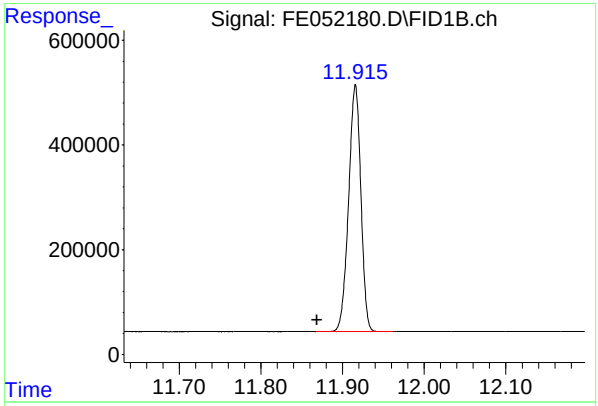
#4 N-TETRADECANE

R.T.: 8.893 min
Delta R.T.: 0.029 min
Response: 4500991
Conc: 44.24 ug/ml



#5 N-HEXADECANE

R.T.: 10.485 min
Delta R.T.: 0.049 min
Response: 4687325
Conc: 43.99 ug/ml



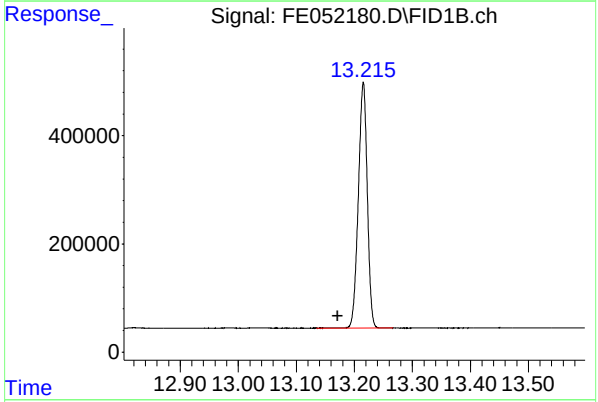
#6 N-OCTADECANE

R.T.: 11.916 min
Delta R.T.: 0.047 min
Response: 4920557
Conc: 43.89 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM TRPH STD

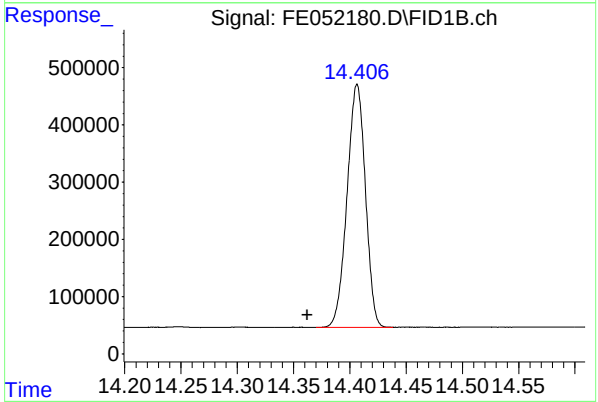
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025



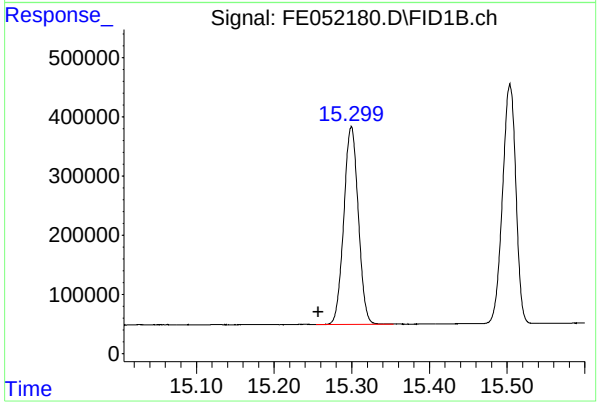
#7 N-EICOSANE

R.T.: 13.216 min
Delta R.T.: 0.045 min
Response: 4863865
Conc: 43.67 ug/ml



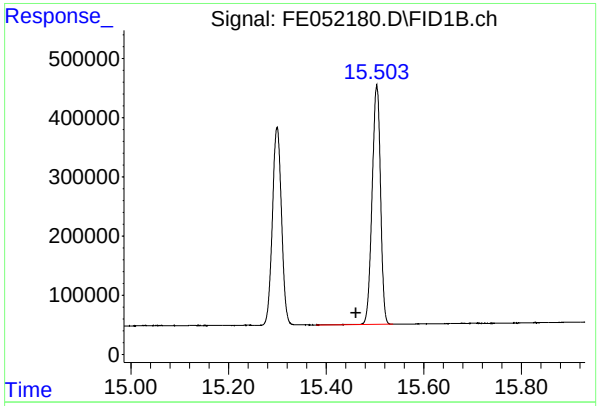
#8 N-DOCOSANE

R.T.: 14.407 min
Delta R.T.: 0.044 min
Response: 4819958
Conc: 43.41 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.299 min
Delta R.T.: 0.042 min
Response: 4338284
Conc: 43.56 ug/ml m



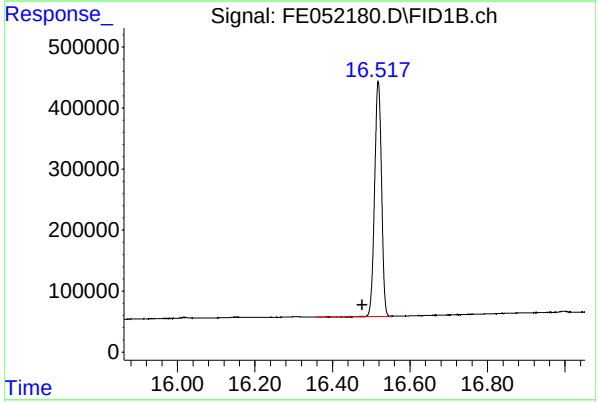
#10 N-TETRACOSANE

R.T.: 15.504 min
Delta R.T.: 0.043 min
Response: 4835161
Conc: 43.71 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM TRPH STD

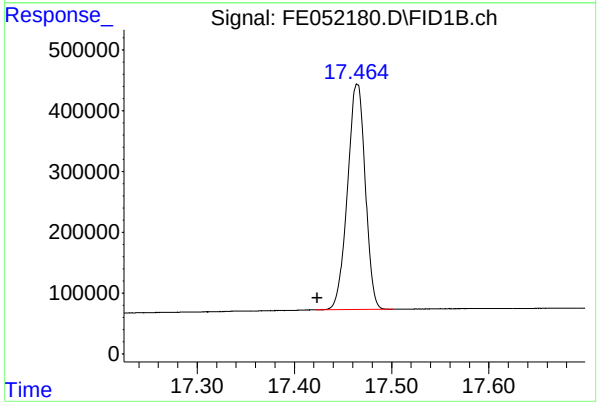
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025



#11 N-HEXACOSANE

R.T.: 16.518 min
Delta R.T.: 0.041 min
Response: 4750373
Conc: 43.58 ug/ml



#12 N-OCTACOSANE

R.T.: 17.464 min
Delta R.T.: 0.040 min
Response: 4722311
Conc: 43.75 ug/ml m

Instrument :
FID_E
LabSampleId :
50 PPM TRPH STD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE01312
Data File : FE052180.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 16:40
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 99 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.966	4.925	5.010	BB	435252	4142020	84.18%	8.108%
2	7.091	7.052	7.132	BB	489980	4467752	90.80%	8.746%
3	8.893	8.837	8.948	BB	466717	4500991	91.47%	8.811%
4	10.485	10.439	10.539	BB	472426	4687325	95.26%	9.176%
5	11.916	11.867	11.962	BB	472102	4920557	100.00%	9.632%
6	13.216	13.134	13.267	BB	454165	4863865	98.85%	9.521%
7	14.407	14.370	14.438	PB	425472	4819958	97.96%	9.435%
8	15.300	15.141	15.375	BB	333995	4340391	88.21%	8.497%
9	15.504	15.379	15.537	BB	404444	4835161	98.26%	9.465%
10	16.518	16.357	16.556	BV	382436	4750373	96.54%	9.299%
11	17.465	17.069	17.499	BV	370977	4754852	96.63%	9.308%
			Sum of corrected areas:			51083244		

FE012325.M Mon Feb 03 02:06:20 2025

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DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: RUTW01

ProjectID: NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Lab Code: CHEM Case No.: Q1242 SAS No.: Q1242 SDG No.: Q1242

DataFile: FE052190.D Analyst Name: YP\AJ Analyst Date: 01-31-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	47002499	94005	106182	11.468

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052190.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 22:12
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 99 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 03 01:36:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_E
ClientSampleId :
50 PPM TRPH STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	15.300	4365755	43.833 ug/ml
	Target Compounds			
2)	N-DECANE	4.963	4159030	45.452 ug/ml
3)	N-DODECANE	7.088	4494120	44.979 ug/ml
4)	N-TETRADECANE	8.892	4533699	44.558 ug/ml
5)	N-HEXADECANE	10.483	4731275	44.401 ug/ml
6)	N-OCTADECANE	11.914	4963662	44.270 ug/ml
7)	N-EICOSANE	13.215	4892146	43.923 ug/ml
8)	N-DOCOSANE	14.406	4844018	43.628 ug/ml
10)	N-TETRACOSANE	15.503	4865994	43.992 ug/ml
11)	N-HEXACOSANE	16.518	4778892	43.839 ug/ml
12)	N-OCTACOSANE	17.462	4739663	43.910 ug/mlm

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052190.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 22:12
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 99 Sample Multiplier: 1

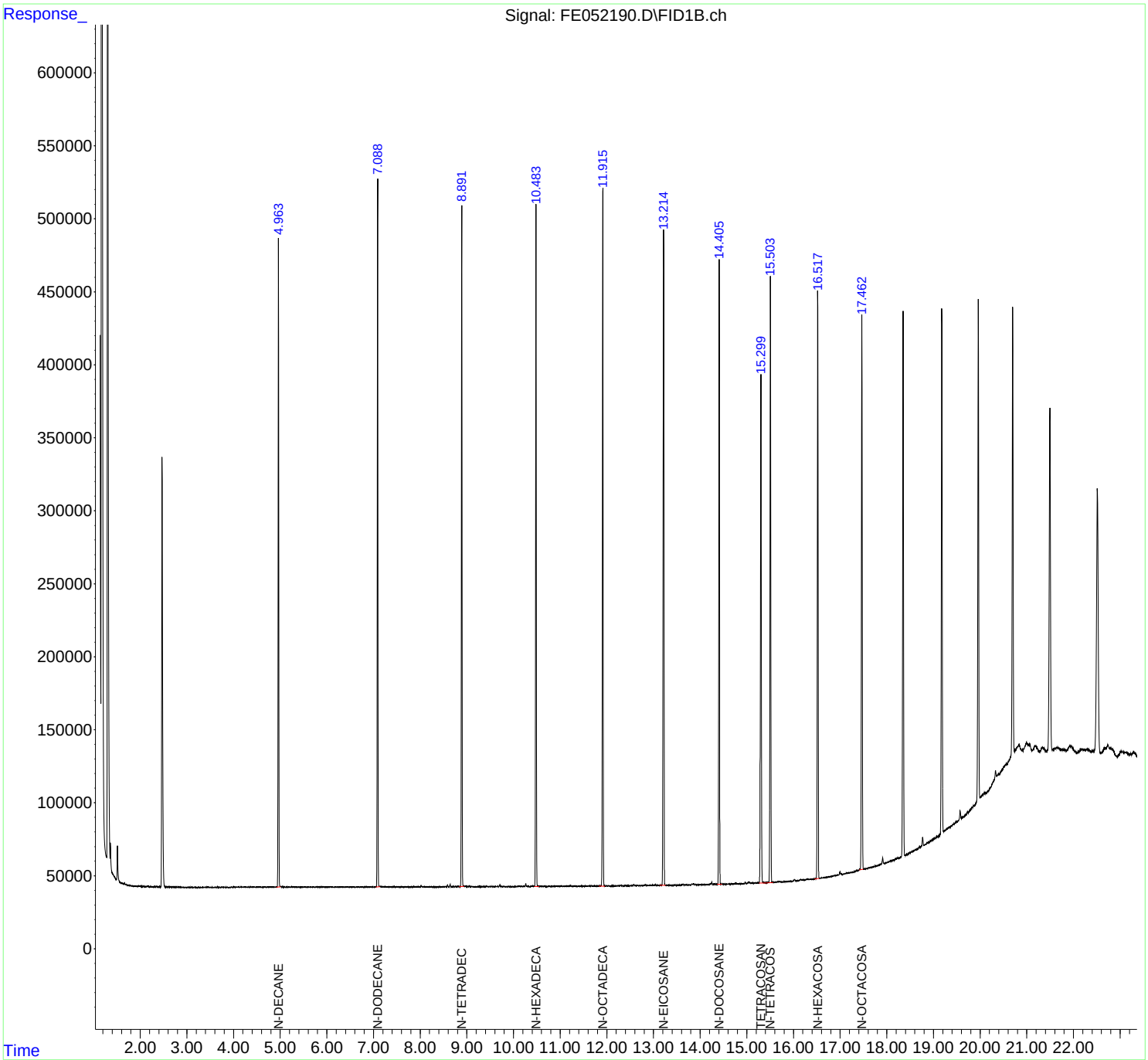
Integration File: autoint1.e
Quant Time: Feb 03 01:36:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

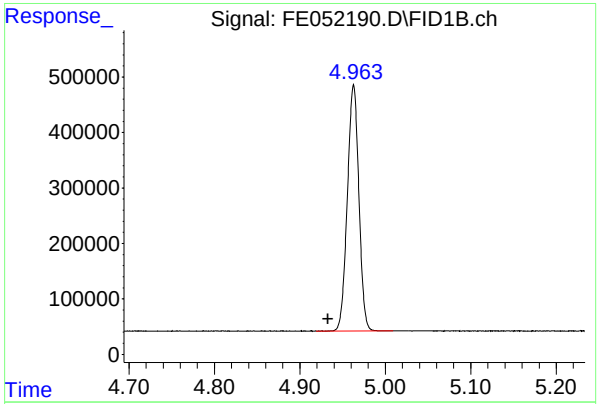
Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_E
ClientSampleId :
50 PPM TRPH STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025





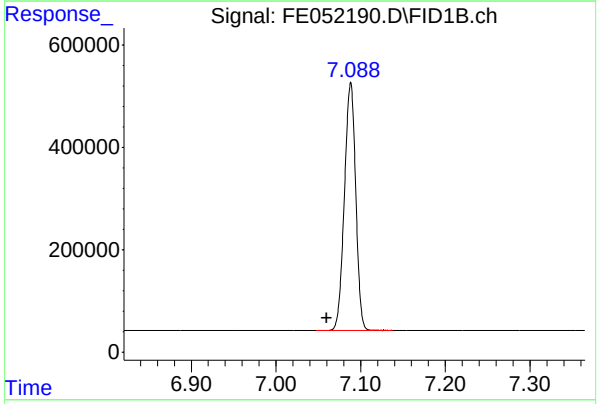
#2 N-DECANE

R.T.: 4.963 min
Delta R.T.: 0.030 min
Response: 4159030
Conc: 45.45 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM TRPH STD

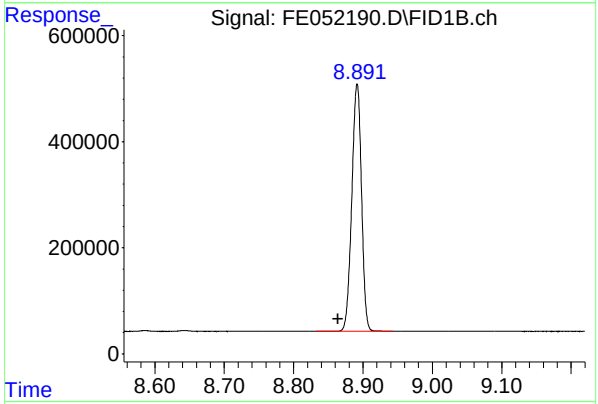
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025



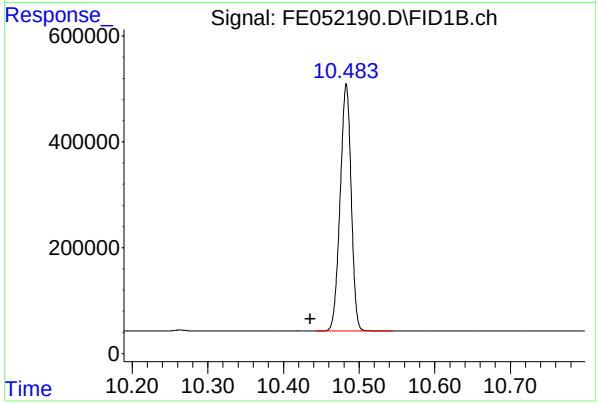
#3 N-DODECANE

R.T.: 7.088 min
Delta R.T.: 0.028 min
Response: 4494120
Conc: 44.98 ug/ml



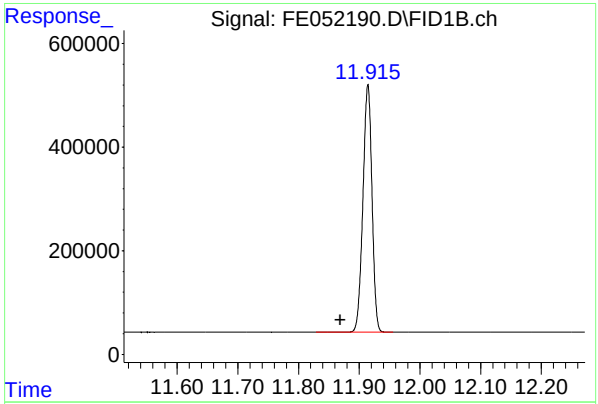
#4 N-TETRADECANE

R.T.: 8.892 min
Delta R.T.: 0.028 min
Response: 4533699
Conc: 44.56 ug/ml



#5 N-HEXADECANE

R.T.: 10.483 min
Delta R.T.: 0.048 min
Response: 4731275
Conc: 44.40 ug/ml



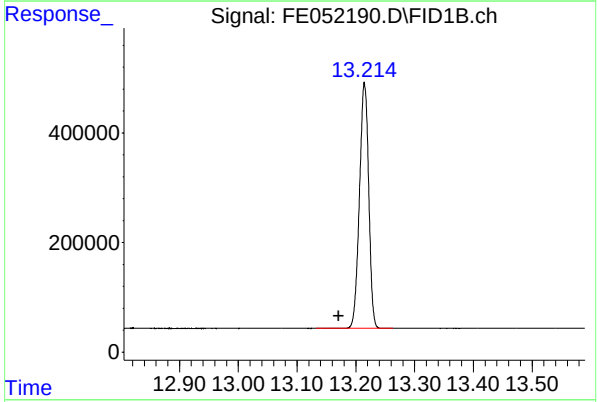
#6 N-OCTADECANE

R.T.: 11.914 min
Delta R.T.: 0.045 min
Response: 4963662
Conc: 44.27 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM TRPH STD

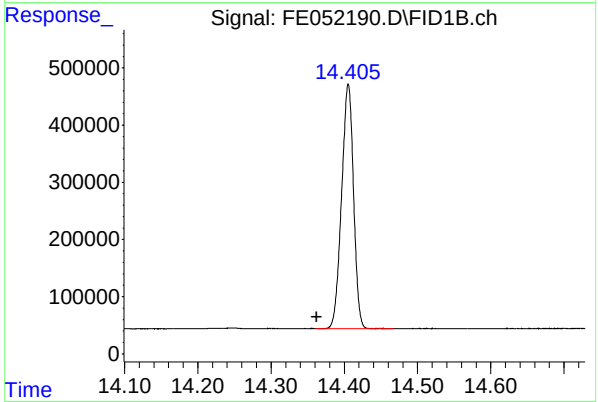
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025



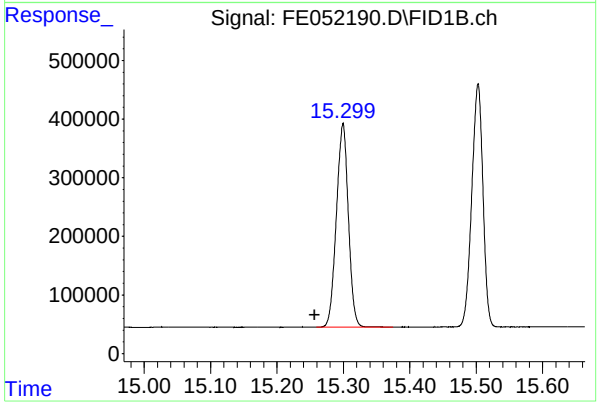
#7 N-EICOSANE

R.T.: 13.215 min
Delta R.T.: 0.044 min
Response: 4892146
Conc: 43.92 ug/ml



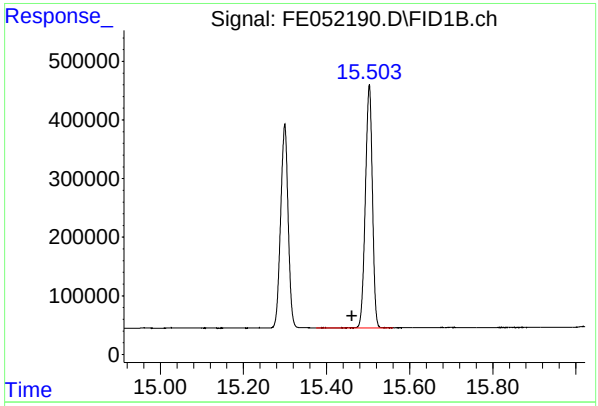
#8 N-DOCOSANE

R.T.: 14.406 min
Delta R.T.: 0.043 min
Response: 4844018
Conc: 43.63 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.300 min
Delta R.T.: 0.043 min
Response: 4365755
Conc: 43.83 ug/ml



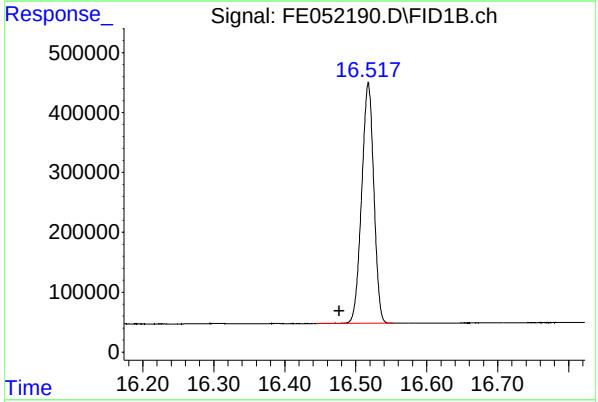
#10 N-TETRACOSANE

R.T.: 15.503 min
Delta R.T.: 0.042 min
Response: 4865994
Conc: 43.99 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM TRPH STD

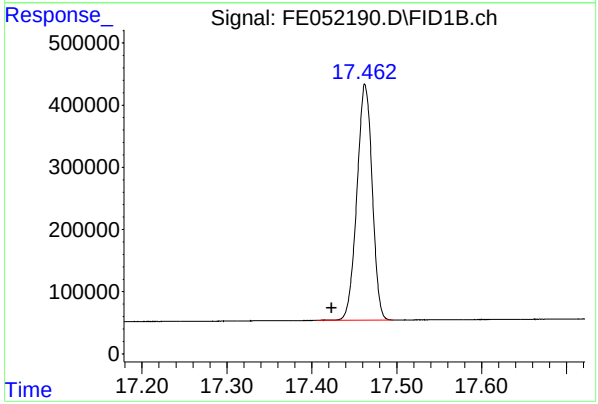
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025



#11 N-HEXACOSANE

R.T.: 16.518 min
Delta R.T.: 0.041 min
Response: 4778892
Conc: 43.84 ug/ml



#12 N-OCTACOSANE

R.T.: 17.462 min
Delta R.T.: 0.038 min
Response: 4739663
Conc: 43.91 ug/ml m

Instrument :
FID_E
LabSampleId :
50 PPM TRPH STD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE01312
Data File : FE052190.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 22:12
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 99 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.963	4.919	5.009	BB	444623	4159030	83.79%	8.099%
2	7.088	7.047	7.138	BB	484231	4494120	90.54%	8.751%
3	8.892	8.832	8.943	BB	466689	4533699	91.34%	8.828%
4	10.483	10.443	10.545	BB	467195	4731275	95.32%	9.213%
5	11.914	11.829	11.956	BV	478751	4963662	100.00%	9.665%
6	13.215	13.132	13.263	BB	447007	4892146	98.56%	9.526%
7	14.406	14.361	14.466	BB	427712	4844018	97.59%	9.432%
8	15.300	15.259	15.375	BV	348585	4365755	87.95%	8.501%
9	15.503	15.375	15.560	PB	415200	4865994	98.03%	9.475%
10	16.518	16.444	16.552	BB	402585	4778892	96.28%	9.306%
11	17.463	17.044	17.501	BB	378377	4726578	95.22%	9.204%
			Sum of corrected areas:			51355168		

FE012325.M Mon Feb 03 02:07:35 2025

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

Analytical Sequence

Client: RU2 Engineering, LLC **SDG No.:** Q1242

Project: NYCDDC SANTWOBR Brooklyn Bridge BBMCR **Instrument ID:** FID_E

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

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

MEAN SUROGATE RT FROM INITIAL CALIBRATION **15.2554**

EPA SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
PIBLK01	I.BLK01	31 Jan 2025 09:56	FE052167.D	15.274	
50 PPM TRPH STD	50 PPM TRPH STD	31 Jan 2025 10:26	FE052168.D	15.275	
PB166415BL	PB166415BL	31 Jan 2025 12:08	FE052171.D	15.271	
PB166415BS	PB166415BS	31 Jan 2025 12:38	FE052172.D	15.270	
PIBLK02	I.BLK02	31 Jan 2025 16:09	FE052179.D	15.300	
50 PPM TRPH STD	50 PPM TRPH STD	31 Jan 2025 16:40	FE052180.D	15.300	
JPP-5.3-013025MS	Q1241-05MS	31 Jan 2025 17:10	FE052181.D	15.243	
JPP-5.3-013025MSD	Q1241-05MSD	31 Jan 2025 17:40	FE052182.D	15.248	
JPP-6.2-013025	Q1242-01	31 Jan 2025 20:42	FE052188.D	15.230	
PIBLK03	I.BLK03	31 Jan 2025 21:12	FE052189.D	15.299	
50 PPM TRPH STD	50 PPM TRPH STD	31 Jan 2025 22:12	FE052190.D	15.300	

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

QC Limits	Lower Limit	Upper Limits
(± 0.10 minutes)	15.1554	15.3554

QC SAMPLE DATA

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166415BL	SDG No.:	Q1242
Lab Sample ID:	PB166415BL	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	100 Decanted:
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE052171.D	1	01/31/25 08:50	01/31/25 12:08	PB166415

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	1670	U	185	1670	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	17.4		37 - 130	87%	SPK: 20

Comments:

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

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052171.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 12:08
Operator : YP\AJ
Sample : PB166415BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB166415BL

Integration File: autoint1.e
Quant Time: Feb 03 00:08:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.271	1729476	17.364 ug/ml
Target Compounds			

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

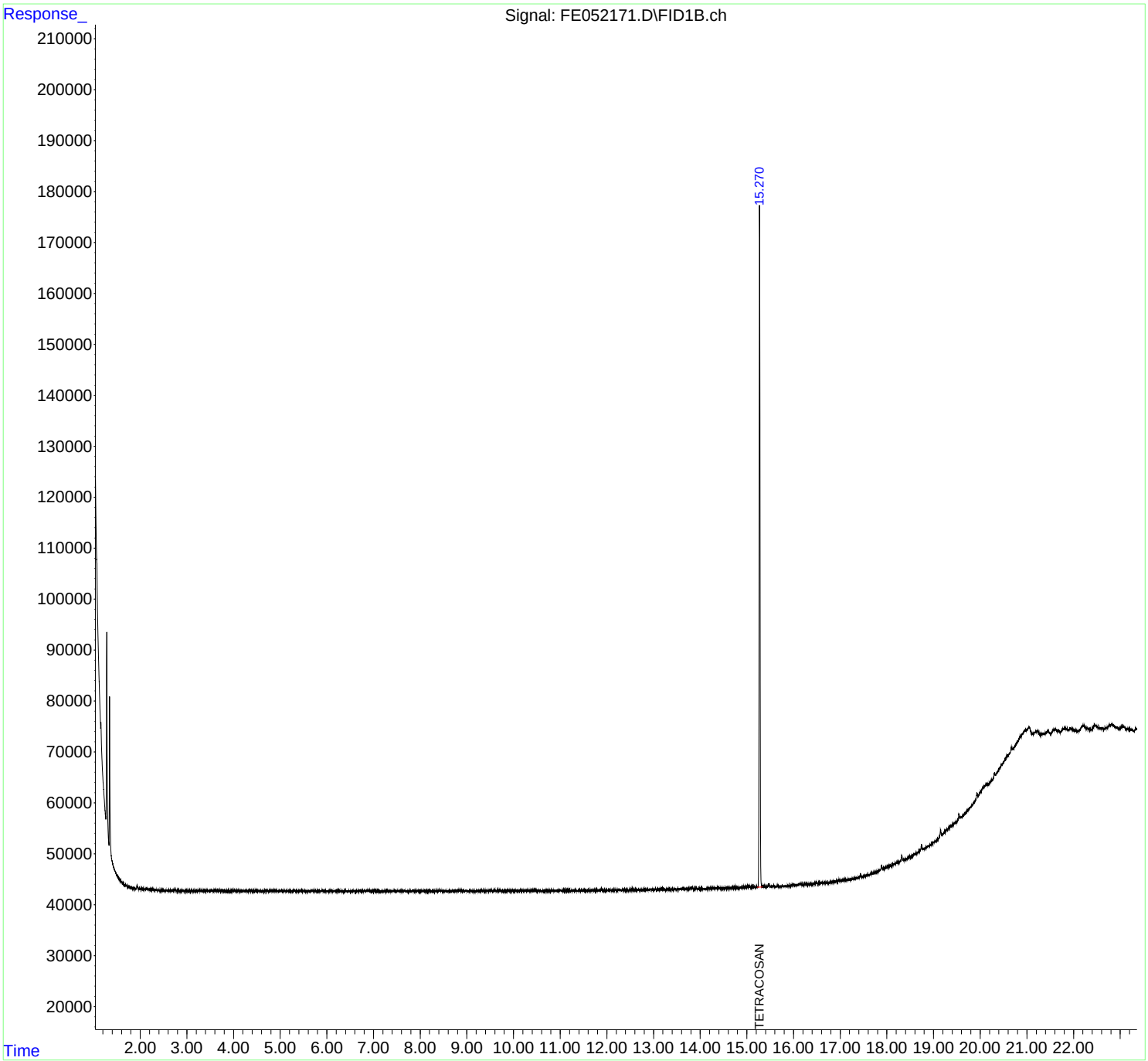
Quantitation Report (QT Reviewed)

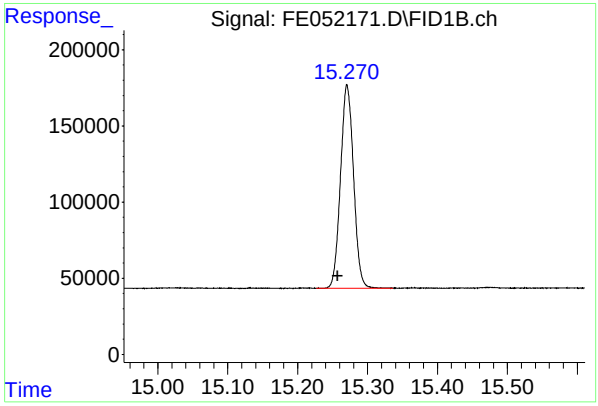
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052171.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 12:08
Operator : YP\AJ
Sample : PB166415BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB166415BL

Integration File: autoint1.e
Quant Time: Feb 03 00:08:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.271 min
Delta R.T.: 0.014 mi
Response: 1729476
Conc: 17.36 ug/m

Instrument :
FID_E
ClientSampleId :
PB166415BL

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052171.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 12:08
Sample : PB166415BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.271	15.227	15.337	BB	133669	1729476	100.00%	100.000%
			Sum of corrected areas:			1729476		

FE012325.M Mon Feb 03 02:04:36 2025

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/31/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/31/25
Client Sample ID:	PIBLK-FE052167.D	SDG No.:	Q1242
Lab Sample ID:	I.BLK-FE052167.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
FE052167.D	1		01/31/25	FE013125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	50.0	U	10.0	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	18.1		29 - 130	90%	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_E\Data\FE013125\
Data File : FE052167.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 09:56
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 98 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 03 00:07:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_E
ClientSampleId :
I.BLK

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.273	1801068	18.083 ug/mlm
Target Compounds			

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052167.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 09:56
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 98 Sample Multiplier: 1

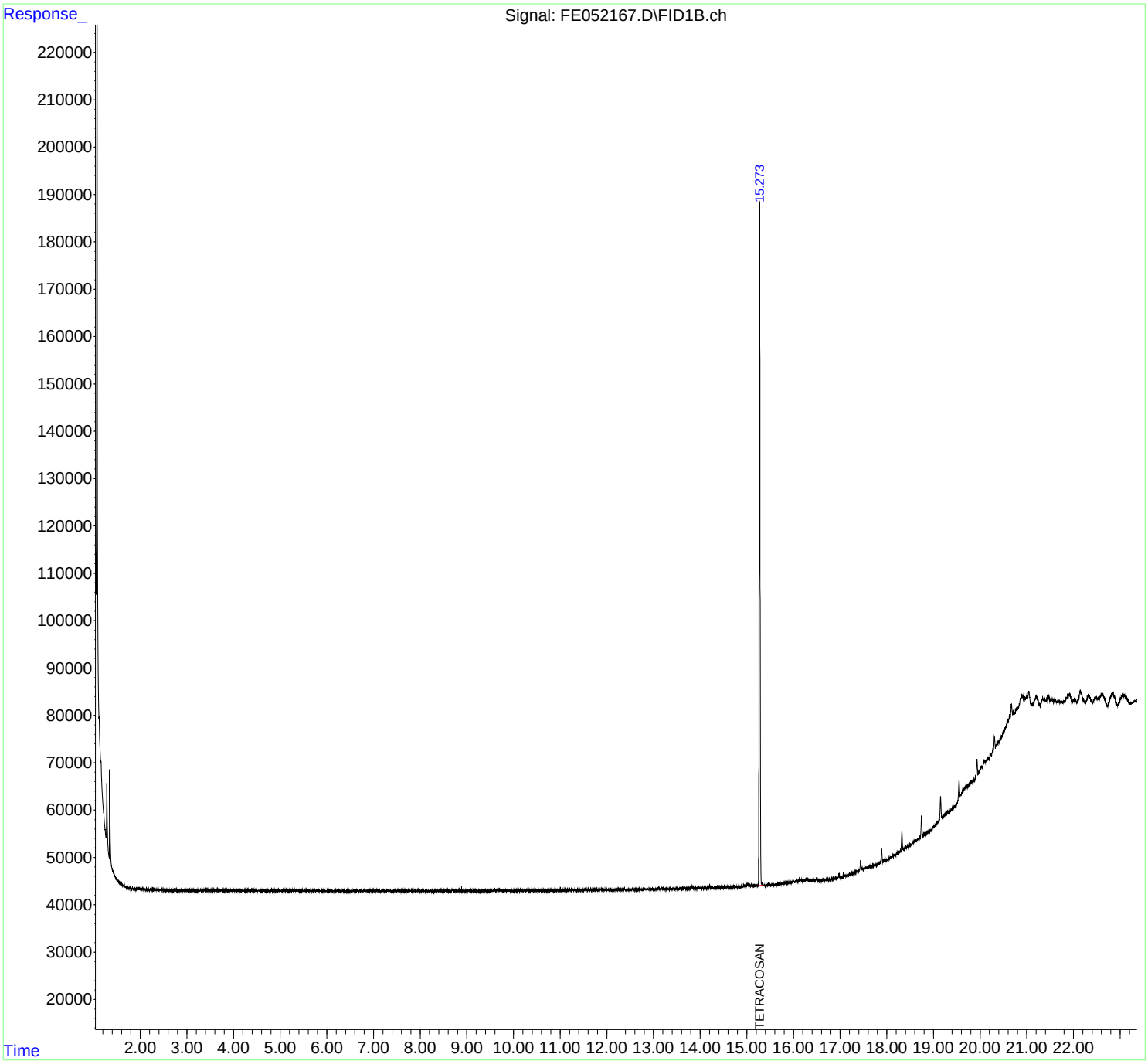
Integration File: autoint1.e
Quant Time: Feb 03 00:07:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

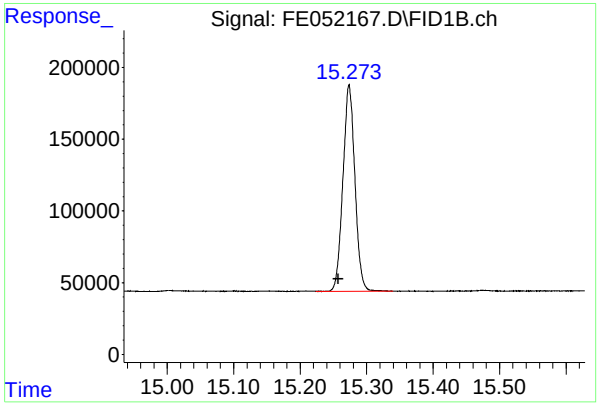
Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_E
ClientSampleId :
I.BLK

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.273 min
Delta R.T.: 0.017 mir
Response: 1801068
Conc: 18.08 ug/m

Instrument :
FID_E
ClientSampleId :
I.BLK

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025

Instrument :
FID_E
LabSampleId :
I.BLK

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE01312
Data File : FE052167.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 09:56
Sample : I.BLK
Misc :
ALS Vial : 98 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.274	15.186	15.347	BB	143692	1808772	100.00%	100.000%
			Sum of corrected areas:			1808772		

FE012325.M Mon Feb 03 02:01:24 2025

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/31/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/31/25
Client Sample ID:	PIBLK-FE052179.D	SDG No.:	Q1242
Lab Sample ID:	I.BLK-FE052179.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
FE052179.D	1		01/31/25	FE013125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	50.0	U	10.0	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	16.3		29 - 130	82%	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_E\Data\FE013125\
Data File : FE052179.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 16:09
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 98 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Feb 03 00:11:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.300	1626036	16.326 ug/ml
Target Compounds			

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

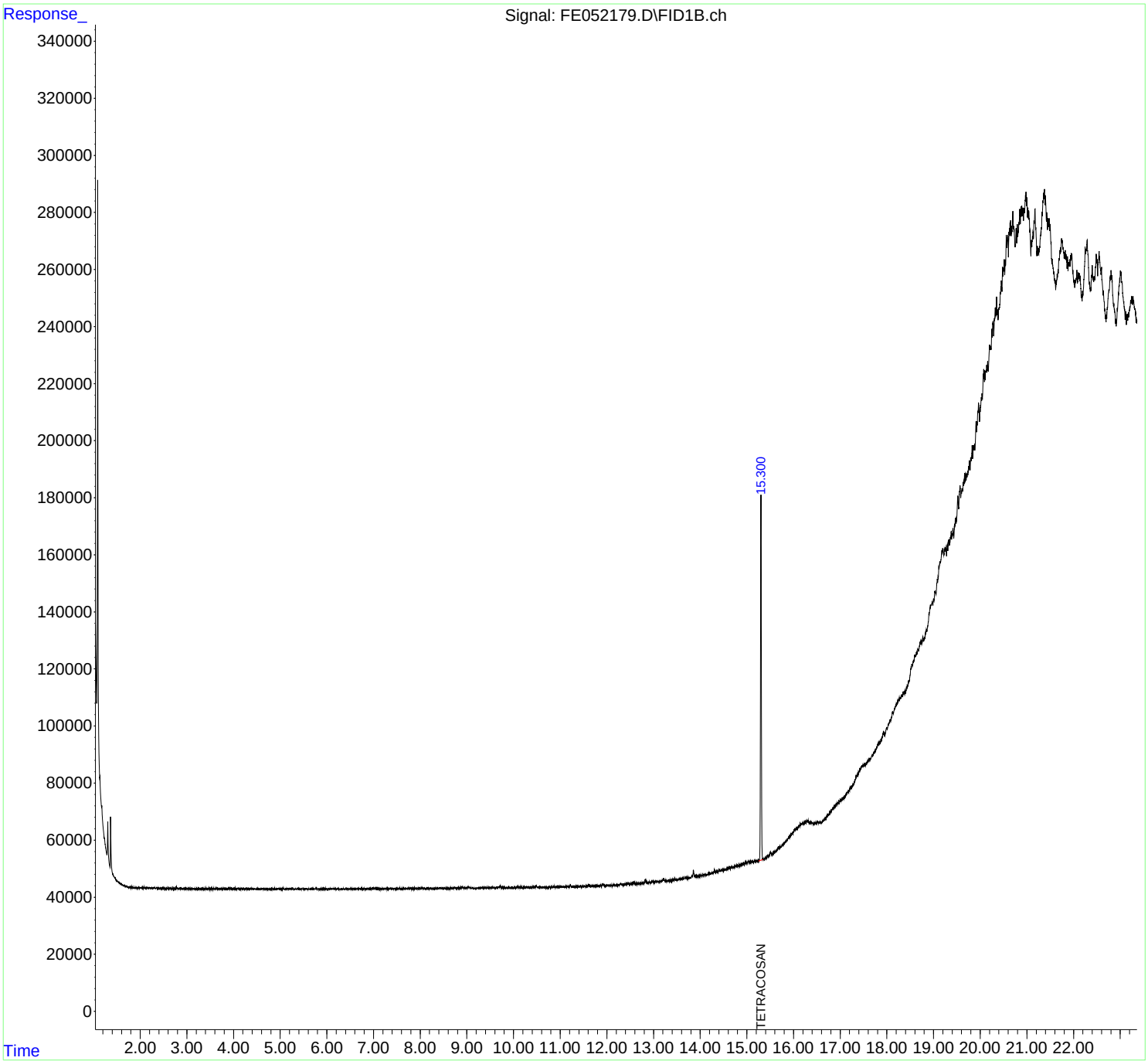
Quantitation Report (QT Reviewed)

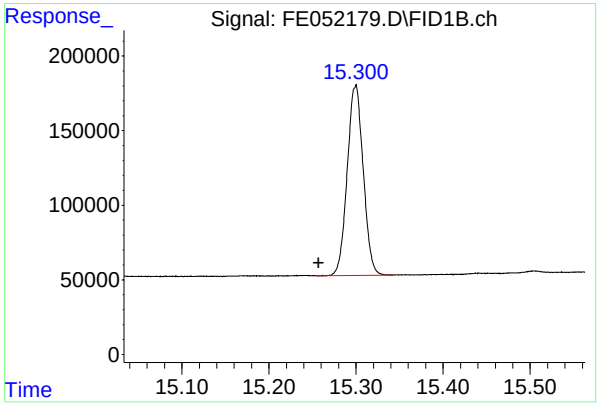
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052179.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 16:09
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 98 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Feb 03 00:11:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.300 min
Delta R.T.: 0.043 mi
Response: 1626036
Conc: 16.33 ug/m

Instrument :
FID_E
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052179.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 16:09
Sample : I.BLK
Misc :
ALS Vial : 98 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.300	15.254	15.342	BB	127391	1626036	100.00%	100.000%
			Sum of corrected areas:			1626036		

FE012325.M Mon Feb 03 02:05:36 2025

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/31/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/31/25
Client Sample ID:	PIBLK-FE052189.D	SDG No.:	Q1242
Lab Sample ID:	I.BLK-FE052189.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
FE052189.D	1		01/31/25	FE013125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	50.0	U	10.0	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	17.5		29 - 130	87%	SPK: 20

Comments:

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

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052189.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 21:12
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 96 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Feb 03 00:14:45 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.299	1739092	17.461 ug/ml
Target Compounds			

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

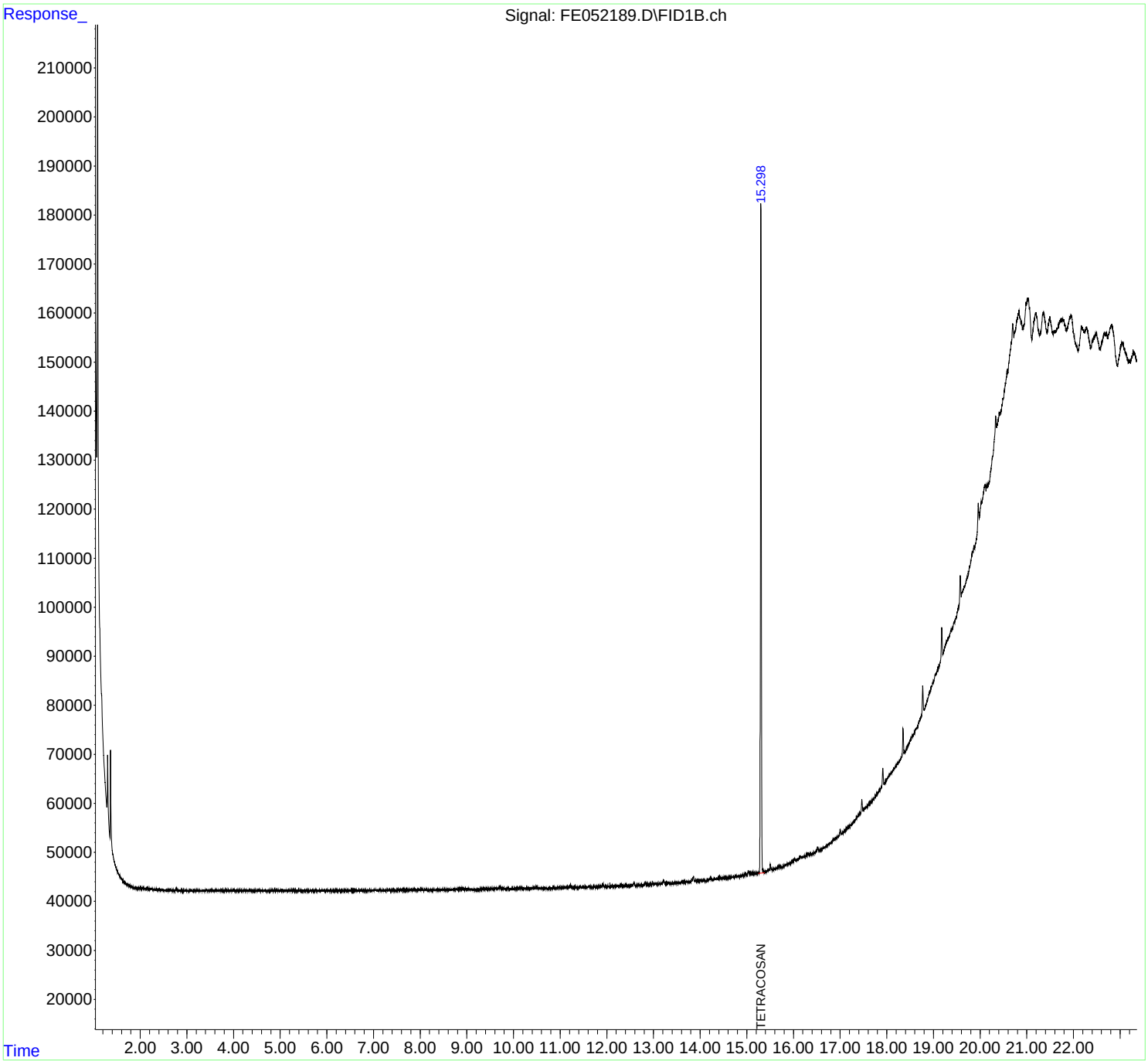
Quantitation Report (QT Reviewed)

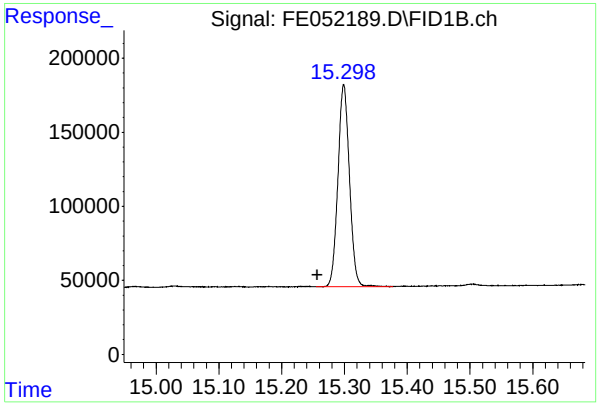
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052189.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 21:12
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 96 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Feb 03 00:14:45 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.299 min
Delta R.T.: 0.042 mi
Response: 1739092
Conc: 17.46 ug/m

Instrument :
FID_E
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052189.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 21:12
Sample : I.BLK
Misc :
ALS Vial : 96 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.299	15.255	15.377	BB	136524	1739092	100.00%	100.000%
			Sum of corrected areas:			1739092		

FE012325.M Mon Feb 03 02:07:03 2025

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166415BS	SDG No.:	Q1242
Lab Sample ID:	PB166415BS	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	100 Decanted:
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE052172.D	1	01/31/25 08:50	01/31/25 12:38	PB166415

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	6350		185	1670	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	18.8		37 - 130	94%	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_E\Data\FE013125\
Data File : FE052172.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 12:38
Operator : YP\AJ
Sample : PB166415BS
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 03 00:08:54 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_E
ClientSampleId :
PB166415BS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
9)	S TETRACOSANE-d50 (SURR...	15.269	1871130	18.787	ug/mlm
	Target Compounds				
2)	N-DECANE	4.930	1667496	18.223	ug/ml
3)	N-DODECANE	7.056	1831391	18.329	ug/ml
4)	N-TETRADECANE	8.860	1960262	19.266	ug/ml
5)	N-HEXADECANE	10.452	2054144	19.277	ug/ml
6)	N-OCTADECANE	11.884	2140266	19.089	ug/mlm
7)	N-EICOSANE	13.186	2185174	19.619	ug/ml
8)	N-DOCOSANE	14.376	2128002	19.166	ug/ml
10)	N-TETRACOSANE	15.474	2117307	19.142	ug/ml
11)	N-HEXACOSANE	16.490	2103127	19.293	ug/ml
12)	N-OCTACOSANE	17.436	2070572	19.183	ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052172.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 12:38
Operator : YP\AJ
Sample : PB166415BS
Misc :
ALS Vial : 13 Sample Multiplier: 1

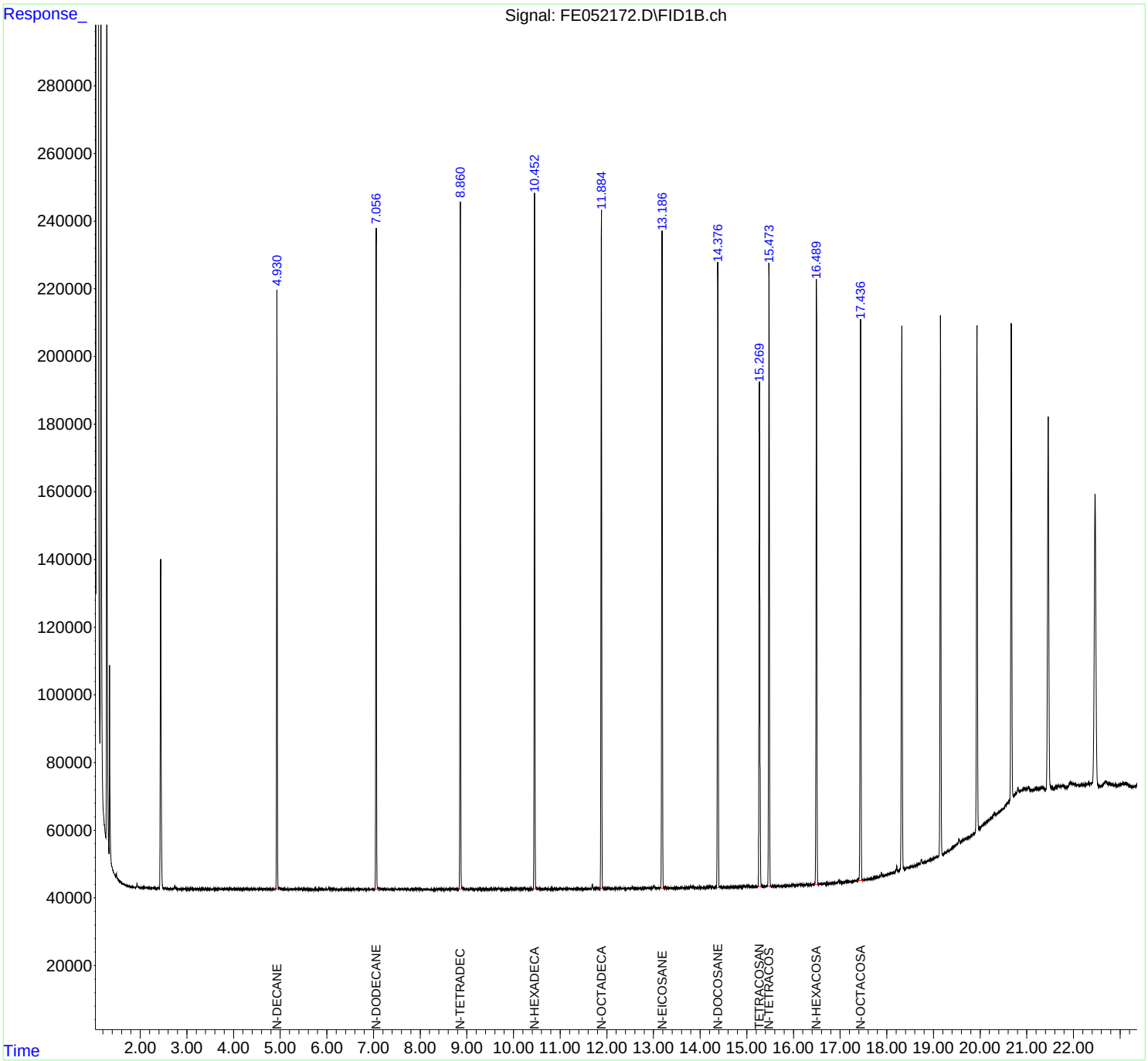
Integration File: autoint1.e
Quant Time: Feb 03 00:08:54 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

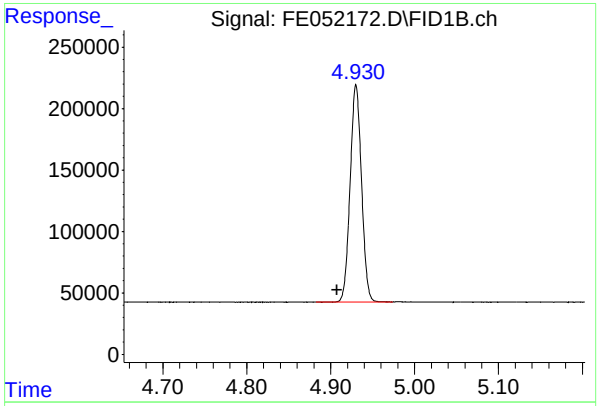
Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_E
ClientSampleId :
PB166415BS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025





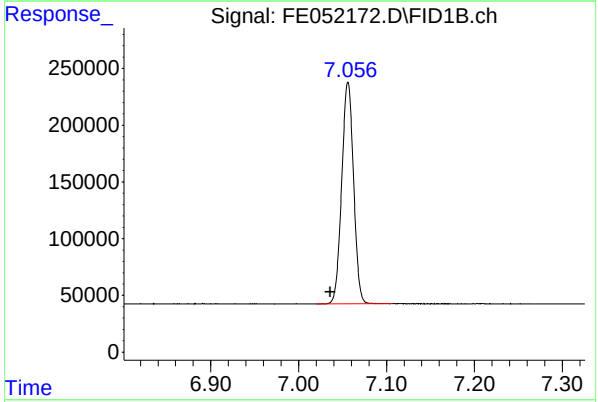
#2 N-DECANE

R.T.: 4.930 min
Delta R.T.: 0.023 min
Response: 1667496
Conc: 18.22 ug/ml

Instrument :
FID_E
ClientSampleId :
PB166415BS

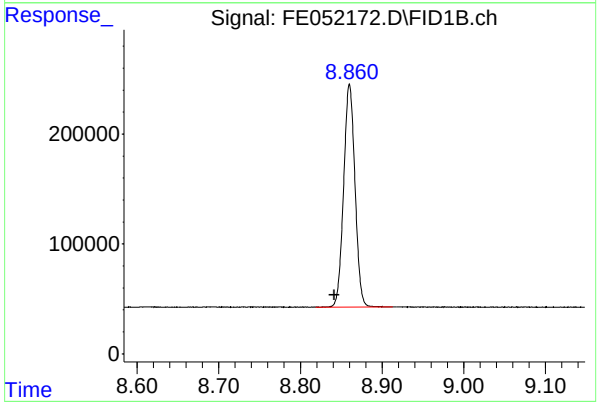
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025



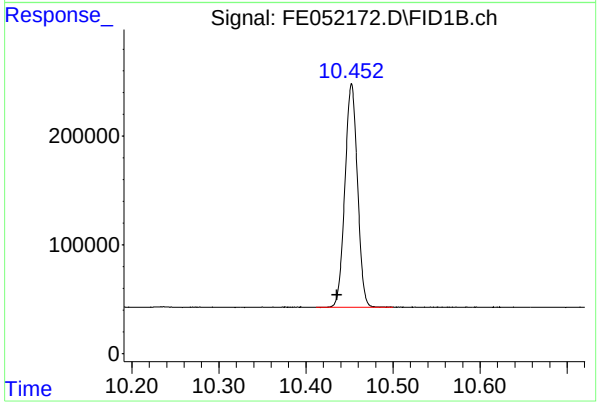
#3 N-DODECANE

R.T.: 7.056 min
Delta R.T.: 0.020 min
Response: 1831391
Conc: 18.33 ug/ml



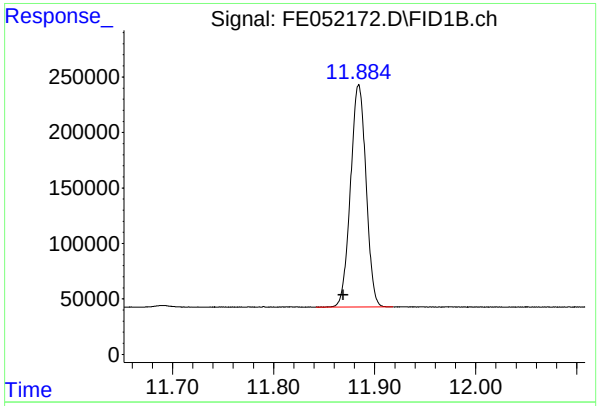
#4 N-TETRADECANE

R.T.: 8.860 min
Delta R.T.: 0.018 min
Response: 1960262
Conc: 19.27 ug/ml



#5 N-HEXADECANE

R.T.: 10.452 min
Delta R.T.: 0.017 min
Response: 2054144
Conc: 19.28 ug/ml



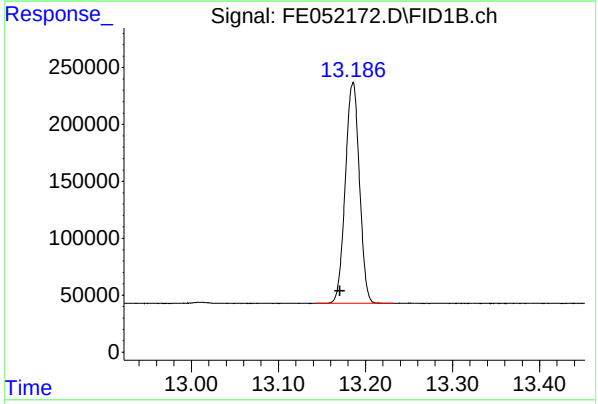
#6 N-OCTADECANE

R.T.: 11.884 min
Delta R.T.: 0.015 min
Response: 2140266
Conc: 19.09 ug/ml

Instrument :
FID_E
ClientSampleId :
PB166415BS

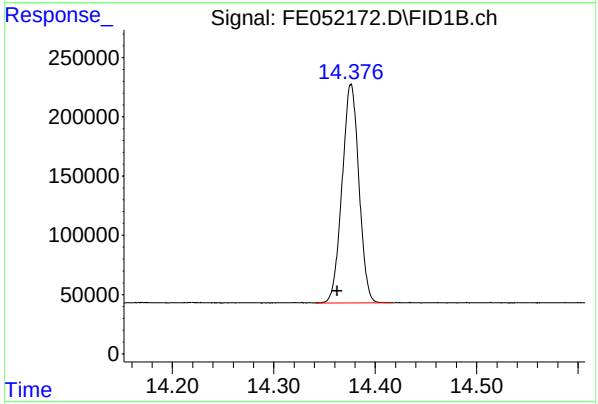
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025



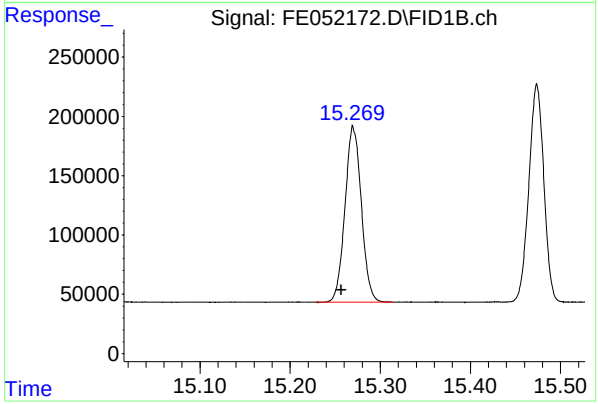
#7 N-EICOSANE

R.T.: 13.186 min
Delta R.T.: 0.015 min
Response: 2185174
Conc: 19.62 ug/ml



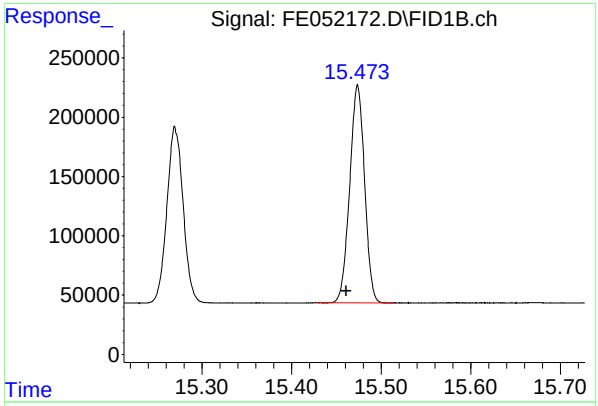
#8 N-DOCOSANE

R.T.: 14.376 min
Delta R.T.: 0.014 min
Response: 2128002
Conc: 19.17 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.269 min
Delta R.T.: 0.012 min
Response: 1871130
Conc: 18.79 ug/ml m



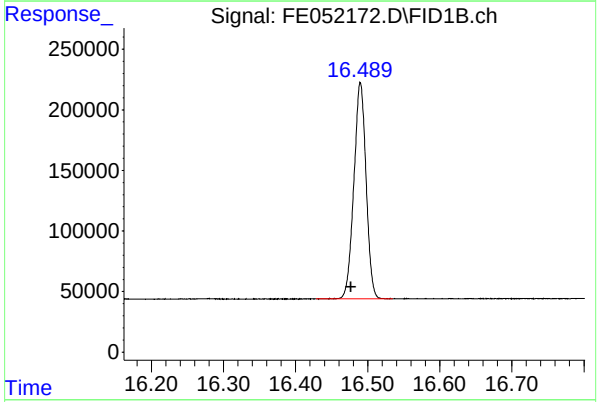
#10 N-TETRACOSANE

R.T.: 15.474 min
Delta R.T.: 0.013 min
Response: 2117307
Conc: 19.14 ug/ml

Instrument :
FID_E
ClientSampleId :
PB166415BS

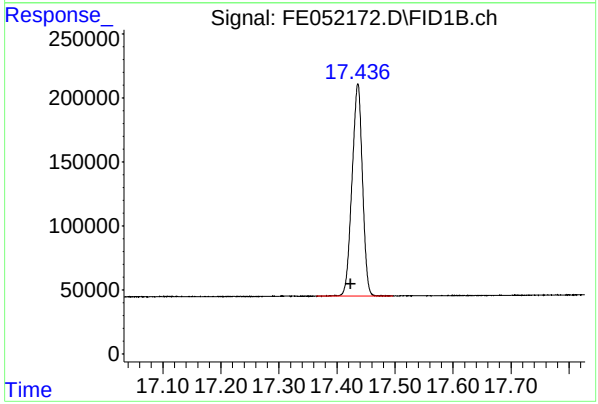
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025



#11 N-HEXACOSANE

R.T.: 16.490 min
Delta R.T.: 0.013 min
Response: 2103127
Conc: 19.29 ug/ml



#12 N-OCTACOSANE

R.T.: 17.436 min
Delta R.T.: 0.013 min
Response: 2070572
Conc: 19.18 ug/ml

Instrument :
FID_E
ClientSampleId :
PB166415BS

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE01312
Data File : FE052172.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 12:38
Sample : PB166415BS
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.930	4.882	4.974	BB	177047	1667496	76.31%	7.536%
2	7.056	7.020	7.107	BB	195607	1831391	83.81%	8.276%
3	8.860	8.819	8.913	BB	203032	1960262	89.71%	8.859%
4	10.452	10.412	10.500	BB	205530	2054144	94.00%	9.283%
5	11.884	11.772	11.920	BB	200340	2139250	97.90%	9.668%
6	13.186	13.143	13.232	BB	194052	2185174	100.00%	9.875%
7	14.376	14.342	14.417	BB	184985	2128002	97.38%	9.617%
8	15.270	15.191	15.322	BB	148202	1871106	85.63%	8.456%
9	15.474	15.427	15.513	BB	183502	2117307	96.89%	9.569%
10	16.490	16.428	16.535	BB	178491	2103127	96.25%	9.504%
11	17.436	17.364	17.497	BB	165740	2070572	94.76%	9.357%
			Sum of corrected areas:			22127831		

FE012325.M Mon Feb 03 02:05:04 2025

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.3-013025MS	SDG No.:	Q1242
Lab Sample ID:	Q1241-05MS	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	89.3 Decanted:
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE052181.D	1	01/31/25 08:50	01/31/25 17:10	PB166415

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	150000	E	207	1860	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	12.8		37 - 130	64%	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_E\Data\FE013125\
Data File : FE052181.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 17:10
Operator : YP\AJ
Sample : Q1241-05MS
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
JPP-5.3-013025MS

Integration File: autoint1.e
Quant Time: Feb 03 01:36:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
9)	S TETRACOSANE-d50 (SURR...	15.243	1271058	12.762	ug/ml
	Target Compounds				
2)	N-DECANE	4.973	1675110	18.306	ug/ml
3)	N-DODECANE	7.095	1826036	18.276	ug/ml
4)	N-TETRADECANE	8.848	414569	4.074	ug/ml
5)	N-HEXADECANE	10.428	733215	6.881	ug/ml
6)	N-OCTADECANE	11.865	126683	1.130	ug/ml
7)	N-EICOSANE	13.165	991476	8.902	ug/ml
8)	N-DOCOSANE	14.356	1338735	12.057	ug/ml
10)	N-TETRACOSANE	15.449	647568	5.854	ug/ml
11)	N-HEXACOSANE	16.476	419148	3.845	ug/ml
12)	N-OCTACOSANE	17.451	10339978	95.794	ug/ml

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

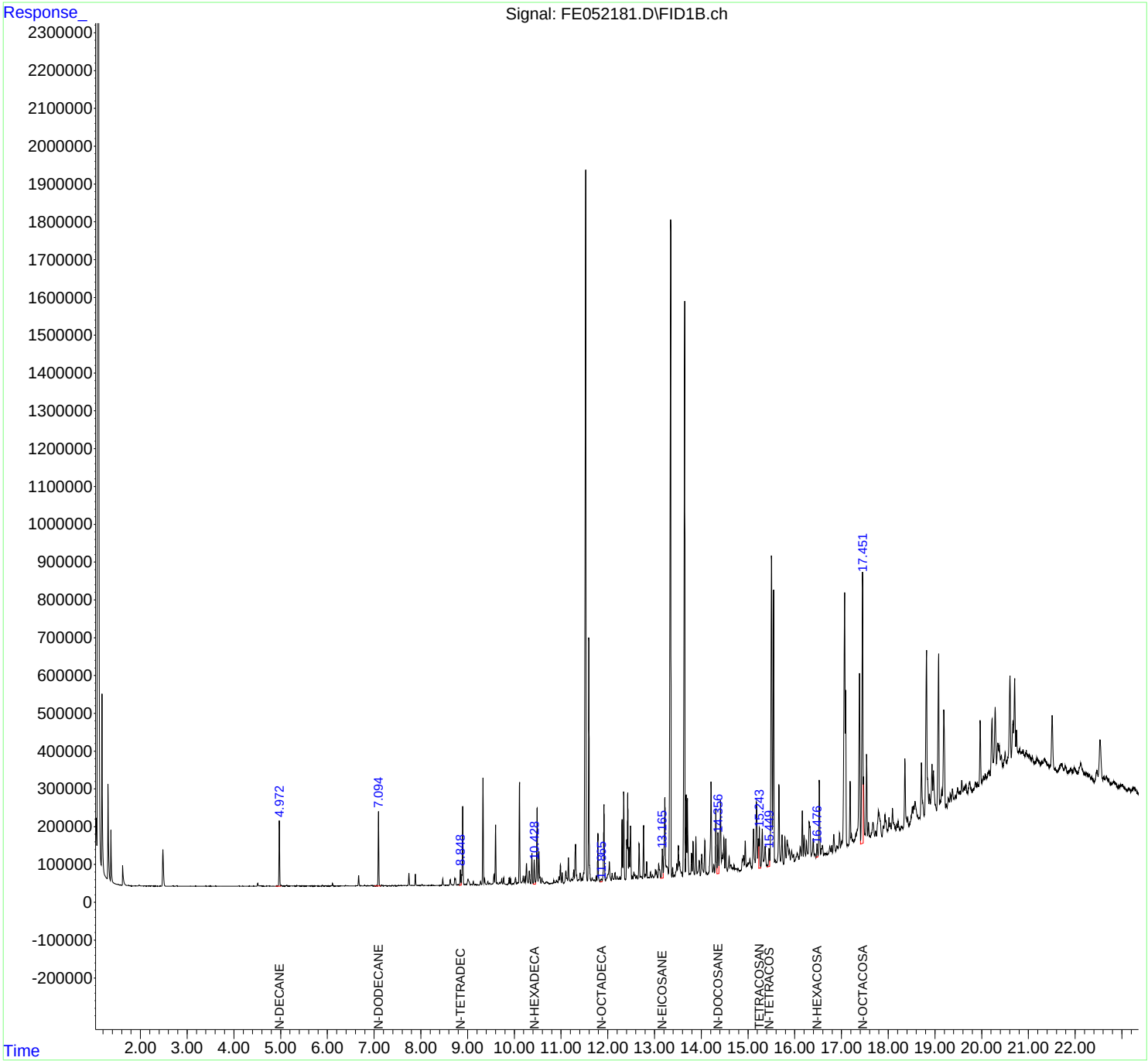
Quantitation Report (QT Reviewed)

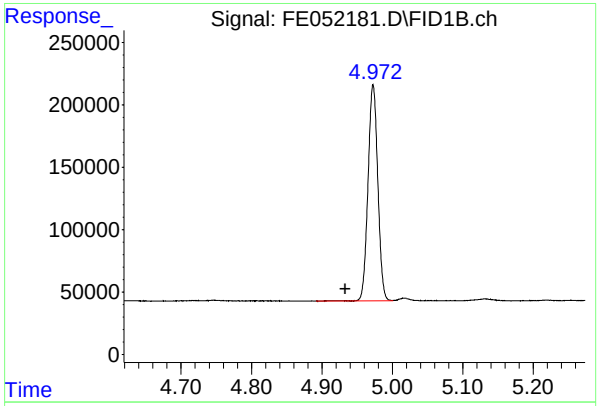
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052181.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 17:10
Operator : YP\AJ
Sample : Q1241-05MS
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
JPP-5.3-013025MS

Integration File: autoint1.e
Quant Time: Feb 03 01:36:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

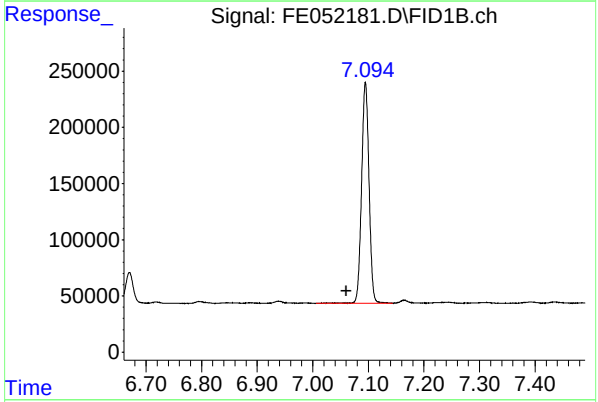




#2 N-DECANE

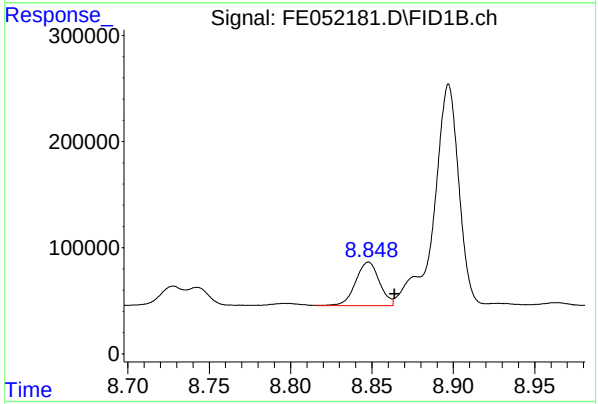
R.T.: 4.973 min
Delta R.T.: 0.040 min
Response: 1675110
Conc: 18.31 ug/ml

Instrument :
FID_E
ClientSampleId :
JPP-5.3-013025MS



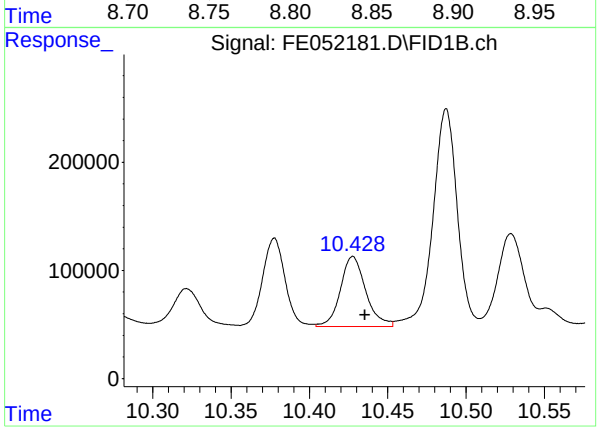
#3 N-DODECANE

R.T.: 7.095 min
Delta R.T.: 0.035 min
Response: 1826036
Conc: 18.28 ug/ml



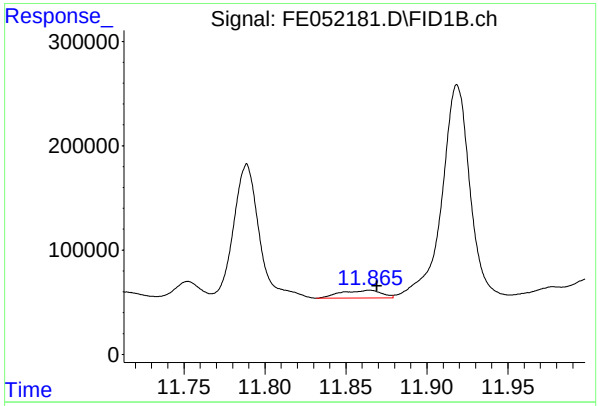
#4 N-TETRADECANE

R.T.: 8.848 min
Delta R.T.: -0.016 min
Response: 414569
Conc: 4.07 ug/ml



#5 N-HEXADECANE

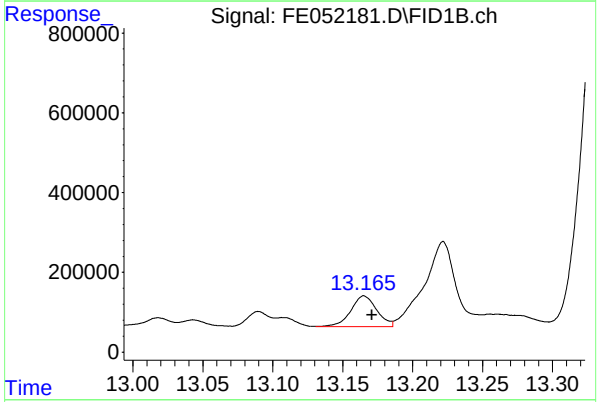
R.T.: 10.428 min
Delta R.T.: -0.008 min
Response: 733215
Conc: 6.88 ug/ml



#6 N-OCTADECANE

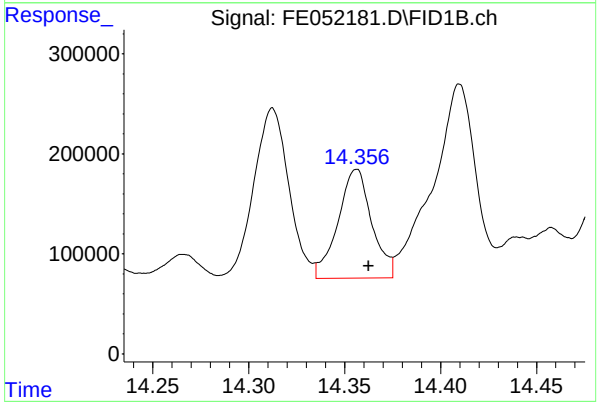
R.T.: 11.865 min
Delta R.T.: -0.004 min
Response: 126683
Conc: 1.13 ug/ml

Instrument :
FID_E
ClientSampleId :
JPP-5.3-013025MS



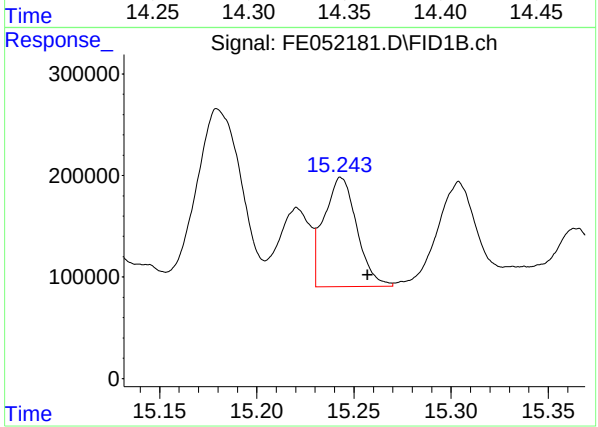
#7 N-EICOSANE

R.T.: 13.165 min
Delta R.T.: -0.006 min
Response: 991476
Conc: 8.90 ug/ml



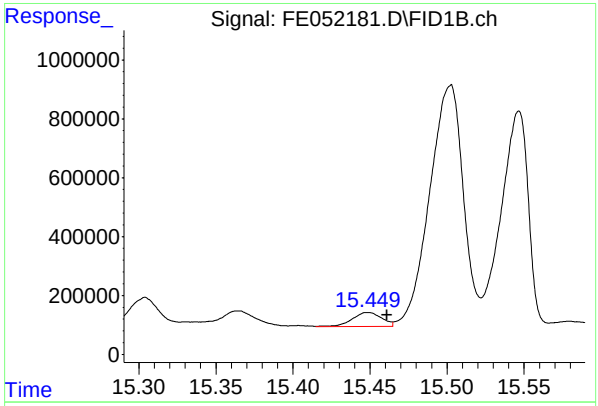
#8 N-DOCOSANE

R.T.: 14.356 min
Delta R.T.: -0.006 min
Response: 1338735
Conc: 12.06 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

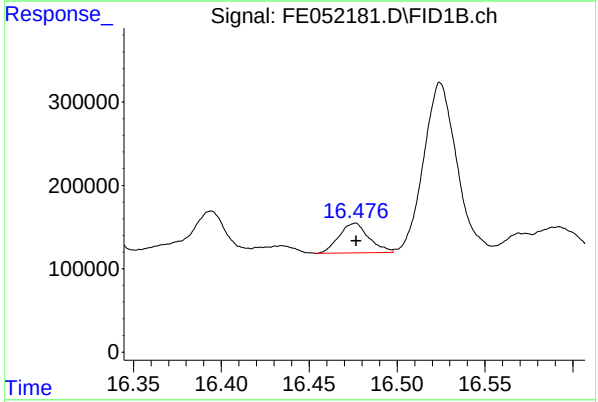
R.T.: 15.243 min
Delta R.T.: -0.014 min
Response: 1271058
Conc: 12.76 ug/ml



#10 N-TETRACOSANE

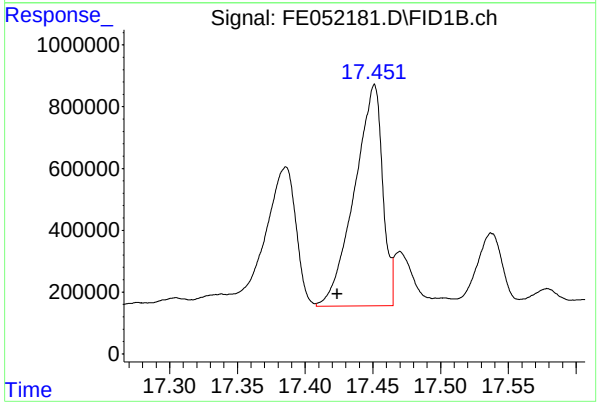
R.T.: 15.449 min
Delta R.T.: -0.012 min
Response: 647568
Conc: 5.85 ug/ml

Instrument :
FID_E
ClientSampleId :
JPP-5.3-013025MS



#11 N-HEXACOSANE

R.T.: 16.476 min
Delta R.T.: 0.000 min
Response: 419148
Conc: 3.85 ug/ml



#12 N-OCTACOSANE

R.T.: 17.451 min
Delta R.T.: 0.027 min
Response: 10339978
Conc: 95.79 ug/ml

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Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052181.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 17:10
Sample : Q1241-05MS
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.912	4.852	4.944	BH	301	3548	0.01%	0.001%
2	4.973	4.944	5.001	HH	173549	1673818	6.41%	0.392%
3	5.017	5.001	5.045	HH	2249	27945	0.11%	0.007%
4	5.055	5.045	5.071	HH	348	4301	0.02%	0.001%
5	5.088	5.071	5.098	HH	365	4282	0.02%	0.001%
6	5.131	5.098	5.177	HH	1772	34366	0.13%	0.008%
7	5.178	5.177	5.182	HH	231	509	0.00%	0.000%
8	5.200	5.182	5.205	HH	385	3503	0.01%	0.001%
9	5.218	5.205	5.240	HH	667	10080	0.04%	0.002%
10	5.258	5.240	5.274	HH	513	8390	0.03%	0.002%
11	5.280	5.274	5.292	HH	493	4116	0.02%	0.001%
12	5.293	5.292	5.310	HH	404	2770	0.01%	0.001%
13	5.317	5.310	5.323	HH	371	2087	0.01%	0.000%
14	5.344	5.323	5.367	HH	922	15169	0.06%	0.004%
15	5.383	5.367	5.413	HH	665	12202	0.05%	0.003%
16	5.432	5.413	5.452	HH	409	6032	0.02%	0.001%
17	5.471	5.452	5.538	HH	644	14634	0.06%	0.003%
18	5.560	5.538	5.566	HH	514	4873	0.02%	0.001%
19	5.572	5.566	5.578	HH	493	3115	0.01%	0.001%
20	5.587	5.578	5.602	HH	453	5079	0.02%	0.001%
21	5.618	5.602	5.629	HH	603	6087	0.02%	0.001%
22	5.643	5.629	5.656	HH	365	4954	0.02%	0.001%
23	5.660	5.656	5.678	HH	414	4210	0.02%	0.001%
24	5.682	5.678	5.699	HH	389	2981	0.01%	0.001%
25	5.708	5.699	5.714	HH	424	1879	0.01%	0.000%
26	5.729	5.714	5.744	HH	421	5500	0.02%	0.001%
27	5.774	5.744	5.798	HH	646	12803	0.05%	0.003%
28	5.812	5.798	5.830	HH	433	4755	0.02%	0.001%
29	5.842	5.830	5.855	HH	209	2015	0.01%	0.000%
30	5.895	5.855	5.922	HH	2158	27880	0.11%	0.007%
31	5.931	5.922	5.941	HH	420	3428	0.01%	0.001%
32	5.956	5.941	5.961	HH	433	4001	0.02%	0.001%
33	5.968	5.961	5.994	HH	393	6550	0.03%	0.002%
34	5.997	5.994	6.006	HH	255	1141	0.00%	0.000%
35	6.010	6.006	6.020	HH	212	1249	0.00%	0.000%
36	6.038	6.020	6.065	HH	371	6074	0.02%	0.001%

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37	6.084	6.065	6.095	HH	1163	12749	0.05%	0.003%
38	6.111	6.095	6.155	HH	7701	87789	0.34%	0.021%
39	6.166	6.155	6.178	HH	426	4337	0.02%	0.001%
40	6.203	6.178	6.216	HH	695	9678	0.04%	0.002%
41	6.229	6.216	6.251	HH	430	6817	0.03%	0.002%
42	6.267	6.251	6.278	HH	432	5536	0.02%	0.001%
43	6.291	6.278	6.310	HH	899	12507	0.05%	0.003%
44	6.319	6.310	6.341	HH	772	10696	0.04%	0.003%
45	6.391	6.341	6.427	HH	1984	38765	0.15%	0.009%
46	6.442	6.427	6.461	HH	1215	14274	0.05%	0.003%
47	6.491	6.461	6.498	HH	683	11350	0.04%	0.003%
48	6.508	6.498	6.520	HH	751	8978	0.03%	0.002%
49	6.537	6.520	6.552	HH	788	12276	0.05%	0.003%
50	6.563	6.552	6.581	HH	757	10464	0.04%	0.002%
51	6.584	6.581	6.595	HH	559	4038	0.02%	0.001%
52	6.612	6.595	6.625	HH	1238	16979	0.07%	0.004%
53	6.638	6.625	6.645	HH	1170	12392	0.05%	0.003%
54	6.670	6.645	6.705	HH	28119	288565	1.11%	0.068%
55	6.718	6.705	6.742	HH	1805	24754	0.09%	0.006%
56	6.746	6.742	6.772	HH	755	11330	0.04%	0.003%
57	6.796	6.772	6.829	HH	2225	40055	0.15%	0.009%
58	6.847	6.829	6.874	HH	1092	24345	0.09%	0.006%
59	6.888	6.874	6.913	HH	1169	19844	0.08%	0.005%
60	6.939	6.913	6.963	HH	2513	39968	0.15%	0.009%
61	6.967	6.963	6.973	HH	869	5247	0.02%	0.001%
62	6.988	6.973	7.005	HH	970	15781	0.06%	0.004%
63	7.028	7.005	7.038	HH	904	15832	0.06%	0.004%
64	7.049	7.038	7.062	HH	970	12223	0.05%	0.003%
65	7.095	7.062	7.144	HH	197146	1855219	7.11%	0.434%
66	7.164	7.144	7.197	HH	3474	51161	0.20%	0.012%
67	7.244	7.197	7.266	HH	1618	46495	0.18%	0.011%
68	7.276	7.266	7.284	HH	905	9001	0.03%	0.002%
69	7.312	7.284	7.344	HH	1291	35397	0.14%	0.008%
70	7.394	7.344	7.415	HH	1841	46768	0.18%	0.011%
71	7.436	7.415	7.472	HH	1883	40252	0.15%	0.009%
72	7.484	7.472	7.491	HH	1091	10628	0.04%	0.002%
73	7.495	7.491	7.502	HH	1006	7040	0.03%	0.002%
74	7.518	7.502	7.542	HH	2250	33657	0.13%	0.008%
75	7.556	7.542	7.573	HH	1967	28785	0.11%	0.007%
76	7.586	7.573	7.602	HH	1608	23653	0.09%	0.006%
77	7.622	7.602	7.643	HH	1734	38206	0.15%	0.009%
78	7.654	7.643	7.667	HH	1897	23931	0.09%	0.006%
79	7.677	7.667	7.697	HH	1964	30233	0.12%	0.007%
80	7.699	7.697	7.712	HH	1471	12574	0.05%	0.003%
81	7.746	7.712	7.774	HH	33821	361973	1.39%	0.085%
82	7.784	7.774	7.789	HH	1916	16740	0.06%	0.004%
83	7.804	7.789	7.816	HH	2440	33433	0.13%	0.008%
84	7.818	7.816	7.829	HH	2084	15395	0.06%	0.004%
85	7.839	7.829	7.861	HH	2104	32715	0.13%	0.008%
86	7.884	7.861	7.915	HH	31767	329841	1.26%	0.077%
87	7.925	7.915	7.947	HH	1936	32238	0.12%	0.008%
88	7.961	7.947	7.972	HH	1605	21121	0.08%	0.005%
89	7.979	7.972	7.989	HH	1525	15582	0.06%	0.004%

90	8.026	7.989	8.071	HH	4554	109629	0.42%	0.026%
91	8.087	8.071	8.091	HH	1854	21085	0.08%	0.005%
92	8.107	8.091	8.126	HH	2074	39446	0.15%	0.009%
93	8.132	8.126	8.162	HH	1846	34672	0.13%	0.008%
94	8.184	8.162	8.189	HH	1780	25537	0.10%	0.006%
95	8.218	8.189	8.229	HH	2167	45517	0.17%	0.011%
96	8.239	8.229	8.261	HH	2268	38582	0.15%	0.009%
97	8.272	8.261	8.304	HH	1899	39825	0.15%	0.009%
98	8.326	8.304	8.333	HH	2136	30659	0.12%	0.007%
99	8.343	8.333	8.356	HH	2080	26062	0.10%	0.006%
100	8.360	8.356	8.392	HH	2019	38209	0.15%	0.009%
101	8.395	8.392	8.410	HH	1699	17914	0.07%	0.004%
102	8.434	8.410	8.447	HH	2513	46695	0.18%	0.011%
103	8.471	8.447	8.497	HH	19903	235290	0.90%	0.055%
104	8.506	8.497	8.537	HH	2890	58282	0.22%	0.014%
105	8.550	8.537	8.567	HH	2681	43486	0.17%	0.010%
106	8.578	8.567	8.583	HH	2638	23779	0.09%	0.006%
107	8.593	8.583	8.608	HH	2854	39533	0.15%	0.009%
108	8.630	8.608	8.667	HH	17456	263814	1.01%	0.062%
109	8.676	8.667	8.695	HH	3584	53156	0.20%	0.012%
110	8.728	8.695	8.736	HH	21037	243054	0.93%	0.057%
111	8.743	8.736	8.779	HH	19833	227334	0.87%	0.053%
112	8.797	8.779	8.816	HH	4784	82896	0.32%	0.019%
113	8.848	8.816	8.863	HH	43912	491986	1.88%	0.115%
114	8.897	8.863	8.921	HH	211363	2311378	8.85%	0.541%
115	8.928	8.921	8.945	HH	4885	60237	0.23%	0.014%
116	8.964	8.945	8.982	HH	5395	91701	0.35%	0.021%
117	9.010	8.982	9.066	HH	19096	522931	2.00%	0.122%
118	9.081	9.066	9.107	HH	5091	104365	0.40%	0.024%
119	9.124	9.107	9.152	HH	13271	189727	0.73%	0.044%
120	9.166	9.152	9.181	HH	4975	74293	0.28%	0.017%
121	9.197	9.181	9.216	HH	3722	74500	0.29%	0.017%
122	9.228	9.216	9.241	HH	3259	46074	0.18%	0.011%
123	9.248	9.241	9.252	HH	3257	21453	0.08%	0.005%
124	9.279	9.252	9.302	HH	13232	202753	0.78%	0.047%
125	9.332	9.302	9.352	HH	286408	2829735	10.84%	0.662%
126	9.365	9.352	9.410	HH	20953	331821	1.27%	0.078%
127	9.435	9.410	9.456	HH	13110	213991	0.82%	0.050%
128	9.472	9.456	9.501	HH	8530	177307	0.68%	0.041%
129	9.517	9.501	9.522	HH	5978	70952	0.27%	0.017%
130	9.534	9.522	9.541	HH	6256	66145	0.25%	0.015%
131	9.567	9.541	9.582	HH	31162	440259	1.69%	0.103%
132	9.601	9.582	9.623	HH	161969	1630870	6.25%	0.382%
133	9.634	9.623	9.664	HH	9640	169000	0.65%	0.040%
134	9.685	9.664	9.700	HH	10222	161828	0.62%	0.038%
135	9.732	9.700	9.750	HH	19520	337599	1.29%	0.079%
136	9.774	9.750	9.796	HH	22602	322032	1.23%	0.075%
137	9.800	9.796	9.819	HH	5986	74089	0.28%	0.017%
138	9.833	9.819	9.851	HH	5041	89635	0.34%	0.021%
139	9.890	9.851	9.906	HH	22259	339508	1.30%	0.079%
140	9.921	9.906	9.950	HH	20946	283191	1.08%	0.066%
141	9.974	9.950	9.987	HH	6199	124889	0.48%	0.029%

142	10.025	9.987	10.047	HH	23055	426056	1.63%	0.100%
143	10.066	10.047	10.073	HH	8887	123143	0.47%	0.029%
144	10.082	10.073	10.087	HH	8693	67830	0.26%	0.016%
145	10.112	10.087	10.157	HH	274329	2925521	11.21%	0.685%
146	10.191	10.157	10.213	HH	26683	515880	1.98%	0.121%
147	10.229	10.213	10.243	HH	25709	297800	1.14%	0.070%
148	10.263	10.243	10.298	HH	60192	925135	3.54%	0.217%
149	10.322	10.298	10.356	HH	40382	633324	2.43%	0.148%
150	10.378	10.356	10.404	HH	87209	972953	3.73%	0.228%
151	10.428	10.404	10.453	HH	70235	887713	3.40%	0.208%
152	10.487	10.453	10.509	HH	206954	2353209	9.01%	0.551%
153	10.529	10.509	10.572	HH	91418	1360959	5.21%	0.319%
154	10.592	10.572	10.611	HH	22614	345571	1.32%	0.081%
155	10.620	10.611	10.645	HH	12273	193978	0.74%	0.045%
156	10.691	10.645	10.715	HH	11701	399215	1.53%	0.093%
157	10.727	10.715	10.759	HH	9987	199674	0.76%	0.047%
158	10.790	10.759	10.802	HH	8038	182229	0.70%	0.043%
159	10.811	10.802	10.823	HH	7977	100117	0.38%	0.023%
160	10.846	10.823	10.867	HH	15569	292687	1.12%	0.069%
161	10.878	10.867	10.886	HH	9670	105180	0.40%	0.025%
162	10.903	10.886	10.916	HH	15711	225586	0.86%	0.053%
163	10.923	10.916	10.936	HH	12121	132411	0.51%	0.031%
164	10.954	10.936	10.966	HH	25034	337560	1.29%	0.079%
165	10.987	10.966	11.009	HH	57811	836100	3.20%	0.196%
166	11.027	11.009	11.057	HH	36013	535227	2.05%	0.125%
167	11.103	11.057	11.120	HH	39695	753333	2.89%	0.176%
168	11.127	11.120	11.140	HH	21664	233089	0.89%	0.055%
169	11.160	11.140	11.193	HH	76054	1115449	4.27%	0.261%
170	11.198	11.193	11.207	HH	13664	111325	0.43%	0.026%
171	11.222	11.207	11.232	HH	18566	240850	0.92%	0.056%
172	11.239	11.232	11.249	HH	17433	175486	0.67%	0.041%
173	11.271	11.249	11.285	HH	43266	626518	2.40%	0.147%
174	11.313	11.285	11.332	HH	111137	1904391	7.30%	0.446%
175	11.336	11.332	11.354	HH	27886	292246	1.12%	0.068%
176	11.379	11.354	11.390	HH	17769	338513	1.30%	0.079%
177	11.408	11.390	11.427	HH	34559	531209	2.03%	0.124%
178	11.442	11.427	11.463	HH	20914	382244	1.46%	0.089%
179	11.483	11.463	11.489	HH	35668	415314	1.59%	0.097%
180	11.530	11.489	11.562	HH	1891774	24689658	94.58%	5.779%
181	11.593	11.562	11.647	HH	656863	7375721	28.25%	1.726%
182	11.667	11.647	11.702	HH	22104	577695	2.21%	0.135%
183	11.713	11.702	11.733	HH	17130	282149	1.08%	0.066%
184	11.752	11.733	11.767	HH	27166	397359	1.52%	0.093%
185	11.789	11.767	11.832	HH	140179	1847006	7.08%	0.432%
186	11.865	11.832	11.879	HH	18783	448895	1.72%	0.105%
187	11.919	11.879	11.952	HH	215782	2972671	11.39%	0.696%
188	11.979	11.952	11.983	HH	22021	346633	1.33%	0.081%
189	12.031	11.983	12.074	HH	65145	1735857	6.65%	0.406%
190	12.095	12.074	12.122	HH	34540	696803	2.67%	0.163%
191	12.156	12.122	12.175	HH	35648	748439	2.87%	0.175%
192	12.196	12.175	12.220	HH	26066	570205	2.18%	0.133%
193	12.233	12.220	12.244	HH	19791	270280	1.04%	0.063%
194	12.259	12.244	12.275	HH	24751	389042	1.49%	0.091%

195	12.307	12.275	12.322	HH	176642	2228603	8.54%	0.522%
196	12.339	12.322	12.367	HH	249361	2854829	10.94%	0.668%
197	12.375	12.367	12.381	HH	17851	143971	0.55%	0.034%
198	12.405	12.381	12.413	HH	123096	1342825	5.14%	0.314%
199	12.427	12.413	12.442	HH	247359	2713561	10.39%	0.635%
200	12.456	12.442	12.469	HH	103430	1213147	4.65%	0.284%
201	12.486	12.469	12.507	HH	159381	1950988	7.47%	0.457%
202	12.520	12.507	12.535	HH	27098	381814	1.46%	0.089%
203	12.559	12.535	12.572	HH	37310	629947	2.41%	0.147%
204	12.581	12.572	12.601	HH	30113	452134	1.73%	0.106%
205	12.622	12.601	12.642	HH	27723	586134	2.25%	0.137%
206	12.668	12.642	12.705	HH	112652	1831695	7.02%	0.429%
207	12.714	12.705	12.743	HH	25228	534434	2.05%	0.125%
208	12.768	12.743	12.789	HH	160837	2024883	7.76%	0.474%
209	12.803	12.789	12.812	HH	32001	406725	1.56%	0.095%
210	12.830	12.812	12.856	HH	65450	1016318	3.89%	0.238%
211	12.880	12.856	12.894	HH	23719	522427	2.00%	0.122%
212	12.917	12.894	12.936	HH	37603	723791	2.77%	0.169%
213	12.954	12.936	12.989	HH	30555	810573	3.11%	0.190%
214	13.018	12.989	13.032	HH	43404	851129	3.26%	0.199%
215	13.043	13.032	13.072	HH	38383	698607	2.68%	0.164%
216	13.090	13.072	13.103	HH	59246	810842	3.11%	0.190%
217	13.108	13.103	13.131	HH	43730	568020	2.18%	0.133%
218	13.165	13.131	13.186	HH	98926	1695235	6.49%	0.397%
219	13.222	13.186	13.250	HH	234478	4250263	16.28%	0.995%
220	13.255	13.250	13.297	HH	52834	1324010	5.07%	0.310%
221	13.346	13.297	13.371	HH	1749935	26104905	100.00%	6.110%
222	13.388	13.371	13.405	HH	49209	717286	2.75%	0.168%
223	13.419	13.405	13.433	HH	29984	470168	1.80%	0.110%
224	13.475	13.433	13.489	HH	59251	1386486	5.31%	0.325%
225	13.511	13.489	13.526	HH	107271	1637659	6.27%	0.383%
226	13.535	13.526	13.568	HH	65019	1254969	4.81%	0.294%
227	13.579	13.568	13.596	HH	37303	554816	2.13%	0.130%
228	13.644	13.596	13.660	HH	1548929	21592296	82.71%	5.054%
229	13.679	13.660	13.692	HH	241516	2837276	10.87%	0.664%
230	13.706	13.692	13.738	HH	232764	3130213	11.99%	0.733%
231	13.759	13.738	13.771	HH	33974	630338	2.41%	0.148%
232	13.790	13.771	13.805	HH	87321	1208349	4.63%	0.283%
233	13.824	13.805	13.852	HH	118244	1877447	7.19%	0.439%
234	13.883	13.852	13.907	HH	131585	2114764	8.10%	0.495%
235	13.956	13.907	13.977	HH	67813	1875151	7.18%	0.439%
236	14.011	13.977	14.050	HH	84308	2210345	8.47%	0.517%
237	14.075	14.050	14.100	HH	121019	2191198	8.39%	0.513%
238	14.112	14.100	14.129	HH	35841	579204	2.22%	0.136%
239	14.208	14.129	14.245	HH	275057	5974430	22.89%	1.398%
240	14.266	14.245	14.284	HH	56614	1075545	4.12%	0.252%
241	14.312	14.284	14.335	HH	203460	3167095	12.13%	0.741%
242	14.356	14.335	14.375	HH	141724	2131155	8.16%	0.499%
243	14.410	14.375	14.430	HH	227040	4119628	15.78%	0.964%
244	14.440	14.430	14.446	HH	73977	681032	2.61%	0.159%
245	14.458	14.446	14.468	HH	83625	1027423	3.94%	0.240%
246	14.484	14.468	14.503	HH	128038	1884778	7.22%	0.441%

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247	14.523	14.503	14.556	HH	125370	2281197	8.74%	0.534%
248	14.594	14.556	14.611	HH	77945	1847526	7.08%	0.432%
249	14.635	14.611	14.655	HH	56758	1391424	5.33%	0.326%
250	14.671	14.655	14.684	HH	49409	820441	3.14%	0.192%
251	14.701	14.684	14.717	HH	56904	970878	3.72%	0.227%
252	14.727	14.717	14.735	HH	47151	504653	1.93%	0.118%
253	14.743	14.735	14.768	HH	46456	911728	3.49%	0.213%
254	14.788	14.768	14.823	HH	47522	1406541	5.39%	0.329%
255	14.840	14.823	14.852	HH	42638	725022	2.78%	0.170%
256	14.876	14.852	14.886	HH	71079	1232064	4.72%	0.288%
257	14.904	14.886	14.920	HH	81172	1438495	5.51%	0.337%
258	14.939	14.920	14.961	HH	119703	2015867	7.72%	0.472%
259	14.974	14.961	14.983	HH	56623	742191	2.84%	0.174%
260	15.000	14.983	15.008	HH	61235	858573	3.29%	0.201%
261	15.039	15.008	15.084	HH	72671	2679598	10.26%	0.627%
262	15.117	15.084	15.153	HH	151819	3706381	14.20%	0.867%
263	15.180	15.153	15.205	HH	222789	4324746	16.57%	1.012%
264	15.221	15.205	15.230	HH	125771	1620445	6.21%	0.379%
265	15.243	15.230	15.270	HH	155298	2407665	9.22%	0.564%
266	15.304	15.270	15.340	HH	151460	3659536	14.02%	0.856%
267	15.364	15.340	15.397	HH	104717	2674047	10.24%	0.626%
268	15.404	15.397	15.415	HH	55338	569453	2.18%	0.133%
269	15.449	15.415	15.465	HH	99406	2190188	8.39%	0.513%
270	15.502	15.465	15.522	HH	871496	14267128	54.65%	3.339%
271	15.547	15.522	15.567	HH	783742	10381130	39.77%	2.430%
272	15.580	15.567	15.605	HH	70051	1478133	5.66%	0.346%
273	15.661	15.605	15.695	HH	269064	6123593	23.46%	1.433%
274	15.727	15.695	15.762	HH	136192	3439246	13.17%	0.805%
275	15.788	15.762	15.816	HH	130750	2947693	11.29%	0.690%
276	15.838	15.816	15.872	HH	122631	3433656	13.15%	0.804%
277	15.885	15.872	15.907	HH	96134	1764825	6.76%	0.413%
278	15.933	15.907	15.958	HH	94455	2558945	9.80%	0.599%
279	15.973	15.958	15.996	HH	83398	1703112	6.52%	0.399%
280	16.052	15.996	16.093	HH	87879	4486013	17.18%	1.050%
281	16.116	16.093	16.138	HH	104381	2427453	9.30%	0.568%
282	16.161	16.138	16.181	HH	199341	3380806	12.95%	0.791%
283	16.199	16.181	16.232	HH	135266	3114075	11.93%	0.729%
284	16.249	16.232	16.283	HH	120590	2940228	11.26%	0.688%
285	16.308	16.283	16.320	HH	170678	3007320	11.52%	0.704%
286	16.324	16.320	16.352	HH	159078	2272582	8.71%	0.532%
287	16.394	16.352	16.417	HH	126472	3774007	14.46%	0.883%
288	16.434	16.417	16.454	HH	84921	1786925	6.85%	0.418%
289	16.476	16.454	16.497	HH	111819	2407182	9.22%	0.563%
290	16.525	16.497	16.555	HH	279785	5327176	20.41%	1.247%
291	16.570	16.555	16.577	HH	99245	1273626	4.88%	0.298%
292	16.592	16.577	16.620	HH	107593	2451281	9.39%	0.574%
293	16.631	16.620	16.637	HH	84306	873440	3.35%	0.204%
294	16.654	16.637	16.673	HH	87614	1832294	7.02%	0.429%
295	16.685	16.673	16.700	HH	86902	1348669	5.17%	0.316%
296	16.749	16.700	16.774	HH	105538	4098215	15.70%	0.959%
297	16.791	16.774	16.809	HH	107657	2059516	7.89%	0.482%
298	16.834	16.809	16.878	HH	137219	4495672	17.22%	1.052%
299	16.905	16.878	16.933	HH	106759	3353762	12.85%	0.785%

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300	16.957	16.933	16.980	HH	140950	3347235	12.82%	0.783%
301	17.004	16.980	17.016	HH	119496	2440069	9.35%	0.571%
302	17.067	17.016	17.081	HH	776713	15700979	60.15%	3.675%
303	17.089	17.081	17.115	HH	517488	5852524	22.42%	1.370%
304	17.126	17.115	17.141	HH	110576	1722497	6.60%	0.403%
305	17.185	17.141	17.203	HH	277800	6091367	23.33%	1.426%
306	17.213	17.203	17.229	HH	138572	2036588	7.80%	0.477%
307	17.240	17.229	17.259	HH	123771	2112154	8.09%	0.494%
308	17.276	17.259	17.284	HH	123777	1832614	7.02%	0.429%
309	17.305	17.284	17.317	HH	139457	2635834	10.10%	0.617%
310	17.386	17.317	17.408	HH	563003	13813880	52.92%	3.233%
311	17.451	17.408	17.461	HHA	829208	13546539	51.89%	3.171%

Sum of corrected areas: 427267569

FE012325.M Mon Feb 03 02:19:51 2025

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.3-013025MSD	SDG No.:	Q1242
Lab Sample ID:	Q1241-05MSD	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	89.3 Decanted:
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE052182.D	1	01/31/25 08:50	01/31/25 17:40	PB166415

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	152000	E	207	1870	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	12.4		37 - 130	62%	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_E\Data\FE013125\
Data File : FE052182.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 17:40
Operator : YP\AJ
Sample : Q1241-05MSD
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
JPP-5.3-013025MSD

Integration File: autoint1.e
Quant Time: Feb 03 01:36:31 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	15.248	1234688	12.397 ug/ml
	Target Compounds			
2)	N-DECANE	4.978	1653958	18.075 ug/ml
3)	N-DODECANE	7.099	1805020	18.065 ug/ml
4)	N-TETRADECANE	8.852	403253	3.963 ug/ml
5)	N-HEXADECANE	10.433	725075	6.804 ug/ml
6)	N-OCTADECANE	11.869	119565	1.066 ug/ml
7)	N-EICOSANE	13.170	970798	8.716 ug/ml
8)	N-DOCOSANE	14.360	1318984	11.879 ug/ml
10)	N-TETRACOSANE	15.453	606157	5.480 ug/ml
11)	N-HEXACOSANE	16.478	426274	3.910 ug/ml
12)	N-OCTACOSANE	17.454	10079391	93.380 ug/ml

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

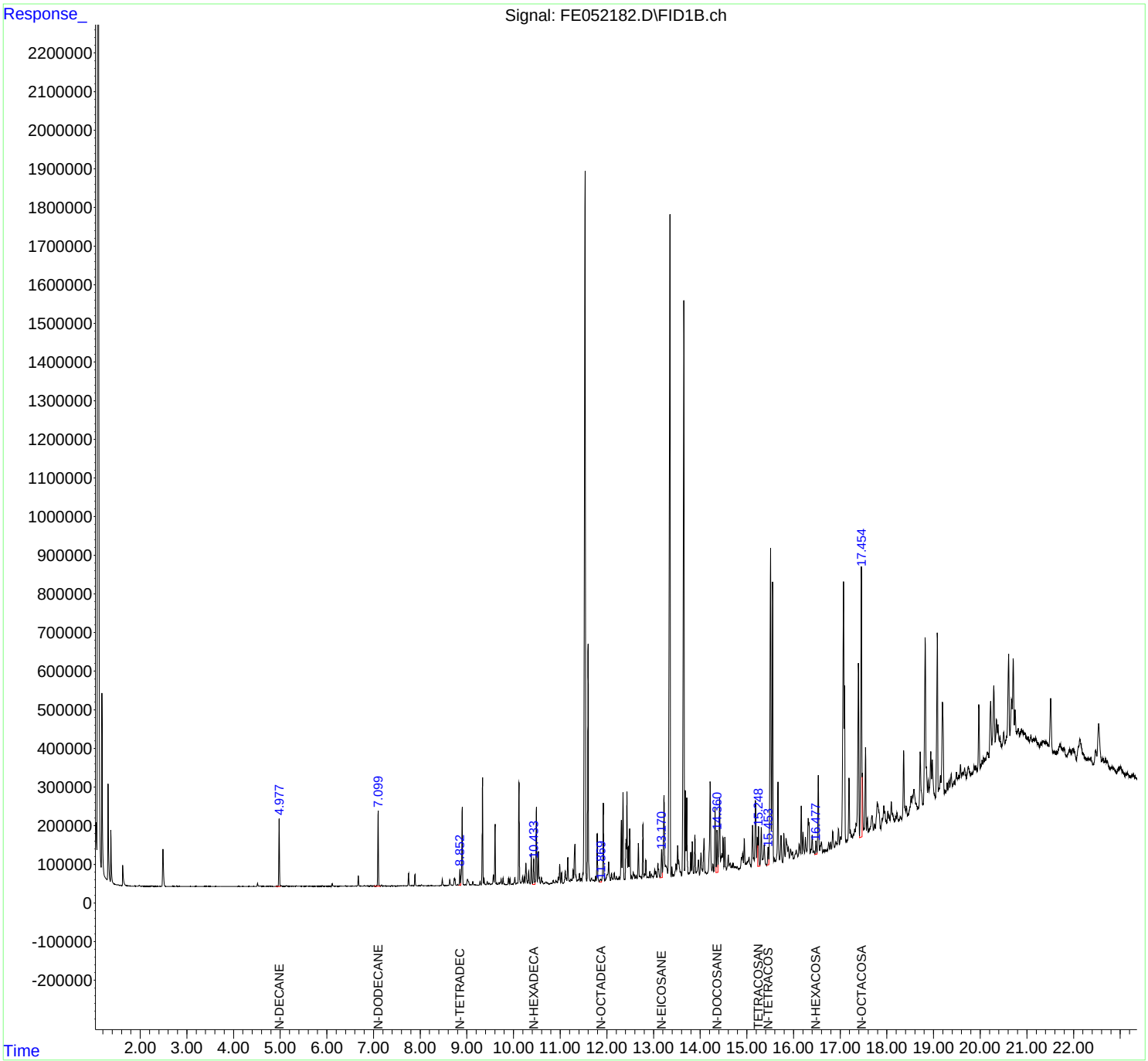
Quantitation Report (QT Reviewed)

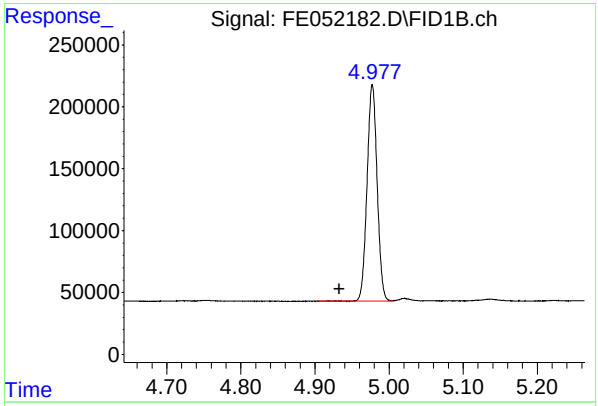
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052182.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 17:40
Operator : YP\AJ
Sample : Q1241-05MSD
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
JPP-5.3-013025MSD

Integration File: autoint1.e
Quant Time: Feb 03 01:36:31 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

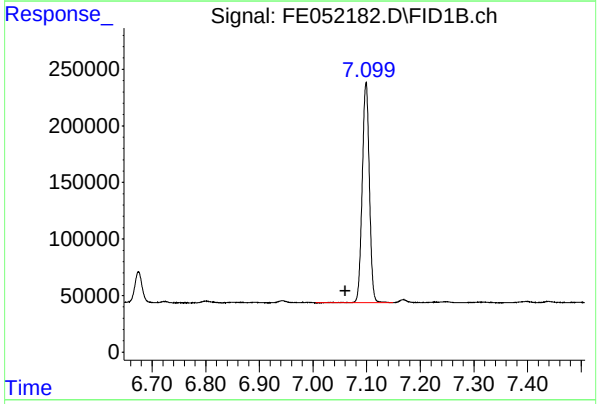




#2 N-DECANE

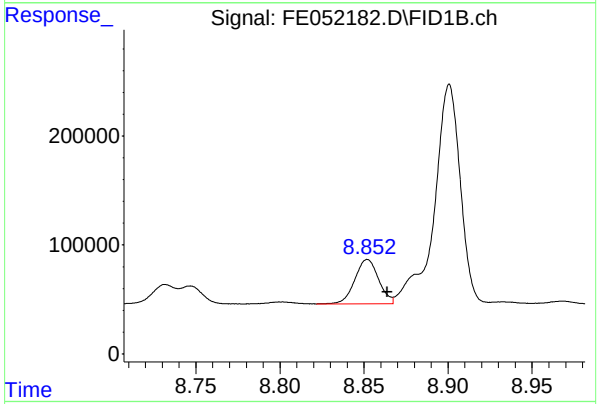
R.T.: 4.978 min
Delta R.T.: 0.045 min
Response: 1653958
Conc: 18.08 ug/ml

Instrument :
FID_E
ClientSampleId :
JPP-5.3-013025MSD



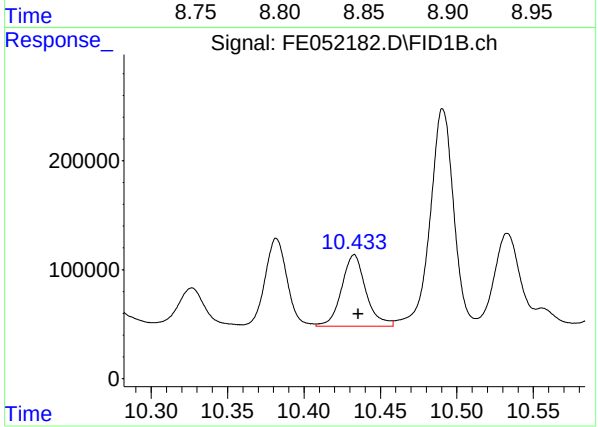
#3 N-DODECANE

R.T.: 7.099 min
Delta R.T.: 0.039 min
Response: 1805020
Conc: 18.07 ug/ml



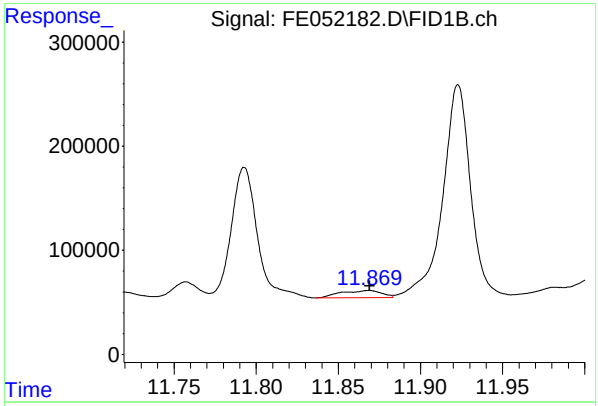
#4 N-TETRADECANE

R.T.: 8.852 min
Delta R.T.: -0.012 min
Response: 403253
Conc: 3.96 ug/ml



#5 N-HEXADECANE

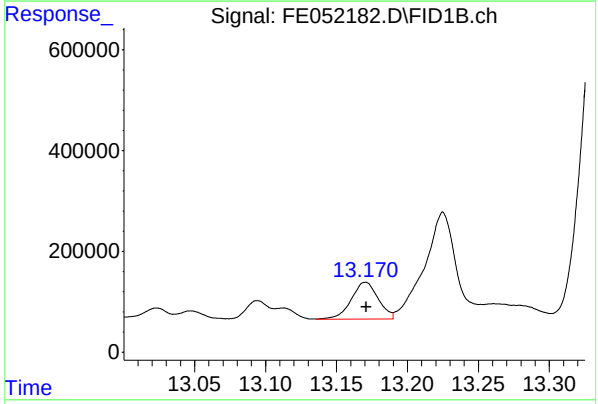
R.T.: 10.433 min
Delta R.T.: -0.003 min
Response: 725075
Conc: 6.80 ug/ml



#6 N-OCTADECANE

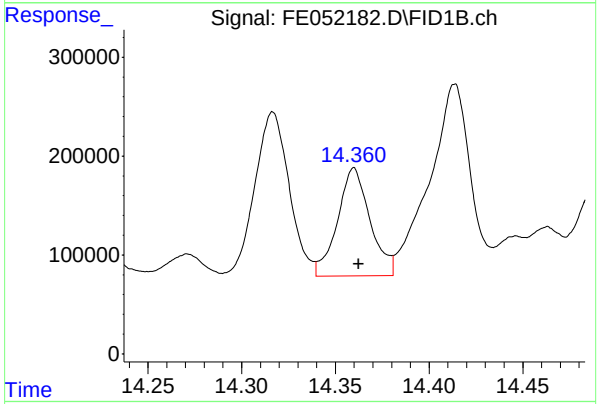
R.T.: 11.869 min
Delta R.T.: 0.000 min
Response: 119565
Conc: 1.07 ug/ml

Instrument :
FID_E
ClientSampleId :
JPP-5.3-013025MSD



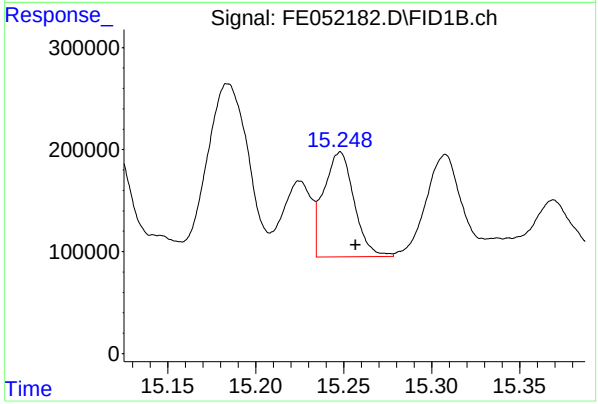
#7 N-EICOSANE

R.T.: 13.170 min
Delta R.T.: 0.000 min
Response: 970798
Conc: 8.72 ug/ml



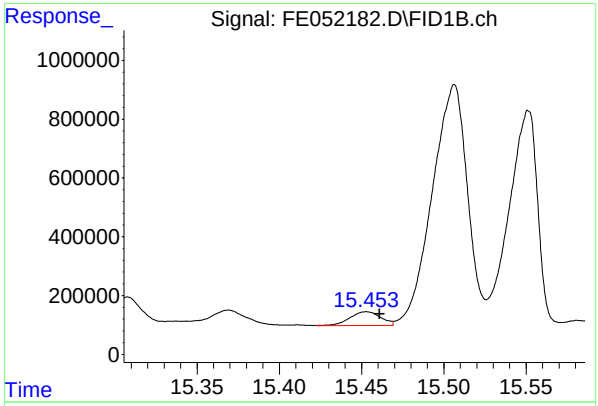
#8 N-DOCOSANE

R.T.: 14.360 min
Delta R.T.: -0.003 min
Response: 1318984
Conc: 11.88 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

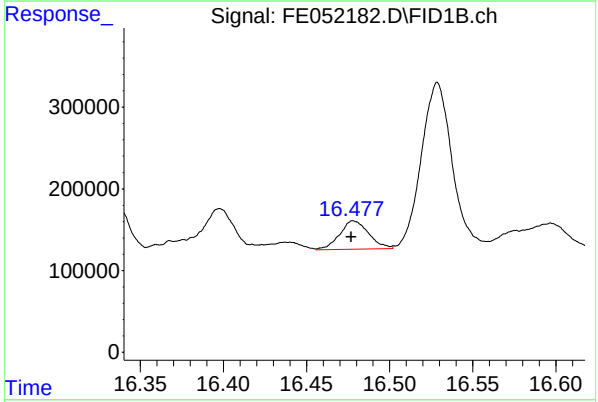
R.T.: 15.248 min
Delta R.T.: -0.009 min
Response: 1234688
Conc: 12.40 ug/ml



#10 N-TETRACOSANE

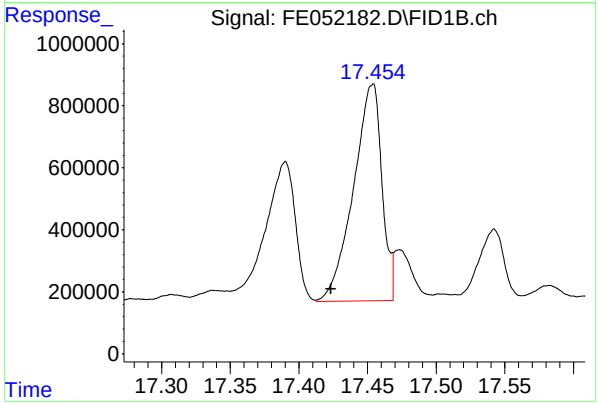
R.T.: 15.453 min
Delta R.T.: -0.008 min
Response: 606157
Conc: 5.48 ug/ml

Instrument :
FID_E
ClientSampleId :
JPP-5.3-013025MSD



#11 N-HEXACOSANE

R.T.: 16.478 min
Delta R.T.: 0.001 min
Response: 426274
Conc: 3.91 ug/ml



#12 N-OCTACOSANE

R.T.: 17.454 min
Delta R.T.: 0.030 min
Response: 10079391
Conc: 93.38 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052182.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 17:40
Sample : Q1241-05MSD
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.890	4.852	4.897	BH	-21	-1745	-0.01%	-0.000%
2	4.918	4.897	4.944	PH	188	1623	0.01%	0.000%
3	4.978	4.944	5.005	PH	174906	1654055	6.43%	0.382%
4	5.021	5.005	5.046	HH	2179	25035	0.10%	0.006%
5	5.051	5.046	5.076	HH	264	3969	0.02%	0.001%
6	5.083	5.076	5.088	HH	265	1425	0.01%	0.000%
7	5.092	5.088	5.104	HH	238	1856	0.01%	0.000%
8	5.137	5.104	5.172	HH	1666	29518	0.11%	0.007%
9	5.176	5.172	5.194	PH	154	1048	0.00%	0.000%
10	5.223	5.194	5.245	HH	502	8320	0.03%	0.002%
11	5.259	5.245	5.272	HH	388	4378	0.02%	0.001%
12	5.291	5.272	5.328	HH	495	9714	0.04%	0.002%
13	5.348	5.328	5.366	HH	763	10484	0.04%	0.002%
14	5.371	5.366	5.382	HH	419	3302	0.01%	0.001%
15	5.391	5.382	5.418	HH	507	8973	0.03%	0.002%
16	5.428	5.418	5.452	HH	319	4871	0.02%	0.001%
17	5.473	5.452	5.491	HH	476	6953	0.03%	0.002%
18	5.501	5.491	5.527	HH	324	4223	0.02%	0.001%
19	5.533	5.527	5.545	HH	118	701	0.00%	0.000%
20	5.564	5.545	5.585	PH	427	6103	0.02%	0.001%
21	5.594	5.585	5.607	HH	368	3952	0.02%	0.001%
22	5.619	5.607	5.640	HH	475	4793	0.02%	0.001%
23	5.646	5.640	5.658	HH	357	2794	0.01%	0.001%
24	5.665	5.658	5.672	HH	331	1901	0.01%	0.000%
25	5.677	5.672	5.688	HH	270	1849	0.01%	0.000%
26	5.690	5.688	5.705	HH	218	1190	0.00%	0.000%
27	5.737	5.705	5.752	PH	415	5487	0.02%	0.001%
28	5.772	5.752	5.798	HH	622	10053	0.04%	0.002%
29	5.813	5.798	5.856	PH	342	4057	0.02%	0.001%
30	5.860	5.856	5.876	HH	92	626	0.00%	0.000%
31	5.899	5.876	5.929	HH	2043	23417	0.09%	0.005%
32	5.933	5.929	5.942	HH	269	1505	0.01%	0.000%
33	5.946	5.942	5.952	HH	281	1086	0.00%	0.000%
34	5.963	5.952	5.969	HH	364	3023	0.01%	0.001%
35	5.974	5.969	6.011	HH	344	4260	0.02%	0.001%
36	6.015	6.011	6.019	HH	147	311	0.00%	0.000%

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37	6.049	6.019	6.070	HH	281	3753	0.01%	0.001%
38	6.088	6.070	6.099	PH	1197	11154	0.04%	0.003%
39	6.115	6.099	6.166	HH	7713	84996	0.33%	0.020%
40	6.171	6.166	6.191	HH	269	3442	0.01%	0.001%
41	6.207	6.191	6.222	HH	590	6669	0.03%	0.002%
42	6.230	6.222	6.263	HH	276	5129	0.02%	0.001%
43	6.275	6.263	6.283	HH	407	3400	0.01%	0.001%
44	6.296	6.283	6.317	HH	853	11422	0.04%	0.003%
45	6.326	6.317	6.346	HH	689	8709	0.03%	0.002%
46	6.351	6.346	6.357	HH	474	2237	0.01%	0.001%
47	6.396	6.357	6.428	HH	1701	31398	0.12%	0.007%
48	6.446	6.428	6.463	HH	1140	13061	0.05%	0.003%
49	6.495	6.463	6.499	HH	573	8752	0.03%	0.002%
50	6.505	6.499	6.529	HH	702	10125	0.04%	0.002%
51	6.537	6.529	6.557	HH	749	9300	0.04%	0.002%
52	6.569	6.557	6.593	HH	670	9911	0.04%	0.002%
53	6.617	6.593	6.630	HH	1082	16719	0.06%	0.004%
54	6.643	6.630	6.649	HH	1150	11642	0.05%	0.003%
55	6.675	6.649	6.707	HH	27912	280664	1.09%	0.065%
56	6.723	6.707	6.741	HH	1759	21715	0.08%	0.005%
57	6.751	6.741	6.772	HH	647	9897	0.04%	0.002%
58	6.775	6.772	6.783	HH	548	3808	0.01%	0.001%
59	6.800	6.783	6.831	HH	2083	33730	0.13%	0.008%
60	6.848	6.831	6.878	HH	1062	22723	0.09%	0.005%
61	6.891	6.878	6.916	HH	1033	17883	0.07%	0.004%
62	6.943	6.916	6.963	HH	2388	35414	0.14%	0.008%
63	6.967	6.963	6.979	HH	794	7647	0.03%	0.002%
64	6.992	6.979	7.006	HH	885	12622	0.05%	0.003%
65	7.033	7.006	7.045	HH	874	16747	0.07%	0.004%
66	7.055	7.045	7.071	HH	909	12014	0.05%	0.003%
67	7.099	7.071	7.149	HH	195327	1829876	7.11%	0.422%
68	7.168	7.149	7.206	HH	3292	49944	0.19%	0.012%
69	7.226	7.206	7.236	HH	1172	17426	0.07%	0.004%
70	7.246	7.236	7.273	HH	1507	24367	0.09%	0.006%
71	7.312	7.273	7.353	HH	1210	40355	0.16%	0.009%
72	7.361	7.353	7.367	HH	737	5779	0.02%	0.001%
73	7.397	7.367	7.422	HH	1761	37243	0.14%	0.009%
74	7.439	7.422	7.475	HH	1854	35288	0.14%	0.008%
75	7.492	7.475	7.507	HH	999	16430	0.06%	0.004%
76	7.522	7.507	7.541	HH	2087	29176	0.11%	0.007%
77	7.561	7.541	7.577	HH	1953	28948	0.11%	0.007%
78	7.591	7.577	7.607	HH	1441	23286	0.09%	0.005%
79	7.635	7.607	7.646	HH	1673	33686	0.13%	0.008%
80	7.656	7.646	7.671	HH	1838	24582	0.10%	0.006%
81	7.686	7.671	7.714	HH	1852	38381	0.15%	0.009%
82	7.751	7.714	7.777	HH	33425	357192	1.39%	0.082%
83	7.808	7.777	7.834	HH	2264	63315	0.25%	0.015%
84	7.843	7.834	7.866	HH	2062	32099	0.12%	0.007%
85	7.888	7.866	7.921	HH	31037	323911	1.26%	0.075%
86	7.931	7.921	7.949	HH	1851	27058	0.11%	0.006%
87	7.966	7.949	7.972	HH	1481	18469	0.07%	0.004%
88	7.980	7.972	7.992	HH	1508	16054	0.06%	0.004%
89	8.030	7.992	8.077	HH	4513	108068	0.42%	0.025%

90	8.114	8.077	8.127	HH	1929	53655	0.21%	0.012%
91	8.136	8.127	8.172	HH	1785	40969	0.16%	0.009%
92	8.187	8.172	8.199	HH	1651	24464	0.10%	0.006%
93	8.224	8.199	8.234	HH	2133	38563	0.15%	0.009%
94	8.247	8.234	8.306	HH	2180	71080	0.28%	0.016%
95	8.333	8.306	8.339	HH	1971	32353	0.13%	0.007%
96	8.349	8.339	8.377	HH	1885	41343	0.16%	0.010%
97	8.380	8.377	8.392	HH	1756	14806	0.06%	0.003%
98	8.399	8.392	8.412	HH	1598	17618	0.07%	0.004%
99	8.435	8.412	8.451	HH	2293	46996	0.18%	0.011%
100	8.475	8.451	8.502	HH	19135	232136	0.90%	0.054%
101	8.508	8.502	8.540	HH	2684	52401	0.20%	0.012%
102	8.557	8.540	8.569	HH	2616	41208	0.16%	0.010%
103	8.581	8.569	8.587	HH	2496	24497	0.10%	0.006%
104	8.597	8.587	8.612	HH	2838	39589	0.15%	0.009%
105	8.634	8.612	8.670	HH	17144	254646	0.99%	0.059%
106	8.681	8.670	8.700	HH	3573	54078	0.21%	0.012%
107	8.732	8.700	8.740	HH	20635	236624	0.92%	0.055%
108	8.747	8.740	8.771	HH	19262	200082	0.78%	0.046%
109	8.774	8.771	8.779	HH	2966	14358	0.06%	0.003%
110	8.801	8.779	8.822	HH	4589	90677	0.35%	0.021%
111	8.852	8.822	8.867	HH	43834	481351	1.87%	0.111%
112	8.901	8.867	8.925	HH	204728	2278125	8.86%	0.525%
113	8.933	8.925	8.950	HH	4659	62080	0.24%	0.014%
114	8.968	8.950	8.984	HH	5323	83767	0.33%	0.019%
115	9.015	8.984	9.070	HH	19249	519411	2.02%	0.120%
116	9.085	9.070	9.110	HH	4976	100032	0.39%	0.023%
117	9.128	9.110	9.157	HH	12859	188583	0.73%	0.043%
118	9.169	9.157	9.186	HH	4763	70785	0.28%	0.016%
119	9.200	9.186	9.222	HH	3609	72839	0.28%	0.017%
120	9.235	9.222	9.242	HH	3163	37822	0.15%	0.009%
121	9.284	9.242	9.307	HH	13173	225355	0.88%	0.052%
122	9.336	9.307	9.357	HH	282381	2783724	10.82%	0.642%
123	9.369	9.357	9.417	HH	21121	331067	1.29%	0.076%
124	9.439	9.417	9.460	HH	12582	203635	0.79%	0.047%
125	9.477	9.460	9.506	HH	8415	177594	0.69%	0.041%
126	9.519	9.506	9.527	HH	5796	66856	0.26%	0.015%
127	9.539	9.527	9.546	HH	6142	68203	0.27%	0.016%
128	9.571	9.546	9.586	HH	30337	429889	1.67%	0.099%
129	9.605	9.586	9.627	HH	160395	1598935	6.22%	0.369%
130	9.638	9.627	9.666	HH	9423	163246	0.63%	0.038%
131	9.690	9.666	9.704	HH	10069	163932	0.64%	0.038%
132	9.736	9.704	9.754	HH	18994	332318	1.29%	0.077%
133	9.778	9.754	9.799	HH	22374	311271	1.21%	0.072%
134	9.805	9.799	9.825	HH	5858	80170	0.31%	0.018%
135	9.838	9.825	9.857	HH	5049	84905	0.33%	0.020%
136	9.893	9.857	9.910	HH	21337	329333	1.28%	0.076%
137	9.925	9.910	9.957	HH	20288	282702	1.10%	0.065%
138	9.982	9.957	9.993	HH	6056	121078	0.47%	0.028%
139	10.030	9.993	10.051	HH	22894	415425	1.61%	0.096%
140	10.069	10.051	10.078	HH	8674	120468	0.47%	0.028%
141	10.086	10.078	10.091	HH	8581	64469	0.25%	0.015%

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142	10.117	10.091	10.156	HH	269344	2853100	11.09%	0.658%
143	10.195	10.156	10.218	HH	25628	533642	2.07%	0.123%
144	10.234	10.218	10.247	HH	24769	291950	1.13%	0.067%
145	10.267	10.247	10.302	HH	60465	908183	3.53%	0.209%
146	10.327	10.302	10.361	HH	40338	627401	2.44%	0.145%
147	10.382	10.361	10.408	HH	85642	951741	3.70%	0.220%
148	10.433	10.408	10.458	HH	71141	879548	3.42%	0.203%
149	10.491	10.458	10.513	HH	204738	2311399	8.98%	0.533%
150	10.533	10.513	10.578	HH	90373	1348112	5.24%	0.311%
151	10.597	10.578	10.615	HH	22361	332482	1.29%	0.077%
152	10.625	10.615	10.647	HH	11850	179774	0.70%	0.041%
153	10.693	10.647	10.719	HH	11486	399195	1.55%	0.092%
154	10.731	10.719	10.763	HH	9808	194620	0.76%	0.045%
155	10.795	10.763	10.807	HH	7944	184925	0.72%	0.043%
156	10.815	10.807	10.827	HH	7990	90970	0.35%	0.021%
157	10.850	10.827	10.873	HH	15469	295287	1.15%	0.068%
158	10.881	10.873	10.891	HH	9631	99652	0.39%	0.023%
159	10.907	10.891	10.920	HH	15526	219361	0.85%	0.051%
160	10.927	10.920	10.939	HH	11907	123058	0.48%	0.028%
161	10.958	10.939	10.971	HH	24323	336088	1.31%	0.078%
162	10.992	10.971	11.013	HH	57198	823770	3.20%	0.190%
163	11.032	11.013	11.062	HH	35872	526935	2.05%	0.122%
164	11.107	11.062	11.125	HH	39702	745386	2.90%	0.172%
165	11.131	11.125	11.144	HH	21202	220167	0.86%	0.051%
166	11.164	11.144	11.198	HH	75028	1104081	4.29%	0.255%
167	11.204	11.198	11.211	HH	13725	107951	0.42%	0.025%
168	11.227	11.211	11.236	HH	18664	241504	0.94%	0.056%
169	11.244	11.236	11.254	HH	17216	173822	0.68%	0.040%
170	11.276	11.254	11.289	HH	42931	613220	2.38%	0.141%
171	11.318	11.289	11.337	HH	109704	1877245	7.30%	0.433%
172	11.341	11.337	11.360	HH	27695	291626	1.13%	0.067%
173	11.383	11.360	11.392	HH	17391	306122	1.19%	0.071%
174	11.413	11.392	11.432	HH	33250	542369	2.11%	0.125%
175	11.446	11.432	11.468	HH	20743	375740	1.46%	0.087%
176	11.488	11.468	11.494	HH	34930	421136	1.64%	0.097%
177	11.534	11.494	11.566	HH	1854896	24234629	94.20%	5.590%
178	11.598	11.566	11.649	HH	627392	7234087	28.12%	1.669%
179	11.673	11.649	11.707	HH	21530	582779	2.27%	0.134%
180	11.719	11.707	11.738	HH	16675	283272	1.10%	0.065%
181	11.757	11.738	11.772	HH	26671	393933	1.53%	0.091%
182	11.793	11.772	11.836	HH	136576	1819554	7.07%	0.420%
183	11.869	11.836	11.883	HH	18526	439532	1.71%	0.101%
184	11.923	11.883	11.956	HH	216088	2927931	11.38%	0.675%
185	11.982	11.956	11.987	HH	21437	340798	1.32%	0.079%
186	12.036	11.987	12.078	HH	63527	1722594	6.70%	0.397%
187	12.100	12.078	12.129	HH	34319	718872	2.79%	0.166%
188	12.161	12.129	12.182	HH	35068	747361	2.91%	0.172%
189	12.201	12.182	12.224	HH	25844	536232	2.08%	0.124%
190	12.238	12.224	12.248	HH	20155	278853	1.08%	0.064%
191	12.263	12.248	12.279	HH	25128	390833	1.52%	0.090%
192	12.312	12.279	12.327	HH	170981	2205307	8.57%	0.509%
193	12.344	12.327	12.372	HH	242731	2815489	10.94%	0.649%
194	12.379	12.372	12.387	HH	17741	154093	0.60%	0.036%

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195	12.410	12.387	12.418	HH	122127	1345693	5.23%	0.310%
196	12.432	12.418	12.448	HH	244386	2666770	10.37%	0.615%
197	12.461	12.448	12.473	HH	102327	1186075	4.61%	0.274%
198	12.491	12.473	12.512	HH	149299	1935150	7.52%	0.446%
199	12.525	12.512	12.541	HH	27463	393627	1.53%	0.091%
200	12.563	12.541	12.577	HH	37170	631097	2.45%	0.146%
201	12.585	12.577	12.606	HH	30473	459018	1.78%	0.106%
202	12.626	12.606	12.646	HH	28321	571994	2.22%	0.132%
203	12.673	12.646	12.694	HH	111642	1606000	6.24%	0.370%
204	12.700	12.694	12.710	HH	26200	240757	0.94%	0.056%
205	12.718	12.710	12.746	HH	25895	518004	2.01%	0.119%
206	12.773	12.746	12.794	HH	160953	2043323	7.94%	0.471%
207	12.808	12.794	12.817	HH	32600	419531	1.63%	0.097%
208	12.834	12.817	12.857	HH	68053	1000058	3.89%	0.231%
209	12.871	12.857	12.878	HH	24283	287112	1.12%	0.066%
210	12.883	12.878	12.901	HH	24226	320794	1.25%	0.074%
211	12.921	12.901	12.942	HH	38868	729870	2.84%	0.168%
212	12.959	12.942	12.991	HH	31470	771316	3.00%	0.178%
213	13.023	12.991	13.036	HH	44467	888894	3.46%	0.205%
214	13.047	13.036	13.075	HH	38897	723698	2.81%	0.167%
215	13.094	13.075	13.107	HH	58963	824229	3.20%	0.190%
216	13.112	13.107	13.136	HH	44717	597853	2.32%	0.138%
217	13.170	13.136	13.190	HH	95699	1700201	6.61%	0.392%
218	13.225	13.190	13.254	HH	235213	4237559	16.47%	0.977%
219	13.261	13.254	13.301	HH	53228	1340248	5.21%	0.309%
220	13.351	13.301	13.377	HH	1726104	25726613	100.00%	5.934%
221	13.393	13.377	13.410	HH	50311	728368	2.83%	0.168%
222	13.423	13.410	13.438	HH	31370	491104	1.91%	0.113%
223	13.479	13.438	13.493	HH	58023	1410087	5.48%	0.325%
224	13.515	13.493	13.530	HH	106112	1629013	6.33%	0.376%
225	13.538	13.530	13.572	HH	66697	1297579	5.04%	0.299%
226	13.583	13.572	13.602	HH	38217	597090	2.32%	0.138%
227	13.649	13.602	13.665	HH	1514485	21271547	82.68%	4.906%
228	13.683	13.665	13.697	HH	247362	2822055	10.97%	0.651%
229	13.711	13.697	13.744	HH	229451	3155153	12.26%	0.728%
230	13.764	13.744	13.774	HH	35490	610937	2.37%	0.141%
231	13.795	13.774	13.809	HH	88733	1261339	4.90%	0.291%
232	13.829	13.809	13.860	HH	116313	1963987	7.63%	0.453%
233	13.887	13.860	13.912	HH	132563	2100590	8.17%	0.485%
234	13.961	13.912	13.983	HH	68736	1971712	7.66%	0.455%
235	14.016	13.983	14.055	HH	86696	2261974	8.79%	0.522%
236	14.080	14.055	14.105	HH	124364	2234525	8.69%	0.515%
237	14.116	14.105	14.136	HH	37234	643534	2.50%	0.148%
238	14.212	14.136	14.251	HH	271342	6040221	23.48%	1.393%
239	14.271	14.251	14.290	HH	58181	1129827	4.39%	0.261%
240	14.317	14.290	14.340	HH	201909	3185407	12.38%	0.735%
241	14.360	14.340	14.381	HH	145606	2202100	8.56%	0.508%
242	14.414	14.381	14.434	HH	229962	4119058	16.01%	0.950%
243	14.446	14.434	14.452	HH	76481	786388	3.06%	0.181%
244	14.463	14.452	14.473	HH	86015	1004351	3.90%	0.232%
245	14.488	14.473	14.508	HH	126433	1907521	7.41%	0.440%
246	14.528	14.508	14.562	HH	128079	2379712	9.25%	0.549%

247	14.599	14.562	14.616	HH	81637	1947606	7.57%	0.449%
248	14.642	14.616	14.661	HH	60314	1486095	5.78%	0.343%
249	14.676	14.661	14.688	HH	53579	840865	3.27%	0.194%
250	14.705	14.688	14.722	HH	60062	1100899	4.28%	0.254%
251	14.733	14.722	14.742	HH	50776	595305	2.31%	0.137%
252	14.758	14.742	14.777	HH	50940	1012217	3.93%	0.233%
253	14.792	14.777	14.826	HH	51562	1398943	5.44%	0.323%
254	14.841	14.826	14.856	HH	47294	824331	3.20%	0.190%
255	14.880	14.856	14.891	HH	75083	1320727	5.13%	0.305%
256	14.907	14.891	14.926	HH	86243	1576745	6.13%	0.364%
257	14.944	14.926	14.965	HH	122928	2044867	7.95%	0.472%
258	14.975	14.965	14.990	HH	60149	863384	3.36%	0.199%
259	15.004	14.990	15.010	HH	63920	765753	2.98%	0.177%
260	15.044	15.010	15.090	HH	75276	2985781	11.61%	0.689%
261	15.121	15.090	15.158	HH	158132	3812210	14.82%	0.879%
262	15.184	15.158	15.208	HH	221266	4307309	16.74%	0.993%
263	15.225	15.208	15.234	HH	126069	1667769	6.48%	0.385%
264	15.248	15.234	15.278	HH	155087	2595442	10.09%	0.599%
265	15.308	15.278	15.332	HH	152432	3094902	12.03%	0.714%
266	15.369	15.332	15.405	HH	107842	3391374	13.18%	0.782%
267	15.411	15.405	15.422	HH	57551	593350	2.31%	0.137%
268	15.453	15.422	15.469	HH	102250	2161994	8.40%	0.499%
269	15.506	15.469	15.526	HH	875199	14107844	54.84%	3.254%
270	15.551	15.526	15.572	HH	785666	10312423	40.08%	2.379%
271	15.582	15.572	15.607	HH	72579	1468712	5.71%	0.339%
272	15.665	15.607	15.698	HH	270199	6275198	24.39%	1.447%
273	15.731	15.698	15.768	HH	132128	3653861	14.20%	0.843%
274	15.792	15.768	15.818	HH	136478	2874277	11.17%	0.663%
275	15.840	15.818	15.875	HH	123660	3583292	13.93%	0.827%
276	15.888	15.875	15.909	HH	101308	1804501	7.01%	0.416%
277	15.936	15.909	15.960	HH	96520	2648084	10.29%	0.611%
278	15.978	15.960	15.997	HH	89467	1779194	6.92%	0.410%
279	16.055	15.997	16.092	HH	93664	4671732	18.16%	1.078%
280	16.119	16.092	16.141	HH	109667	2805446	10.90%	0.647%
281	16.164	16.141	16.184	HH	208403	3527108	13.71%	0.814%
282	16.201	16.184	16.235	HH	140728	3284679	12.77%	0.758%
283	16.254	16.235	16.287	HH	127008	3146095	12.23%	0.726%
284	16.314	16.287	16.325	HH	176196	3228850	12.55%	0.745%
285	16.329	16.325	16.354	HH	165939	2279083	8.86%	0.526%
286	16.398	16.354	16.421	HH	133003	4078404	15.85%	0.941%
287	16.438	16.421	16.456	HH	91662	1864216	7.25%	0.430%
288	16.478	16.456	16.501	HH	117918	2691508	10.46%	0.621%
289	16.529	16.501	16.559	HH	287496	5534246	21.51%	1.276%
290	16.597	16.559	16.621	HH	115180	3830310	14.89%	0.883%
291	16.642	16.621	16.650	HH	92462	1564425	6.08%	0.361%
292	16.659	16.650	16.675	HH	94618	1401571	5.45%	0.323%
293	16.691	16.675	16.704	HH	94725	1612215	6.27%	0.372%
294	16.717	16.704	16.725	HH	94087	1156714	4.50%	0.267%
295	16.754	16.725	16.776	HH	112338	3154920	12.26%	0.728%
296	16.795	16.776	16.813	HH	114923	2351406	9.14%	0.542%
297	16.839	16.813	16.878	HH	142682	4539375	17.64%	1.047%
298	16.907	16.878	16.933	HH	115775	3567350	13.87%	0.823%
299	16.962	16.933	16.984	HH	148582	3878410	15.08%	0.895%

rteres

300	17.006	16.984	17.022	HH	128521	2733705	10.63%	0.631%
301	17.070	17.022	17.085	HH	787244	15737693	61.17%	3.630%
302	17.093	17.085	17.120	HH	519694	6029801	23.44%	1.391%
303	17.134	17.120	17.147	HH	119684	1886059	7.33%	0.435%
304	17.188	17.147	17.207	HH	280539	6330112	24.61%	1.460%
305	17.217	17.207	17.235	HH	146304	2251555	8.75%	0.519%
306	17.247	17.235	17.267	HH	133467	2532480	9.84%	0.584%
307	17.278	17.267	17.290	HH	135018	1793902	6.97%	0.414%
308	17.307	17.290	17.320	HH	148777	2587042	10.06%	0.597%
309	17.338	17.320	17.350	HH	161353	2743570	10.66%	0.633%
310	17.390	17.350	17.413	HH	576614	11657904	45.31%	2.689%
311	17.454	17.413	17.461	HHA	826826	12839561	49.91%	2.961%

Sum of corrected areas: 433549302

FE012325.M Mon Feb 03 02:20:30 2025

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

Manual Integration Report

Sample ID	ClientId ID	File ID	Sequence ID	Parameter	Supervised By	Supervised On	Reason
I.BLK		FE052167.D	FE013125	TETRACOSANE-d50 (SURROGA	Ankita	2/3/2025 1:08:00 PM	Peak Integrated by Software incorrectly
PB166415BS		FE052172.D	FE013125	N-OCTADECANE	Ankita	2/3/2025 1:07:23 PM	Peak Integrated by Software incorrectly
PB166415BS		FE052172.D	FE013125	TETRACOSANE-d50 (SURROGA	Ankita	2/3/2025 1:07:23 PM	Peak Integrated by Software incorrectly
Q1241-13		FE052176.D	FE013125	TETRACOSANE-d50 (SURROGA	Ankita	2/3/2025 1:07:25 PM	Peak Integrated by Software incorrectly
Q1242-01		FE052178.D	FE013125	TETRACOSANE-d50 (SURROGA	Ankita	2/3/2025 1:07:26 PM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FE052180.D	FE013125	N-OCTACOSANE	Ankita	2/3/2025 1:07:28 PM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FE052180.D	FE013125	TETRACOSANE-d50 (SURROGA	Ankita	2/3/2025 1:07:28 PM	Peak Integrated by Software incorrectly
Q1241-05		FE052184.D	FE013125	TETRACOSANE-d50 (SURROGA	Ankita	2/3/2025 1:07:30 PM	Peak Integrated by Software incorrectly
Q1241-09		FE052185.D	FE013125	TETRACOSANE-d50 (SURROGA	Ankita	2/3/2025 1:07:31 PM	Peak Integrated by Software incorrectly
Q1241-17		FE052187.D	FE013125	TETRACOSANE-d50 (SURROGA	Ankita	2/3/2025 1:07:33 PM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FE052190.D	FE013125	N-OCTACOSANE	Ankita	2/3/2025 1:07:34 PM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FE052192.D	FE013125	N-DOTRIACONTANE	Ankita	2/3/2025 1:07:35 PM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FE052192.D	FE013125	N-OCTACOSANE	Ankita	2/3/2025 1:07:35 PM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FE052192.D	FE013125	N-TRIACONTANE	Ankita	2/3/2025 1:07:35 PM	Peak Integrated by Software incorrectly
PB166433BS		FE052195.D	FE013125	N-DOTRIACONTANE	Ankita	2/3/2025 1:07:37 PM	Peak Integrated by Software incorrectly
Q1236-01MS		FE052197.D	FE013125	N-HEXATRIACONTANE	Ankita	2/3/2025 1:07:39 PM	Peak Integrated by Software incorrectly
Q1236-01MS		FE052197.D	FE013125	N-OCTACOSANE	Ankita	2/3/2025 1:07:39 PM	Peak Integrated by Software incorrectly
Q1236-01MS		FE052197.D	FE013125	N-OCTADECANE	Ankita	2/3/2025 1:07:39 PM	Peak Integrated by Software incorrectly
Q1236-01MS		FE052197.D	FE013125	N-TETRATRIACONTANE	Ankita	2/3/2025 1:07:39 PM	Peak Integrated by Software incorrectly
Q1236-01MSD		FE052198.D	FE013125	N-HEXATRIACONTANE	Ankita	2/3/2025 1:07:40 PM	Peak Integrated by Software incorrectly
Q1236-01MSD		FE052198.D	FE013125	N-OCTACOSANE	Ankita	2/3/2025 1:07:40 PM	Peak Integrated by Software incorrectly
Q1236-01MSD		FE052198.D	FE013125	N-OCTADECANE	Ankita	2/3/2025 1:07:40 PM	Peak Integrated by Software incorrectly

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

Manual Integration Report

.BLK		FE052200.D	FE013125	TETRACOSANE-d50 (SURROGA	Ankita	2/3/2025 1:07:42 PM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FE052201.D	FE013125	N-DOTRIACONTANE	Ankita	2/3/2025 1:07:43 PM	Peak Integrated by Software incorrectly

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

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE012325

Review By	yogesh	Review On	1/23/2025 3:09:47 PM		
Supervise By	sohil	Supervise On	1/24/2025 2:02:13 PM		
SubDirectory	FE012325	HP Acquire Method		HP Processing Method	FE012325

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

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FE052025.D	23 Jan 2025 21:06	YP\AJ	Ok
2	I.BLK	FE052026.D	23 Jan 2025 21:35	YP\AJ	Ok
3	100 TRPH STD	FE052027.D	23 Jan 2025 22:06	YP\AJ	Ok
4	50 TRPH STD	FE052028.D	23 Jan 2025 23:06	YP\AJ	Ok
5	20 TRPH STD	FE052029.D	23 Jan 2025 23:36	YP\AJ	Ok
6	10 TRPH STD	FE052030.D	24 Jan 2025 00:06	YP\AJ	Ok
7	5 TRPH STD	FE052031.D	24 Jan 2025 00:36	YP\AJ	Ok
8	FE012325ICV	FE052032.D	24 Jan 2025 01:06	YP\AJ	Ok

M : Manual Integration

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

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE013125

Review By	yogesh	Review On	1/31/2025 12:39:58 PM		
Supervise By	Ankita	Supervise On	2/3/2025 1:08:07 PM		
SubDirectory	FE013125	HP Acquire Method		HP Processing Method	FE012325

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

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FE052166.D	31 Jan 2025 09:26	YP\AJ	Ok
2	I.BLK	FE052167.D	31 Jan 2025 09:56	YP\AJ	Ok,M
3	50 PPM TRPH STD	FE052168.D	31 Jan 2025 10:26	YP\AJ	Ok
4	RT MARKER	FE052169.D	31 Jan 2025 11:07	YP\AJ	Ok
5	PP24162	FE052170.D	31 Jan 2025 11:37	YP\AJ	Ok
6	PB166415BL	FE052171.D	31 Jan 2025 12:08	YP\AJ	Ok
7	PB166415BS	FE052172.D	31 Jan 2025 12:38	YP\AJ	Ok,M
8	Q1241-01	FE052173.D	31 Jan 2025 13:08	YP\AJ	Dilution
9	Q1241-05	FE052174.D	31 Jan 2025 13:38	YP\AJ	Dilution
10	Q1241-09	FE052175.D	31 Jan 2025 14:08	YP\AJ	Dilution
11	Q1241-13	FE052176.D	31 Jan 2025 14:39	YP\AJ	Dilution
12	Q1241-17	FE052177.D	31 Jan 2025 15:09	YP\AJ	Dilution
13	Q1242-01	FE052178.D	31 Jan 2025 15:39	YP\AJ	Dilution
14	I.BLK	FE052179.D	31 Jan 2025 16:09	YP\AJ	Ok
15	50 PPM TRPH STD	FE052180.D	31 Jan 2025 16:40	YP\AJ	Ok,M
16	Q1241-05MS	FE052181.D	31 Jan 2025 17:10	YP\AJ	Ok
17	Q1241-05MSD	FE052182.D	31 Jan 2025 17:40	YP\AJ	Ok
18	Q1241-01	FE052183.D	31 Jan 2025 18:11	YP\AJ	Ok
19	Q1241-05	FE052184.D	31 Jan 2025 18:41	YP\AJ	Ok,M
20	Q1241-09	FE052185.D	31 Jan 2025 19:11	YP\AJ	Ok,M
21	Q1241-13	FE052186.D	31 Jan 2025 19:41	YP\AJ	Ok

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

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE013125

Review By	yogesh	Review On	1/31/2025 12:39:58 PM		
Supervise By	Ankita	Supervise On	2/3/2025 1:08:07 PM		
SubDirectory	FE013125	HP Acquire Method		HP Processing Method	FE012325

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

22	Q1241-17	FE052187.D	31 Jan 2025 20:12	YP\AJ	Ok,M
23	Q1242-01	FE052188.D	31 Jan 2025 20:42	YP\AJ	Ok
24	I.BLK	FE052189.D	31 Jan 2025 21:12	YP\AJ	Ok
25	50 PPM TRPH STD	FE052190.D	31 Jan 2025 22:12	YP\AJ	Ok,M
26	I.BLK	FE052191.D	31 Jan 2025 23:13	YP\AJ	Ok
27	50 PPM TRPH STD	FE052192.D	01 Feb 2025 00:13	YP\AJ	Ok,M
28	RT MARKER	FE052193.D	01 Feb 2025 01:14	YP\AJ	Ok
29	PB166433BL	FE052194.D	01 Feb 2025 02:14	YP\AJ	Ok
30	PB166433BS	FE052195.D	01 Feb 2025 02:44	YP\AJ	Ok,M
31	Q1236-01	FE052196.D	01 Feb 2025 03:15	YP\AJ	Ok
32	Q1236-01MS	FE052197.D	01 Feb 2025 03:45	YP\AJ	Ok,M
33	Q1236-01MSD	FE052198.D	01 Feb 2025 04:15	YP\AJ	Ok,M
34	Q1236-01	FE052199.D	01 Feb 2025 04:45	YP\AJ	Not Ok
35	I.BLK	FE052200.D	01 Feb 2025 05:15	YP\AJ	Ok,M
36	50 PPM TRPH STD	FE052201.D	01 Feb 2025 06:15	YP\AJ	Ok,M

M : Manual Integration

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

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE012325

Review By	yogesh	Review On	1/23/2025 3:09:47 PM		
Supervise By	sohil	Supervise On	1/24/2025 2:02:13 PM		
SubDirectory	FE012325	HP Acquire Method		HP Processing Method	FE012325

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

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FE052025.D	23 Jan 2025 21:06		YP\AJ	Ok
2	I.BLK		FE052026.D	23 Jan 2025 21:35		YP\AJ	Ok
3	100 TRPH STD		FE052027.D	23 Jan 2025 22:06		YP\AJ	Ok
4	50 TRPH STD		FE052028.D	23 Jan 2025 23:06		YP\AJ	Ok
5	20 TRPH STD		FE052029.D	23 Jan 2025 23:36		YP\AJ	Ok
6	10 TRPH STD		FE052030.D	24 Jan 2025 00:06		YP\AJ	Ok
7	5 TRPH STD		FE052031.D	24 Jan 2025 00:36		YP\AJ	Ok
8	FE012325ICV		FE052032.D	24 Jan 2025 01:06		YP\AJ	Ok

M : Manual Integration

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

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE013125

Review By	yogesh	Review On	1/31/2025 12:39:58 PM		
Supervise By	Ankita	Supervise On	2/3/2025 1:08:07 PM		
SubDirectory	FE013125	HP Acquire Method		HP Processing Method	FE012325

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

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FE052166.D	31 Jan 2025 09:26		YP\AJ	Ok
2	I.BLK		FE052167.D	31 Jan 2025 09:56		YP\AJ	Ok,M
3	50 PPM TRPH STD		FE052168.D	31 Jan 2025 10:26		YP\AJ	Ok
4	RT MARKER		FE052169.D	31 Jan 2025 11:07		YP\AJ	Ok
5	PP24162		FE052170.D	31 Jan 2025 11:37		YP\AJ	Ok
6	PB166415BL		FE052171.D	31 Jan 2025 12:08		YP\AJ	Ok
7	PB166415BS		FE052172.D	31 Jan 2025 12:38		YP\AJ	Ok,M
8	Q1241-01		FE052173.D	31 Jan 2025 13:08	need 10x dilution	YP\AJ	Dilution
9	Q1241-05		FE052174.D	31 Jan 2025 13:38	need 10x dilution	YP\AJ	Dilution
10	Q1241-09		FE052175.D	31 Jan 2025 14:08	need 10x dilution	YP\AJ	Dilution
11	Q1241-13		FE052176.D	31 Jan 2025 14:39	need 10x dilution	YP\AJ	Dilution
12	Q1241-17		FE052177.D	31 Jan 2025 15:09	need 10x dilution	YP\AJ	Dilution
13	Q1242-01		FE052178.D	31 Jan 2025 15:39	need 10x dilution	YP\AJ	Dilution
14	I.BLK		FE052179.D	31 Jan 2025 16:09		YP\AJ	Ok
15	50 PPM TRPH STD		FE052180.D	31 Jan 2025 16:40		YP\AJ	Ok,M
16	Q1241-05MS		FE052181.D	31 Jan 2025 17:10		YP\AJ	Ok
17	Q1241-05MSD		FE052182.D	31 Jan 2025 17:40		YP\AJ	Ok
18	Q1241-01		FE052183.D	31 Jan 2025 18:11		YP\AJ	Ok

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

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE013125

Review By	yogesh	Review On	1/31/2025 12:39:58 PM		
Supervise By	Ankita	Supervise On	2/3/2025 1:08:07 PM		
SubDirectory	FE013125	HP Acquire Method		HP Processing Method	FE012325

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

19	Q1241-05		FE052184.D	31 Jan 2025 18:41		YP\AJ	Ok,M
20	Q1241-09		FE052185.D	31 Jan 2025 19:11		YP\AJ	Ok,M
21	Q1241-13		FE052186.D	31 Jan 2025 19:41		YP\AJ	Ok
22	Q1241-17		FE052187.D	31 Jan 2025 20:12		YP\AJ	Ok,M
23	Q1242-01		FE052188.D	31 Jan 2025 20:42		YP\AJ	Ok
24	I.BLK		FE052189.D	31 Jan 2025 21:12		YP\AJ	Ok
25	50 PPM TRPH STD		FE052190.D	31 Jan 2025 22:12		YP\AJ	Ok,M
26	I.BLK		FE052191.D	31 Jan 2025 23:13		YP\AJ	Ok
27	50 PPM TRPH STD		FE052192.D	01 Feb 2025 00:13		YP\AJ	Ok,M
28	RT MARKER		FE052193.D	01 Feb 2025 01:14		YP\AJ	Ok
29	PB166433BL		FE052194.D	01 Feb 2025 02:14		YP\AJ	Ok
30	PB166433BS		FE052195.D	01 Feb 2025 02:44		YP\AJ	Ok,M
31	Q1236-01		FE052196.D	01 Feb 2025 03:15		YP\AJ	Ok
32	Q1236-01MS		FE052197.D	01 Feb 2025 03:45		YP\AJ	Ok,M
33	Q1236-01MSD		FE052198.D	01 Feb 2025 04:15		YP\AJ	Ok,M
34	Q1236-01		FE052199.D	01 Feb 2025 04:45	not required	YP\AJ	Not Ok
35	I.BLK		FE052200.D	01 Feb 2025 05:15		YP\AJ	Ok,M
36	50 PPM TRPH STD		FE052201.D	01 Feb 2025 06:15		YP\AJ	Ok,M

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 2/3/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:35
In Date: 01/31/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:40
Out Date: 02/01/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB134497

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q1236-01	WASTE	17	1.14	8.55	9.69	8.12	81.6	
Q1236-02	VOC	18	1.13	8.71	9.84	8.3	82.3	
Q1236-03	1	19	1.17	8.50	9.67	8.2	82.7	
Q1236-04	2	20	1.17	8.60	9.77	8.2	81.7	
Q1236-05	3	21	1.15	8.84	9.99	8.35	81.4	
Q1236-06	4	22	1.16	8.53	9.69	8.24	83.0	
Q1236-07	5	23	1.15	8.82	9.97	8.48	83.1	
Q1241-01	JPP-3.5-013025	1	1.15	8.58	9.73	8.41	84.6	
Q1241-03	JPP-3.5-013025	2	1.12	8.76	9.88	8.3	82.0	
Q1241-05	JPP-5.3-013025	3	1.15	8.43	9.58	8.68	89.3	
Q1241-07	JPP-5.3-013025	4	1.11	8.77	9.88	8.81	87.8	
Q1241-09	JPP-5.2-013025	5	1.15	8.59	9.74	8.65	87.3	
Q1241-11	JPP-5.2-013025	6	1.12	8.41	9.53	8.58	88.7	
Q1241-13	JPP-5.4-013025	7	1.16	8.66	9.82	8.69	87.0	
Q1241-15	JPP-5.4-013025	8	1.18	8.45	9.63	8.5	86.6	
Q1241-17	JPP-51.4-013025	9	1.14	8.55	9.69	9.12	93.3	
Q1241-19	JPP-51.4-013025	10	1.16	8.51	9.67	9.09	93.2	
Q1242-01	JPP-6.2-013025	11	1.15	8.80	9.95	8.32	81.5	
Q1242-03	JPP-6.2-013025	12	1.13	8.60	9.73	8.11	81.2	
Q1243-01	CL-01-01302025	13	1.16	8.40	9.56	9.12	94.8	
Q1243-02	CL-01-01302025-E2	14	1.13	8.70	9.83	9.36	94.6	
Q1244-01	EO-02-01302025	15	1.18	8.71	9.89	9.36	93.9	
Q1244-02	EO-02-01302025-E2	16	1.12	8.80	9.92	9.42	94.3	
Q1254-01	OK-02-01312025	24	1.16	8.40	9.56	8.48	87.1	
Q1254-02	OK-02-01312025-E2	25	1.15	8.83	9.98	9.6	95.7	
Q1257-01	013025	42	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1258-01	112224A	43	1.00	1.00	2.00	2.00	100.0	debris
Q1259-01	12825	44	1.14	8.70	9.84	8.7	86.9	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 2/3/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:35
In Date: 01/31/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:40
Out Date: 02/01/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB134497

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q1260-01	12925-A	45	1.00	1.00	2.00	2.00	100.0	debris
Q1260-02	12925-BC	46	1.16	8.42	9.58	9.2	95.5	
Q1261-01	CHRT-20430	47	1.14	8.43	9.57	5.86	56.0	
Q1261-02	CHRT-20430-E2	48	1.12	8.77	9.89	5.93	54.8	
Q1262-01	ETGI-371	49	1.15	8.70	9.85	8.64	86.1	
Q1262-02	ETGI-371-E2	50	1.16	8.82	9.98	8.78	86.4	
Q1262-03	CONCRETE-PAD	51	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
Q1262-04	CONCRETE-PAD-E2	52	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
Q1262-05	3762	53	1.00	1.00	2.00	2.00	100.0	debris
Q1263-01	KMA9027-1-1	54	1.00	1.00	2.00	2.00	100.0	oilc
Q1263-02	KMA9027-1-2	55	1.00	1.00	2.00	2.00	100.0	oilc
Q1263-03	BC274653-1-1	56	1.00	1.00	2.00	2.00	100.0	oilc
Q1263-04	BC274653-1-2	57	1.00	1.00	2.00	2.00	100.0	oilc
Q1264-01	AUD-1606	26	1.18	8.62	9.8	9.63	98.0	
Q1264-02	AUD-25-0008	27	1.11	8.71	9.82	7.77	76.5	
Q1265-01	AUD-25-0006	28	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1267-01	TRE-25-0003	29	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1267-02	TRE-25-0009	30	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1267-03	TRE-25-0011	31	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1268-05	SVOC-GPC-BLANK	32	1.00	1.00	2.00	2.00	100.0	
Q1268-06	PEST-GPC-BLANK	33	1.00	1.00	2.00	2.00	100.0	
Q1268-07	PEST-GPC-BLANK-SPIKE	34	1.00	1.00	2.00	2.00	100.0	
Q1268-08	PCB-GPC-BLANK	35	1.00	1.00	2.00	2.00	100.0	
Q1268-09	PCB-GPC-BLANK-SPIKE	36	1.00	1.00	2.00	2.00	100.0	
Q1268-10	SVOC-GPC2-BLANK	37	1.00	1.00	2.00	2.00	100.0	
Q1268-11	PEST-GPC2-BLANK	38	1.00	1.00	2.00	2.00	100.0	
Q1268-12	PEST-GPC2-BLANK-SPIKE	39	1.00	1.00	2.00	2.00	100.0	
Q1268-13	PCB-GPC2-BLANK	40	1.00	1.00	2.00	2.00	100.0	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 2/3/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:35
In Date: 01/31/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:40
Out Date: 02/01/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB134497

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q1268-14	PCB-GPC2-BLANK-SPIKE	41	1.00	1.00	2.00	2.00	100.0	
Q1269-01	VNJ-231	58	1.17	8.81	9.98	9.00	88.9	
Q1269-02	VNJ-231-E2	59	1.12	8.86	9.98	9.1	90.1	
Q1270-01	BC247799-1-1	60	1.00	1.00	2.00	2.00	100.0	pilc
Q1270-02	BC247799-1-2	61	1.00	1.00	2.00	2.00	100.0	pilc
Q1270-03	BC274768-1-1	62	1.00	1.00	2.00	2.00	100.0	pilc
Q1270-04	BC274768-1-2	63	1.00	1.00	2.00	2.00	100.0	pilc
Q1270-05	BC274768-2-1	64	1.00	1.00	2.00	2.00	100.0	pilc
Q1270-06	BC274768-2-2	65	1.00	1.00	2.00	2.00	100.0	pilc
Q1271-01	RBR200030	66	1.12	8.74	9.86	8.87	88.7	
Q1271-02	RBR200030-E2	67	1.17	8.53	9.7	9.02	92.0	
Q1271-03	3189-3196	68	1.00	1.00	2.00	2.00	100.0	oil sample

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

WORKLIST(Hardcopy Internal Chain)

Q134497

WorkList Name : %1-013125 **WorkList ID :** 187328 **Department :** Wet-Chemistry **Date :** 01-31-2025 07:56:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1236-01	WASTE	Solid	Percent Solids	Cool 4 deg C	SCIA01	E11	01/30/2025	Chemtech -SO
Q1236-02	VOC	Solid	Percent Solids	Cool 4 deg C	SCIA01	E11	01/30/2025	Chemtech -SO
Q1236-03	1	Solid	Percent Solids	Cool 4 deg C	SCIA01	E11	01/30/2025	Chemtech -SO
Q1236-04	2	Solid	Percent Solids	Cool 4 deg C	SCIA01	E11	01/30/2025	Chemtech -SO
Q1236-05	3	Solid	Percent Solids	Cool 4 deg C	SCIA01	E11	01/30/2025	Chemtech -SO
Q1236-06	4	Solid	Percent Solids	Cool 4 deg C	SCIA01	E11	01/30/2025	Chemtech -SO
Q1236-07	5	Solid	Percent Solids	Cool 4 deg C	SCIA01	E11	01/30/2025	Chemtech -SO
Q1241-01	JPP-3.5-013025	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/30/2025	Chemtech -SO
Q1241-03	JPP-3.5-013025	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/30/2025	Chemtech -SO
Q1241-05	JPP-5.3-013025	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/30/2025	Chemtech -SO
Q1241-07	JPP-5.3-013025	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/30/2025	Chemtech -SO
Q1241-09	JPP-5.2-013025	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/30/2025	Chemtech -SO
Q1241-11	JPP-5.2-013025	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/30/2025	Chemtech -SO
Q1241-13	JPP-5.4-013025	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/30/2025	Chemtech -SO
Q1241-15	JPP-5.4-013025	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/30/2025	Chemtech -SO
Q1241-17	JPP-51.4-013025	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/30/2025	Chemtech -SO
Q1241-19	JPP-51.4-013025	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/30/2025	Chemtech -SO
Q1242-01	JPP-6.2-013025	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/30/2025	Chemtech -SO
Q1242-03	JPP-6.2-013025	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/30/2025	Chemtech -SO
Q1243-01	CL-01-01302025	Solid	Percent Solids	Cool 4 deg C	PSEG05	N41	01/30/2025	Chemtech -SO
Q1243-02	CL-01-01302025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	N41	01/30/2025	Chemtech -SO

Date/Time 01/31/25 16:10
Raw Sample Received by: JO (WC)
Raw Sample Relinquished by: RJ CEDt-lab

Date/Time 01/31/25 17:50
Raw Sample Received by: RJ CEDt-lab
Raw Sample Relinquished by: JO (WC)

WORKLIST(Hardcopy Internal Chain)

SB 134497

WorkList Name : %1-013125 **WorkList ID :** 187328 **Department :** Wet-Chemistry **Date :** 01-31-2025 07:56:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1244-01	EO-02-01302025	Solid	Percent Solids	Cool 4 deg C	PSEG05	N51	01/30/2025	Chemtech -SO
Q1244-02	EO-02-01302025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	N51	01/30/2025	Chemtech -SO
Q1254-01	OK-02-01312025	Solid	Percent Solids	Cool 4 deg C	PSEG05	N41	01/31/2025	Chemtech -SO
Q1254-02	OK-02-01312025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	N41	01/31/2025	Chemtech -SO
Q1257-01	013025	Solid	Percent Solids	Cool 4 deg C	PSEG03	N41	01/31/2025	Chemtech -SO
Q1258-01	112224A	Solid	Percent Solids	Cool 4 deg C	PSEG03	N41	01/31/2025	Chemtech -SO
Q1259-01	12825	Solid	Percent Solids	Cool 4 deg C	PSEG03	N41	01/31/2025	Chemtech -SO
Q1260-01	12925-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	N31	01/31/2025	Chemtech -SO
Q1260-02	12925-BC	Solid	Percent Solids	Cool 4 deg C	PSEG03	N31	01/31/2025	Chemtech -SO
Q1261-01	CHRT-20430	Solid	Percent Solids	Cool 4 deg C	PSEG03	N31	01/31/2025	Chemtech -SO
Q1261-02	CHRT-20430-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	N31	01/31/2025	Chemtech -SO
Q1262-01	ETGI-371	Solid	Percent Solids	Cool 4 deg C	PSEG03	N41	01/31/2025	Chemtech -SO
Q1262-02	ETGI-371-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	N41	01/31/2025	Chemtech -SO
Q1262-03	CONCRETE-PAD	Solid	Percent Solids	Cool 4 deg C	PSEG03	N41	01/31/2025	Chemtech -SO
Q1262-04	CONCRETE-PAD-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	N41	01/31/2025	Chemtech -SO
Q1262-05	3762	Solid	Percent Solids	Cool 4 deg C	PSEG03	N41	01/31/2025	Chemtech -SO
Q1263-01	KMA9027-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	N11	01/31/2025	Chemtech -SO
Q1263-02	KMA9027-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	N11	01/31/2025	Chemtech -SO
Q1263-03	BC274653-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	N11	01/31/2025	Chemtech -SO
Q1263-04	BC274653-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	N11	01/31/2025	Chemtech -SO
Q1264-01	AUD-1606	Solid	Percent Solids	Cool 4 deg C	PSEG03	N31	01/31/2025	Chemtech -SO

Date/Time 01/31/25 16:10

Raw Sample Received by: SD (wC)

Raw Sample Relinquished by: RJ (Edt-lab)

Date/Time 01/31/25 17:50

Raw Sample Received by: RJ (Edt-lab)

Raw Sample Relinquished by: SD (wC)

Page 2 of 4

WORKLIST(Hardcopy Internal Chain)

VR134497

WorkList Name : %1-013125 **WorkList ID :** 187328 **Department :** Wet-Chemistry **Date :** 01-31-2025 07:56:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1264-02	AUD-25-0008	Solid	Percent Solids	Cool 4 deg C	PSEG03	N31	01/31/2025	Chemtech -SO
Q1265-01	AUD-25-0006	Solid	Percent Solids	Cool 4 deg C	PSEG03	N41	01/31/2025	Chemtech -SO
Q1267-01	TRE-25-0003	Solid	Percent Solids	Cool 4 deg C	PSEG03	N41	01/31/2025	Chemtech -SO
Q1267-02	TRE-25-0009	Solid	Percent Solids	Cool 4 deg C	PSEG03	N41	01/31/2025	Chemtech -SO
Q1267-03	TRE-25-0011	Solid	Percent Solids	Cool 4 deg C	PSEG03	N41	01/31/2025	Chemtech -SO
Q1268-05	SVOC-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	D11	01/31/2025	Chemtech -SO
Q1268-06	PEST-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	D11	01/31/2025	Chemtech -SO
Q1268-07	PEST-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	D11	01/31/2025	Chemtech -SO
Q1268-08	PCB-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	D11	01/31/2025	Chemtech -SO
Q1268-09	PCB-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	D11	01/31/2025	Chemtech -SO
Q1268-10	SVOC-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	D11	01/31/2025	Chemtech -SO
Q1268-11	PEST-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	D11	01/31/2025	Chemtech -SO
Q1268-12	PEST-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	D11	01/31/2025	Chemtech -SO
Q1268-13	PCB-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	D11	01/31/2025	Chemtech -SO
Q1268-14	PCB-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	D11	01/31/2025	Chemtech -SO
Q1269-01	VNJ-231	Solid	Percent Solids	Cool 4 deg C	CHEM02	D11	01/31/2025	Chemtech -SO
Q1269-02	VNJ-231-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D11	01/31/2025	Chemtech -SO
Q1270-01	BC247799-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D11	01/31/2025	Chemtech -SO
Q1270-02	BC247799-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	01/31/2025	Chemtech -SO
Q1270-03	BC274768-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	01/31/2025	Chemtech -SO
Q1270-04	BC274768-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	01/31/2025	Chemtech -SO

Date/Time 01/31/25 16:10

Raw Sample Received by: JA WDC

Raw Sample Relinquished by: RJ CLH-Lab

Date/Time 01/31/25 17:50

Raw Sample Received by: RJ CLH-Lab

Raw Sample Relinquished by: JA WDC

WORKLIST(Hardcopy Internal Chain)

IR-134497

WorkList Name : %1-013125 **WorkList ID :** 187328 **Department :** Wet-Chemistry **Date :** 01-31-2025 07:56:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1270-05	BC274768-2-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	01/31/2025	Chemtech -SO
Q1270-06	BC274768-2-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	01/31/2025	Chemtech -SO
Q1271-01	RBR200030	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	01/31/2025	Chemtech -SO
Q1271-02	RBR200030-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	01/31/2025	Chemtech -SO
Q1271-03	3189-3196	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	01/31/2025	Chemtech -SO

Date/Time 01/31/25 16:10

Raw Sample Received by: JD WDC

Raw Sample Relinquished by: RJ CEXT-lab

Date/Time 01/31/25 17:50

Raw Sample Received by: RJ CEXT-lab

Raw Sample Relinquished by: 6.0°C

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB166415

SOP ID: M3541-ASE Extraction-14

Clean Up SOP #: N/A

Matrix : Solid

Weigh By: EH

Balance check: RJ

Balance ID: EX-SC-2

pH Strip Lot#: N/A

Extraction By: RJ

Filter By: RJ

pH Meter ID: N/A

Hood ID: 3,7

Extraction Start Date : 01/31/2025

Extraction Start Time : 08:50

Extraction End Date : 01/31/2025

Extraction End Time : 11:50

Concentration By: EH

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	PP23913
Surrogate	1.0ML	20 PPM	PP23935
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
MeCl2/Acetone/1:1	N/A	EP2578
Baked Na2SO4	N/A	EP2580
Sand	N/A	E2865
Methylene Chloride	N/A	E3874
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5 ML Vial lot# 2210673.

KD Bath ID: N/A

KD Bath Temperature: N/A

Envap ID: NEVAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
01/31/25	RP (Ext. Lab)	A.P-Pest-PCB.
11:55	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB166415

Analytical Method: M3541-ASE Extraction-14 **Concentration Date:** 01/31/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Pr Pos
					AddedBy	VerifiedBy				
PB166415BL	PB166415BL	Diesel Range Organics	30.02	N/A	ritesh	Evelyn	1			U2-1
PB166415BS	PB166415BS	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1			2
Q1232-01	JPP-46.2-012925	Diesel Range Organics	30.07	N/A	ritesh	Evelyn	1	I		3
Q1232-05	JPP-46.1-012925	Diesel Range Organics	30.06	N/A	ritesh	Evelyn	1	I		4
Q1232-09	JPP-42.1-012925	Diesel Range Organics	30.02	N/A	ritesh	Evelyn	1	I		5
Q1232-13	JPP-42.2-012925	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1	I		6
Q1232-17	JPP-51.1-012925	Diesel Range Organics	30.01	N/A	ritesh	Evelyn	1	I		U3-1
Q1235-01	JPP-51.2-012925	Diesel Range Organics	30.05	N/A	ritesh	Evelyn	1	I		2
Q1235-05	JPP-16.1-012925	Diesel Range Organics	30.04	N/A	ritesh	Evelyn	1	I		3
Q1241-01	JPP-3.5-013025	Diesel Range Organics	30.07	N/A	ritesh	Evelyn	1	I		4
Q1241-05	JPP-5.3-013025	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1	I		5
Q1241-05MS	JPP-5.3-013025MS	Diesel Range Organics	30.05	N/A	ritesh	Evelyn	1	I		6
Q1241-05MSD	JPP-5.3-013025MSD	Diesel Range Organics	30.02	N/A	ritesh	Evelyn	1	I		U4-1
Q1241-09	JPP-5.2-013025	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1	I		2
Q1241-13	JPP-5.4-013025	Diesel Range Organics	30.06	N/A	ritesh	Evelyn	1	I		3
Q1241-17	JPP-51.4-013025	Diesel Range Organics	30.08	N/A	ritesh	Evelyn	1	I		4
Q1242-01	JPP-6.2-013025	Diesel Range Organics	30.01	N/A	ritesh	Evelyn	1	I		5

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

1/31/25

Q1242-Diesel Range Organics

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1241 **WorkList ID :** 187331 **Department :** Extraction **Date :** 01-31-2025 08:13:34

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1232-01	JPP-46.2-012925	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/29/2025	8015D
Q1232-05	JPP-46.1-012925	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/29/2025	8015D
Q1232-09	JPP-42.1-012925	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/29/2025	8015D
Q1232-13	JPP-42.2-012925	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/29/2025	8015D
Q1232-17	JPP-51.1-012925	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/29/2025	8015D
Q1235-01	JPP-51.2-012925	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/29/2025	8015D
Q1235-05	JPP-16.1-012925	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/29/2025	8015D
Q1241-01	JPP-3.5-013025	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/30/2025	8015D
Q1241-05	JPP-5.3-013025	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/30/2025	8015D
Q1241-09	JPP-5.2-013025	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/30/2025	8015D
Q1241-13	JPP-5.4-013025	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/30/2025	8015D
Q1241-17	JPP-51.4-013025	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/30/2025	8015D
Q1242-01	JPP-6.2-013025	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/30/2025	8015D

172 of 233

Date/Time 01/31/25 8:45

Raw Sample Received by: RJ (Cell log)

Raw Sample Relinquished by: [signature]

Date/Time 01/31/25 9:10

Raw Sample Received by: CP SM

Raw Sample Relinquished by: RJ (Cell log)

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

Prep Standard - Chemical Standard Summary

Order ID : Q1242

Test : Diesel Range Organics

Prepbatch ID : PB166415,

Sequence ID/Qc Batch ID: FE013125

Standard ID :
EP2578,EP2580,PP23913,PP23935,PP23961,PP23962,PP23963,PP23964,PP23965,PP23966,PP23967,

Chemical ID :
E2865,E3551,E3822,E3828,E3846,E3848,E3874,P11958,P11959,P13104,P13109,P13213,P13218,P13219,P13492,P13493,P13494,P13495,

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Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2017	1:1 ACETONE/METHYLENE CHLORIDE	EP2578	01/06/2025	06/18/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 01/06/2025

FROM 8000.00000ml of E3846 + 8000.00000ml of E3848 = Final Quantity: 16000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2580	01/17/2025	07/01/2025	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 01/17/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

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Fax : 908 789 8922

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3609	20 PPM DRO SPIKE SOLUTION (RESTEK)	PP23913	10/25/2024	04/23/2025	Yogesh Patel	None	None	Ankita Jodhani 10/25/2024

FROM 1.00000ml of P13104 + 1.00000ml of P13109 + 48.00000ml of E3822 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
147	20 PPM DRO Surrogate Spike Solution	PP23935	11/01/2024	04/23/2025	Yogesh Patel	None	None	Ankita Jodhani 11/04/2024

FROM 1.00000ml of P13492 + 1.00000ml of P13493 + 1.00000ml of P13494 + 1.00000ml of P13495 + 196.00000ml of E3822 = Final Quantity: 200.000 ml

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Fax : 908 789 8922

Pest/Pcb STANDARD PREPARATION LOG

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

FROM 1.00000ml of P11958 + 1.00000ml of P11959 + 1.00000ml of P13213 + 7.00000ml of E3828 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3796	100/100 PPM DRO STD (CPI)	PP23962	11/13/2024	02/14/2025	Yogesh Patel	None	None	Ankita Jodhani 11/13/2024

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

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Pest/Pcb STANDARD PREPARATION LOG

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

FROM 0.50000ml of E3828 + 0.50000ml of PP23961 = Final Quantity: 1.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
437	20 PPM ICC DRO STD (Restek)	PP23964	11/13/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/13/2024

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

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Pest/Pcb STANDARD PREPARATION LOG

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

FROM 0.90000ml of E3828 + 0.10000ml of PP23961 = Final Quantity: 1.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
439	5 PPM ICC DRO STD (Restek)	PP23966	11/13/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/13/2024

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

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3797	50 PPM DRO ICV STD (CPI)	PP23967	11/13/2024	02/14/2025	Yogesh Patel	None	None	Ankita Jodhani 11/13/2024

FROM 0.80000ml of E3828 + 0.50000ml of PP23962 = 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 #
Seidler Chemical	BA-3382-05 / Sand, Purified (cs/4x2.5kg)	0000243821	06/30/2025	04/30/2020 / RAJESH	04/28/2020 / RAJESH	E2865

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24I2662006	04/23/2025	10/24/2024 / Rajesh	10/24/2024 / Rajesh	E3822

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	06/26/2025	12/26/2024 / Rajesh	12/13/2024 / Rajesh	E3846

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)	24K1762005	06/18/2025	12/18/2024 / Rajesh	12/09/2024 / Rajesh	E3848

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CHEMICAL RECEIPT LOG BOOK

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0186840	05/13/2025	11/13/2024 / yogesh	07/11/2022 / Yogesh	P11958

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0204859	04/25/2025	10/25/2024 / yogesh	01/12/2024 / Yogesh	P13104

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0204859	04/25/2025	10/25/2024 / yogesh	01/12/2024 / Yogesh	P13109

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	05/13/2025	11/13/2024 / yogesh	01/17/2024 / Ankita	P13213

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Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	05/01/2025	11/01/2024 / yogesh	07/24/2024 / yogesh	P13492

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	05/01/2025	11/01/2024 / yogesh	07/24/2024 / yogesh	P13493

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	05/01/2025	11/01/2024 / yogesh	07/24/2024 / yogesh	P13494

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	05/01/2025	11/01/2024 / yogesh	07/24/2024 / yogesh	P13495

Sand
Purified
Washed and Ignited

avantor™ | J.T.Baker®

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

Certificate of Analysis

Test	Specification	Result
Substances Soluble in HCl	<= 0.16 %	0.01

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

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

E 2865

James T Ethier
Jamie Ethier
Vice President Global Quality

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

PRODUCTOS QUIMICOS MONTERREY, S.A. DE C.V.

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

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na_2SO_4
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_4)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO_4)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreing matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

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

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.: 24I2662006
Manufactured Date: 2024-08-29
Expiration Date:2025-11-28
Revision No.: 0

Certificate of Analysis

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

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

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

E 3822

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

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

avantor™ | J.T.Baker

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

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	2
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Titrable Acid (µeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

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

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

E 3828

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

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™ | J.T.Baker

Material No.: 9254-03
Batch No.: 24H2762008
Manufactured Date: 2024-04-18
Expiration Date:2027-04-18
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected forwater)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	<= 0.3	0.2
Titrable Base (µeq/g)	<= 0.6	<0.1
Water (H_2O)	<= 0.5 %	<0.1 %
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1

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

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

Recd by RP on 12/13/24

E 3846

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

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

avantor | J.T.Baker

Material No.: 9266-A4
Batch No.: 24K1762005
Manufactured Date: 2024-10-08
Expiration Date:2026-01-07
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	<= 0.3	0.0
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	0.01 %

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

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

E 3848

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

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

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

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

avantor | J.T.Baker

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

Certificate of Analysis

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

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

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

E 3874

Jamie Croak
Director Quality Operations, Bioscience Production

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

P11948 & P11962 } 7.6 07/...

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

Description : Florida TRPH Standard

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

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

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

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

CERTIFIED VALUES

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

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

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

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

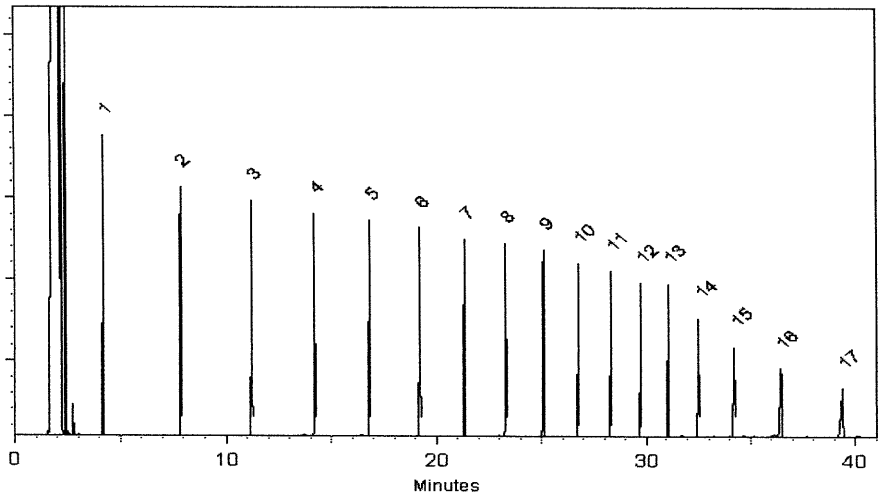
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Brittany Federinko - Operations Tech I

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

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

P11948
&
P11962
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07/...

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

Description : Florida TRPH Standard

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

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

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	n-Octane (C8) **CAS #** 111-65-9 **Purity** 99%	(Lot SHBN3807)	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 **Purity** 99%	(Lot SHBN8619)	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 **Purity** 99%	(Lot SHBN7174)	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 **Purity** 99%	(Lot STBK2282)	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 **Purity** 98%	(Lot SHBM4146)	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 **Purity** 97%	(Lot VZKOJ)	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 **Purity** 99%	(Lot MKCF7888)	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL		Gravimetric Unstressed Stressed

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

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

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

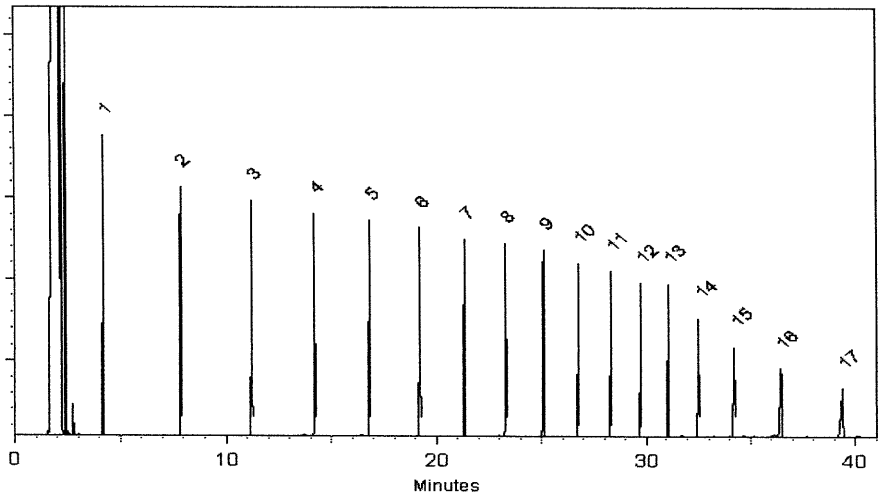
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Brittany Federinko - Operations Tech I

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

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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CERTIFIED REFERENCE MATERIAL

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

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

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Florida TRPH Standard

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

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

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

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

P13103 → P13112 Y.P. 01/12/2024

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

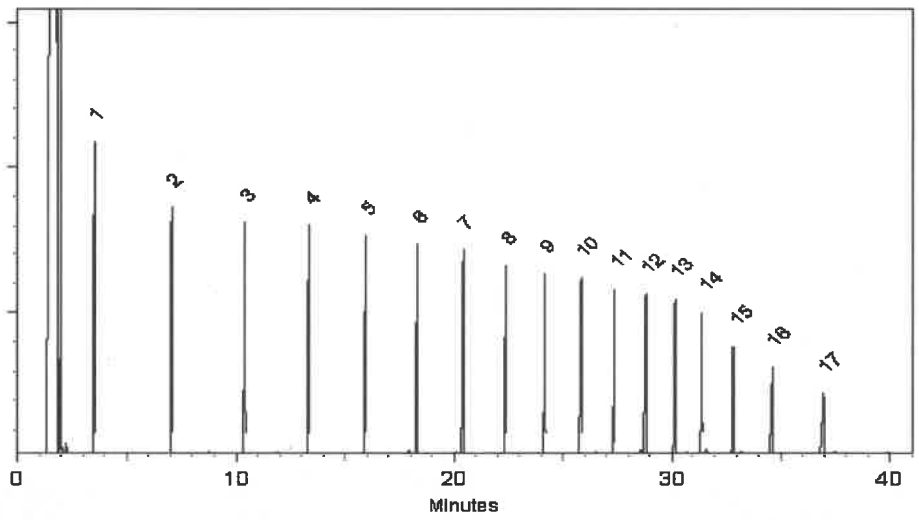
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Dakota Parson - Operations Technician I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 01-Dec-2023

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified 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:

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

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chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Florida TRPH Standard

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

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

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

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

P13103 → P13112 Y.P. 01/12/2024

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

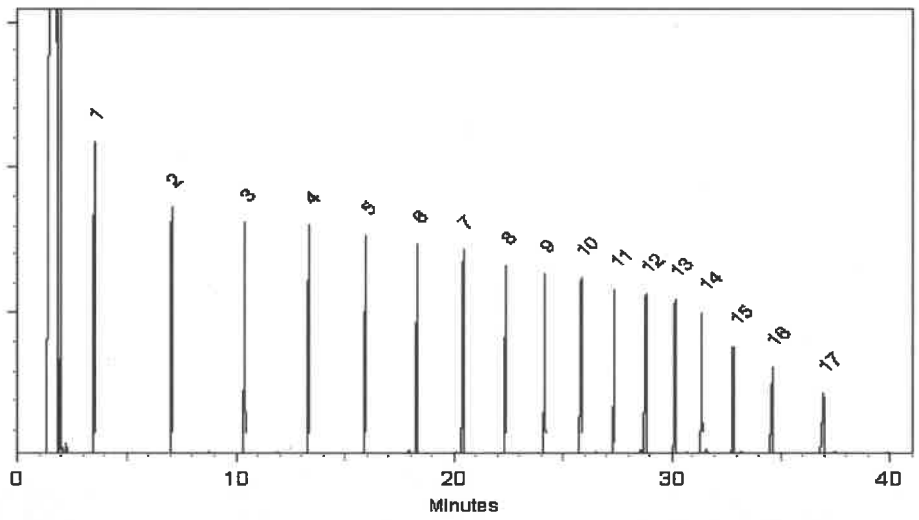
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Dakota Parson - Operations Technician I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 01-Dec-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Absolute Standards, Inc.
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

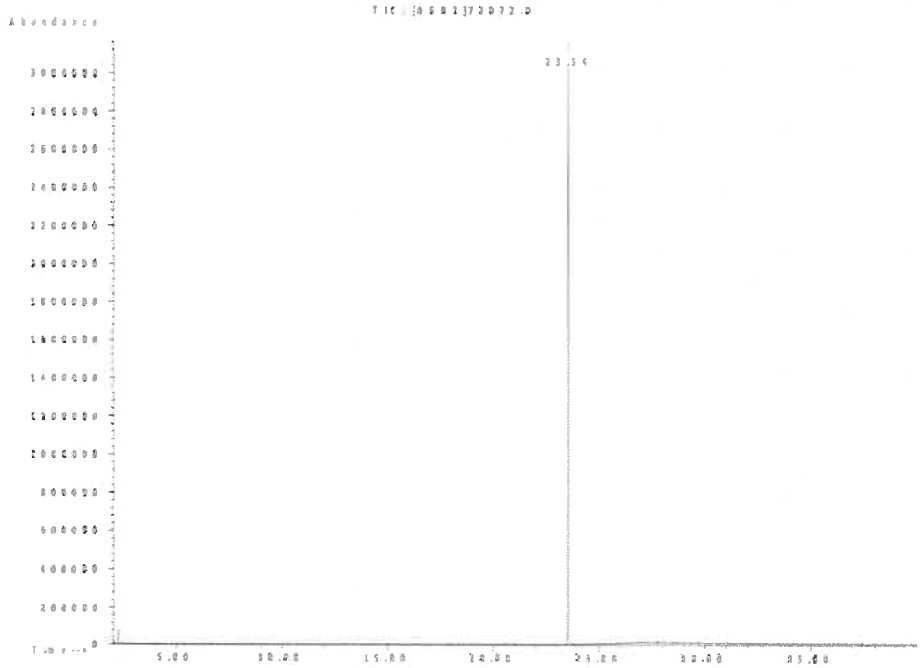
Weight(s) shown below were combined and diluted to (mL): 200.0

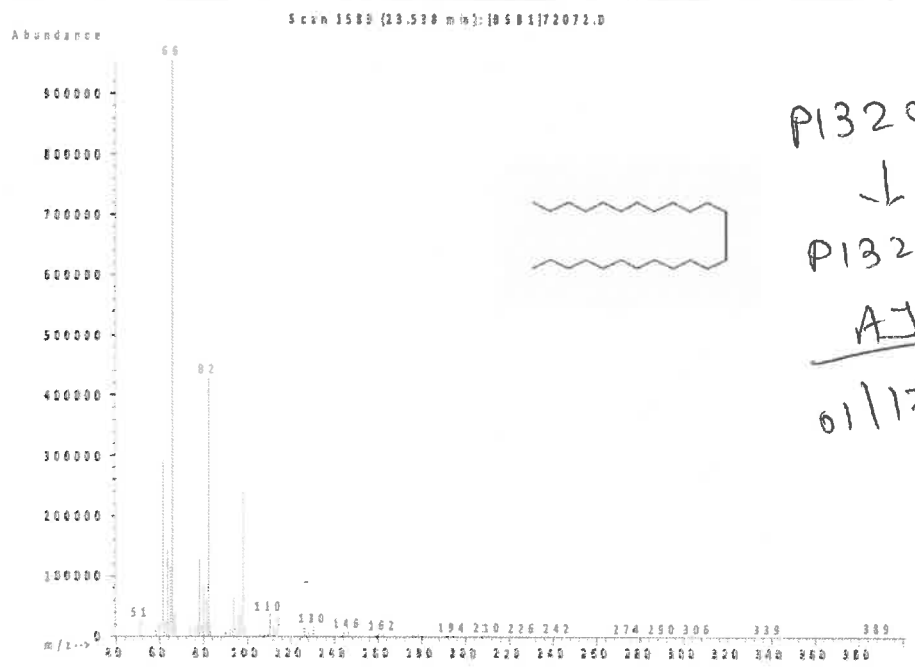
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

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

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

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





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

CPI INTERNATIONAL

5580 Skylane Blvd
Santa Rosa, CA 95403

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

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

Date Received:_____

Certificate of Analysis

Rev 0

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

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

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01/31/24

*Not a certified value

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

Certified By: Andrea Schaible

Andrea Schaible
Chemist

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

CPI INTERNATIONAL

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Santa Rosa, CA 95403

(707)525-5788
(800)878-7654 Toll Free
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Manufacturer's Quality System
Audited & Registered
by TUV USA to ISO 9001:2015

Date Received:_____

Certificate of Analysis

Rev 0

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

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

P 13215
↓
P 13224

AJ
01/31/24

*Not a certified value

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

Certified By: Andrea Schaible

Andrea Schaible
Chemist

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

ABSOLUTE STANDARDS, INC.

ISO - 17034

Certificate of Analysis

Certified Reference Material (CRM)

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

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

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

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

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

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

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

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

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

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

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

Minimum Sample Size: 0.5 uL for analytical applications.

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

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

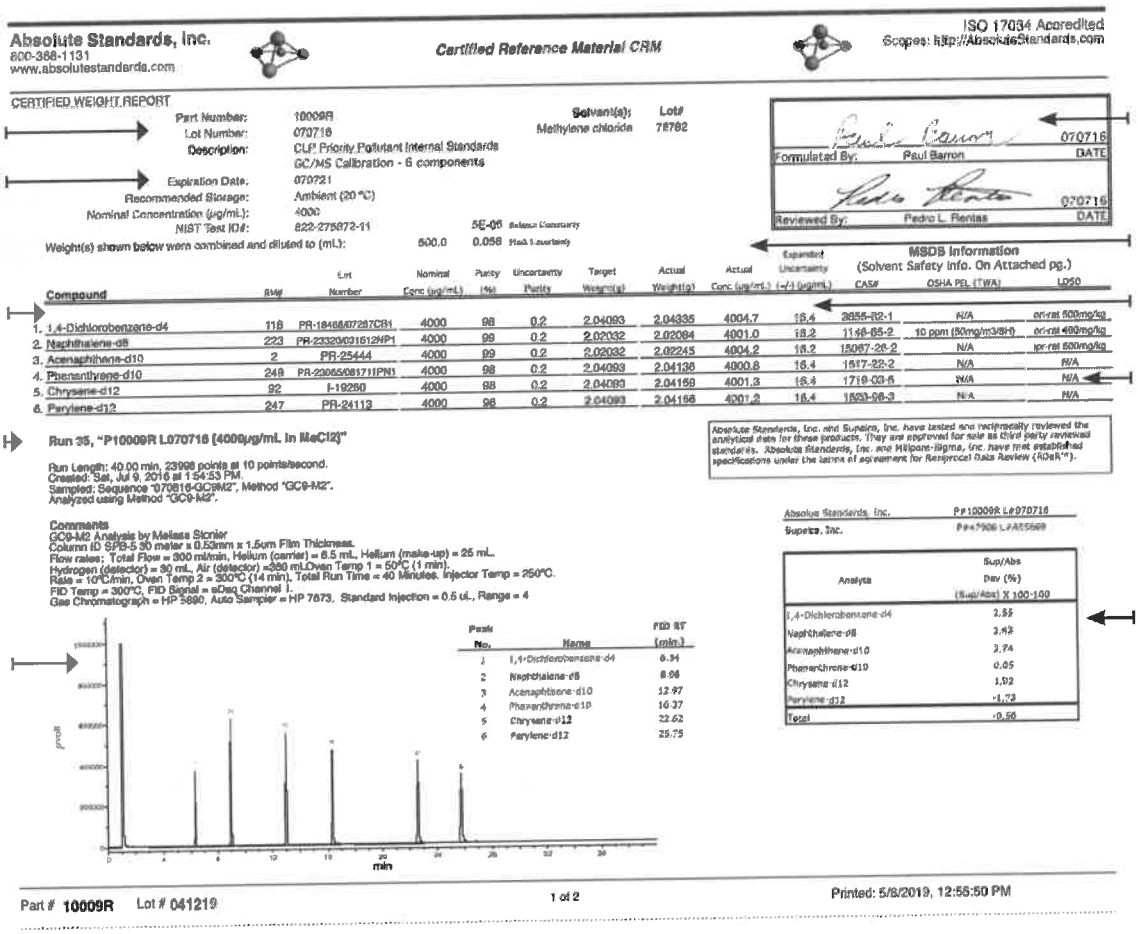
Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

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



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

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

Solvent(s): Methylene chloride
Lot#: 78782

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

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

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

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-18488/07267CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	or-rat 500mg/kg
2. Naphthalene-d8	223	PR-233203031612NP1	4000	99	0.2	2.02032	2.02064	4001.0	16.2	1146-65-2	10 ppm (50mg/m3/8H)	or-rat 490mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	16.2	15067-26-2	N/A	ipr-rat 500mg/kg
4. Phenanthrene-d10	248	PR-230605061711PN1	4000	98	0.2	2.04093	2.04136	4000.8	16.4	1517-22-2	N/A	N/A
5. Chrysene-d12	92	I-19250	4000	98	0.2	2.04093	2.04159	4001.3	16.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	96	0.2	2.04093	2.04156	4001.2	16.4	1520-96-3	N/A	N/A

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

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

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

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

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

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

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

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

Part # / Lot # / Shelf Life

Target Compounds

Method of Analysis

Qualitative / Quantitative

Formulator / Reviewer

Actual Concentration

Uncertainty Values

Health & Safety

3rd Party Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

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

Absolute Standards, Inc.
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www.absolutestandards.com

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

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

Solvent(s):	Lot#
Methylene chloride	105345

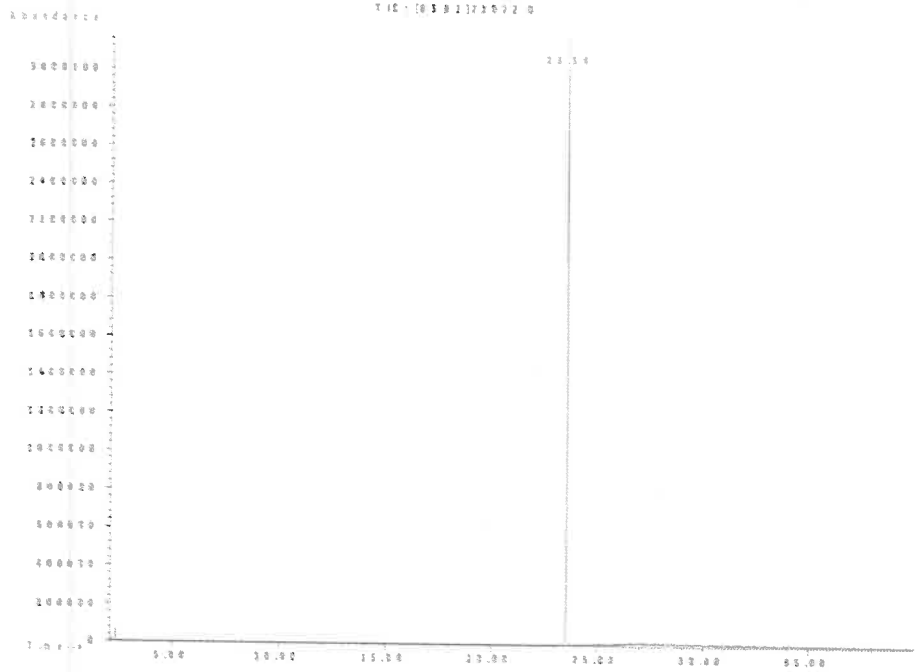
P13477 → P13496 } X.P. 07/24/24

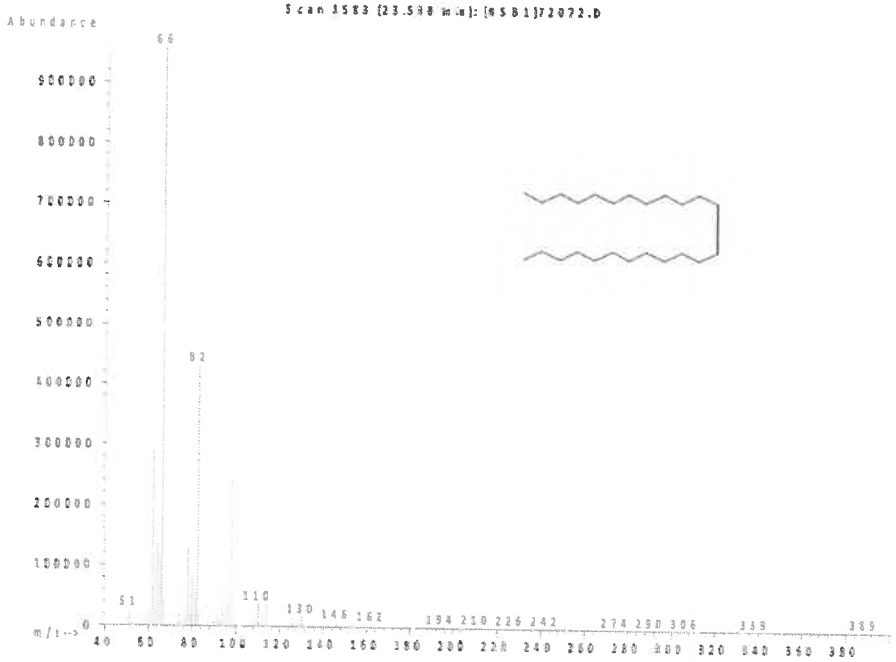
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 200.0 0.058 Flask Uncertainty

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

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

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





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

ABSOLUTE STANDARDS, INC.

ISO - 17034

Certificate of Analysis

Certified Reference Material (CRM)

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

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

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

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

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

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

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

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

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

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

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

Minimum Sample Size: 0.5 uL for analytical applications.

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

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

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

ABSOLUTE STANDARDS, INC.

ISO - 17034

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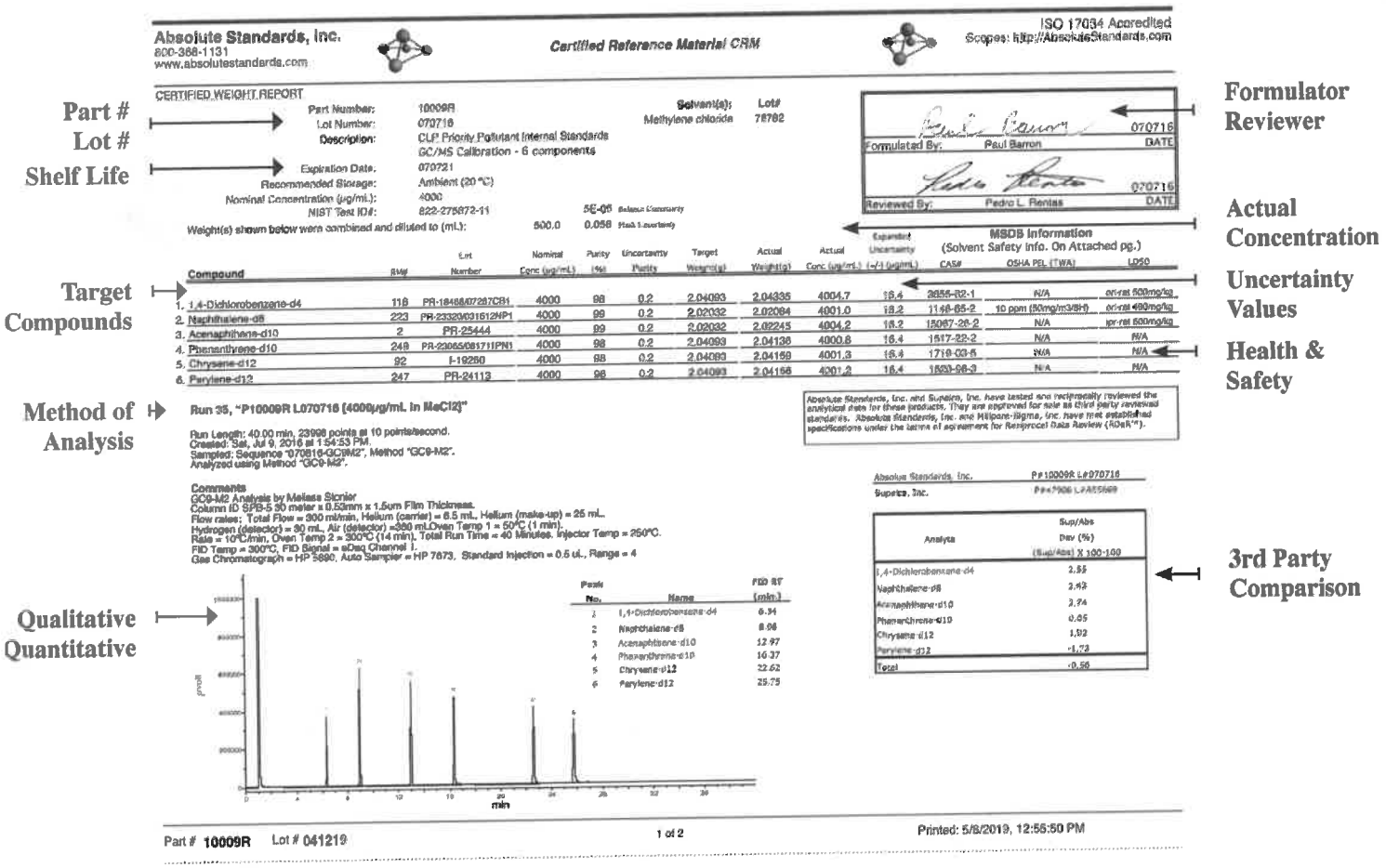


Part # / Lot # / Shelf Life

Formulator / Reviewer

Actual Concentration

Target Compounds

Uncertainty Values

Health & Safety

Method of Analysis

3rd Party Comparison

Qualitative / Quantitative

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

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

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

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

Solvent(s):	Lot#
Methylene chloride	105345

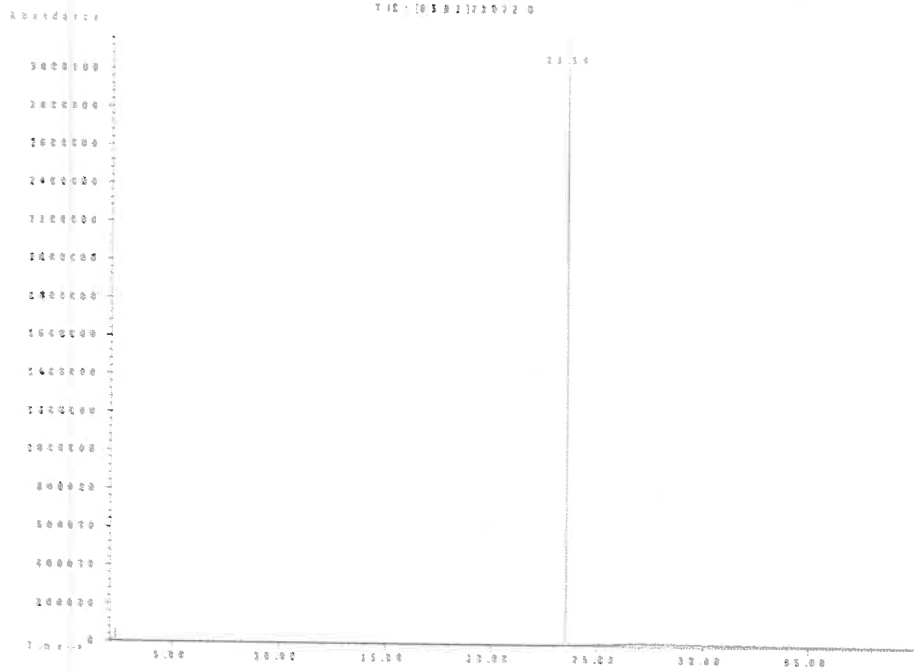
P13477 → P13496 } X.P. 07/24/24

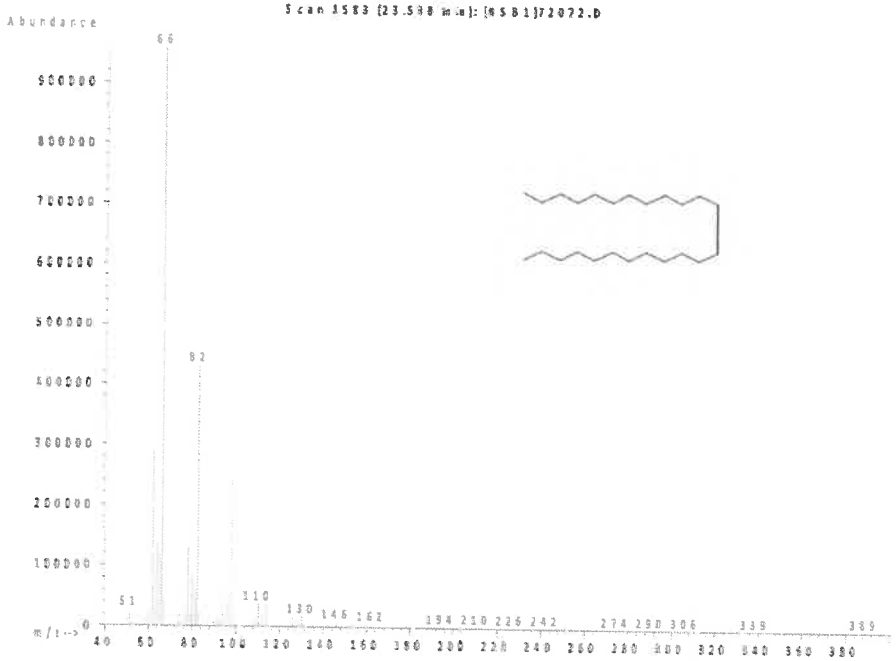
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 200.0 0.058 Flask Uncertainty

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

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

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





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- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
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ABSOLUTE STANDARDS, INC.

ISO - 17034

Certificate of Analysis

Certified Reference Material (CRM)

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

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

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

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

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

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

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

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

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

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

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

Minimum Sample Size: 0.5 uL for analytical applications.

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

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

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

ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

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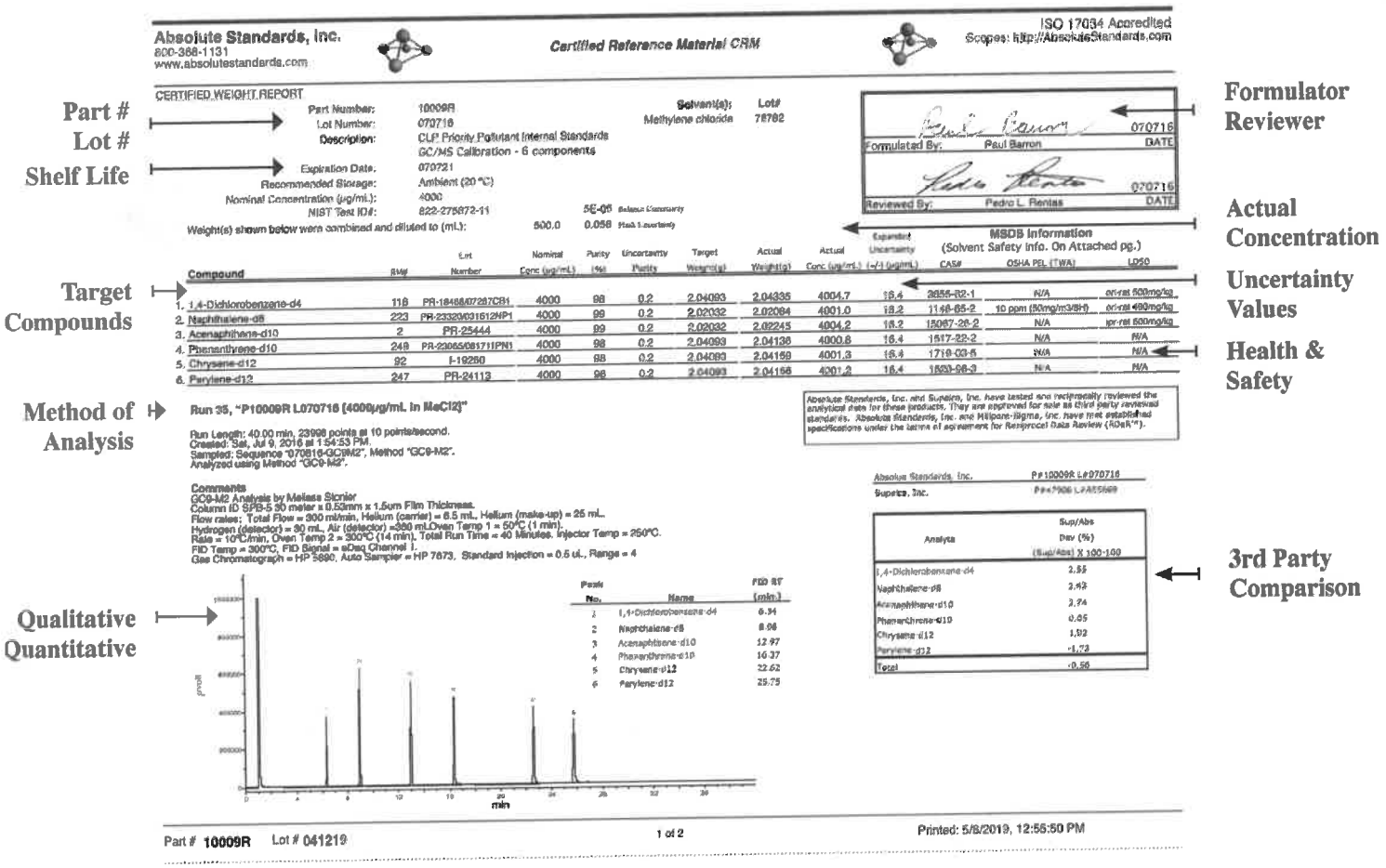

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

Solvent(s): Methylene chloride
Lot# 78782

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

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

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

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-18488/07267CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	or-rat 500mg/kg
2. Naphthalene-d8	223	PR-233230/31612NP1	4000	99	0.2	2.02032	2.02064	4001.0	16.2	1146-65-2	10 ppm (50mg/m3/8H)	or-rat 490mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	16.2	15067-26-2	N/A	ipr-rat 500mg/kg
4. Phenanthrene-d10	248	PR-230650/31711PN1	4000	98	0.2	2.04093	2.04136	4000.8	16.4	1517-22-2	N/A	N/A
5. Chrysene-d12	92	I-19250	4000	98	0.2	2.04093	2.04159	4001.3	16.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	96	0.2	2.04093	2.04156	4001.2	16.4	1520-96-3	N/A	N/A

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

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

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

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

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

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

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

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

Part # / Lot # / Shelf Life

Formulator / Reviewer

Actual Concentration

Target Compounds

Uncertainty Values

Health & Safety

Method of Analysis

3rd Party Comparison

Qualitative / Quantitative

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

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www.absolutestandards.com

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

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

Solvent(s):	Lot#
Methylene chloride	105345

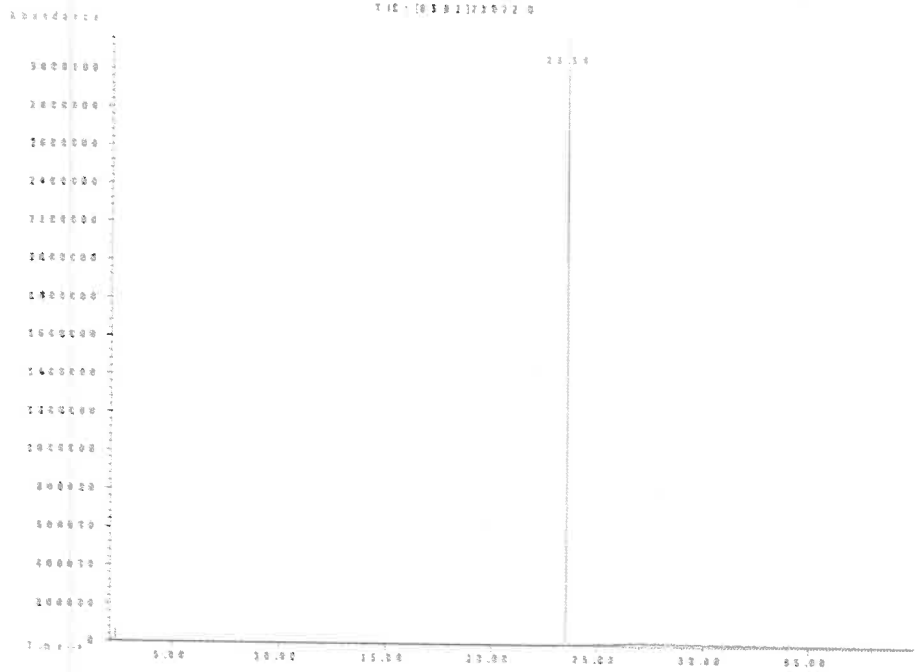
P13477 → P13496 } X.P. 07/24/24

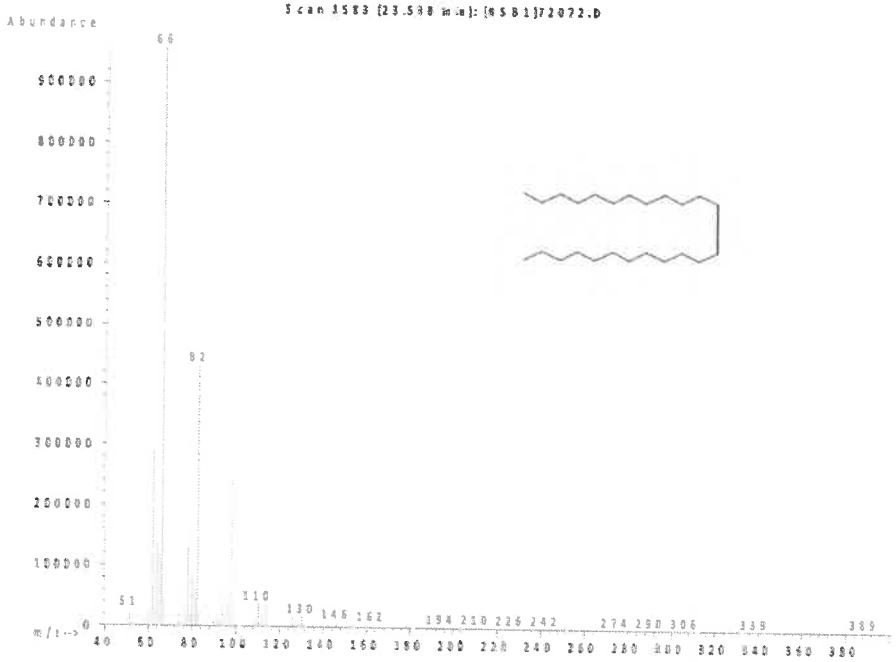
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

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

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

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





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ISO - 17034

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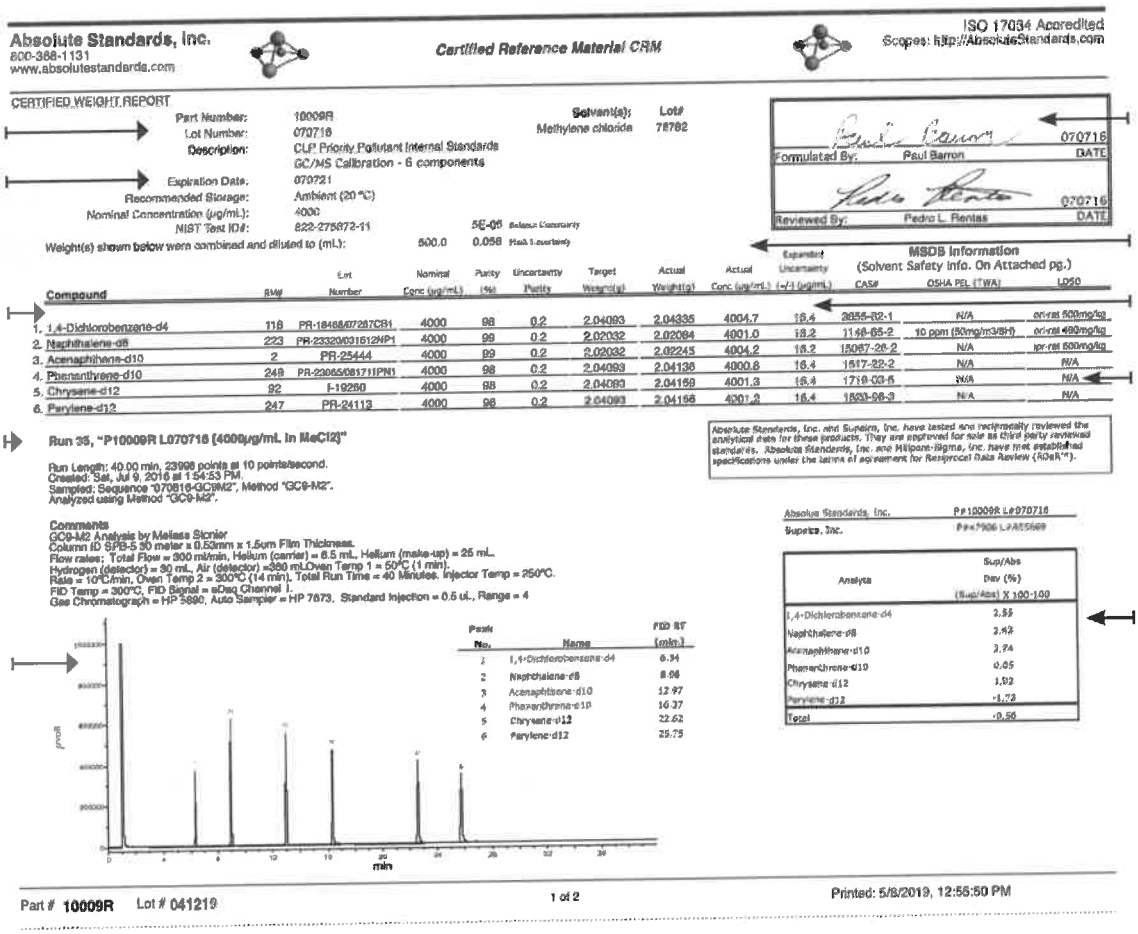

Absolute Standards, Inc.
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www.absolutestandards.com

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

Solvent(s): Methylene chloride
Lot#: 78782

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

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

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

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-18488/07267CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	or-rat 500mg/kg
2. Naphthalene-d8	223	PR-233203031612NP1	4000	99	0.2	2.02032	2.02064	4001.0	16.2	1146-65-2	10 ppm (50mg/m3/8H)	or-rat 490mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	16.2	15067-26-2	N/A	ipr-rat 500mg/kg
4. Phenanthrene-d10	248	PR-230605061711PN1	4000	98	0.2	2.04093	2.04136	4000.8	16.4	1517-22-2	N/A	N/A
5. Chrysene-d12	92	I-19250	4000	98	0.2	2.04093	2.04159	4001.3	16.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	96	0.2	2.04093	2.04156	4001.2	16.4	1520-96-3	N/A	N/A

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

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

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

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

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

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

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

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

Part # / Lot # / Shelf Life

Target Compounds

Method of Analysis

Qualitative / Quantitative

Formulator / Reviewer

Actual Concentration

Uncertainty Values

Health & Safety

3rd Party Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

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

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

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

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

Solvent(s):	Lot#
Methylene chloride	105345

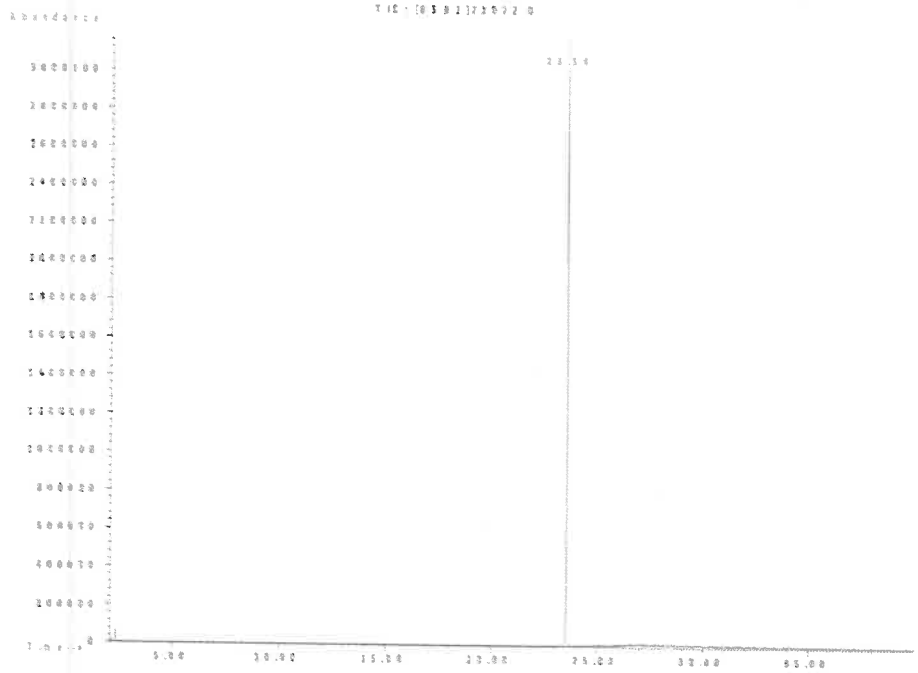
P13477 → P13496 } X.P. 07/24/24

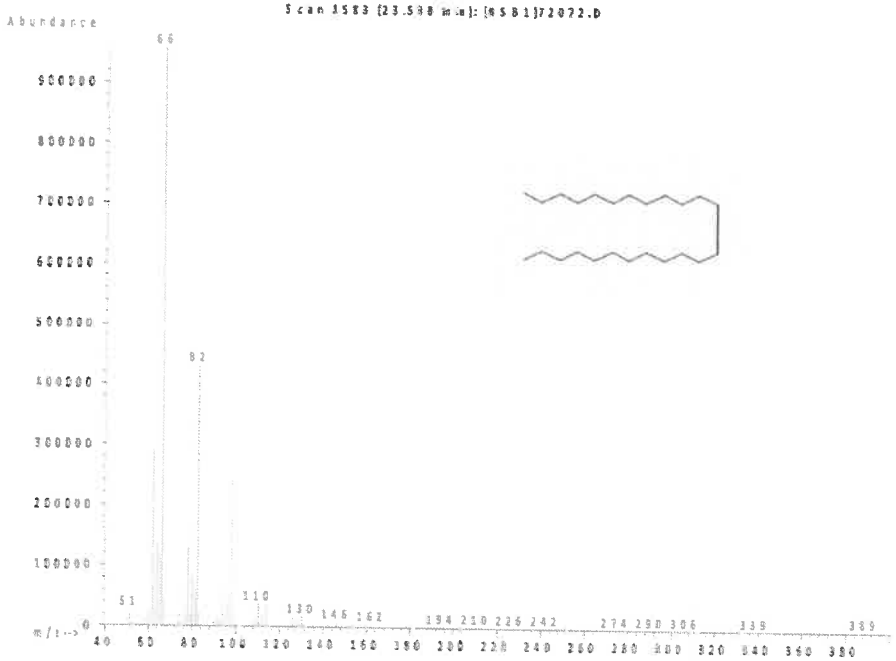
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

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

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

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





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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052178.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 15:39
Operator : YP\AJ
Sample : Q1242-01
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 03 00:11:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_E
ClientSampleId :
JPP-6.2-013025

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.303	1123420	11.279 ug/mlm
Target Compounds			

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE013125\
Data File : FE052178.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 15:39
Operator : YP\AJ
Sample : Q1242-01
Misc :
ALS Vial : 19 Sample Multiplier: 1

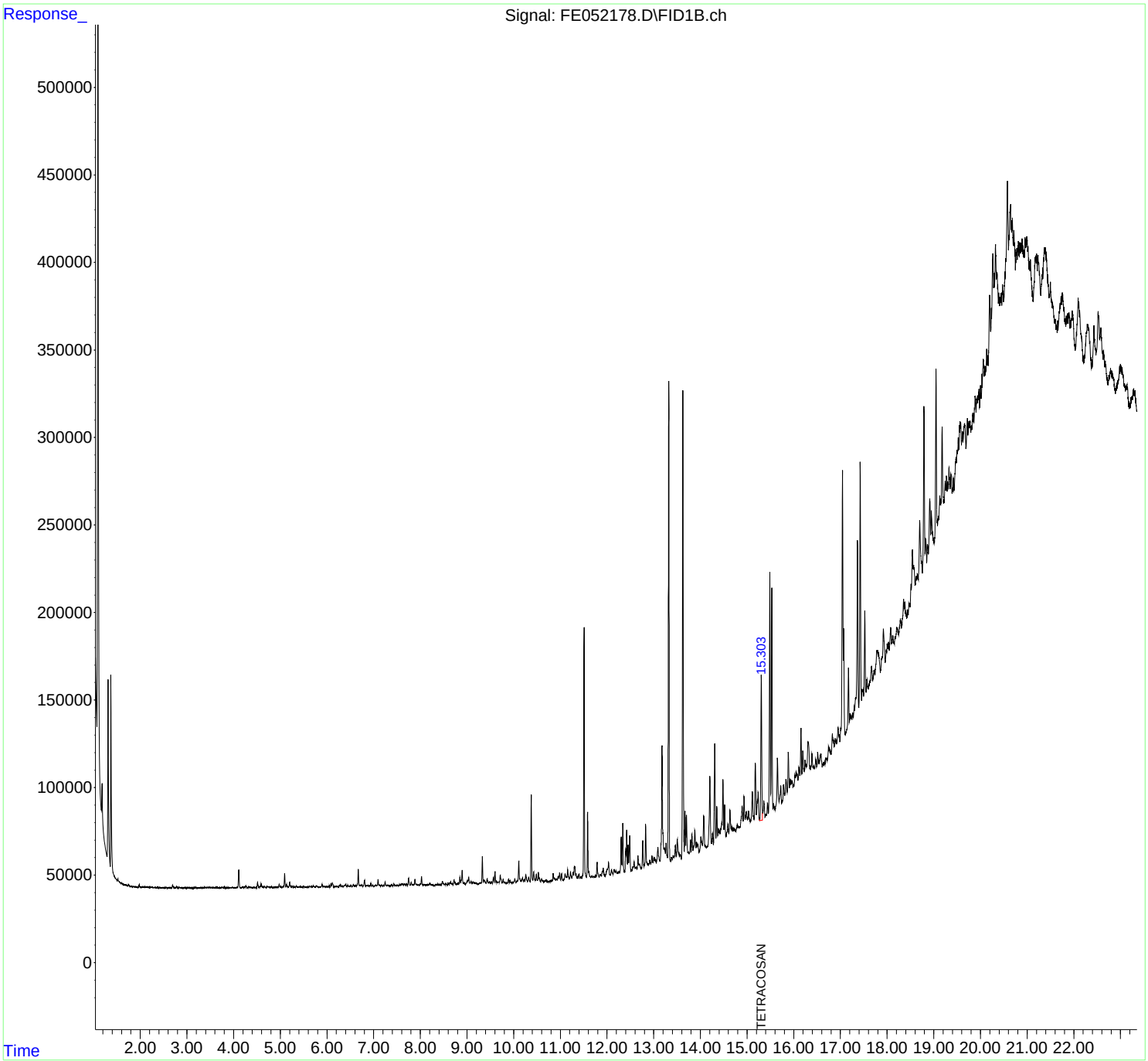
Integration File: autoint1.e
Quant Time: Feb 03 00:11:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Quant Title :
QLast Update : Fri Jan 24 03:06:38 2025
Response via : Initial Calibration
Integrator: ChemStation

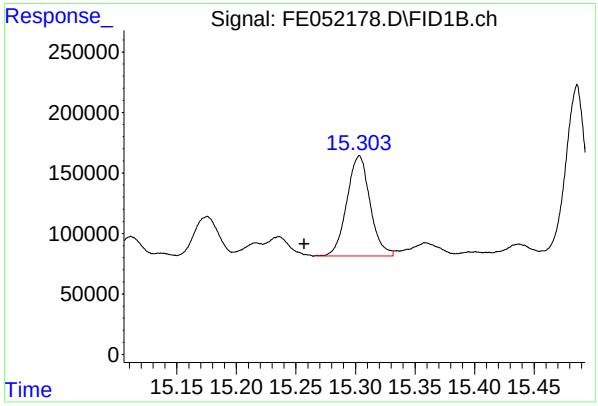
Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_E
ClientSampleId :
JPP-6.2-013025

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.303 min
Delta R.T.: 0.046 mi
Response: 1123420
Conc: 11.28 ug/m

Instrument :
FID_E
ClientSampleId :
JPP-6.2-013025

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025

Instrument :
FID_E
ClientSampleId :
JPP-6.2-013025

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE01312
Data File : FE052178.D
Signal(s) : FID1B.ch
Acq On : 31 Jan 2025 15:39
Sample : Q1242-01
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\FE012325.M
Title :

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.871	4.852	4.902	BH	335	4618	0.09%	0.003%
2	4.925	4.902	4.956	HH	268	5339	0.10%	0.003%
3	4.976	4.956	4.994	HH	1825	19462	0.36%	0.011%
4	5.007	4.994	5.043	HH	749	12068	0.22%	0.007%
5	5.060	5.043	5.075	HH	735	8243	0.15%	0.005%
6	5.094	5.075	5.117	HH	8108	79796	1.49%	0.046%
7	5.134	5.117	5.174	HH	1845	27914	0.52%	0.016%
8	5.201	5.174	5.238	HH	3229	45728	0.85%	0.026%
9	5.253	5.238	5.272	HH	884	12477	0.23%	0.007%
10	5.290	5.272	5.311	HH	550	8926	0.17%	0.005%
11	5.318	5.311	5.324	HH	326	2128	0.04%	0.001%
12	5.344	5.324	5.372	HH	1012	13965	0.26%	0.008%
13	5.383	5.372	5.411	HH	478	7639	0.14%	0.004%
14	5.422	5.411	5.450	HH	475	8115	0.15%	0.005%
15	5.472	5.450	5.481	HH	430	5526	0.10%	0.003%
16	5.502	5.481	5.522	HH	757	11254	0.21%	0.006%
17	5.527	5.522	5.545	HH	308	3644	0.07%	0.002%
18	5.555	5.545	5.566	HH	357	3719	0.07%	0.002%
19	5.592	5.566	5.606	HH	529	8193	0.15%	0.005%
20	5.618	5.606	5.627	HH	613	5752	0.11%	0.003%
21	5.634	5.627	5.647	HH	602	6026	0.11%	0.003%
22	5.667	5.647	5.688	HH	701	11356	0.21%	0.007%
23	5.713	5.688	5.745	HH	942	17465	0.33%	0.010%
24	5.774	5.745	5.800	HH	1025	19795	0.37%	0.011%
25	5.809	5.800	5.828	HH	468	6309	0.12%	0.004%
26	5.843	5.828	5.862	HH	392	6796	0.13%	0.004%
27	5.897	5.862	5.915	HH	1744	28138	0.52%	0.016%
28	5.927	5.915	5.943	HH	714	10001	0.19%	0.006%
29	5.948	5.943	5.962	HH	631	6602	0.12%	0.004%
30	5.965	5.962	5.972	HH	557	3361	0.06%	0.002%
31	5.978	5.972	5.996	HH	562	6438	0.12%	0.004%
32	6.008	5.996	6.026	HH	533	8119	0.15%	0.005%
33	6.045	6.026	6.068	HH	1048	15289	0.28%	0.009%
34	6.085	6.068	6.100	HH	2346	24499	0.46%	0.014%
35	6.115	6.100	6.153	HH	2550	47010	0.88%	0.027%
36	6.160	6.153	6.175	HH	694	7277	0.14%	0.004%

Instrument :
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ClientSampleId :
JPP-6.2-013025

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025

					rteres			
37	6.204	6.175	6.245	HH	739	22895	0.43%	0.013%
38	6.269	6.245	6.277	HH	1176	15767		
39	6.292	6.277	6.314	HH	1731	25576		
40	6.331	6.314	6.353	HH	866	16765		
41	6.403	6.353	6.430	HH	1612	47918		
42	6.445	6.430	6.464	HH	1381	19166		
43	6.474	6.464	6.483	HH	691	7231	0.13%	0.004%
44	6.510	6.483	6.545	HH	1209	30382	0.57%	0.018%
45	6.566	6.545	6.595	HH	1902	32030	0.60%	0.018%
46	6.613	6.595	6.627	HH	1434	21604	0.40%	0.012%
47	6.672	6.627	6.696	HH	10551	138983	2.59%	0.080%
48	6.705	6.696	6.732	HH	1443	26818	0.50%	0.015%
49	6.747	6.732	6.766	HH	1736	24773	0.46%	0.014%
50	6.806	6.766	6.831	HH	4178	73469	1.37%	0.042%
51	6.866	6.831	6.881	HH	1287	32468	0.60%	0.019%
52	6.885	6.881	6.897	HH	1160	10112	0.19%	0.006%
53	6.904	6.897	6.913	HH	1079	9642	0.18%	0.006%
54	6.941	6.913	6.962	HH	2310	41961	0.78%	0.024%
55	6.983	6.962	7.006	HH	1672	30993	0.58%	0.018%
56	7.042	7.006	7.068	HH	1334	40115	0.75%	0.023%
57	7.096	7.068	7.112	HH	4658	61671	1.15%	0.036%
58	7.126	7.112	7.147	HH	1566	25857	0.48%	0.015%
59	7.168	7.147	7.195	HH	1565	32735	0.61%	0.019%
60	7.218	7.195	7.230	HH	1331	23672	0.44%	0.014%
61	7.247	7.230	7.267	HH	3232	44141	0.82%	0.025%
62	7.291	7.267	7.298	HH	1372	23399	0.44%	0.013%
63	7.311	7.298	7.352	HH	1404	35726	0.67%	0.021%
64	7.385	7.352	7.409	HH	1707	40953	0.76%	0.024%
65	7.432	7.409	7.478	HH	1867	55339	1.03%	0.032%
66	7.494	7.478	7.508	HH	1405	22547	0.42%	0.013%
67	7.522	7.508	7.537	HH	1549	21082	0.39%	0.012%
68	7.558	7.537	7.578	HH	1744	35805	0.67%	0.021%
69	7.597	7.578	7.607	HH	1922	30238	0.56%	0.017%
70	7.620	7.607	7.635	HH	2262	31707	0.59%	0.018%
71	7.659	7.635	7.686	HH	2068	53462	1.00%	0.031%
72	7.704	7.686	7.727	HH	2239	42674	0.79%	0.025%
73	7.749	7.727	7.788	HH	5407	98241	1.83%	0.057%
74	7.806	7.788	7.830	HH	3080	51691	0.96%	0.030%
75	7.839	7.830	7.852	HH	1748	21670	0.40%	0.013%
76	7.862	7.852	7.870	HH	1828	17651	0.33%	0.010%
77	7.886	7.870	7.912	HH	4743	69813	1.30%	0.040%
78	7.914	7.912	7.952	HH	1859	37353	0.70%	0.022%
79	7.964	7.952	7.977	HH	1583	22037	0.41%	0.013%
80	8.002	7.977	8.011	HH	2131	36140	0.67%	0.021%
81	8.028	8.011	8.073	HH	6385	102942	1.92%	0.059%
82	8.080	8.073	8.099	HH	1572	23394	0.44%	0.013%
83	8.115	8.099	8.119	HH	1538	18027	0.34%	0.010%
84	8.135	8.119	8.141	HH	1637	20683	0.39%	0.012%
85	8.149	8.141	8.173	HH	1667	28757	0.54%	0.017%
86	8.200	8.173	8.212	HH	2283	42757	0.80%	0.025%
87	8.223	8.212	8.232	HH	1957	21625	0.40%	0.012%
88	8.242	8.232	8.272	HH	1782	37265	0.69%	0.021%
89	8.282	8.272	8.303	HH	1345	23630	0.44%	0.014%

Instrument :
FID_E
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JPP-6.2-013025

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rteres

90	8.345	8.303	8.365	HH	1870	58769	1.09%	0.034%
91	8.377	8.365	8.399	HH	1993	35591		
92	8.401	8.399	8.415	HH	1647	14341		
93	8.433	8.415	8.445	HH	1923	31163		
94	8.476	8.445	8.500	HH	3623	83191		
95	8.508	8.500	8.530	HH	2342	35794		
96	8.550	8.530	8.571	HH	2313	47341	0.88%	0.027%
97	8.595	8.571	8.620	HH	2649	59967	1.12%	0.035%
98	8.632	8.620	8.642	HH	2827	34356	0.64%	0.020%
99	8.651	8.642	8.670	HH	2967	42203	0.79%	0.024%
100	8.677	8.670	8.701	HH	2233	36932	0.69%	0.021%
101	8.724	8.701	8.738	HH	4310	70280	1.31%	0.041%
102	8.743	8.738	8.774	HH	3107	51269	0.95%	0.030%
103	8.795	8.774	8.813	HH	2581	52964	0.99%	0.031%
104	8.823	8.813	8.830	HH	2321	21919	0.41%	0.013%
105	8.850	8.830	8.864	HH	6068	80296	1.50%	0.046%
106	8.898	8.864	8.932	HH	9859	190608	3.55%	0.110%
107	8.945	8.932	8.972	HH	2576	54697	1.02%	0.032%
108	9.011	8.972	9.018	HH	3949	88016	1.64%	0.051%
109	9.038	9.018	9.065	HH	5881	114032	2.12%	0.066%
110	9.086	9.065	9.111	HH	3489	78332	1.46%	0.045%
111	9.126	9.111	9.153	HH	3253	69963	1.30%	0.040%
112	9.157	9.153	9.181	HH	2718	40350	0.75%	0.023%
113	9.193	9.181	9.242	HH	2536	81496	1.52%	0.047%
114	9.279	9.242	9.295	HH	2853	77486	1.44%	0.045%
115	9.331	9.295	9.351	HH	17792	234596	4.37%	0.135%
116	9.366	9.351	9.407	HH	4453	115349	2.15%	0.067%
117	9.433	9.407	9.462	HH	5046	115657	2.15%	0.067%
118	9.482	9.462	9.502	HH	3500	69427	1.29%	0.040%
119	9.520	9.502	9.541	HH	3115	65857	1.23%	0.038%
120	9.568	9.541	9.584	HH	5657	104968	1.96%	0.061%
121	9.602	9.584	9.622	HH	9157	127525	2.38%	0.074%
122	9.635	9.622	9.664	HH	3554	79127	1.47%	0.046%
123	9.687	9.664	9.695	HH	3347	56793	1.06%	0.033%
124	9.714	9.695	9.752	HH	7118	157289	2.93%	0.091%
125	9.775	9.752	9.796	HH	4755	90959	1.69%	0.052%
126	9.803	9.796	9.825	HH	2953	47983	0.89%	0.028%
127	9.830	9.825	9.851	HH	2700	39270	0.73%	0.023%
128	9.891	9.851	9.908	HH	4907	111978	2.09%	0.065%
129	9.922	9.908	9.942	HH	4189	68272	1.27%	0.039%
130	9.945	9.942	9.953	HH	2910	18213	0.34%	0.011%
131	9.976	9.953	9.992	HH	3186	66756	1.24%	0.039%
132	10.025	9.992	10.045	HH	4980	120493	2.24%	0.070%
133	10.080	10.045	10.090	HH	3950	95149	1.77%	0.055%
134	10.111	10.090	10.154	HH	15278	267186	4.98%	0.154%
135	10.175	10.154	10.179	HH	4673	62795	1.17%	0.036%
136	10.192	10.179	10.212	HH	5608	92940	1.73%	0.054%
137	10.231	10.212	10.242	HH	4621	73101	1.36%	0.042%
138	10.261	10.242	10.299	HH	7394	171873	3.20%	0.099%
139	10.322	10.299	10.355	HH	5967	148173	2.76%	0.085%
140	10.379	10.355	10.408	HH	52970	594476	11.07%	0.343%
141	10.430	10.408	10.459	HH	9045	184554	3.44%	0.106%

Instrument :
FID_E
ClientSampleId :
JPP-6.2-013025

Manual IntegrationsAPPROVED

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Supervised By :Ankita Jodhani 02/03/2025

rteres

142	10.487	10.459	10.508	HH	7642	158149	2.95%	0.091%
143	10.529	10.508	10.545	HH	8690	138711	2	
144	10.552	10.545	10.572	HH	5284	73436	1	
145	10.594	10.572	10.618	HH	4881	113689	2	
146	10.621	10.618	10.645	HH	4036	56617	1	
147	10.662	10.645	10.668	HH	3623	48947	0	
148	10.687	10.668	10.721	HH	4266	121800	2.27%	0.070%
149	10.726	10.721	10.738	HH	3445	33400	0.62%	0.019%
150	10.779	10.738	10.797	HH	3800	125910	2.35%	0.073%
151	10.849	10.797	10.866	HH	8020	206372	3.84%	0.119%
152	10.875	10.866	10.892	HH	5522	80177	1.49%	0.046%
153	10.902	10.892	10.912	HH	4757	54573	1.02%	0.031%
154	10.923	10.912	10.936	HH	4912	66802	1.24%	0.039%
155	10.956	10.936	10.967	HH	6575	104321	1.94%	0.060%
156	10.986	10.967	11.007	HH	8466	157125	2.93%	0.091%
157	11.028	11.007	11.059	HH	7988	173409	3.23%	0.100%
158	11.103	11.059	11.120	HH	7857	208672	3.89%	0.120%
159	11.130	11.120	11.140	HH	6254	71812	1.34%	0.041%
160	11.159	11.140	11.192	HH	10366	222701	4.15%	0.128%
161	11.220	11.192	11.253	HH	8952	242326	4.51%	0.140%
162	11.271	11.253	11.282	HH	8665	130082	2.42%	0.075%
163	11.300	11.282	11.328	HH	12124	272930	5.08%	0.157%
164	11.337	11.328	11.363	HH	7690	137277	2.56%	0.079%
165	11.401	11.363	11.420	HH	7873	216236	4.03%	0.125%
166	11.433	11.420	11.460	HH	6286	138845	2.59%	0.080%
167	11.510	11.460	11.553	HH	148674	1781255	33.18%	1.028%
168	11.584	11.553	11.604	HH	43170	572541	10.66%	0.330%
169	11.610	11.604	11.658	HH	9164	228335	4.25%	0.132%
170	11.674	11.658	11.700	HH	6691	157347	2.93%	0.091%
171	11.715	11.700	11.736	HH	6448	130441	2.43%	0.075%
172	11.752	11.736	11.768	HH	7222	126577	2.36%	0.073%
173	11.789	11.768	11.832	HH	14467	342175	6.37%	0.197%
174	11.860	11.832	11.879	HH	7455	192670	3.59%	0.111%
175	11.918	11.879	11.956	HH	11020	393054	7.32%	0.227%
176	12.031	11.956	12.071	HH	14363	636130	11.85%	0.367%
177	12.096	12.071	12.128	HH	10298	296445	5.52%	0.171%
178	12.156	12.128	12.172	HH	10312	240296	4.48%	0.139%
179	12.193	12.172	12.217	HH	9430	233260	4.34%	0.135%
180	12.232	12.217	12.246	HH	8824	147908	2.75%	0.085%
181	12.260	12.246	12.272	HH	9427	138967	2.59%	0.080%
182	12.305	12.272	12.319	HH	29073	461361	8.59%	0.266%
183	12.335	12.319	12.367	HH	36754	557538	10.38%	0.322%
184	12.373	12.367	12.381	HH	9315	72870	1.36%	0.042%
185	12.401	12.381	12.410	HH	22116	284864	5.31%	0.164%
186	12.423	12.410	12.439	HH	33024	412589	7.68%	0.238%
187	12.454	12.439	12.467	HH	24472	315201	5.87%	0.182%
188	12.484	12.467	12.507	HH	29599	464147	8.64%	0.268%
189	12.519	12.507	12.536	HH	10315	168470	3.14%	0.097%
190	12.556	12.536	12.563	HH	11771	182289	3.40%	0.105%
191	12.583	12.563	12.613	HH	14945	375065	6.99%	0.216%
192	12.622	12.613	12.641	HH	11580	184470	3.44%	0.106%
193	12.663	12.641	12.686	HH	18199	386409	7.20%	0.223%
194	12.695	12.686	12.725	HH	13430	284286	5.29%	0.164%

Instrument :
FID_E
ClientSampleId :
JPP-6.2-013025

Manual IntegrationsAPPROVED

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Supervised By :Ankita Jodhani 02/03/2025

rteres

195	12.731	12.725	12.741	HH	11227	105718	1.97%	0.061%
196	12.767	12.741	12.792	HH	26863	507302	9	
197	12.825	12.792	12.878	HH	36148	926076	17	
198	12.893	12.878	12.900	HH	13605	176930	3	
199	12.917	12.900	12.936	HH	15653	307765	5	
200	12.961	12.936	12.983	HH	18204	444923	8	
201	12.999	12.983	13.008	HH	16916	236010	4.40%	0.136%
202	13.019	13.008	13.032	HH	17179	234543	4.37%	0.135%
203	13.043	13.032	13.056	HH	16050	216348	4.03%	0.125%
204	13.088	13.056	13.135	HH	22985	817928	15.23%	0.472%
205	13.179	13.135	13.217	HH	81034	1760879	32.80%	1.016%
206	13.225	13.217	13.248	HH	22669	398855	7.43%	0.230%
207	13.263	13.248	13.294	HH	25507	571309	10.64%	0.330%
208	13.323	13.294	13.361	HH	289122	3611184	67.26%	2.083%
209	13.381	13.361	13.396	HH	17349	338479	6.30%	0.195%
210	13.413	13.396	13.429	HH	18106	341539	6.36%	0.197%
211	13.464	13.429	13.481	HH	24151	625919	11.66%	0.361%
212	13.508	13.481	13.535	HH	27644	720011	13.41%	0.415%
213	13.541	13.535	13.557	HH	19999	248111	4.62%	0.143%
214	13.571	13.557	13.590	HH	18810	359085	6.69%	0.207%
215	13.622	13.590	13.655	HH	283502	3706687	69.04%	2.138%
216	13.671	13.655	13.686	HH	43660	605538	11.28%	0.349%
217	13.700	13.686	13.729	HH	41290	745093	13.88%	0.430%
218	13.737	13.729	13.755	HH	20256	313498	5.84%	0.181%
219	13.757	13.755	13.765	HH	19889	116816	2.18%	0.067%
220	13.786	13.765	13.801	HH	27140	497164	9.26%	0.287%
221	13.820	13.801	13.841	HH	30720	609364	11.35%	0.352%
222	13.879	13.841	13.902	HH	32819	951606	17.72%	0.549%
223	13.914	13.902	13.928	HH	25892	378663	7.05%	0.218%
224	13.943	13.928	13.976	HH	24806	654220	12.18%	0.377%
225	14.010	13.976	14.045	HH	28937	1027533	19.14%	0.593%
226	14.071	14.045	14.098	HH	41049	997531	18.58%	0.575%
227	14.106	14.098	14.125	HH	23967	376016	7.00%	0.217%
228	14.134	14.125	14.147	HH	23446	314353	5.85%	0.181%
229	14.201	14.147	14.237	HH	63773	1910694	35.59%	1.102%
230	14.260	14.237	14.281	HH	30920	715838	13.33%	0.413%
231	14.305	14.281	14.330	HH	82259	1403836	26.15%	0.810%
232	14.350	14.330	14.371	HH	46448	899328	16.75%	0.519%
233	14.387	14.371	14.401	HH	33464	561758	10.46%	0.324%
234	14.408	14.401	14.421	HH	32532	379007	7.06%	0.219%
235	14.438	14.421	14.442	HH	33937	416653	7.76%	0.240%
236	14.454	14.442	14.464	HH	36748	470064	8.75%	0.271%
237	14.482	14.464	14.502	HH	61809	1070056	19.93%	0.617%
238	14.519	14.502	14.552	HH	47135	1093836	20.37%	0.631%
239	14.590	14.552	14.607	HH	36238	1073348	19.99%	0.619%
240	14.633	14.607	14.663	HH	44367	1223892	22.79%	0.706%
241	14.672	14.663	14.687	HH	34916	479412	8.93%	0.277%
242	14.699	14.687	14.712	HH	34013	515360	9.60%	0.297%
243	14.722	14.712	14.747	HH	33615	694299	12.93%	0.401%
244	14.752	14.747	14.761	HH	32740	260638	4.85%	0.150%
245	14.788	14.761	14.811	HH	36221	1037869	19.33%	0.599%
246	14.814	14.811	14.822	HH	34740	223780	4.17%	0.129%

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rteres

247	14.838	14.822	14.847	HH	34659	516399	9.62%	0.298%
248	14.894	14.847	14.916	HH	46091	1662257	30	
249	14.934	14.916	14.958	HH	52183	1122810	20	
250	14.985	14.958	15.005	HH	43400	1148289	21	
251	15.033	15.005	15.069	HH	43523	1547206	28	
252	15.073	15.069	15.079	HH	38356	231215	4	
253	15.111	15.079	15.131	HH	54676	1411639	26.29%	0.814%
254	15.135	15.131	15.151	HH	40708	476466	8.87%	0.275%
255	15.175	15.151	15.198	HH	71152	1554854	28.96%	0.897%
256	15.216	15.198	15.222	HH	49291	662463	12.34%	0.382%
257	15.236	15.222	15.265	HH	54509	1209038	22.52%	0.697%
258	15.303	15.265	15.337	HH	121545	2801240	52.17%	1.616%
259	15.359	15.337	15.385	HH	49334	1283402	23.90%	0.740%
260	15.401	15.385	15.416	HH	42017	765710	14.26%	0.442%
261	15.437	15.416	15.455	HH	48239	1054893	19.65%	0.609%
262	15.486	15.455	15.507	HH	179807	2918536	54.36%	1.684%
263	15.528	15.507	15.553	HH	171251	2634983	49.08%	1.520%
264	15.566	15.553	15.600	HH	47949	1296119	24.14%	0.748%
265	15.649	15.600	15.685	HH	73948	2764658	51.49%	1.595%
266	15.721	15.685	15.743	HH	58114	1840215	34.27%	1.062%
267	15.755	15.743	15.760	HH	49530	495189	9.22%	0.286%
268	15.781	15.760	15.808	HH	58711	1588982	29.59%	0.917%
269	15.831	15.808	15.858	HH	61789	1723589	32.10%	0.994%
270	15.882	15.858	15.907	HH	77258	1893346	35.26%	1.092%
271	15.924	15.907	15.941	HH	61958	1199739	22.34%	0.692%
272	15.950	15.941	15.954	HH	60045	469270	8.74%	0.271%
273	15.966	15.954	15.983	HH	60964	1038579	19.34%	0.599%
274	15.996	15.983	16.002	HH	58277	680283	12.67%	0.392%
275	16.024	16.002	16.035	HH	64217	1199840	22.35%	0.692%
276	16.050	16.035	16.062	HH	66156	1066473	19.86%	0.615%
277	16.068	16.062	16.090	HH	65125	1050727	19.57%	0.606%
278	16.110	16.090	16.129	HH	68815	1541249	28.71%	0.889%
279	16.153	16.129	16.174	HH	90943	2020031	37.62%	1.165%
280	16.192	16.174	16.225	HH	77854	2170809	40.43%	1.252%
281	16.241	16.225	16.263	HH	72949	1605139	29.90%	0.926%
282	16.270	16.263	16.277	HH	69941	589898	10.99%	0.340%
283	16.307	16.277	16.344	HH	83133	3063160	57.05%	1.767%
284	16.354	16.344	16.363	HH	69060	788767	14.69%	0.455%
285	16.389	16.363	16.409	HH	76394	1965075	36.60%	1.134%
286	16.413	16.409	16.422	HH	69158	522035	9.72%	0.301%
287	16.432	16.422	16.444	HH	69526	927412	17.27%	0.535%
288	16.470	16.444	16.491	HH	73402	1997520	37.20%	1.152%
289	16.513	16.491	16.545	HH	77509	2339373	43.57%	1.349%
290	16.580	16.545	16.610	HH	76684	2852293	53.12%	1.645%
291	16.639	16.610	16.643	HH	71393	1407376	26.21%	0.812%
292	16.648	16.643	16.655	HH	71397	497345	9.26%	0.287%
293	16.659	16.655	16.668	HH	71459	549615	10.24%	0.317%
294	16.686	16.668	16.719	HH	74121	2241295	41.74%	1.293%
295	16.745	16.719	16.757	HH	80739	1738606	32.38%	1.003%
296	16.761	16.757	16.781	HH	79332	1141047	21.25%	0.658%
297	16.785	16.781	16.801	HH	78216	954833	17.78%	0.551%
298	16.826	16.801	16.842	HH	87832	2041342	38.02%	1.178%
299	16.847	16.842	16.869	HH	84381	1324252	24.66%	0.764%

Instrument :
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rteres

300	16.893	16.869	16.908	HH	84906	1969454	36.68%	1.136%
301	16.951	16.908	16.967	HH	91663	3062895	57	
302	16.973	16.967	16.990	HH	87438	1155028	21	
303	17.010	16.990	17.016	HH	90946	1374808	25	
304	17.043	17.016	17.060	HH	238030	4232798	78	
305	17.069	17.060	17.103	HH	147506	2902667	54	
306	17.171	17.103	17.190	HH	125539	5128819	95.52%	2.959%
307	17.204	17.190	17.214	HH	99451	1373609	25.58%	0.792%
308	17.218	17.214	17.222	HH	97318	436899	8.14%	0.252%
309	17.230	17.222	17.245	HH	98129	1352635	25.19%	0.780%
310	17.263	17.245	17.274	HH	99824	1705376	31.76%	0.984%
311	17.295	17.274	17.305	HH	103544	1892055	35.24%	1.091%
312	17.322	17.305	17.326	HH	108310	1320374	24.59%	0.762%
313	17.365	17.326	17.392	HH	198249	5369175	100.00%	3.097%
314	17.423	17.392	17.451	HH	243041	5322472	99.13%	3.070%

Sum of corrected areas: 173354336

FE012325.M Mon Feb 03 02:19:03 2025

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

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

CHEMTECH PROJECT NO. Q1242
QUOTE NO.
COC Number 2041688

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: RU2 Engineering LLC
ADDRESS: 2 Melinda Drive, Monroe Twp, NJ 08831
CITY ZIP:
ATTENTION: Rutu Manani
PHONE: 609-409-4564 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: SANDTWOBR B/MCR Project
PROJECT NO.: LOCATION: Brooklyn, NYC
PROJECT MANAGER: Rutu Manani
e-mail: Rmanani@Ru2eng.com
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: Same as Company address PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) Standard 10 days DAYS*
HARDCOPY (DATA PACKAGE): Standard 10 days DAYS*
EDD: Standard 10 days DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

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

ANALYSIS

1 TCL VOC + TICs MTBE/TBA
2 TCLP VOCs
3 TPH GRO-DRO
4 TCL SVOCs + TICs
5 TAL Metals
6 Pesticides, PCBs
7 RCRA characteristics
8 Paint filter
9 full TCLP

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	JPP-6.2-013025	Soil		G	1/30/25	12:44	3	X	X	X							
2.	JPP-6.2-93025	Soil	C		1/30/25	12:52	8			X	X	X	X	X	X	X	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

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

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

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. RA	1-30-25 1453	1.
2.		2.
3.		3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 4.1 °C
Comments: Preserve extra Sample Jar if additional analysis is Required
IR-Gun #1

Page 2 of 2

CLIENT: ☐ Hand Delivered ☐ Other
CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete ☐ YES ☐ NO

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

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1242 RUTW01
Client Name : RU2 Engineering, LLC
Client Contact : Rutu Manani
Invoice Name : RU2 Engineering, LLC
Invoice Contact : Rutu Manani

Order Date : 1/30/2025 3:02:00 PM
Project Name : NYCDDC SANTWOBR Bi
Receive DateTime : 1/30/2025 2:53:00 PM
Purchase Order :

Project Mgr :
Report Type : NYS ASP B
EDD Type : Excel NY
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1242-01	JPP-6.2-013025	Solid	01/30/2025	12:44					
					VOCMS Group1		8260D		10 Bus. Days

Relinguished By : [signature]
Date / Time : 1-30-25 15:50

Received By : [signature]
Date / Time : 1/30/25 1530

Storage Area : VOA Refridgerator Room

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1242 RUTW01
Client Name : RU2 Engineering, LLC
Client Contact : Rutu Manani
Invoice Name : RU2 Engineering, LLC
Invoice Contact : Rutu Manani

Order Date : 1/30/2025 3:02:00 PM
Project Name : NYCDDC SANTWOBR Bi
Receive DateTime : 1/30/2025 2:53:00 PM
Purchase Order :

Project Mgr :
Report Type : NYS ASP B
EDD Type : Excel NY
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1242-01	JPP-6.2-013025	Solid	01/30/2025	12:44					
					Gasoline Range Organics		8015D		10 Bus. Days

Relinguished By : CR
Date / Time : 1-30-25 1550

Received By : JC
Date / Time : 1/30/25 1550

Storage Area : VOA Refridgerator Room