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

Cover Page

Order ID : Q1215

Project ID : NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Client : RU2 Engineering, LLC

Lab Sample Number	Client Sample Number
Q1215-01	JPP-29.1-012825
Q1215-02	JPP-29.1-012825
Q1215-03	JPP-29.1-012825
Q1215-04	JPP-29.1-012825
Q1215-05	JPP-29.2-012825
Q1215-06	JPP-29.2-012825
Q1215-07	JPP-29.2-012825
Q1215-08	JPP-29.2-012825

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

Signature : _____

Date: 2/6/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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

CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1215
Test Name: Diesel Range Organics

A. Number of Samples and Date of Receipt:
8 Solid samples were received on 01/29/2025.

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_G. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 13302.The analysis of Diesel Range Organics was based on method 8015D and extraction was done based on method 3541.

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

The MS {Q1215-01MS} with File ID: FG015260.D recoveries met the requirements for all compounds except for DRO[-143%] Due to matrix interference.
The MSD {Q1215-01MSD} with File ID: FG015261.D recoveries met the acceptable requirements except for DRO[-126%] Due to 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-29.1-012825, JPP-29.2-012825 was diluted due to bad matrix. The above sample original run is reported as screening data in miscellaneous data.

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

E. Additional Comments:

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

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

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

Signature_____

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

DATA REPORTING QUALIFIERS- ORGANIC

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

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

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

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1215 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 {Q1215-01MS} with File ID: FG015260.D recoveries met the requirements for all compounds except for DRO[-143%] Due to matrix interference. The MSD {Q1215-01MSD} with File ID: FG015261.D recoveries met the acceptable requirements except for DRO[-126%] Due to 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:			✓
9.	Analysis Holding Time Met If not met, list those compounds and their recoveries which fall outside the acceptable range.			✓

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

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

NA NO YES

ADDITIONAL COMMENTS:

Samples JPP-29.1-012825, JPP-29.2-012825 was diluted due to bad matrix. The above sample original run is reported as screening data in miscellaneous data.

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

_____ _____

QA REVIEW Date

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **Q1215**

	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:** **02/06/2025**

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

LAB CHRONICLE

OrderID:	Q1215	**OrderDate:**	1/29/2025 11:20:00 AM
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
Q1215-01	**JPP-29.1-012825**	**SOIL**			**01/28/25**			**01/29/25**
			Diesel Range Organics	8015D		01/30/25	01/30/25	
			Gasoline Range Organics	8015D			01/30/25	
Q1215-03	**JPP-29.1-012825**	**SOIL**			**01/28/25**			**01/29/25**
			PCB	8082A		01/30/25	01/30/25	
			Pesticide-TCL	8081B		01/30/25	02/01/25	
Q1215-05	**JPP-29.2-012825**	**SOIL**			**01/28/25**			**01/29/25**
			Diesel Range Organics	8015D		01/30/25	01/30/25	
			Gasoline Range Organics	8015D			01/30/25	
Q1215-07	**JPP-29.2-012825**	**SOIL**			**01/28/25**			**01/29/25**
			PCB	8082A		01/30/25	01/30/25	
			Pesticide-TCL	8081B		01/30/25	01/30/25	

QC SUMMARY

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

SOIL DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Chemtech Client: RU2 Engineering, LLC

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG No.: Q1215

EPA SAMPLE NO.	S1 TETRACOSANE-d50	S2	S3	S4	TOT OUT
PIBLK-FG015246.D	87				0
PIBLK-FG015258.D	89				0
PIBLK-FG015269.D	90				0
PB166361BL	79				0
PB166361BS	76				0
JPP-29.1-012825	116				0
JPP-29.1-012825MS	88				0
JPP-29.1-012825MSD	89				0
JPP-29.2-012825	91				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

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

SOIL DIESEL RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

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

Lab Code: CHEM **Cas No:** Q1215 **SAS No :** Q1215 **SDG No:** Q1215

Client SampleID : JPP-29.1-012825MS **Datafile:** FG015260.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
DRO	7483	92000	81300	-143%	*	68-131

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

SOIL DIESEL RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

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

Lab Code: CHEM **Cas No:** Q1215 **SAS No :** Q1215 **SDG No:** Q1215

Client SampleID : JPP-29.1-012825MSD **Datafile:** FG015261.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
DRO	7471	92000	82600	-126%	*	68-131

MS/MSD % Recovery RPD : 12.64

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

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

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

Lab Code: CHEM **Cas No:** Q1215 **SAS No :** Q1215 **SDG No:** Q1215

Matrix Spike - EPA Sample No : PB166361BS **Datafile:** FG015249.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS
DRO	6660	0	5211	78	68-131

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

4B

METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166361BL

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG NO.: Q1215

Lab File ID: FG015250.D Lab Sample ID: PB166361BL

Instrument ID: FG Date Extracted: 01/30/2025

Matrix: (soil/water) Soil Date Analyzed: 01/30/25

Level: (low/med) low Time Analyzed: 12:56

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166361BS	PB166361BS	FG015249.D	01/30/25
JPP-29.1-012825MS	Q1215-01MS	FG015260.D	01/30/25
JPP-29.1-012825MSD	Q1215-01MSD	FG015261.D	01/30/25
JPP-29.1-012825	Q1215-01	FG015262.D	01/30/25
JPP-29.2-012825	Q1215-05	FG015263.D	01/30/25

COMMENTS:

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:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825	SDG No.:	Q1215
Lab Sample ID:	Q1215-01	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	89 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
FG015262.D	10	01/30/25 09:15	01/30/25 19:06	PB166361

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	90700		2070	18700	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	2.32		37 - 130	116%	SPK: 20

Comments:

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

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015262.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 19:06
Operator : YP\AJ
Sample : Q1215-01 10X
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825

Integration File: autoint1.e
Quant Time: Jan 31 05:11:54 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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...	15.051	297012	2.315 ug/ml
Target Compounds			

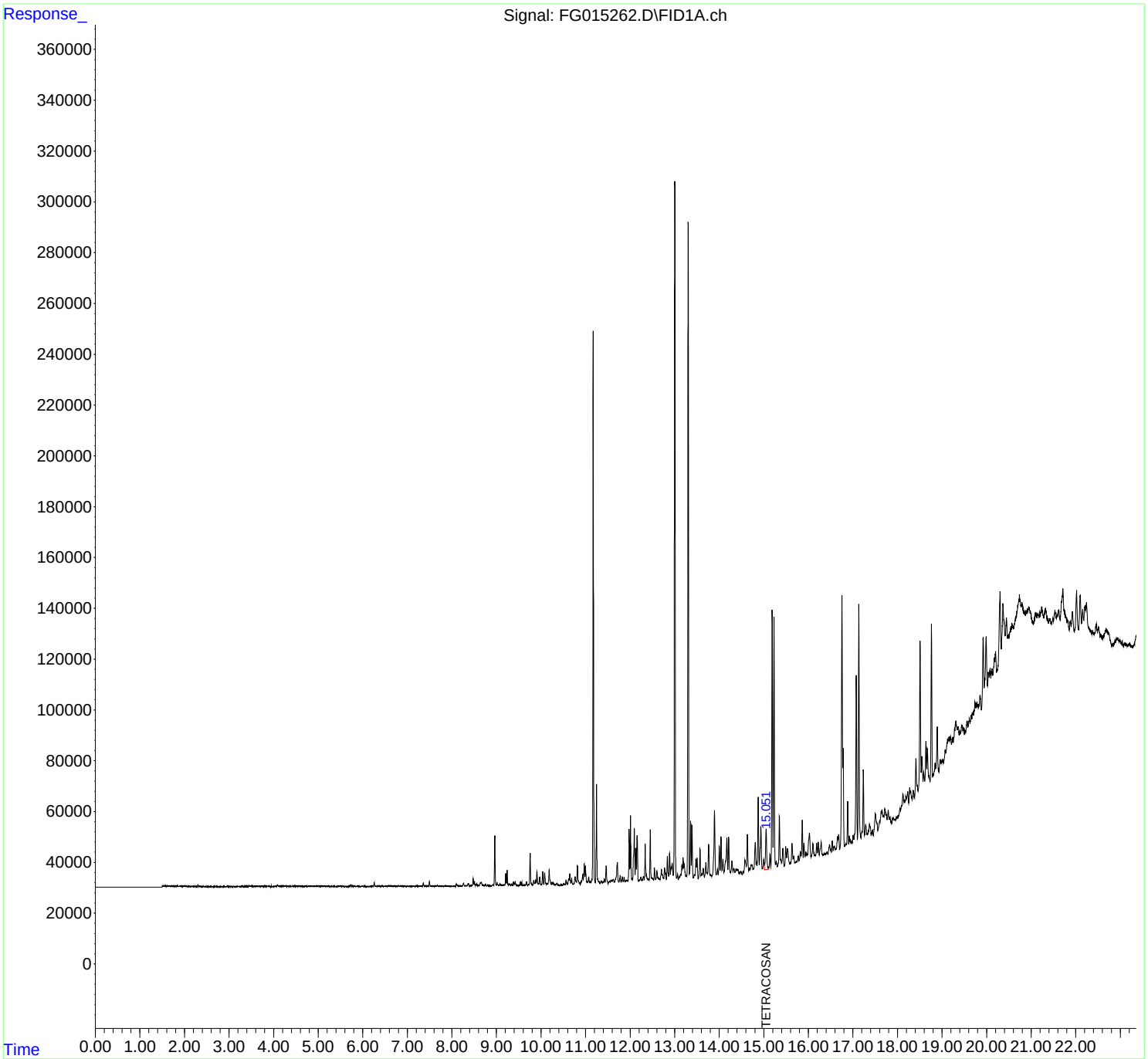
(f)=RT Delta > 1/2 Window (m)=manual int.

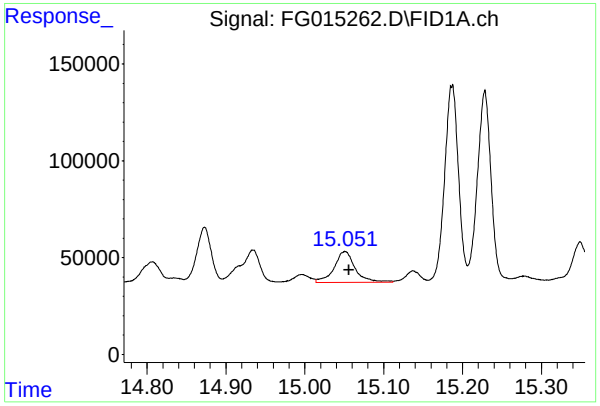
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015262.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 19:06
Operator : YP\AJ
Sample : Q1215-01 10X
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825

Integration File: autoint1.e
Quant Time: Jan 31 05:11:54 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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.: 15.051 min
Delta R.T.: -0.005 mi
Response: 297012
Conc: 2.32 ug/m

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015262.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 19:06
Sample : Q1215-01 10X
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.362	4.350	4.372	BH	37	-272	-0.01%	-0.001%
2	4.376	4.372	4.386	PH	34	-137	-0.00%	-0.000%
3	4.409	4.386	4.414	PH	50	-400	-0.01%	-0.001%
4	4.420	4.414	4.424	PH	69	-44	-0.00%	-0.000%
5	4.429	4.424	4.440	PH	21	-125	-0.00%	-0.000%
6	4.445	4.440	4.457	PH	-10	-170	-0.01%	-0.000%
7	4.462	4.457	4.466	PH	5	-54	-0.00%	-0.000%
8	4.472	4.466	4.475	PH	51	-54	-0.00%	-0.000%
9	4.480	4.475	4.495	PH	82	-131	-0.00%	-0.000%
10	4.498	4.495	4.501	PH	30	-107	-0.00%	-0.000%
11	4.506	4.501	4.514	PH	-51	-331	-0.01%	-0.001%
12	4.524	4.514	4.534	PH	11	-204	-0.01%	-0.001%
13	4.539	4.534	4.559	PH	51	420	0.01%	0.001%
14	4.565	4.559	4.579	PH	85	488	0.02%	0.001%
15	4.583	4.579	4.604	PH	93	120	0.00%	0.000%
16	4.628	4.604	4.645	PH	69	38	0.00%	0.000%
17	4.646	4.645	4.683	PH	57	-371	-0.01%	-0.001%
18	4.715	4.683	4.729	PH	152	771	0.02%	0.002%
19	4.738	4.729	4.749	PH	52	-202	-0.01%	-0.001%
20	4.768	4.749	4.774	PH	77	125	0.00%	0.000%
21	4.780	4.774	4.798	PH	62	243	0.01%	0.001%
22	4.803	4.798	4.822	PH	23	-5	-0.00%	-0.000%
23	4.834	4.822	4.842	PH	41	64	0.00%	0.000%
24	4.852	4.842	4.859	PH	41	15	0.00%	0.000%
25	4.885	4.859	4.897	PH	83	510	0.02%	0.001%
26	4.900	4.897	4.905	PH	21	15	0.00%	0.000%
27	4.924	4.905	4.932	PH	105	680	0.02%	0.002%
28	4.939	4.932	4.948	HH	83	521	0.02%	0.002%
29	4.955	4.948	4.967	HH	72	555	0.02%	0.002%
30	4.971	4.967	4.977	PH	97	261	0.01%	0.001%
31	4.988	4.977	4.996	PH	96	518	0.02%	0.002%
32	5.005	4.996	5.022	HH	106	843	0.03%	0.002%
33	5.027	5.022	5.032	HH	104	293	0.01%	0.001%
34	5.038	5.032	5.043	HH	109	355	0.01%	0.001%
35	5.053	5.043	5.063	HH	171	738	0.02%	0.002%
36	5.072	5.063	5.088	PH	83	444	0.01%	0.001%

rteres

37	5.091	5.088	5.115	PH	56	315	0.01%	0.001%
38	5.120	5.115	5.127	PH	43	86	0.00%	0.000%
39	5.130	5.127	5.141	PH	83	160	0.00%	0.000%
40	5.145	5.141	5.154	PH	52	84	0.00%	0.000%
41	5.186	5.154	5.195	PH	56	-42	-0.00%	-0.000%
42	5.199	5.195	5.209	PH	13	-36	-0.00%	-0.000%
43	5.213	5.209	5.221	PH	-5	-131	-0.00%	-0.000%
44	5.225	5.221	5.247	PH	9	-510	-0.02%	-0.001%
45	5.252	5.247	5.265	PH	14	-328	-0.01%	-0.001%
46	5.272	5.265	5.297	PH	66	-465	-0.01%	-0.001%
47	5.305	5.297	5.333	PH	21	-579	-0.02%	-0.002%
48	5.339	5.333	5.344	PH	6	-293	-0.01%	-0.001%
49	5.362	5.344	5.390	PH	80	212	0.01%	0.001%
50	5.394	5.390	5.403	PH	-44	-521	-0.02%	-0.002%
51	5.416	5.403	5.427	PH	20	-769	-0.02%	-0.002%
52	5.439	5.427	5.473	PH	-10	-1615	-0.05%	-0.005%
53	5.494	5.473	5.527	PH	214	1117	0.03%	0.003%
54	5.531	5.527	5.557	PH	-1	-813	-0.03%	-0.002%
55	5.564	5.557	5.578	PH	29	-556	-0.02%	-0.002%
56	5.582	5.578	5.587	PH	-28	-360	-0.01%	-0.001%
57	5.589	5.587	5.601	PH	-55	-650	-0.02%	-0.002%
58	5.612	5.601	5.641	PH	-26	-2167	-0.07%	-0.006%
59	5.645	5.641	5.665	PH	-54	-1358	-0.04%	-0.004%
60	5.687	5.665	5.699	PH	1	-1161	-0.04%	-0.003%
61	5.729	5.699	5.753	PH	604	6189	0.19%	0.018%
62	5.756	5.753	5.763	HH	61	299	0.01%	0.001%
63	5.766	5.763	5.771	HH	59	131	0.00%	0.000%
64	5.774	5.771	5.783	PH	42	-98	-0.00%	-0.000%
65	5.798	5.783	5.820	PH	60	-304	-0.01%	-0.001%
66	5.825	5.820	5.852	PH	-3	-683	-0.02%	-0.002%
67	5.874	5.852	5.885	PH	53	-241	-0.01%	-0.001%
68	5.889	5.885	5.905	PH	28	-183	-0.01%	-0.001%
69	5.909	5.905	5.940	PH	1	-1080	-0.03%	-0.003%
70	5.948	5.940	5.967	PH	3	-662	-0.02%	-0.002%
71	5.977	5.967	5.995	PH	80	-75	-0.00%	-0.000%
72	6.000	5.995	6.007	PH	-26	-248	-0.01%	-0.001%
73	6.074	6.007	6.092	PH	-3	-3086	-0.10%	-0.009%
74	6.099	6.092	6.112	PH	-43	-959	-0.03%	-0.003%
75	6.119	6.112	6.135	PH	-58	-1063	-0.03%	-0.003%
76	6.166	6.135	6.190	PH	-3	-2028	-0.06%	-0.006%
77	6.203	6.190	6.211	PH	-33	-736	-0.02%	-0.002%
78	6.222	6.211	6.237	PH	34	-156	-0.00%	-0.000%
79	6.260	6.237	6.294	PH	1428	14337	0.45%	0.042%
80	6.307	6.294	6.332	HH	80	708	0.02%	0.002%
81	6.342	6.332	6.364	PH	31	27	0.00%	0.000%
82	6.371	6.364	6.387	PH	27	-274	-0.01%	-0.001%
83	6.410	6.387	6.420	PH	34	226	0.01%	0.001%
84	6.438	6.420	6.467	PH	129	1564	0.05%	0.005%
85	6.490	6.467	6.545	PH	62	557	0.02%	0.002%
86	6.572	6.545	6.649	PH	206	5620	0.18%	0.016%
87	6.666	6.649	6.677	HH	116	948	0.03%	0.003%
88	6.683	6.677	6.703	HH	29	182	0.01%	0.001%
89	6.723	6.703	6.757	PH	103	1414	0.04%	0.004%

rteres

90	6.769	6.757	6.782	PH	14	-178	-0.01%	-0.001%
91	6.806	6.782	6.829	PH	257	3061	0.10%	0.009%
92	6.841	6.829	6.863	HH	158	1215	0.04%	0.004%
93	6.880	6.863	6.904	PH	31	72	0.00%	0.000%
94	6.924	6.904	6.964	PH	63	-722	-0.02%	-0.002%
95	6.971	6.964	6.989	PH	-4	-671	-0.02%	-0.002%
96	7.009	6.989	7.033	PH	110	40	0.00%	0.000%
97	7.051	7.033	7.084	PH	48	159	0.00%	0.000%
98	7.094	7.084	7.109	PH	-0	-476	-0.01%	-0.001%
99	7.127	7.109	7.143	PH	59	-52	-0.00%	-0.000%
100	7.163	7.143	7.186	PH	24	-304	-0.01%	-0.001%
101	7.222	7.186	7.237	PH	84	998	0.03%	0.003%
102	7.253	7.237	7.280	HH	135	2062	0.06%	0.006%
103	7.296	7.280	7.335	HH	172	2736	0.09%	0.008%
104	7.360	7.335	7.382	HH	1204	13186	0.41%	0.038%
105	7.402	7.382	7.433	HH	220	3383	0.11%	0.010%
106	7.452	7.433	7.480	HH	222	2736	0.09%	0.008%
107	7.498	7.480	7.534	HH	1908	19395	0.60%	0.057%
108	7.550	7.534	7.590	PH	92	1317	0.04%	0.004%
109	7.596	7.590	7.605	HH	53	259	0.01%	0.001%
110	7.615	7.605	7.625	HH	72	447	0.01%	0.001%
111	7.674	7.625	7.712	HH	297	4933	0.15%	0.014%
112	7.740	7.712	7.769	PH	156	1203	0.04%	0.004%
113	7.800	7.769	7.816	PH	85	949	0.03%	0.003%
114	7.824	7.816	7.837	HH	76	643	0.02%	0.002%
115	7.850	7.837	7.879	HH	111	1393	0.04%	0.004%
116	7.892	7.879	7.914	PH	79	231	0.01%	0.001%
117	7.921	7.914	7.930	PH	6	-75	-0.00%	-0.000%
118	7.966	7.930	7.989	PH	106	724	0.02%	0.002%
119	7.998	7.989	8.037	HH	63	684	0.02%	0.002%
120	8.103	8.037	8.154	PH	838	15981	0.50%	0.047%
121	8.174	8.154	8.190	HH	159	2476	0.08%	0.007%
122	8.208	8.190	8.229	HH	161	2971	0.09%	0.009%
123	8.262	8.229	8.300	HH	1281	20650	0.64%	0.060%
124	8.315	8.300	8.340	HH	310	5228	0.16%	0.015%
125	8.376	8.340	8.419	HH	1111	24748	0.77%	0.072%
126	8.427	8.419	8.453	HH	303	5216	0.16%	0.015%
127	8.480	8.453	8.497	HH	3125	36525	1.14%	0.106%
128	8.509	8.497	8.529	HH	1841	21011	0.65%	0.061%
129	8.559	8.529	8.587	HH	805	17999	0.56%	0.052%
130	8.595	8.587	8.614	HH	341	4439	0.14%	0.013%
131	8.663	8.614	8.736	HH	1603	54694	1.70%	0.159%
132	8.758	8.736	8.782	HH	929	12189	0.38%	0.036%
133	8.807	8.782	8.860	HH	573	11535	0.36%	0.034%
134	8.868	8.860	8.885	HH	180	2287	0.07%	0.007%
135	8.920	8.885	8.942	HH	703	11758	0.37%	0.034%
136	8.966	8.942	8.995	HH	20022	206109	6.42%	0.601%
137	9.015	8.995	9.060	HH	1386	27312	0.85%	0.080%
138	9.084	9.060	9.121	HH	756	20353	0.63%	0.059%
139	9.132	9.121	9.149	HH	520	7510	0.23%	0.022%
140	9.158	9.149	9.183	HH	522	9558	0.30%	0.028%
141	9.211	9.183	9.226	HH	5035	59672	1.86%	0.174%

rteres

142	9.243	9.226	9.267	HH	6395	71337	2.22%	0.208%
143	9.284	9.267	9.319	HH	900	19408	0.60%	0.057%
144	9.336	9.319	9.357	HH	935	13850	0.43%	0.040%
145	9.384	9.357	9.405	HH	1724	29105	0.91%	0.085%
146	9.423	9.405	9.477	HH	1845	33634	1.05%	0.098%
147	9.484	9.477	9.505	HH	324	4840	0.15%	0.014%
148	9.540	9.505	9.556	HH	1719	24298	0.76%	0.071%
149	9.571	9.556	9.600	HH	1588	20629	0.64%	0.060%
150	9.622	9.600	9.644	HH	721	11876	0.37%	0.035%
151	9.676	9.644	9.700	HH	1883	30052	0.94%	0.088%
152	9.719	9.700	9.730	HH	782	10983	0.34%	0.032%
153	9.759	9.730	9.811	HH	12964	163401	5.09%	0.476%
154	9.839	9.811	9.859	HH	2355	37194	1.16%	0.108%
155	9.881	9.859	9.893	HH	2492	34504	1.07%	0.101%
156	9.912	9.893	9.951	HH	5581	88012	2.74%	0.256%
157	9.972	9.951	9.997	HH	3582	50722	1.58%	0.148%
158	10.040	9.997	10.063	HH	5895	85015	2.65%	0.248%
159	10.085	10.063	10.125	HH	5072	82263	2.56%	0.240%
160	10.138	10.125	10.157	HH	1002	17383	0.54%	0.051%
161	10.185	10.157	10.232	HH	6475	121181	3.77%	0.353%
162	10.248	10.232	10.267	HH	1629	24965	0.78%	0.073%
163	10.282	10.267	10.303	HH	1334	20552	0.64%	0.060%
164	10.325	10.303	10.335	HH	747	11641	0.36%	0.034%
165	10.358	10.335	10.425	HH	1301	35860	1.12%	0.104%
166	10.452	10.425	10.467	HH	694	12627	0.39%	0.037%
167	10.511	10.467	10.541	HH	1186	31702	0.99%	0.092%
168	10.563	10.541	10.597	HH	2330	44001	1.37%	0.128%
169	10.623	10.597	10.632	HH	2842	40617	1.27%	0.118%
170	10.648	10.632	10.672	HH	4871	73919	2.30%	0.215%
171	10.689	10.672	10.729	HH	3323	56178	1.75%	0.164%
172	10.767	10.729	10.800	HH	3788	86743	2.70%	0.253%
173	10.819	10.800	10.879	HH	8036	140136	4.36%	0.408%
174	10.938	10.879	10.950	HH	4764	102045	3.18%	0.297%
175	10.972	10.950	10.987	HH	8764	133337	4.15%	0.388%
176	11.000	10.987	11.024	HH	8130	102802	3.20%	0.300%
177	11.043	11.024	11.054	HH	1869	31557	0.98%	0.092%
178	11.071	11.054	11.088	HH	3609	51457	1.60%	0.150%
179	11.101	11.088	11.124	HH	1933	36437	1.13%	0.106%
180	11.172	11.124	11.220	HH	218181	2389415	74.42%	6.962%
181	11.246	11.220	11.294	HH	40161	489354	15.24%	1.426%
182	11.300	11.294	11.332	HH	1878	35539	1.11%	0.104%
183	11.350	11.332	11.374	HH	2005	42048	1.31%	0.123%
184	11.387	11.374	11.401	HH	1812	26813	0.84%	0.078%
185	11.420	11.401	11.441	HH	2861	50652	1.58%	0.148%
186	11.464	11.441	11.505	HH	8008	132059	4.11%	0.385%
187	11.536	11.505	11.550	HH	1904	43968	1.37%	0.128%
188	11.572	11.550	11.595	HH	2360	56308	1.75%	0.164%
189	11.620	11.595	11.647	HH	2576	68604	2.14%	0.200%
190	11.711	11.647	11.747	HH	9490	230967	7.19%	0.673%
191	11.777	11.747	11.799	HH	4211	83168	2.59%	0.242%
192	11.826	11.799	11.849	HH	3727	78295	2.44%	0.228%
193	11.868	11.849	11.892	HH	3621	65997	2.06%	0.192%
194	11.909	11.892	11.917	HH	2249	31846	0.99%	0.093%

rteres

195	11.930	11.917	11.948	HH	2500	40961	1.28%	0.119%
196	11.979	11.948	11.994	HH	22277	279112	8.69%	0.813%
197	12.010	11.994	12.034	HH	27972	330593	10.30%	0.963%
198	12.044	12.034	12.054	HH	3141	34650	1.08%	0.101%
199	12.093	12.054	12.111	HH	22899	398643	12.42%	1.162%
200	12.128	12.111	12.142	HH	14959	187087	5.83%	0.545%
201	12.158	12.142	12.190	HH	20069	273950	8.53%	0.798%
202	12.240	12.190	12.262	HH	3482	112859	3.52%	0.329%
203	12.301	12.262	12.316	HH	3785	95685	2.98%	0.279%
204	12.339	12.316	12.404	HH	16539	308096	9.60%	0.898%
205	12.413	12.404	12.425	HH	2875	35180	1.10%	0.103%
206	12.451	12.425	12.527	HH	22292	383786	11.95%	1.118%
207	12.545	12.527	12.572	HH	7156	119164	3.71%	0.347%
208	12.601	12.572	12.644	HH	6166	166888	5.20%	0.486%
209	12.657	12.644	12.670	HH	3091	46605	1.45%	0.136%
210	12.704	12.670	12.752	HH	6666	213151	6.64%	0.621%
211	12.774	12.752	12.811	HH	7216	169889	5.29%	0.495%
212	12.834	12.811	12.863	HH	11766	207631	6.47%	0.605%
213	12.885	12.863	12.904	HH	12929	197516	6.15%	0.575%
214	12.945	12.904	12.967	HH	8910	257523	8.02%	0.750%
215	13.003	12.967	13.042	HH	278257	3210583	100.00%	9.355%
216	13.063	13.042	13.082	HH	4877	89416	2.79%	0.261%
217	13.100	13.082	13.109	HH	3751	53089	1.65%	0.155%
218	13.163	13.109	13.174	HH	8138	210981	6.57%	0.615%
219	13.187	13.174	13.202	HH	11132	154412	4.81%	0.450%
220	13.212	13.202	13.272	HH	8782	236224	7.36%	0.688%
221	13.303	13.272	13.329	HH	262269	2950844	91.91%	8.598%
222	13.357	13.329	13.372	HH	25248	345961	10.78%	1.008%
223	13.387	13.372	13.422	HH	23844	333715	10.39%	0.972%
224	13.444	13.422	13.454	HH	4644	78976	2.46%	0.230%
225	13.475	13.454	13.487	HH	10495	149808	4.67%	0.436%
226	13.501	13.487	13.529	HH	11151	182528	5.69%	0.532%
227	13.568	13.529	13.595	HH	14763	285243	8.88%	0.831%
228	13.605	13.595	13.615	HH	4746	54087	1.68%	0.158%
229	13.641	13.615	13.665	HH	6897	159727	4.98%	0.465%
230	13.699	13.665	13.720	HH	9277	198186	6.17%	0.577%
231	13.727	13.720	13.736	HH	5331	49224	1.53%	0.143%
232	13.761	13.736	13.790	HH	16584	308169	9.60%	0.898%
233	13.801	13.790	13.827	HH	4535	96192	3.00%	0.280%
234	13.892	13.827	13.930	HH	29828	687357	21.41%	2.003%
235	13.959	13.930	13.976	HH	6729	149269	4.65%	0.435%
236	14.001	13.976	14.019	HH	15636	260602	8.12%	0.759%
237	14.039	14.019	14.060	HH	19526	295567	9.21%	0.861%
238	14.080	14.060	14.105	HH	10720	212535	6.62%	0.619%
239	14.169	14.105	14.191	HH	19064	540792	16.84%	1.576%
240	14.210	14.191	14.252	HH	19393	371903	11.58%	1.084%
241	14.284	14.252	14.308	HH	9958	244793	7.62%	0.713%
242	14.327	14.308	14.356	HH	6879	178458	5.56%	0.520%
243	14.376	14.356	14.390	HH	6879	130117	4.05%	0.379%
244	14.401	14.390	14.412	HH	6515	81737	2.55%	0.238%
245	14.422	14.412	14.463	HH	6567	176032	5.48%	0.513%
246	14.481	14.463	14.511	HH	5927	154353	4.81%	0.450%

rteres

247	14.534	14.511	14.548	HH	5945	119237	3.71%	0.347%
248	14.576	14.548	14.608	HH	10471	306077	9.53%	0.892%
249	14.630	14.608	14.662	HH	20432	377213	11.75%	1.099%
250	14.678	14.662	14.692	HH	7179	121414	3.78%	0.354%
251	14.731	14.692	14.762	HH	8445	320790	9.99%	0.935%
252	14.806	14.762	14.847	HH	17264	533470	16.62%	1.554%
253	14.873	14.847	14.895	HH	35128	556295	17.33%	1.621%
254	14.934	14.895	14.969	HH	23355	586163	18.26%	1.708%
255	14.996	14.969	15.015	HH	10670	245610	7.65%	0.716%
256	15.051	15.015	15.112	HH	22551	681640	21.23%	1.986%
257	15.138	15.112	15.157	HH	12582	257687	8.03%	0.751%
258	15.187	15.157	15.207	HH	108051	1445618	45.03%	4.212%
259	15.228	15.207	15.262	HH	106080	1419456	44.21%	4.136%
260	15.278	15.262	15.309	HH	9927	245210	7.64%	0.714%
261	15.349	15.309	15.397	HH	27627	705020	21.96%	2.054%
262	15.427	15.397	15.460	HH	15032	413706	12.89%	1.205%
263	15.490	15.460	15.512	HH	15623	363528	11.32%	1.059%
264	15.530	15.512	15.590	HH	14802	540087	16.82%	1.574%
265	15.632	15.590	15.658	HH	16624	487551	15.19%	1.421%
266	15.672	15.658	15.695	HH	11783	236731	7.37%	0.690%
267	15.729	15.695	15.742	HH	9749	270025	8.41%	0.787%
268	15.775	15.742	15.792	HH	11707	320072	9.97%	0.933%
269	15.821	15.792	15.838	HH	13598	336384	10.48%	0.980%
270	15.862	15.838	15.883	HH	26113	476007	14.83%	1.387%

Sum of corrected areas: 34321055

FG011325.M Fri Jan 31 06:21:25 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:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.2-012825	SDG No.:	Q1215
Lab Sample ID:	Q1215-05	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	87.1 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
FG015263.D	10	01/30/25 09:15	01/30/25 19:34	PB166361

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	79500		2120	19100	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	1.82		37 - 130	91%	SPK: 20

Comments:

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

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015263.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 19:34
Operator : YP\AJ
Sample : Q1215-05 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
JPP-29.2-012825

Integration File: autoint1.e
Quant Time: Jan 31 05:12:14 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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...	15.051	233510	1.820	ug/ml
	Target Compounds				

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

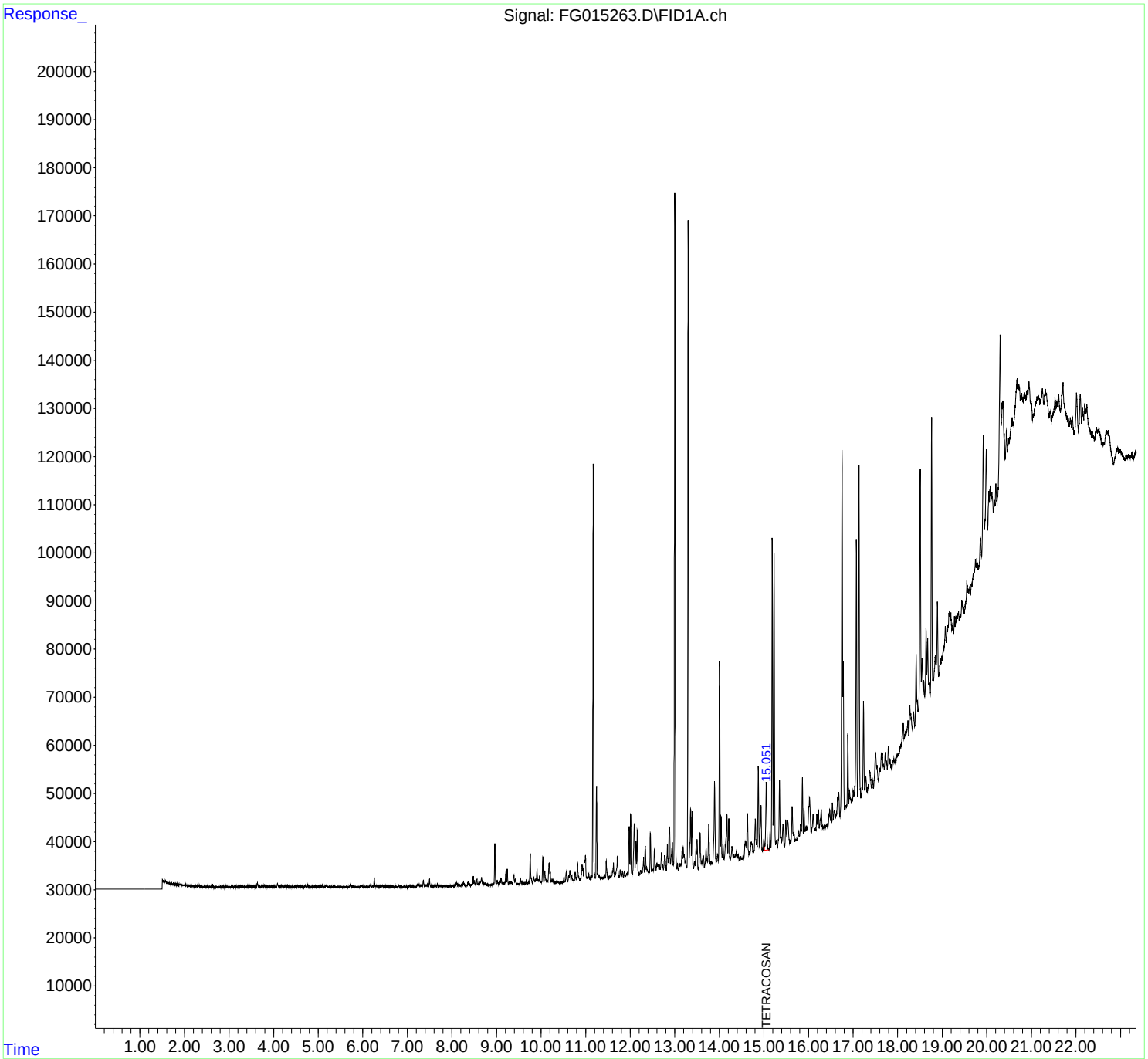
Quantitation Report (QT Reviewed)

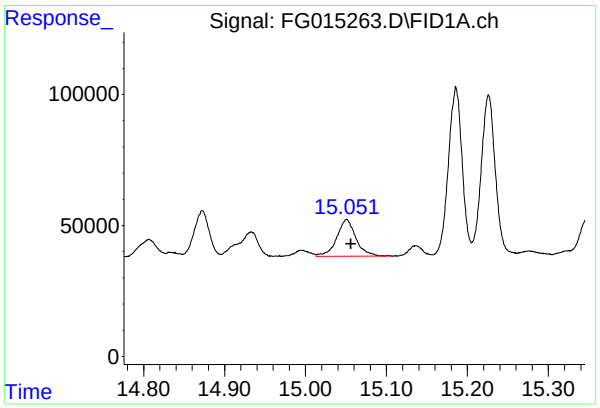
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015263.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 19:34
Operator : YP\AJ
Sample : Q1215-05 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
JPP-29.2-012825

Integration File: autoint1.e
Quant Time: Jan 31 05:12:14 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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.:	15.051 min
Delta R.T.:	-0.005 mi
Response:	233510
Conc:	1.82 ug/m

Instrument :
FID_G
ClientSampleId :
JPP-29.2-012825

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015263.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 19:34
Sample : Q1215-05 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.361	4.350	4.365	BH	24	-44	-0.00%	-0.000%
2	4.372	4.365	4.400	PH	81	117	0.01%	0.000%
3	4.402	4.400	4.414	PH	29	-66	-0.00%	-0.000%
4	4.419	4.414	4.425	PH	70	93	0.01%	0.000%
5	4.444	4.425	4.459	PH	63	189	0.01%	0.001%
6	4.482	4.459	4.491	PH	86	123	0.01%	0.000%
7	4.496	4.491	4.504	PH	64	93	0.01%	0.000%
8	4.512	4.504	4.526	PH	42	17	0.00%	0.000%
9	4.546	4.526	4.574	PH	129	1427	0.08%	0.005%
10	4.579	4.574	4.594	PH	105	299	0.02%	0.001%
11	4.600	4.594	4.604	PH	59	120	0.01%	0.000%
12	4.619	4.604	4.633	PH	93	412	0.02%	0.001%
13	4.651	4.633	4.688	PH	182	1635	0.09%	0.006%
14	4.712	4.688	4.727	PH	181	1395	0.08%	0.005%
15	4.731	4.727	4.744	PH	17	-331	-0.02%	-0.001%
16	4.771	4.744	4.797	PH	291	3380	0.19%	0.012%
17	4.799	4.797	4.809	PH	93	38	0.00%	0.000%
18	4.818	4.809	4.824	PH	35	-123	-0.01%	-0.000%
19	4.829	4.824	4.839	PH	-19	-333	-0.02%	-0.001%
20	4.849	4.839	4.863	PH	53	-77	-0.00%	-0.000%
21	4.869	4.863	4.882	PH	50	-244	-0.01%	-0.001%
22	4.890	4.882	4.900	PH	59	-138	-0.01%	-0.000%
23	4.904	4.900	4.922	PH	56	297	0.02%	0.001%
24	4.933	4.922	4.943	PH	142	835	0.05%	0.003%
25	4.946	4.943	4.959	HH	98	286	0.02%	0.001%
26	4.962	4.959	4.973	PH	50	123	0.01%	0.000%
27	4.975	4.973	4.984	PH	51	90	0.01%	0.000%
28	4.988	4.984	4.992	PH	109	157	0.01%	0.001%
29	5.021	4.992	5.026	PH	205	1907	0.11%	0.006%
30	5.039	5.026	5.045	HH	250	1746	0.10%	0.006%
31	5.050	5.045	5.073	HH	199	2246	0.13%	0.008%
32	5.081	5.073	5.087	HH	110	707	0.04%	0.002%
33	5.096	5.087	5.108	HH	114	595	0.03%	0.002%
34	5.113	5.108	5.120	PH	69	58	0.00%	0.000%
35	5.129	5.120	5.139	PH	32	6	0.00%	0.000%
36	5.144	5.139	5.153	PH	81	-30	-0.00%	-0.000%

rteres

37	5.186	5.153	5.215	PH	194	2464	0.14%	0.008%
38	5.217	5.215	5.222	PH	39	3	0.00%	0.000%
39	5.227	5.222	5.234	PH	27	-95	-0.01%	-0.000%
40	5.249	5.234	5.253	PH	31	-79	-0.00%	-0.000%
41	5.257	5.253	5.265	PH	27	-112	-0.01%	-0.000%
42	5.277	5.265	5.284	PH	51	-125	-0.01%	-0.000%
43	5.299	5.284	5.322	PH	56	14	0.00%	0.000%
44	5.328	5.322	5.350	PH	33	-557	-0.03%	-0.002%
45	5.366	5.350	5.401	PH	104	196	0.01%	0.001%
46	5.405	5.401	5.419	PH	-30	-600	-0.03%	-0.002%
47	5.425	5.419	5.439	PH	12	-588	-0.03%	-0.002%
48	5.445	5.439	5.451	PH	10	-445	-0.03%	-0.002%
49	5.465	5.451	5.476	PH	-17	-809	-0.05%	-0.003%
50	5.493	5.476	5.515	PH	241	1190	0.07%	0.004%
51	5.532	5.515	5.545	PH	1	-1346	-0.08%	-0.005%
52	5.569	5.545	5.581	PH	-25	-1662	-0.09%	-0.006%
53	5.588	5.581	5.594	PH	-60	-750	-0.04%	-0.003%
54	5.595	5.594	5.599	PH	-89	-313	-0.02%	-0.001%
55	5.604	5.599	5.608	PH	-87	-550	-0.03%	-0.002%
56	5.620	5.608	5.638	PH	30	-725	-0.04%	-0.002%
57	5.648	5.638	5.662	PH	-30	-1095	-0.06%	-0.004%
58	5.694	5.662	5.709	PH	77	-499	-0.03%	-0.002%
59	5.729	5.709	5.758	PH	504	5384	0.31%	0.018%
60	5.765	5.758	5.788	PH	42	-119	-0.01%	-0.000%
61	5.794	5.788	5.800	PH	-28	-259	-0.01%	-0.001%
62	5.803	5.800	5.815	PH	15	-328	-0.02%	-0.001%
63	5.820	5.815	5.827	PH	-11	-456	-0.03%	-0.002%
64	5.830	5.827	5.836	PH	-36	-331	-0.02%	-0.001%
65	5.851	5.836	5.857	PH	2	-538	-0.03%	-0.002%
66	5.861	5.857	5.865	PH	11	-230	-0.01%	-0.001%
67	5.870	5.865	5.875	PH	20	-100	-0.01%	-0.000%
68	5.881	5.875	5.912	PH	61	-365	-0.02%	-0.001%
69	5.917	5.912	5.928	PH	-7	-648	-0.04%	-0.002%
70	5.946	5.928	5.970	PH	131	1551	0.09%	0.005%
71	5.979	5.970	5.993	HH	142	942	0.05%	0.003%
72	5.997	5.993	6.033	HH	101	109	0.01%	0.000%
73	6.047	6.033	6.064	PH	23	-673	-0.04%	-0.002%
74	6.071	6.064	6.128	PH	40	-1369	-0.08%	-0.005%
75	6.136	6.128	6.142	PH	10	-240	-0.01%	-0.001%
76	6.159	6.142	6.189	PH	300	2856	0.16%	0.010%
77	6.196	6.189	6.206	PH	44	176	0.01%	0.001%
78	6.223	6.206	6.241	PH	100	892	0.05%	0.003%
79	6.259	6.241	6.281	PH	1872	18804	1.07%	0.064%
80	6.286	6.281	6.294	HH	70	383	0.02%	0.001%
81	6.311	6.294	6.341	HH	208	2440	0.14%	0.008%
82	6.346	6.341	6.356	PH	14	-114	-0.01%	-0.000%
83	6.391	6.356	6.395	PH	99	800	0.05%	0.003%
84	6.411	6.395	6.423	HH	201	1713	0.10%	0.006%
85	6.438	6.423	6.466	HH	168	2302	0.13%	0.008%
86	6.470	6.466	6.473	PH	-3	-90	-0.01%	-0.000%
87	6.484	6.473	6.504	PH	86	653	0.04%	0.002%
88	6.515	6.504	6.542	PH	127	796	0.05%	0.003%
89	6.564	6.542	6.594	PH	278	2450	0.14%	0.008%

rteres

90	6.602	6.594	6.618	PH	73	487	0.03%	0.002%
91	6.622	6.618	6.627	HH	78	183	0.01%	0.001%
92	6.644	6.627	6.664	PH	79	824	0.05%	0.003%
93	6.668	6.664	6.678	PH	90	381	0.02%	0.001%
94	6.683	6.678	6.703	PH	40	-27	-0.00%	-0.000%
95	6.724	6.703	6.750	PH	265	2267	0.13%	0.008%
96	6.758	6.750	6.775	PH	6	-243	-0.01%	-0.001%
97	6.783	6.775	6.787	PH	32	-71	-0.00%	-0.000%
98	6.791	6.787	6.797	PH	71	129	0.01%	0.000%
99	6.806	6.797	6.823	PH	194	1433	0.08%	0.005%
100	6.827	6.823	6.867	PH	55	202	0.01%	0.001%
101	6.880	6.867	6.904	PH	105	300	0.02%	0.001%
102	6.923	6.904	6.941	PH	136	953	0.05%	0.003%
103	6.947	6.941	6.963	PH	15	-314	-0.02%	-0.001%
104	6.981	6.963	6.988	PH	0	-607	-0.03%	-0.002%
105	7.003	6.988	7.016	PH	70	-98	-0.01%	-0.000%
106	7.052	7.016	7.109	PH	230	3179	0.18%	0.011%
107	7.116	7.109	7.122	PH	92	460	0.03%	0.002%
108	7.129	7.122	7.148	PH	111	1185	0.07%	0.004%
109	7.160	7.148	7.180	PH	74	845	0.05%	0.003%
110	7.227	7.180	7.245	PH	316	6282	0.36%	0.021%
111	7.259	7.245	7.278	HH	340	5495	0.31%	0.019%
112	7.282	7.278	7.286	HH	233	962	0.05%	0.003%
113	7.297	7.286	7.327	HH	303	5007	0.28%	0.017%
114	7.360	7.327	7.386	HH	1365	17858	1.01%	0.061%
115	7.402	7.386	7.416	HH	308	4187	0.24%	0.014%
116	7.422	7.416	7.433	HH	332	2732	0.15%	0.009%
117	7.448	7.433	7.478	HH	398	7372	0.42%	0.025%
118	7.498	7.478	7.529	HH	1566	16985	0.96%	0.058%
119	7.541	7.529	7.591	HH	249	5391	0.31%	0.018%
120	7.627	7.591	7.647	HH	218	4717	0.27%	0.016%
121	7.674	7.647	7.692	HH	617	7778	0.44%	0.026%
122	7.709	7.692	7.726	HH	185	2836	0.16%	0.010%
123	7.730	7.726	7.796	HH	187	4428	0.25%	0.015%
124	7.807	7.796	7.816	HH	135	1264	0.07%	0.004%
125	7.819	7.816	7.822	HH	92	347	0.02%	0.001%
126	7.852	7.822	7.882	HH	264	4823	0.27%	0.016%
127	7.888	7.882	7.899	HH	122	985	0.06%	0.003%
128	7.902	7.899	7.913	HH	94	637	0.04%	0.002%
129	7.919	7.913	7.924	PH	84	366	0.02%	0.001%
130	7.931	7.924	7.944	HH	113	720	0.04%	0.002%
131	7.968	7.944	8.000	HH	258	4028	0.23%	0.014%
132	8.015	8.000	8.032	HH	232	2519	0.14%	0.009%
133	8.039	8.032	8.047	HH	149	1028	0.06%	0.004%
134	8.063	8.047	8.071	HH	193	2049	0.12%	0.007%
135	8.104	8.071	8.159	HH	818	21634	1.23%	0.074%
136	8.176	8.159	8.234	HH	317	11371	0.64%	0.039%
137	8.260	8.234	8.298	HH	818	17669	1.00%	0.060%
138	8.310	8.298	8.339	HH	399	8002	0.45%	0.027%
139	8.377	8.339	8.414	HH	1136	26766	1.52%	0.091%
140	8.437	8.414	8.456	HH	538	10961	0.62%	0.037%
141	8.480	8.456	8.496	HH	2189	28045	1.59%	0.095%

rteres

142	8.508	8.496	8.531	HH	1328	17660	1.00%	0.060%
143	8.561	8.531	8.592	HH	1515	30754	1.74%	0.105%
144	8.602	8.592	8.621	HH	658	10035	0.57%	0.034%
145	8.667	8.621	8.702	HH	1915	51083	2.90%	0.174%
146	8.717	8.702	8.740	HH	791	14451	0.82%	0.049%
147	8.758	8.740	8.786	HH	743	13859	0.79%	0.047%
148	8.807	8.786	8.842	HH	509	13490	0.77%	0.046%
149	8.850	8.842	8.876	HH	392	6948	0.39%	0.024%
150	8.921	8.876	8.937	HH	697	17434	0.99%	0.059%
151	8.965	8.937	8.997	HH	8999	105445	5.98%	0.359%
152	9.016	8.997	9.048	HH	1279	25926	1.47%	0.088%
153	9.104	9.048	9.125	HH	1676	44541	2.53%	0.152%
154	9.142	9.125	9.176	HH	912	22828	1.29%	0.078%
155	9.210	9.176	9.226	HH	2647	42677	2.42%	0.145%
156	9.243	9.226	9.267	HH	3667	48431	2.75%	0.165%
157	9.282	9.267	9.297	HH	941	14611	0.83%	0.050%
158	9.307	9.297	9.323	HH	886	12827	0.73%	0.044%
159	9.335	9.323	9.357	HH	942	16417	0.93%	0.056%
160	9.389	9.357	9.410	HH	2418	46299	2.63%	0.158%
161	9.422	9.410	9.464	HH	1574	31307	1.78%	0.107%
162	9.477	9.464	9.504	HH	677	13851	0.79%	0.047%
163	9.539	9.504	9.557	HH	1616	30235	1.71%	0.103%
164	9.571	9.557	9.603	HH	1229	23852	1.35%	0.081%
165	9.623	9.603	9.640	HH	893	16410	0.93%	0.056%
166	9.676	9.640	9.701	HH	1511	33870	1.92%	0.115%
167	9.719	9.701	9.733	HH	1027	16376	0.93%	0.056%
168	9.759	9.733	9.814	HH	6836	113580	6.44%	0.387%
169	9.839	9.814	9.867	HH	1896	42148	2.39%	0.143%
170	9.882	9.867	9.892	HH	1524	20521	1.16%	0.070%
171	9.911	9.892	9.931	HH	3235	49791	2.82%	0.169%
172	9.971	9.931	10.006	HH	2199	61552	3.49%	0.210%
173	10.040	10.006	10.064	HH	6176	89229	5.06%	0.304%
174	10.085	10.064	10.122	HH	3184	63489	3.60%	0.216%
175	10.133	10.122	10.154	HH	1332	23444	1.33%	0.080%
176	10.181	10.154	10.231	HH	4878	122351	6.94%	0.416%
177	10.247	10.231	10.266	HH	1441	26403	1.50%	0.090%
178	10.281	10.266	10.309	HH	1406	28425	1.61%	0.097%
179	10.356	10.309	10.377	HH	1260	40572	2.30%	0.138%
180	10.385	10.377	10.431	HH	975	26545	1.51%	0.090%
181	10.451	10.431	10.469	HH	1004	20215	1.15%	0.069%
182	10.514	10.469	10.544	HH	1970	53583	3.04%	0.182%
183	10.565	10.544	10.595	HH	2955	57985	3.29%	0.197%
184	10.622	10.595	10.632	HH	2324	39461	2.24%	0.134%
185	10.648	10.632	10.674	HH	3340	59782	3.39%	0.203%
186	10.689	10.674	10.729	HH	2368	54038	3.06%	0.184%
187	10.766	10.729	10.798	HH	2927	76552	4.34%	0.261%
188	10.819	10.798	10.877	HH	4792	111565	6.33%	0.380%
189	10.920	10.877	10.950	HH	4463	122455	6.95%	0.417%
190	10.975	10.950	10.982	HH	5412	81685	4.63%	0.278%
191	10.996	10.982	11.027	HH	6417	109299	6.20%	0.372%
192	11.043	11.027	11.052	HH	1953	28546	1.62%	0.097%
193	11.069	11.052	11.087	HH	2746	44718	2.54%	0.152%
194	11.097	11.087	11.122	HH	1844	35908	2.04%	0.122%

rteres

195	11.171	11.122	11.217	HH	87554	1016037	57.63%	3.458%
196	11.245	11.217	11.290	HH	20900	297881	16.89%	1.014%
197	11.300	11.290	11.336	HH	2193	54337	3.08%	0.185%
198	11.345	11.336	11.367	HH	1863	34516	1.96%	0.117%
199	11.383	11.367	11.402	HH	1953	37771	2.14%	0.129%
200	11.422	11.402	11.442	HH	2495	50791	2.88%	0.173%
201	11.464	11.442	11.505	HH	5344	112248	6.37%	0.382%
202	11.541	11.505	11.549	HH	2061	48887	2.77%	0.166%
203	11.571	11.549	11.587	HH	2448	52319	2.97%	0.178%
204	11.625	11.587	11.652	HH	4969	126951	7.20%	0.432%
205	11.711	11.652	11.747	HH	6254	192850	10.94%	0.656%
206	11.776	11.747	11.799	HH	3495	78747	4.47%	0.268%
207	11.826	11.799	11.849	HH	3297	77174	4.38%	0.263%
208	11.868	11.849	11.889	HH	3053	60242	3.42%	0.205%
209	11.929	11.889	11.949	HH	2774	89009	5.05%	0.303%
210	11.978	11.949	11.993	HH	12543	172411	9.78%	0.587%
211	12.009	11.993	12.049	HH	15045	226445	12.84%	0.771%
212	12.093	12.049	12.111	HH	13125	267922	15.20%	0.912%
213	12.127	12.111	12.141	HH	9539	123870	7.03%	0.422%
214	12.157	12.141	12.194	HH	11740	191806	10.88%	0.653%
215	12.240	12.194	12.258	HH	3357	112470	6.38%	0.383%
216	12.299	12.258	12.319	HH	6122	146907	8.33%	0.500%
217	12.338	12.319	12.358	HH	8484	131147	7.44%	0.446%
218	12.368	12.358	12.404	HH	4115	96649	5.48%	0.329%
219	12.412	12.404	12.427	HH	3048	42213	2.39%	0.144%
220	12.451	12.427	12.477	HH	11173	178835	10.14%	0.609%
221	12.486	12.477	12.493	HH	3342	31216	1.77%	0.106%
222	12.510	12.493	12.524	HH	3596	62637	3.55%	0.213%
223	12.545	12.524	12.567	HH	7649	131873	7.48%	0.449%
224	12.599	12.567	12.614	HH	4872	117332	6.65%	0.399%
225	12.624	12.614	12.640	HH	4483	65923	3.74%	0.224%
226	12.655	12.640	12.671	HH	4453	73097	4.15%	0.249%
227	12.699	12.671	12.743	HH	6943	208350	11.82%	0.709%
228	12.772	12.743	12.811	HH	6467	195897	11.11%	0.667%
229	12.833	12.811	12.856	HH	8786	165061	9.36%	0.562%
230	12.880	12.856	12.903	HH	12370	240582	13.64%	0.819%
231	12.943	12.903	12.966	HH	9209	248462	14.09%	0.846%
232	13.000	12.966	13.047	HH	141380	1763158	100.00%	6.001%
233	13.062	13.047	13.081	HH	4795	82952	4.70%	0.282%
234	13.099	13.081	13.114	HH	4677	84750	4.81%	0.288%
235	13.131	13.114	13.142	HH	4762	78005	4.42%	0.266%
236	13.161	13.142	13.174	HH	6797	111848	6.34%	0.381%
237	13.187	13.174	13.201	HH	8305	113700	6.45%	0.387%
238	13.211	13.201	13.268	HH	6680	210754	11.95%	0.717%
239	13.300	13.268	13.324	HH	137996	1574194	89.28%	5.358%
240	13.355	13.324	13.371	HH	15809	299114	16.96%	1.018%
241	13.387	13.371	13.418	HH	15627	238796	13.54%	0.813%
242	13.440	13.418	13.456	HH	5104	104287	5.91%	0.355%
243	13.474	13.456	13.484	HH	8095	109987	6.24%	0.374%
244	13.499	13.484	13.526	HH	9837	174771	9.91%	0.595%
245	13.566	13.526	13.591	HH	11136	258659	14.67%	0.880%
246	13.605	13.591	13.617	HH	5319	80203	4.55%	0.273%

rteres

247	13.639	13.617	13.666	HH	6429	156954	8.90%	0.534%
248	13.699	13.666	13.736	HH	7933	245378	13.92%	0.835%
249	13.762	13.736	13.819	HH	13012	362711	20.57%	1.235%
250	13.831	13.819	13.841	HH	4998	65041	3.69%	0.221%
251	13.890	13.841	13.931	HH	21806	538377	30.53%	1.832%
252	13.958	13.931	13.974	HH	6762	156454	8.87%	0.533%
253	14.004	13.974	14.025	HH	46762	656739	37.25%	2.235%
254	14.038	14.025	14.060	HH	14577	219514	12.45%	0.747%
255	14.080	14.060	14.105	HH	8909	193348	10.97%	0.658%
256	14.169	14.105	14.189	HH	15167	475830	26.99%	1.620%
257	14.210	14.189	14.249	HH	14017	312542	17.73%	1.064%
258	14.283	14.249	14.309	HH	8339	249364	14.14%	0.849%
259	14.328	14.309	14.344	HH	6666	134039	7.60%	0.456%
260	14.378	14.344	14.411	HH	7135	262347	14.88%	0.893%
261	14.424	14.411	14.463	HH	6425	188978	10.72%	0.643%
262	14.480	14.463	14.517	HH	6189	189964	10.77%	0.647%
263	14.533	14.517	14.549	HH	6427	116430	6.60%	0.396%
264	14.595	14.549	14.610	HH	9256	300226	17.03%	1.022%
265	14.630	14.610	14.662	HH	15146	319225	18.11%	1.087%
266	14.679	14.662	14.689	HH	7315	111982	6.35%	0.381%
267	14.712	14.689	14.764	HH	9162	365615	20.74%	1.244%
268	14.807	14.764	14.847	HH	14114	483112	27.40%	1.644%
269	14.872	14.847	14.896	HH	25050	445824	25.29%	1.517%
270	14.933	14.896	14.971	HH	16865	504362	28.61%	1.717%
271	14.996	14.971	15.014	HH	9812	227977	12.93%	0.776%
272	15.051	15.014	15.114	HH	21710	689660	39.12%	2.347%
273	15.136	15.114	15.157	HH	11581	247287	14.03%	0.842%
274	15.186	15.157	15.206	HH	72411	987613	56.01%	3.362%
275	15.226	15.206	15.262	HH	69164	1012244	57.41%	3.445%
276	15.276	15.262	15.304	HH	9631	227095	12.88%	0.773%
277	15.348	15.304	15.401	HH	22008	699627	39.68%	2.381%
278	15.426	15.401	15.464	HH	12907	393799	22.33%	1.340%
279	15.490	15.464	15.511	HH	13809	315791	17.91%	1.075%
280	15.531	15.511	15.582	HH	13626	491139	27.86%	1.672%
281	15.632	15.582	15.662	HH	16614	557880	31.64%	1.899%
282	15.673	15.662	15.704	HH	11399	257686	14.62%	0.877%
283	15.734	15.704	15.743	HH	9818	223746	12.69%	0.762%
284	15.777	15.743	15.795	HH	11593	336402	19.08%	1.145%
285	15.822	15.795	15.839	HH	12756	310390	17.60%	1.056%
286	15.862	15.839	15.884	HH	22672	434075	24.62%	1.477%
287	15.900	15.884	15.927	HH	15826	342049	19.40%	1.164%
288	15.946	15.927	15.959	HH	12625	230669	13.08%	0.785%
289	16.022	15.959	16.061	HH	18612	875177	49.64%	2.979%

Sum of corrected areas: 29379787

FG011325.M Fri Jan 31 06:26:01 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.: Q1215 SAS No.: Q1215 SDG No.: Q1215

Calibration Sequence : FG011325		Test : Diesel Range Organics	
Concentration (PPM)	**Area Count**	**Reference Factor**	**File ID**
500	78963406	157927	FG015057.D
200	26178445	130892	FG015058.D
100	14314421	143144	FG015059.D
50	7127024	142540	FG015060.D
1000	126807043	126807	FG015061.D

AVG RF : 140262 **% RSD : 8.691** **AVG RT : 15.0514**

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015057.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 09:45
Operator : YP\AJ
Sample : 50 TRPH STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 13 10:10:33 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Mon Jan 13 10:10:17 2025
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9)	S TETRACOSANE-d50 (SURR...	15.054	7020283	50.000 ug/ml
	Target Compounds			
1)	N-OCTANE	2.014	6179916	50.000 ug/ml
2)	N-DECANE	4.549	7270974	50.000 ug/ml
3)	N-DODECANE	6.730	7616617	50.000 ug/ml
4)	N-TETRADECANE	8.567	7839892	50.000 ug/ml
5)	N-HEXADECANE	10.182	7974057	50.000 ug/ml
6)	N-OCTADECANE	11.633	8177811	50.000 ug/ml
7)	N-EICOSANE	12.948	8277142	50.000 ug/ml
8)	N-DOCOSANE	14.150	8032457	50.000 ug/ml
10)	N-TETRACOSANE	15.259	7977467	50.000 ug/ml
11)	N-HEXACOSANE	16.285	7920800	50.000 ug/ml
12)	N-OCTACOSANE	17.238	7876189	50.000 ug/ml
13)	N-TRIACONTANE	18.129	8146929	50.000 ug/ml
14)	N-DOTRIACONTANE	18.963	7971620	50.000 ug/ml
15)	N-TETRATRIACONTANE	19.748	7395720	50.000 ug/ml
16)	N-HEXATRIACONTANE	20.490	6634985	50.000 ug/ml
17)	N-OCTATRIACONTANE	21.240	6083503	50.000 ug/ml
18)	N-TETRACONTANE	22.181	5653958	50.000 ug/ml

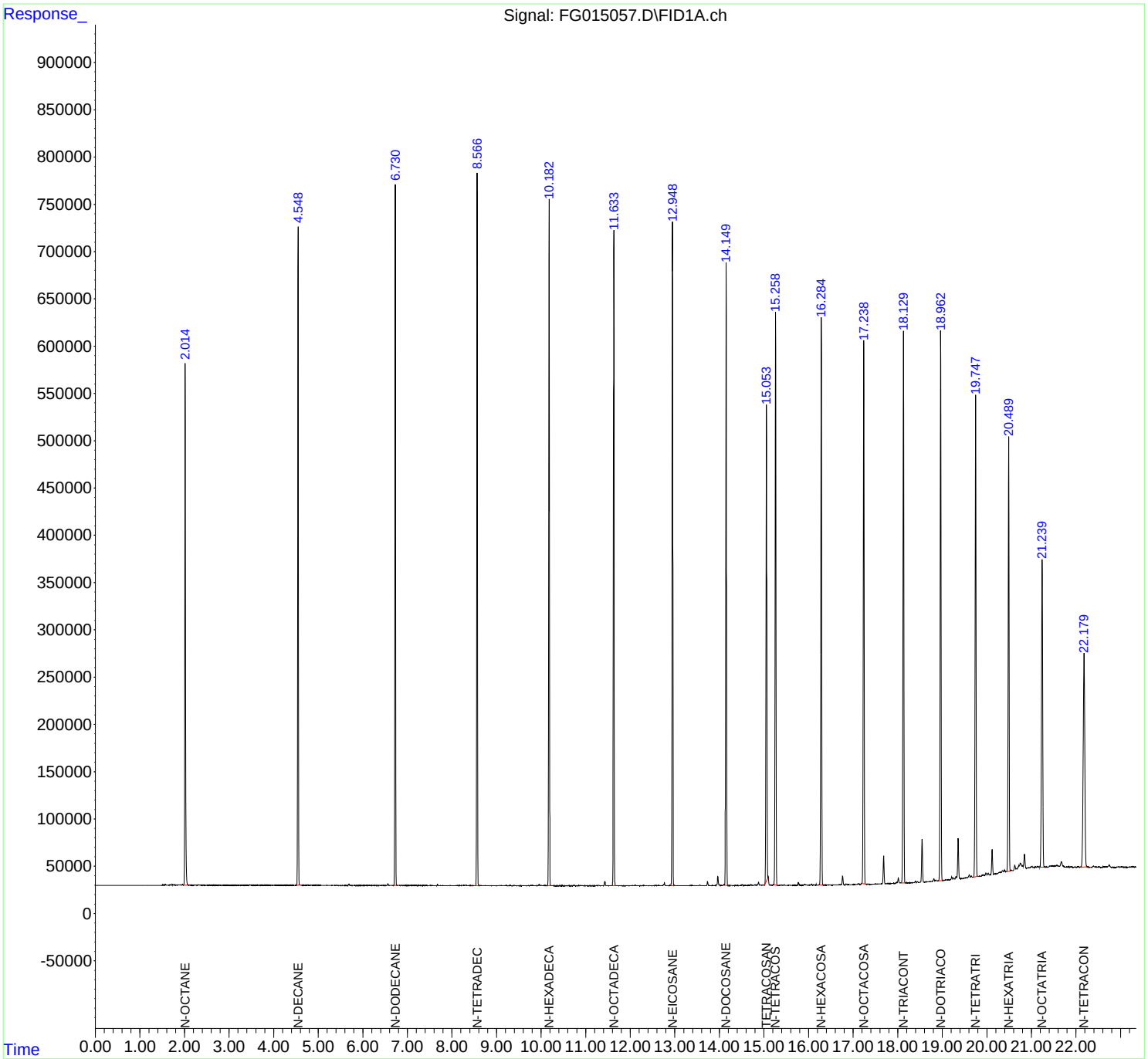
(f)=RT Delta > 1/2 Window (m)=manual int.

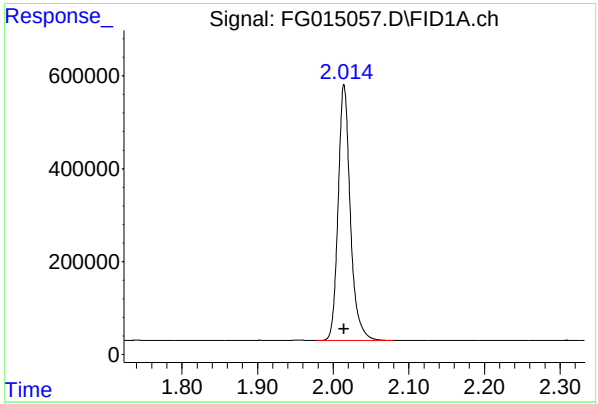
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015057.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 09:45
Operator : YP\AJ
Sample : 50 TRPH STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 13 10:10:33 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Mon Jan 13 10:10:17 2025
Response via : Initial Calibration
Integrator: ChemStation

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

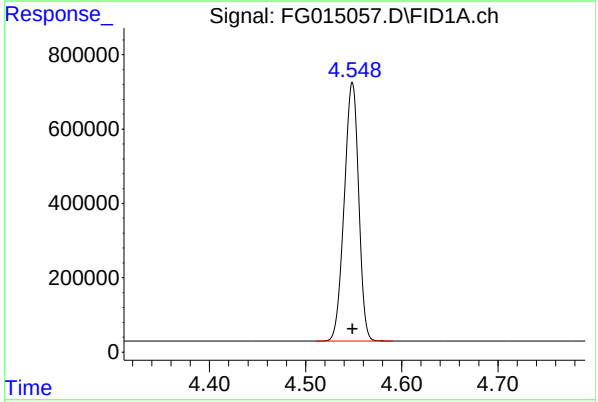




#1 N-OCTANE

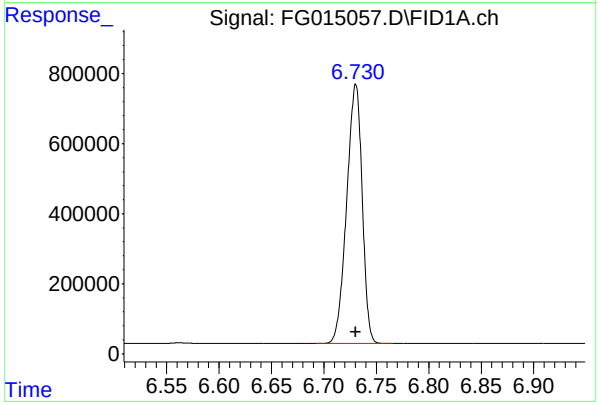
R.T.: 2.014 min
Delta R.T.: 0.000 min
Response: 6179916
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



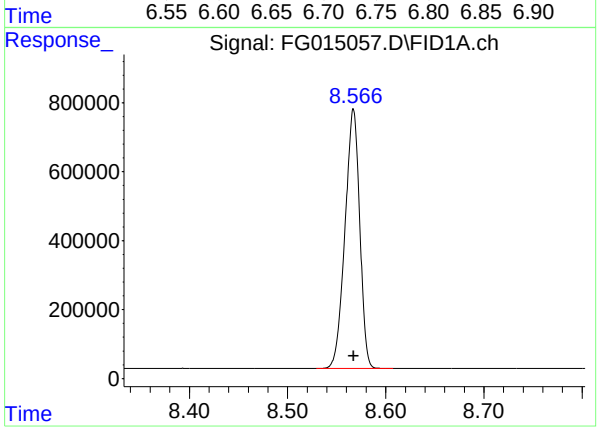
#2 N-DECANE

R.T.: 4.549 min
Delta R.T.: 0.000 min
Response: 7270974
Conc: 50.00 ug/ml



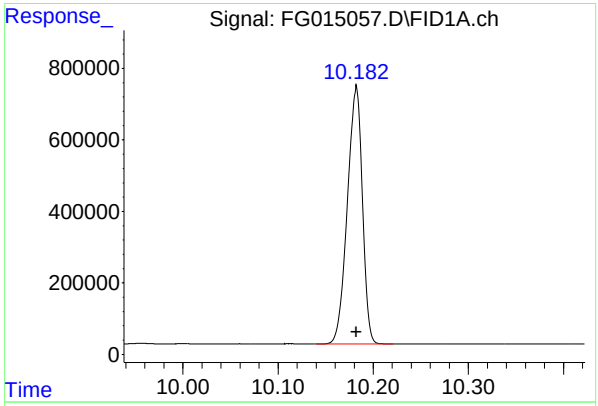
#3 N-DODECANE

R.T.: 6.730 min
Delta R.T.: 0.000 min
Response: 7616617
Conc: 50.00 ug/ml



#4 N-TETRADECANE

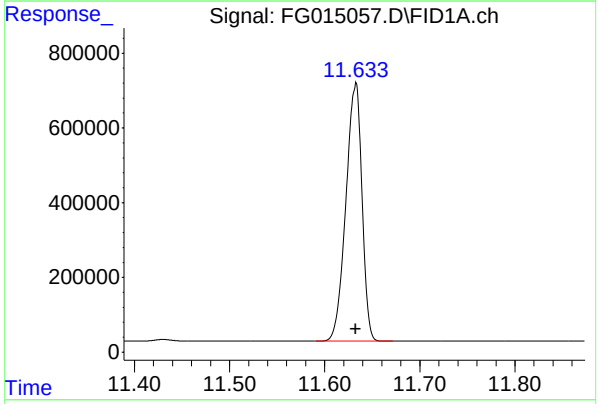
R.T.: 8.567 min
Delta R.T.: 0.000 min
Response: 7839892
Conc: 50.00 ug/ml



#5 N-HEXADECANE

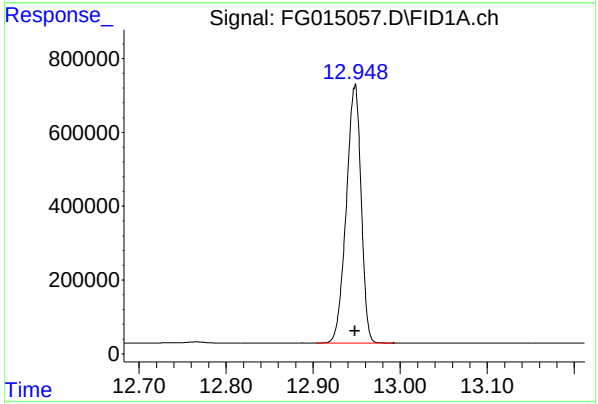
R.T.: 10.182 min
Delta R.T.: 0.000 min
Response: 7974057
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



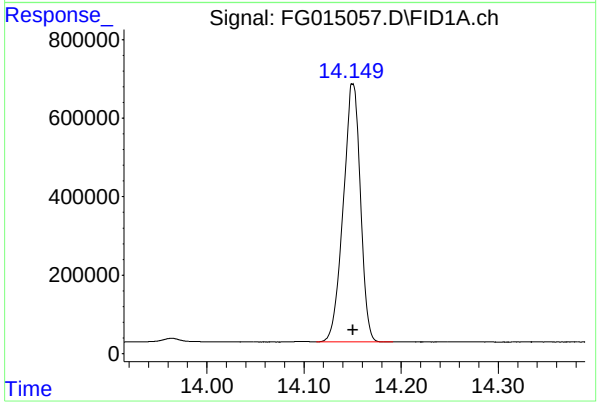
#6 N-OCTADECANE

R.T.: 11.633 min
Delta R.T.: 0.000 min
Response: 8177811
Conc: 50.00 ug/ml



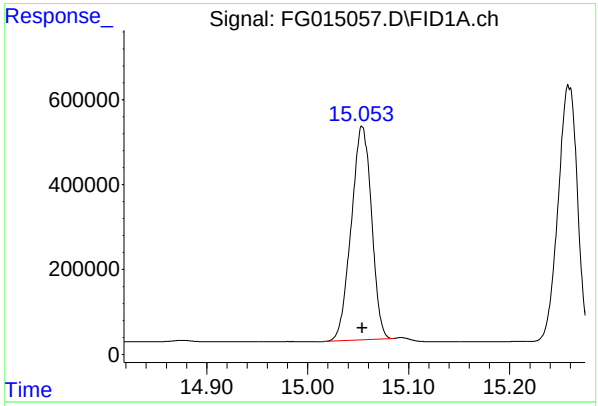
#7 N-EICOSANE

R.T.: 12.948 min
Delta R.T.: 0.000 min
Response: 8277142
Conc: 50.00 ug/ml



#8 N-DOCOSANE

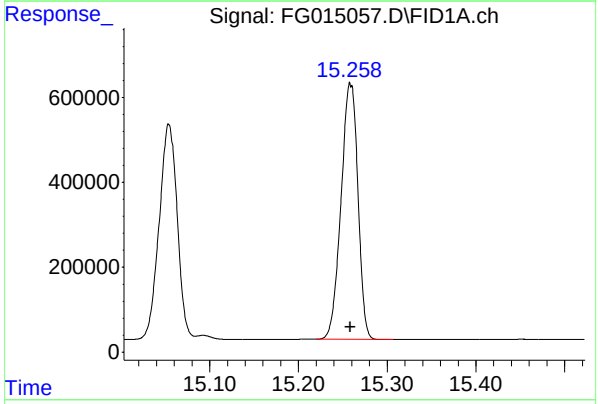
R.T.: 14.150 min
Delta R.T.: 0.000 min
Response: 8032457
Conc: 50.00 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

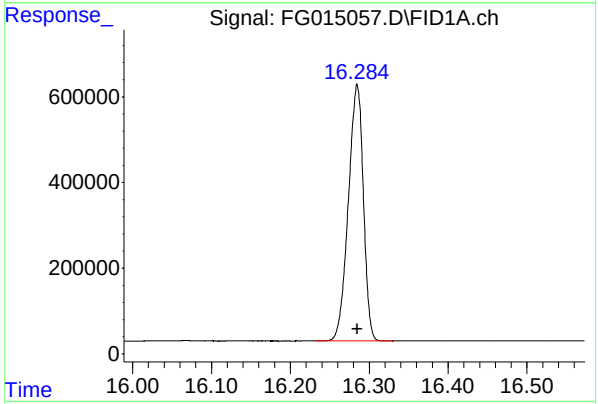
R.T.: 15.054 min
Delta R.T.: 0.000 min
Response: 7020283
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



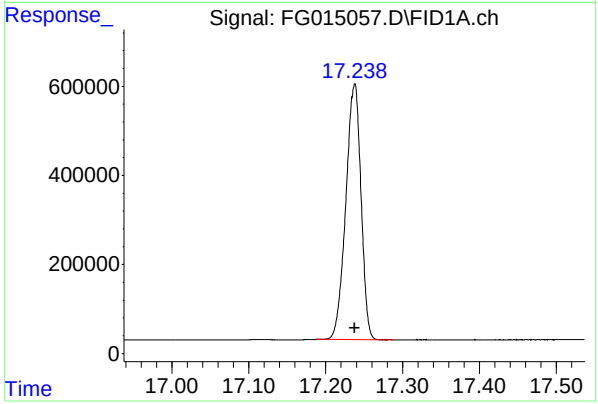
#10 N-TETRACOSANE

R.T.: 15.259 min
Delta R.T.: 0.000 min
Response: 7977467
Conc: 50.00 ug/ml



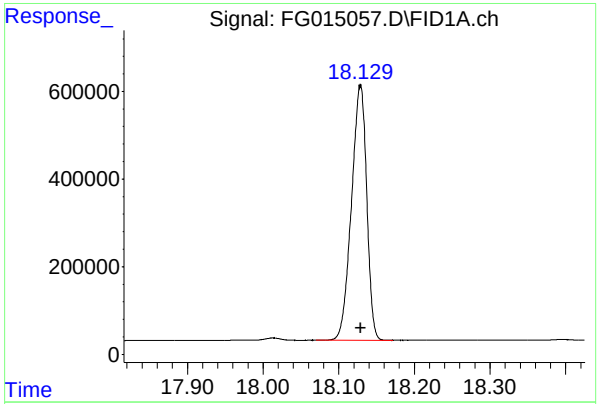
#11 N-HEXACOSANE

R.T.: 16.285 min
Delta R.T.: 0.000 min
Response: 7920800
Conc: 50.00 ug/ml



#12 N-OCTACOSANE

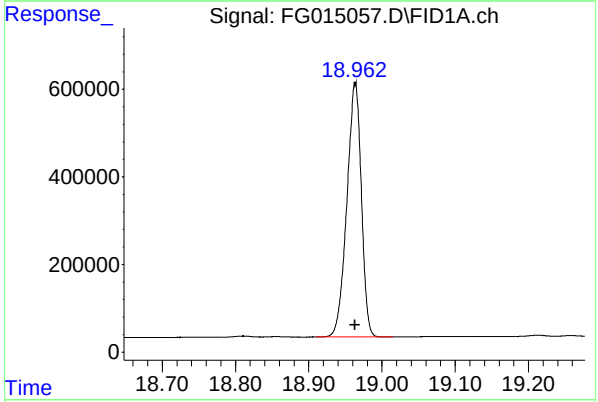
R.T.: 17.238 min
Delta R.T.: 0.000 min
Response: 7876189
Conc: 50.00 ug/ml



#13 N-TRIACONTANE

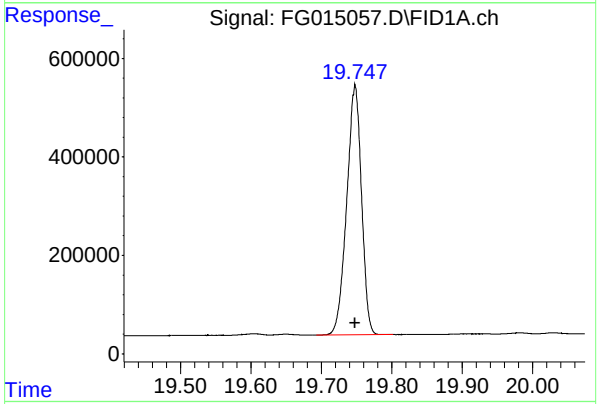
R.T.: 18.129 min
Delta R.T.: 0.000 min
Response: 8146929
Conc: 50.00 ug/ml

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



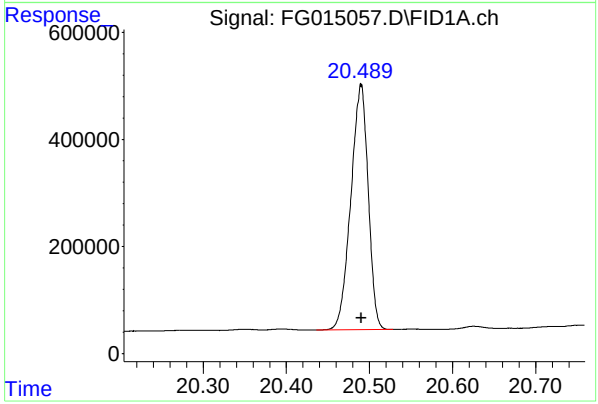
#14 N-DOTRIACONTANE

R.T.: 18.963 min
Delta R.T.: 0.000 min
Response: 7971620
Conc: 50.00 ug/ml



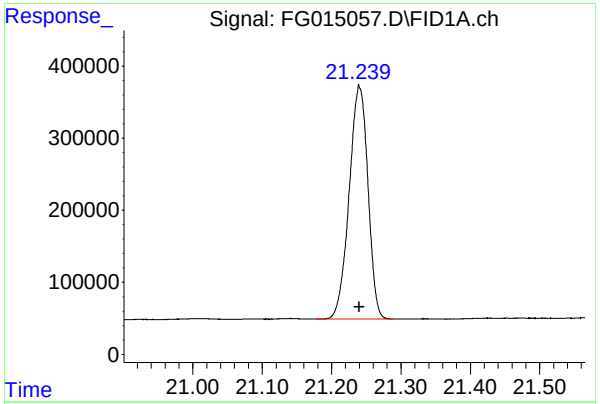
#15 N-TETRATRIACONTANE

R.T.: 19.748 min
Delta R.T.: 0.000 min
Response: 7395720
Conc: 50.00 ug/ml



#16 N-HEXATRIACONTANE

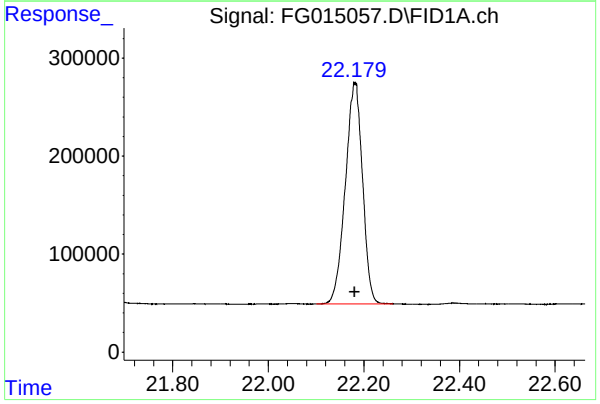
R.T.: 20.490 min
Delta R.T.: 0.000 min
Response: 6634985
Conc: 50.00 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.240 min
Delta R.T.: 0.000 mi
Response: 6083503
Conc: 50.00 ug/m

Instrument :
FID_G
ClientSampleId :
50 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.181 min
Delta R.T.: 0.000 min
Response: 5653958
Conc: 50.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015057.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 09:45
Sample : 50 TRPH STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.014	1.978	2.079	BB	551414	6179916	74.66%	4.610%
2	4.549	4.511	4.591	BB	696147	7270974	87.84%	5.424%
3	6.730	6.692	6.766	BB	739657	7616617	92.02%	5.682%
4	8.567	8.529	8.607	BB	750879	7839892	94.72%	5.848%
5	10.182	10.140	10.221	BB	724423	7974057	96.34%	5.949%
6	11.633	11.591	11.672	BB	690757	8177811	98.80%	6.101%
7	12.948	12.903	12.992	BB	698654	8277142	100.00%	6.175%
8	14.150	14.113	14.192	BB	656408	8032457	97.04%	5.992%
9	15.054	15.008	15.084	BV	501666	7020283	84.82%	5.237%
10	15.259	15.220	15.307	BB	601503	7977467	96.38%	5.951%
11	16.285	16.233	16.330	BB	597903	7920800	95.69%	5.909%
12	17.238	17.188	17.288	BB	574153	7876189	95.16%	5.876%
13	18.129	18.070	18.172	BB	577515	8146929	98.43%	6.078%
14	18.963	18.910	19.015	BB	575018	7971620	96.31%	5.947%
15	19.748	19.693	19.802	BB	508301	7395720	89.35%	5.517%
16	20.490	20.436	20.528	BB	454742	6634985	80.16%	4.950%
17	21.240	21.178	21.288	BB	321864	6083503	73.50%	4.538%
18	22.181	22.100	22.261	BB	226107	5653958	68.31%	4.218%

Sum of corrected areas: 134050320

FG011325.M Mon Jan 13 12:12:21 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015058.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 10:14
Operator : YP\AJ
Sample : 20 TRPH STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
20 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 13 10:27:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Mon Jan 13 10:27:15 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...	15.050	2426477	18.992 ug/ml
	Target Compounds			
1)	N-OCTANE	2.011	2347743	19.557 ug/ml
2)	N-DECANE	4.546	2412466	18.647 ug/ml
3)	N-DODECANE	6.726	2548018	18.721 ug/ml
4)	N-TETRADECANE	8.563	2539205	18.520 ug/ml
5)	N-HEXADECANE	10.178	2630204	18.675 ug/ml
6)	N-OCTADECANE	11.627	2743181	18.799 ug/ml
7)	N-EICOSANE	12.943	2706469	18.626 ug/ml
8)	N-DOCOSANE	14.146	2682390	18.773 ug/ml
10)	N-TETRACOSANE	15.255	2673287	18.803 ug/ml
11)	N-HEXACOSANE	16.279	2631421	18.757 ug/ml
12)	N-OCTACOSANE	17.233	2611804	18.837 ug/ml
13)	N-TRIACONTANE	18.124	2626561	18.792 ug/ml
14)	N-DOTRIACONTANE	18.959	2540319	18.739 ug/ml
15)	N-TETRATRIACONTANE	19.744	2210732	18.063 ug/ml
16)	N-HEXATRIACONTANE	20.486	1807283	17.100 ug/ml
17)	N-OCTATRIACONTANE	21.237	1610414	16.801 ug/ml
18)	N-TETRACONTANE	22.177	1490070	16.833 ug/ml

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

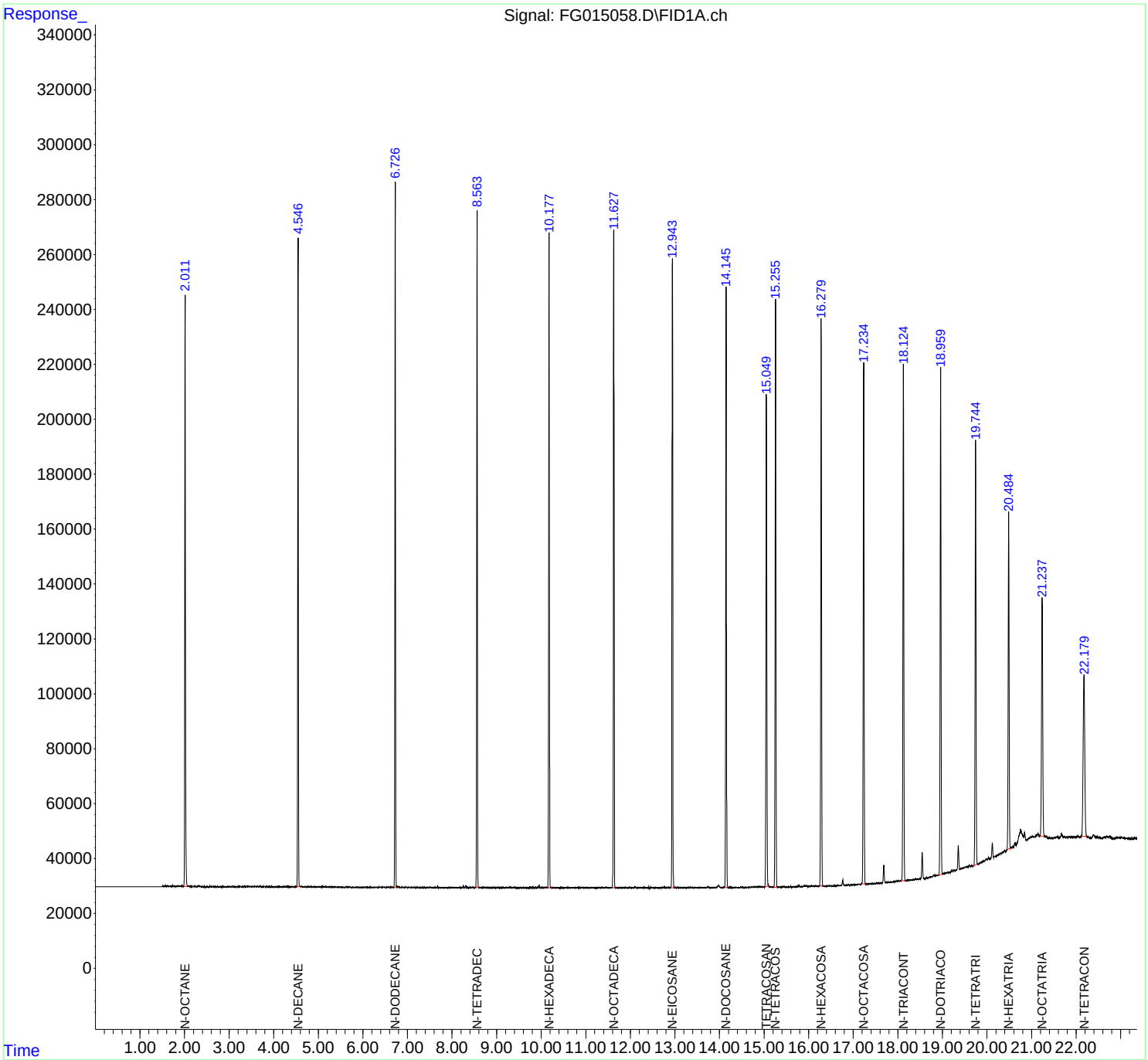
Quantitation Report (QT Reviewed)

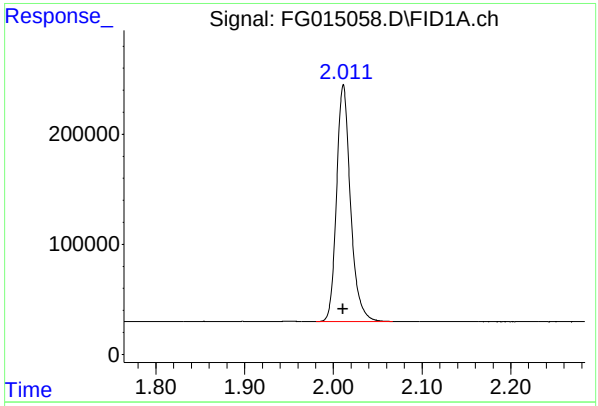
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015058.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 10:14
Operator : YP\AJ
Sample : 20 TRPH STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
20 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 13 10:27:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Mon Jan 13 10:27:15 2025
Response via : Initial Calibration
Integrator: ChemStation

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

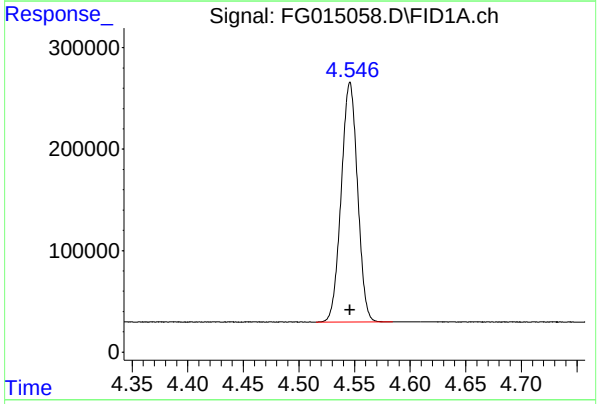




#1 N-OCTANE

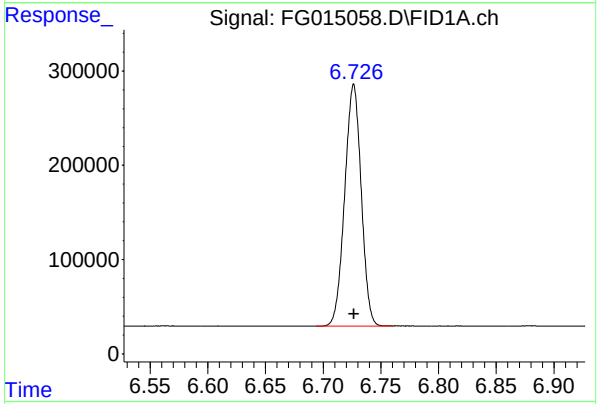
R.T.: 2.011 min
Delta R.T.: 0.000 min
Response: 2347743
Conc: 19.56 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



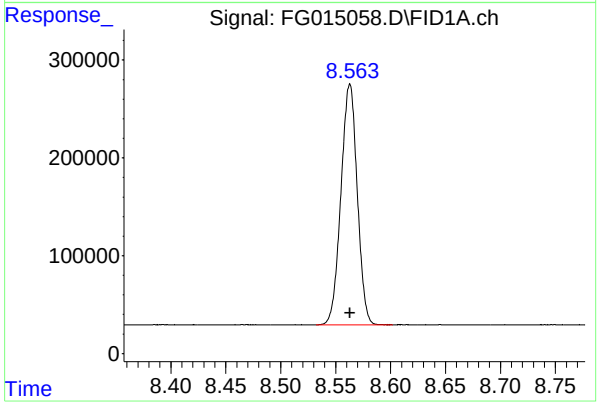
#2 N-DECANE

R.T.: 4.546 min
Delta R.T.: 0.000 min
Response: 2412466
Conc: 18.65 ug/ml



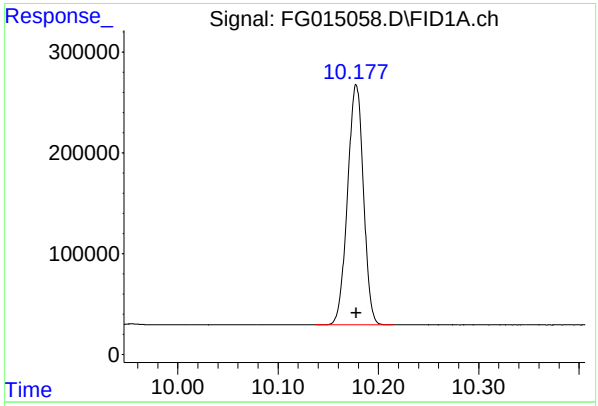
#3 N-DODECANE

R.T.: 6.726 min
Delta R.T.: 0.000 min
Response: 2548018
Conc: 18.72 ug/ml



#4 N-TETRADECANE

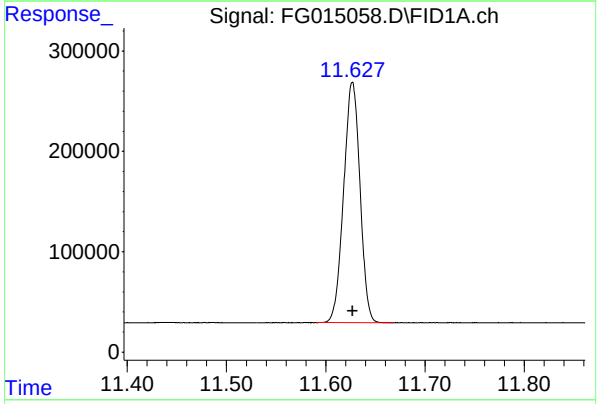
R.T.: 8.563 min
Delta R.T.: 0.000 min
Response: 2539205
Conc: 18.52 ug/ml



#5 N-HEXADECANE

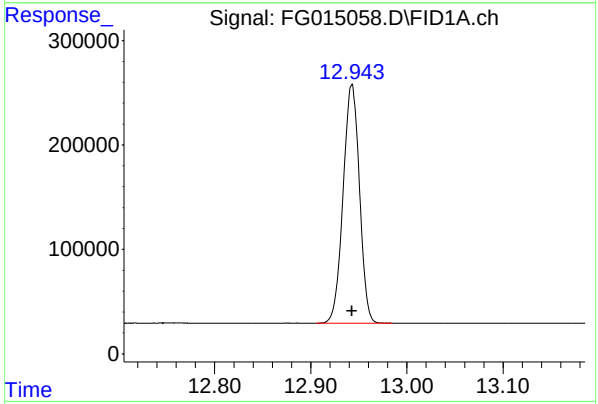
R.T.: 10.178 min
Delta R.T.: 0.000 min
Response: 2630204
Conc: 18.68 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



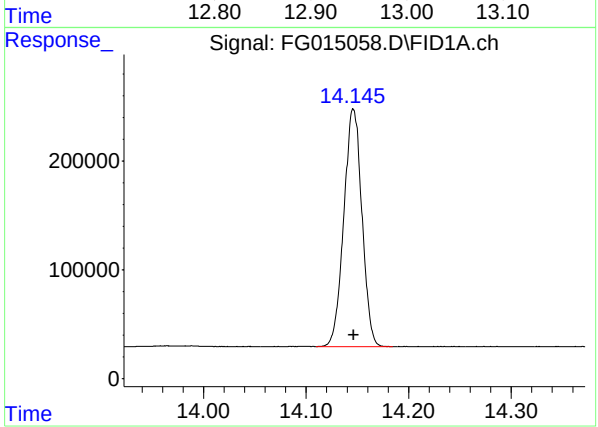
#6 N-OCTADECANE

R.T.: 11.627 min
Delta R.T.: 0.000 min
Response: 2743181
Conc: 18.80 ug/ml



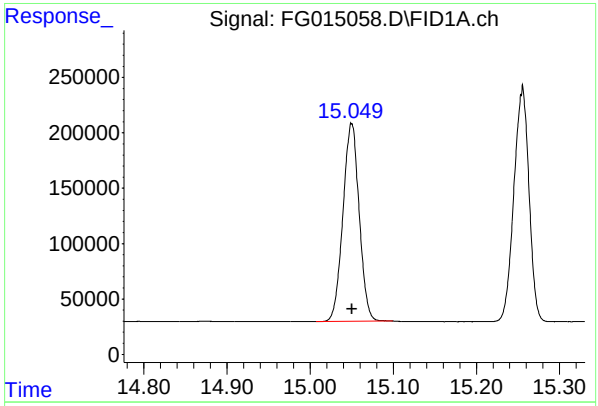
#7 N-EICOSANE

R.T.: 12.943 min
Delta R.T.: 0.000 min
Response: 2706469
Conc: 18.63 ug/ml



#8 N-DOCOSANE

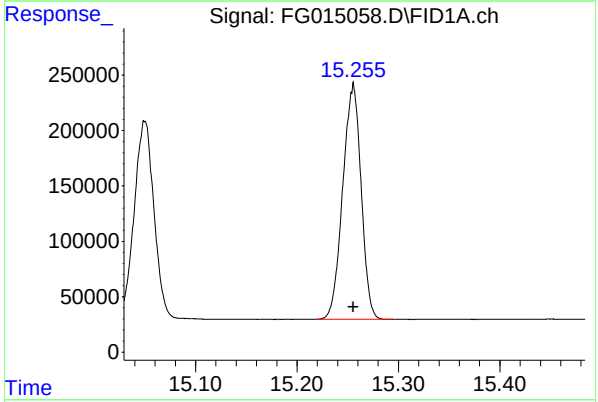
R.T.: 14.146 min
Delta R.T.: 0.000 min
Response: 2682390
Conc: 18.77 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

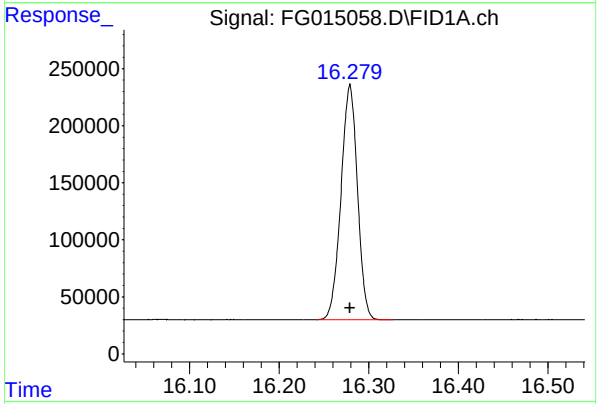
R.T.: 15.050 min
Delta R.T.: 0.000 min
Response: 2426477
Conc: 18.99 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



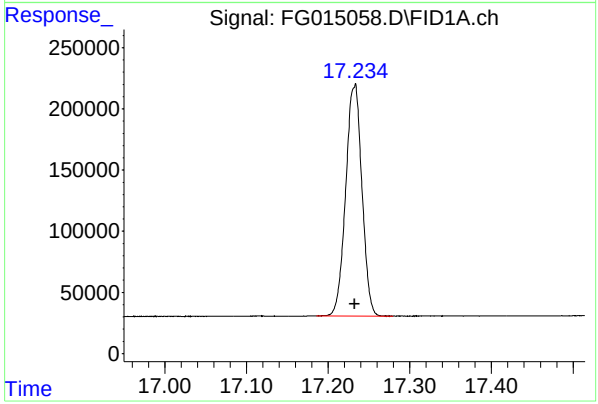
#10 N-TETRACOSANE

R.T.: 15.255 min
Delta R.T.: 0.000 min
Response: 2673287
Conc: 18.80 ug/ml



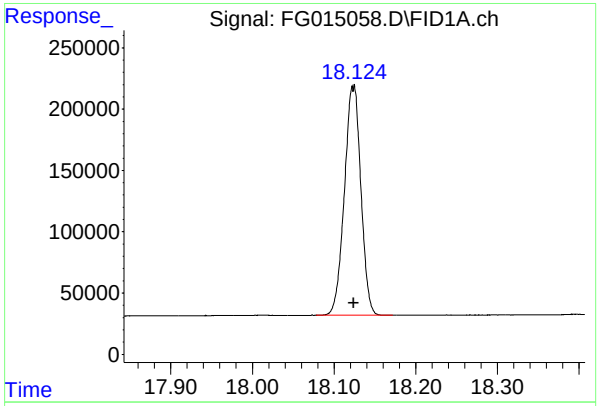
#11 N-HEXACOSANE

R.T.: 16.279 min
Delta R.T.: 0.000 min
Response: 2631421
Conc: 18.76 ug/ml



#12 N-OCTACOSANE

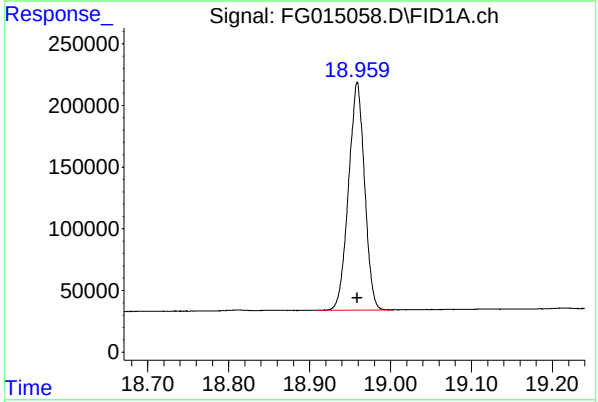
R.T.: 17.233 min
Delta R.T.: 0.000 min
Response: 2611804
Conc: 18.84 ug/ml



#13 N-TRIACONTANE

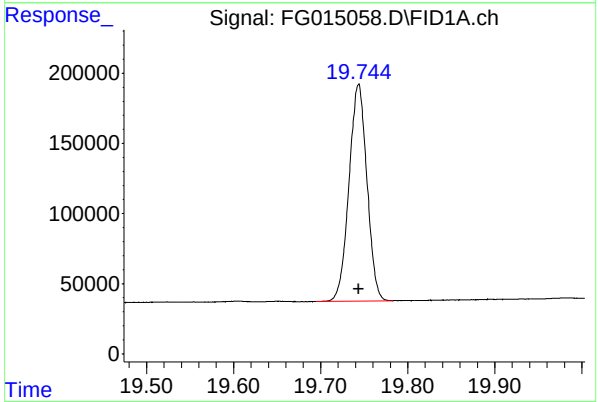
R.T.: 18.124 min
Delta R.T.: 0.000 min
Response: 2626561
Conc: 18.79 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



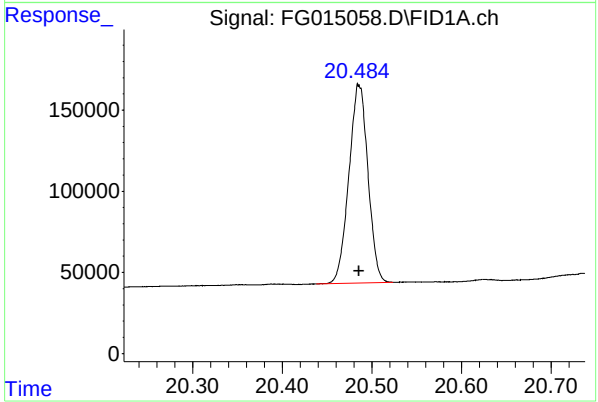
#14 N-DOTRIACONTANE

R.T.: 18.959 min
Delta R.T.: 0.000 min
Response: 2540319
Conc: 18.74 ug/ml



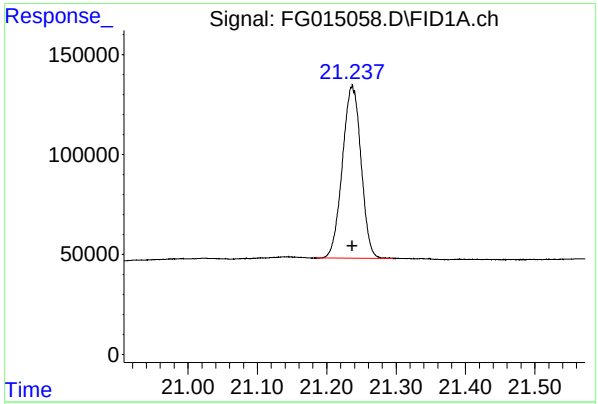
#15 N-TETRATRIACONTANE

R.T.: 19.744 min
Delta R.T.: 0.000 min
Response: 2210732
Conc: 18.06 ug/ml



#16 N-HEXATRIACONTANE

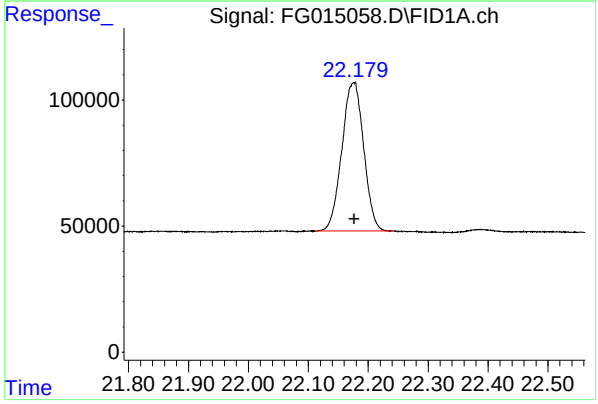
R.T.: 20.486 min
Delta R.T.: 0.000 min
Response: 1807283
Conc: 17.10 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.237 min
Delta R.T.: 0.000 min
Response: 1610414
Conc: 16.80 ug/ml

Instrument :
FID_G
ClientSampleId :
20 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.177 min
Delta R.T.: 0.000 min
Response: 1490070
Conc: 16.83 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015058.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 10:14
Sample : 20 TRPH STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.011	1.980	2.067	BB	215225	2347743	85.58%	5.430%
2	4.546	4.515	4.585	BB	236430	2412466	87.94%	5.579%
3	6.726	6.694	6.760	BB	256457	2548018	92.89%	5.893%
4	8.563	8.532	8.602	BB	246160	2539205	92.56%	5.873%
5	10.178	10.138	10.215	BB	238478	2630204	95.88%	6.083%
6	11.627	11.590	11.668	BB	239392	2743181	100.00%	6.344%
7	12.943	12.905	12.985	BB	228456	2706469	98.66%	6.259%
8	14.146	14.110	14.185	BB	218194	2682390	97.78%	6.204%
9	15.050	15.007	15.100	BB	178429	2426477	88.45%	5.612%
10	15.255	15.219	15.295	BB	212834	2673287	97.45%	6.183%
11	16.279	16.241	16.327	BB	206089	2631421	95.93%	6.086%
12	17.233	17.185	17.280	BB	187624	2611804	95.21%	6.041%
13	18.124	18.078	18.172	BB	183768	2626561	95.75%	6.075%
14	18.959	18.908	19.003	BB	184506	2540319	92.60%	5.875%
15	19.744	19.695	19.783	BB	154500	2210732	80.59%	5.113%
16	20.486	20.438	20.524	BB	122070	1807283	65.88%	4.180%
17	21.237	21.185	21.295	BB	85965	1610414	58.71%	3.725%
18	22.177	22.113	22.241	BB	58558	1490070	54.32%	3.446%
			Sum of corrected areas:			43238043		

FG011325.M Mon Jan 13 12:12:37 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015059.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 10:42
Operator : YP\AJ
Sample : 10 TRPH STD
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
10 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 13 10:53:00 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Mon Jan 13 10:52:39 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...	15.049	1319274	10.242 ug/ml
	Target Compounds			
1)	N-OCTANE	2.012	1276191	10.466 ug/ml
2)	N-DECANE	4.545	1314669	10.121 ug/ml
3)	N-DODECANE	6.726	1389408	10.155 ug/ml
4)	N-TETRADECANE	8.563	1386903	10.086 ug/ml
5)	N-HEXADECANE	10.177	1437974	10.157 ug/ml
6)	N-OCTADECANE	11.627	1501248	10.215 ug/ml
7)	N-EICOSANE	12.942	1478786	10.132 ug/ml
8)	N-DOCOSANE	14.146	1466497	10.196 ug/ml
10)	N-TETRACOSANE	15.254	1461022	10.206 ug/ml
11)	N-HEXACOSANE	16.278	1440458	10.200 ug/ml
12)	N-OCTACOSANE	17.231	1437456	10.273 ug/ml
13)	N-TRIACONTANE	18.121	1459210	10.327 ug/ml
14)	N-DOTRIACONTANE	18.957	1433212	10.423 ug/ml
15)	N-TETRATRIACONTANE	19.741	1288019	10.388 ug/ml
16)	N-HEXATRIACONTANE	20.484	1102769	10.322 ug/ml
17)	N-OCTATRIACONTANE	21.236	1010014	10.398 ug/ml
18)	N-TETRACONTANE	22.175	952991	10.563 ug/ml

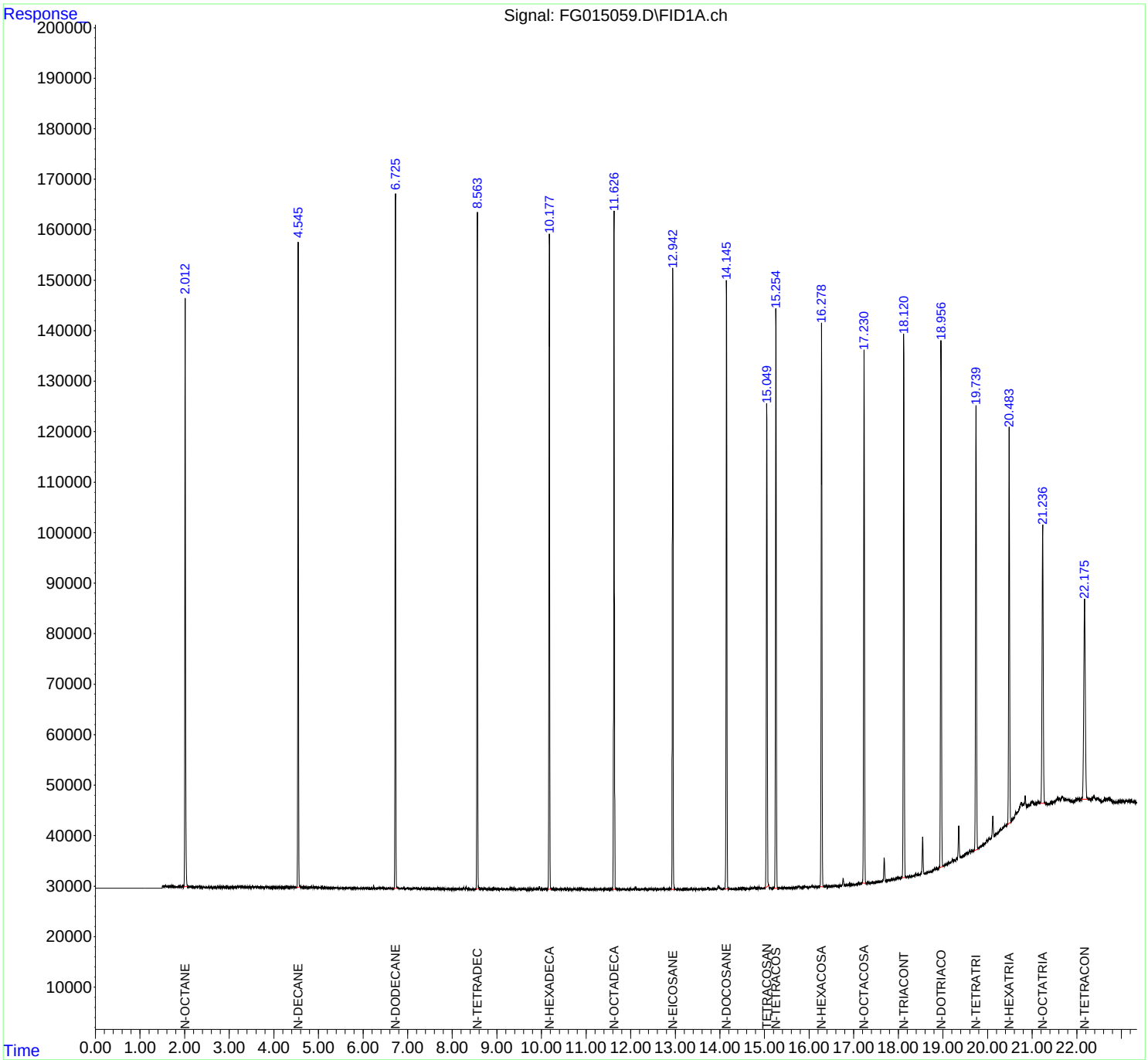
(f)=RT Delta > 1/2 Window (m)=manual int.

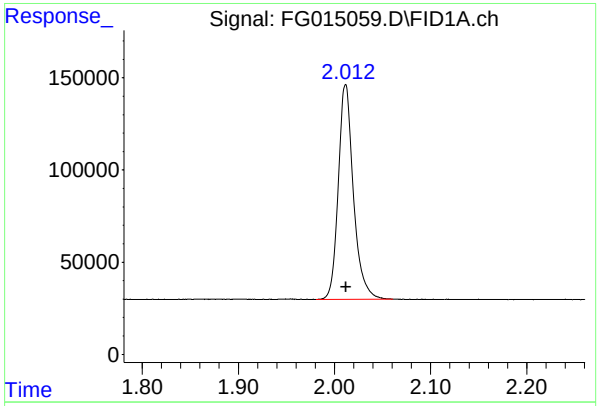
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015059.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 10:42
Operator : YP\AJ
Sample : 10 TRPH STD
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
10 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 13 10:53:00 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Mon Jan 13 10:52:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

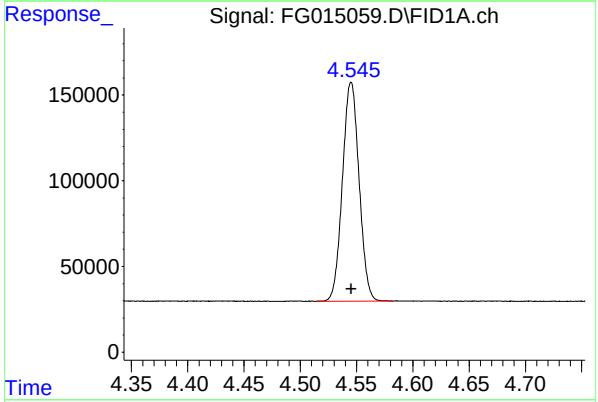




#1 N-OCTANE

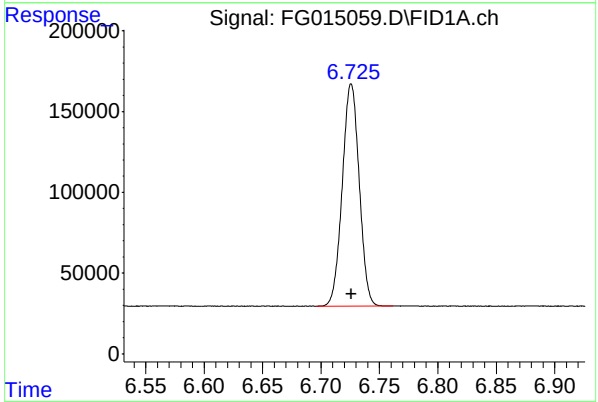
R.T.: 2.012 min
Delta R.T.: 0.000 min
Response: 1276191
Conc: 10.47 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



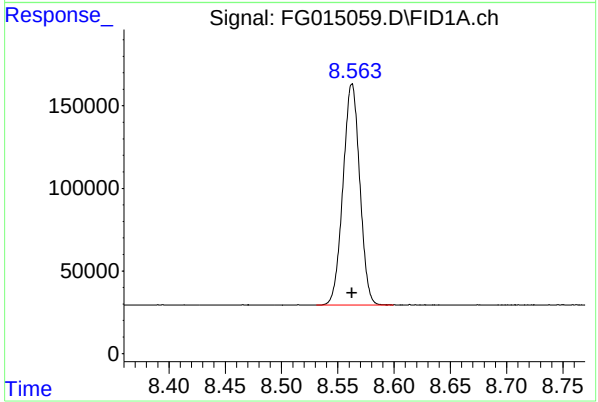
#2 N-DECANE

R.T.: 4.545 min
Delta R.T.: 0.000 min
Response: 1314669
Conc: 10.12 ug/ml



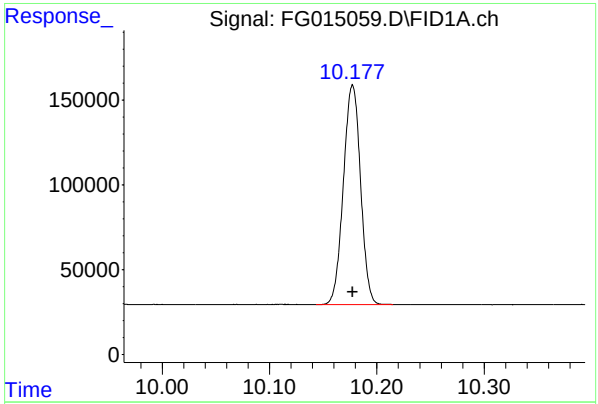
#3 N-DODECANE

R.T.: 6.726 min
Delta R.T.: 0.000 min
Response: 1389408
Conc: 10.16 ug/ml



#4 N-TETRADECANE

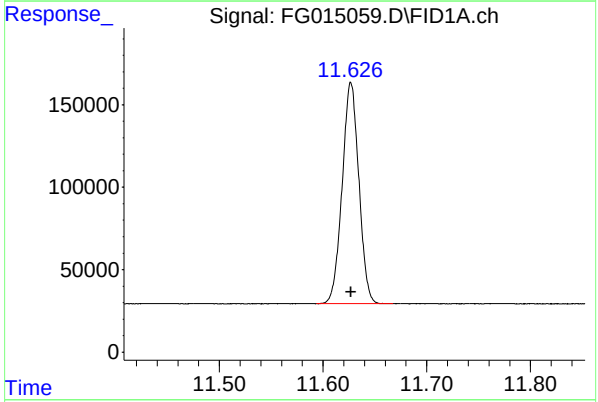
R.T.: 8.563 min
Delta R.T.: 0.000 min
Response: 1386903
Conc: 10.09 ug/ml



#5 N-HEXADECANE

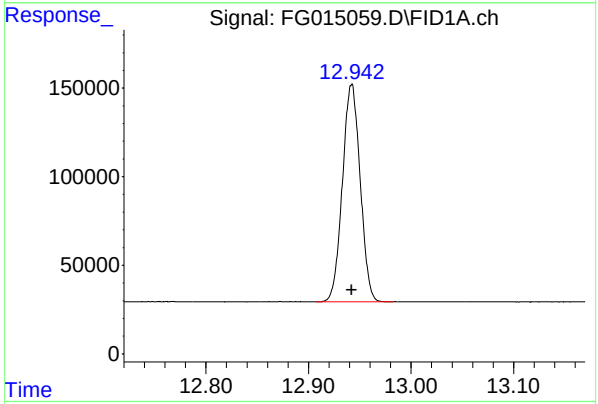
R.T.: 10.177 min
Delta R.T.: 0.000 min
Response: 1437974
Conc: 10.16 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



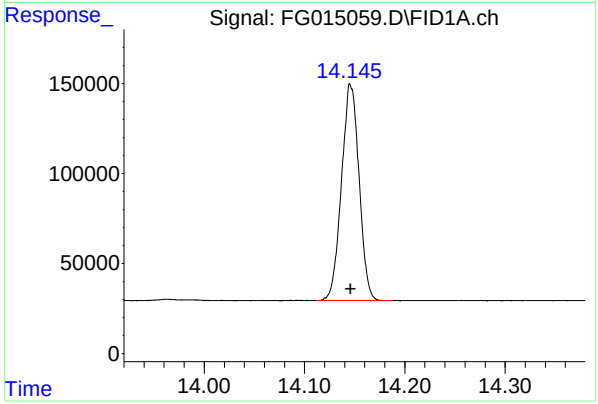
#6 N-OCTADECANE

R.T.: 11.627 min
Delta R.T.: 0.000 min
Response: 1501248
Conc: 10.21 ug/ml



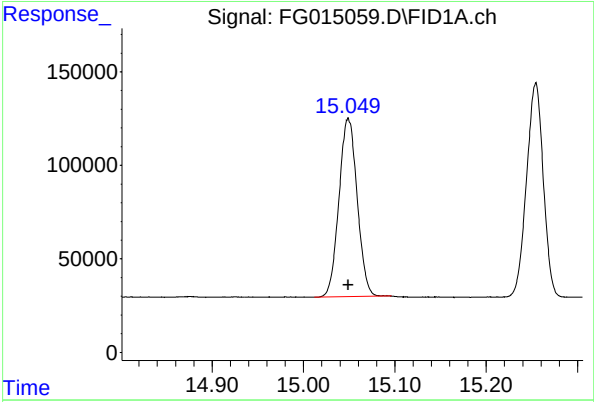
#7 N-EICOSANE

R.T.: 12.942 min
Delta R.T.: 0.000 min
Response: 1478786
Conc: 10.13 ug/ml



#8 N-DOCOSANE

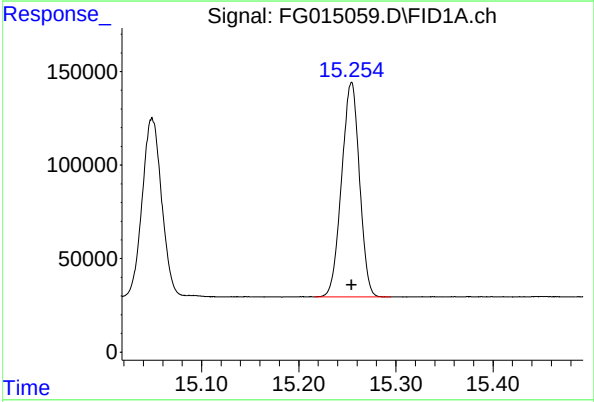
R.T.: 14.146 min
Delta R.T.: 0.000 min
Response: 1466497
Conc: 10.20 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

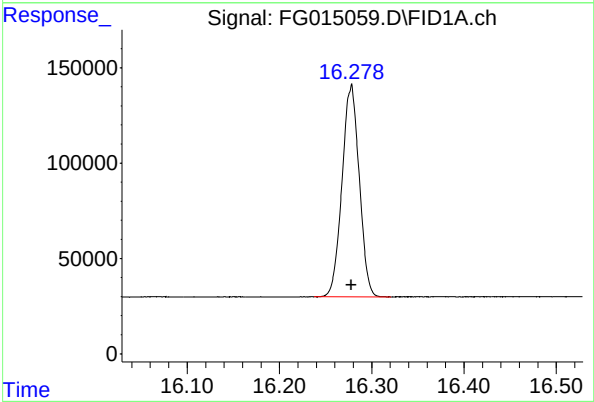
R.T.: 15.049 min
Delta R.T.: 0.000 min
Response: 1319274
Conc: 10.24 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



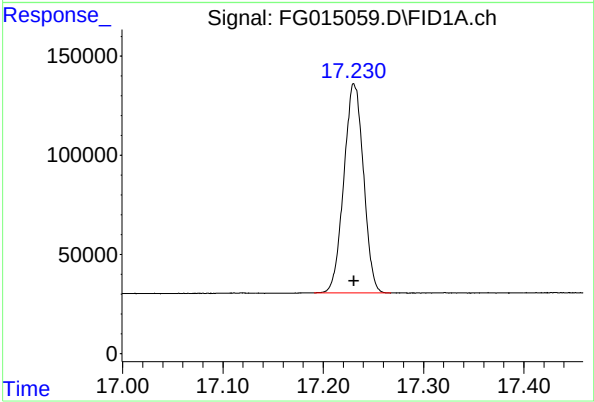
#10 N-TETRACOSANE

R.T.: 15.254 min
Delta R.T.: 0.000 min
Response: 1461022
Conc: 10.21 ug/ml



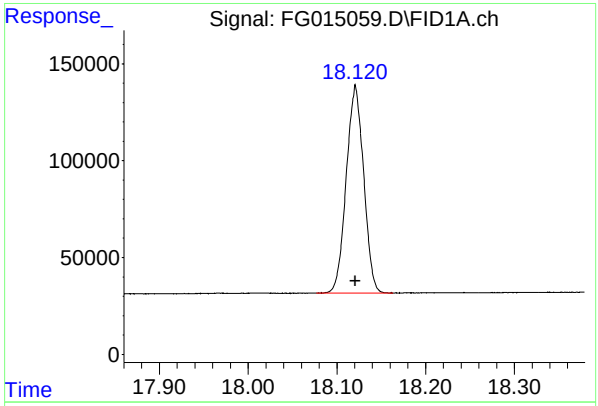
#11 N-HEXACOSANE

R.T.: 16.278 min
Delta R.T.: 0.000 min
Response: 1440458
Conc: 10.20 ug/ml



#12 N-OCTACOSANE

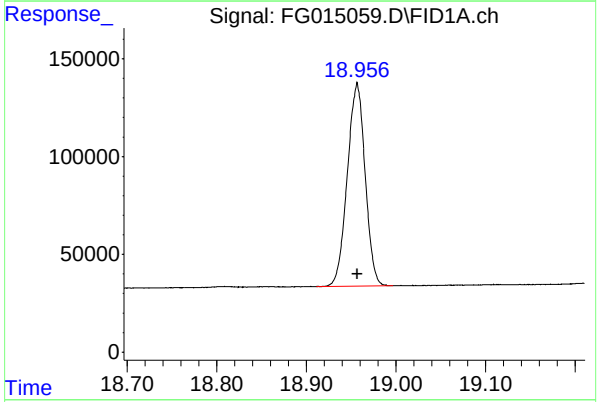
R.T.: 17.231 min
Delta R.T.: 0.000 min
Response: 1437456
Conc: 10.27 ug/ml



#13 N-TRIACONTANE

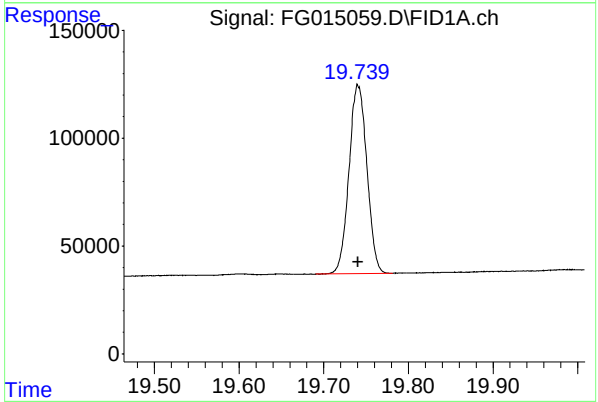
R.T.: 18.121 min
Delta R.T.: 0.000 min
Response: 1459210
Conc: 10.33 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



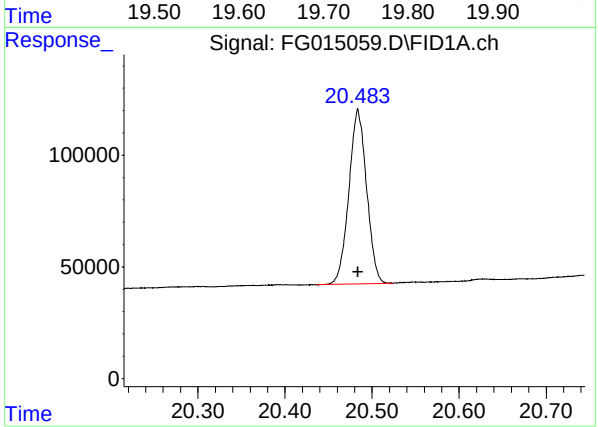
#14 N-DOTRIACONTANE

R.T.: 18.957 min
Delta R.T.: 0.000 min
Response: 1433212
Conc: 10.42 ug/ml



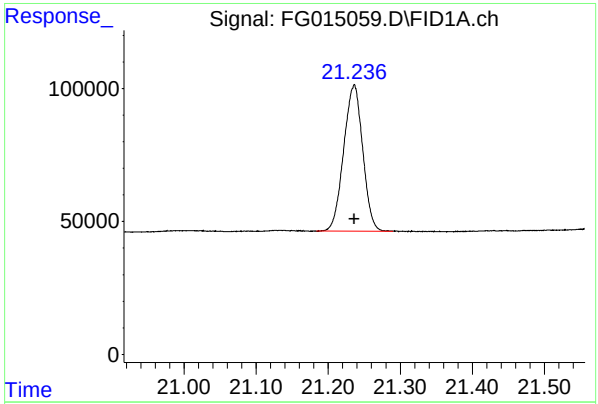
#15 N-TETRATRIACONTANE

R.T.: 19.741 min
Delta R.T.: 0.000 min
Response: 1288019
Conc: 10.39 ug/ml



#16 N-HEXATRIACONTANE

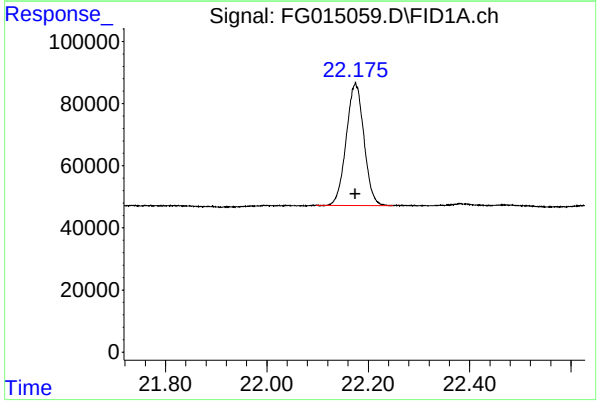
R.T.: 20.484 min
Delta R.T.: 0.000 min
Response: 1102769
Conc: 10.32 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.236 min
Delta R.T.: 0.000 min
Response: 1010014
Conc: 10.40 ug/ml

Instrument :
FID_G
ClientSampleId :
10 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.175 min
Delta R.T.: 0.000 min
Response: 952991
Conc: 10.56 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015059.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 10:42
Sample : 10 TRPH STD
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.012	1.981	2.061	BB	116551	1276191	85.01%	5.283%
2	4.545	4.514	4.583	BB	127760	1314669	87.57%	5.442%
3	6.726	6.696	6.762	BB	137599	1389408	92.55%	5.752%
4	8.563	8.531	8.599	BB	133691	1386903	92.38%	5.741%
5	10.177	10.143	10.215	BB	129522	1437974	95.79%	5.953%
6	11.627	11.593	11.668	BB	134180	1501248	100.00%	6.215%
7	12.942	12.908	12.983	BB	122931	1478786	98.50%	6.122%
8	14.146	14.112	14.188	BB	119620	1466497	97.69%	6.071%
9	15.049	15.012	15.096	BB	95604	1319274	87.88%	5.461%
10	15.254	15.216	15.295	BB	114527	1461022	97.32%	6.048%
11	16.278	16.238	16.321	BB	111744	1440458	95.95%	5.963%
12	17.231	17.191	17.268	BB	105493	1437456	95.75%	5.951%
13	18.121	18.077	18.163	BB	107178	1459210	97.20%	6.041%
14	18.957	18.911	18.997	BB	104074	1433212	95.47%	5.933%
15	19.741	19.691	19.782	BB	86857	1288019	85.80%	5.332%
16	20.484	20.436	20.524	BB	78199	1102769	73.46%	4.565%
17	21.236	21.183	21.290	BB	55242	1010014	67.28%	4.181%
18	22.175	22.097	22.249	BB	39719	952991	63.48%	3.945%
			Sum of corrected areas:			24156101		

FG011325.M Mon Jan 13 12:12:53 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015060.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 11:11
Operator : YP\AJ
Sample : 5 TRPH STD
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
5 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 13 11:35:22 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Mon Jan 13 11:35:11 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...	15.048	648631	5.029 ug/ml
Target Compounds				
1)	N-OCTANE	2.012	634654	5.162 ug/ml
2)	N-DECANE	4.546	654008	5.028 ug/ml
3)	N-DODECANE	6.726	692533	5.049 ug/ml
4)	N-TETRADECANE	8.563	693227	5.033 ug/ml
5)	N-HEXADECANE	10.177	716946	5.051 ug/ml
6)	N-OCTADECANE	11.627	747864	5.071 ug/ml
7)	N-EICOSANE	12.942	734881	5.028 ug/ml
8)	N-DOCOSANE	14.146	728625	5.053 ug/ml
10)	N-TETRACOSANE	15.254	725335	5.053 ug/ml
11)	N-HEXACOSANE	16.277	714017	5.045 ug/ml
12)	N-OCTACOSANE	17.231	719588	5.113 ug/ml
13)	N-TRIACONTANE	18.121	746793	5.225 ug/ml
14)	N-DOTRIACONTANE	18.956	739109	5.296 ug/ml
15)	N-TETRATRIACONTANE	19.742	661594	5.265 ug/ml
16)	N-HEXATRIACONTANE	20.483	565434	5.231 ug/ml
17)	N-OCTATRIACONTANE	21.234	509611	5.195 ug/ml
18)	N-TETRACONTANE	22.172	475271	5.212 ug/ml

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

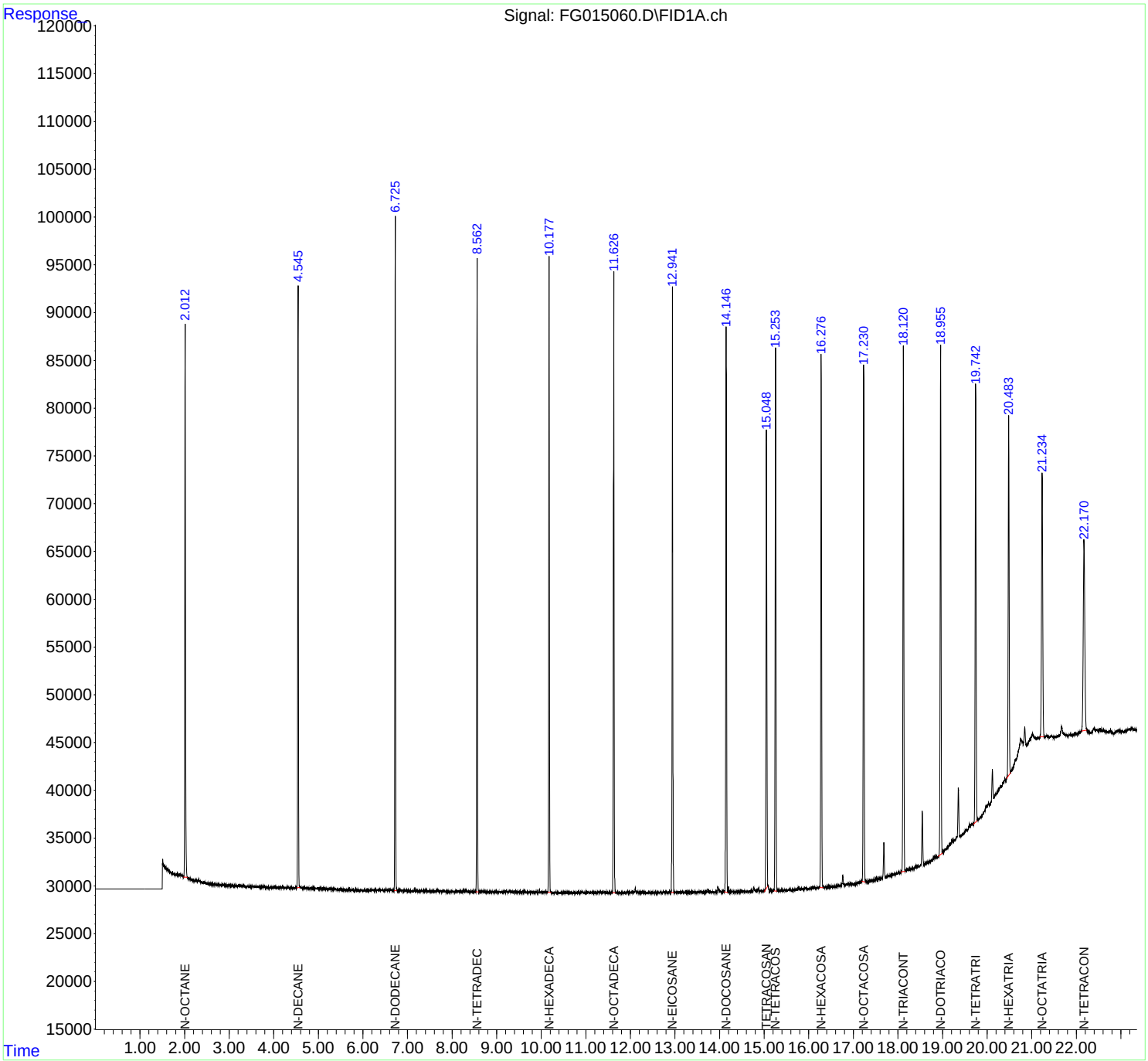
Quantitation Report (QT Reviewed)

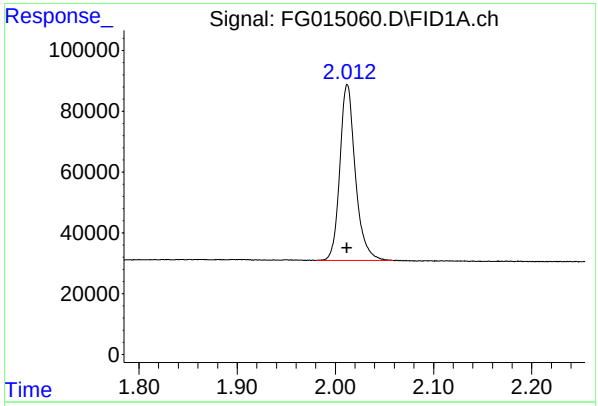
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015060.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 11:11
Operator : YP\AJ
Sample : 5 TRPH STD
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
5 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 13 11:35:22 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Mon Jan 13 11:35:11 2025
Response via : Initial Calibration
Integrator: ChemStation

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

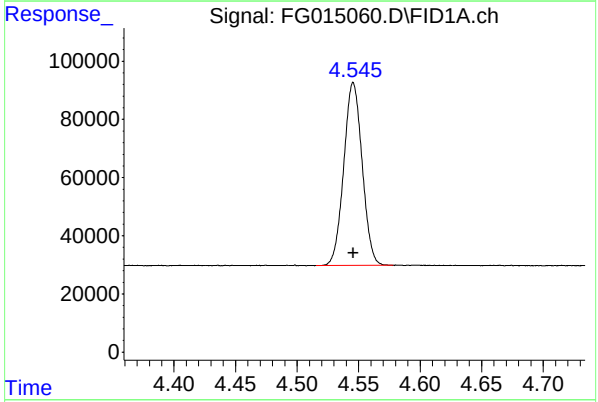




#1 N-OCTANE

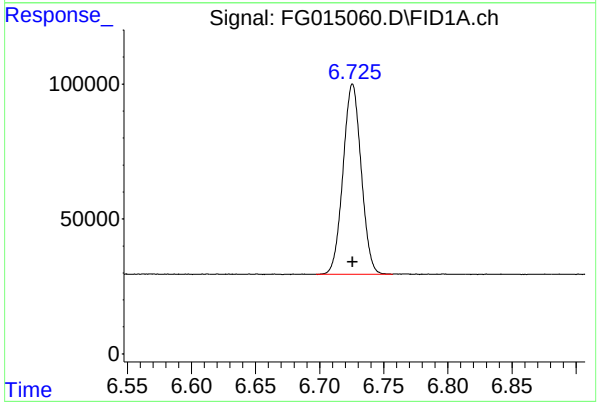
R.T.: 2.012 min
Delta R.T.: 0.000 min
Response: 634654
Conc: 5.16 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



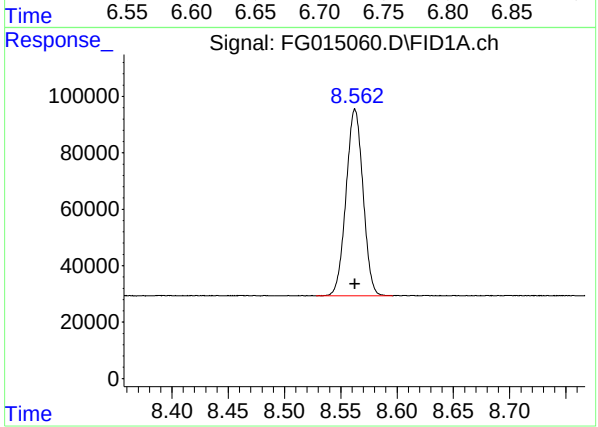
#2 N-DECANE

R.T.: 4.546 min
Delta R.T.: 0.000 min
Response: 654008
Conc: 5.03 ug/ml



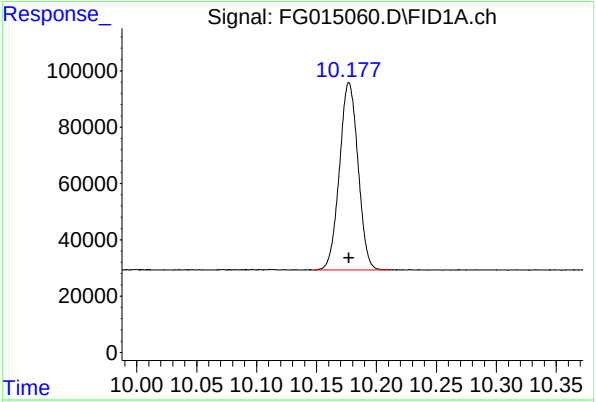
#3 N-DODECANE

R.T.: 6.726 min
Delta R.T.: 0.000 min
Response: 692533
Conc: 5.05 ug/ml



#4 N-TETRADECANE

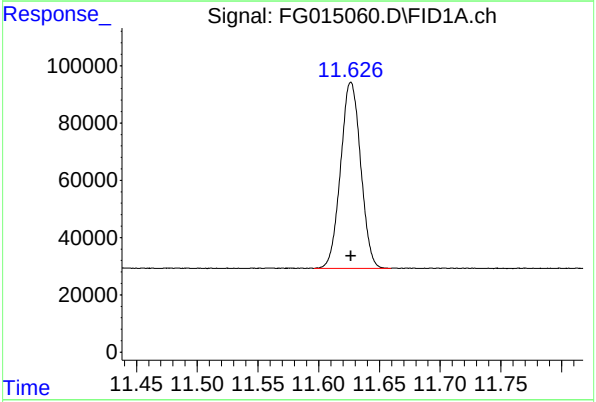
R.T.: 8.563 min
Delta R.T.: 0.000 min
Response: 693227
Conc: 5.03 ug/ml



#5 N-HEXADECANE

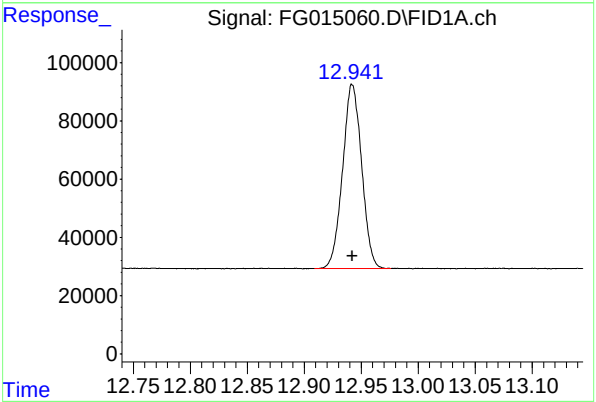
R.T.: 10.177 min
Delta R.T.: 0.000 min
Response: 716946
Conc: 5.05 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



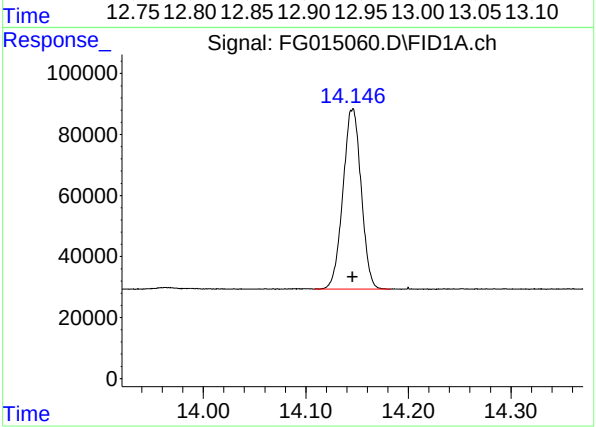
#6 N-OCTADECANE

R.T.: 11.627 min
Delta R.T.: 0.000 min
Response: 747864
Conc: 5.07 ug/ml



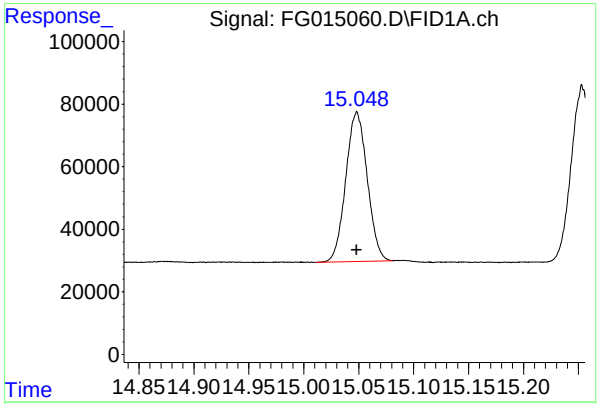
#7 N-EICOSANE

R.T.: 12.942 min
Delta R.T.: 0.000 min
Response: 734881
Conc: 5.03 ug/ml



#8 N-DOCOSANE

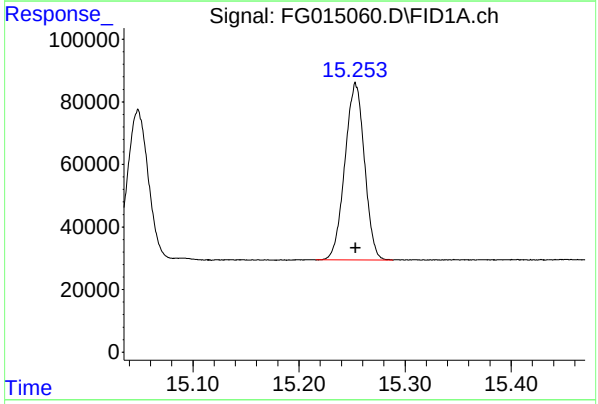
R.T.: 14.146 min
Delta R.T.: 0.000 min
Response: 728625
Conc: 5.05 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

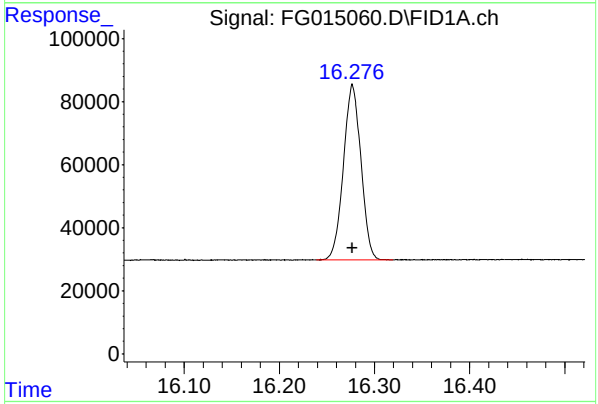
R.T.: 15.048 min
Delta R.T.: 0.000 min
Response: 648631
Conc: 5.03 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



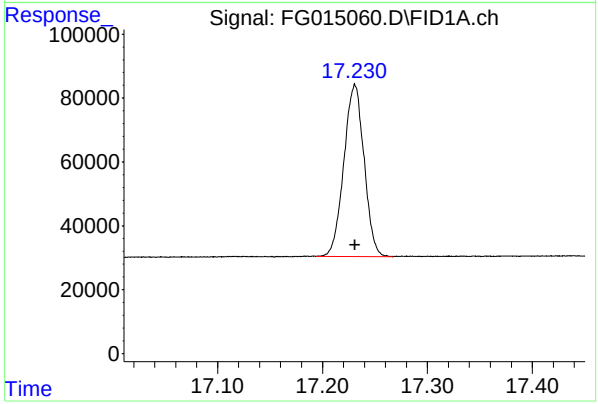
#10 N-TETRACOSANE

R.T.: 15.254 min
Delta R.T.: 0.000 min
Response: 725335
Conc: 5.05 ug/ml



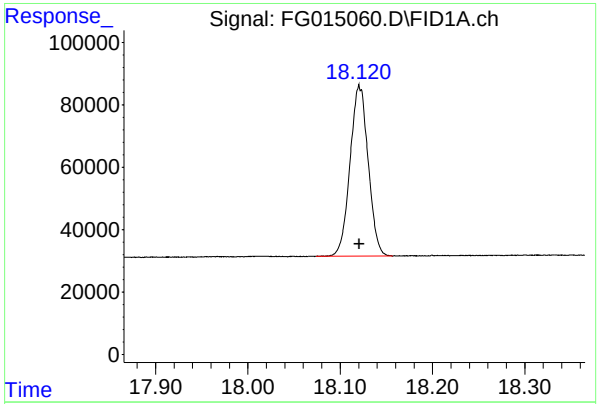
#11 N-HEXACOSANE

R.T.: 16.277 min
Delta R.T.: 0.000 min
Response: 714017
Conc: 5.04 ug/ml



#12 N-OCTACOSANE

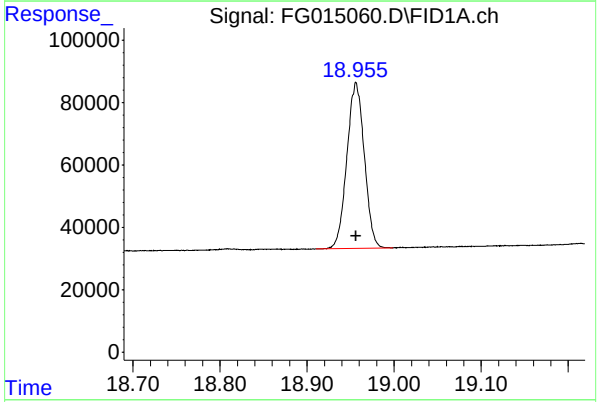
R.T.: 17.231 min
Delta R.T.: 0.000 min
Response: 719588
Conc: 5.11 ug/ml



#13 N-TRIACONTANE

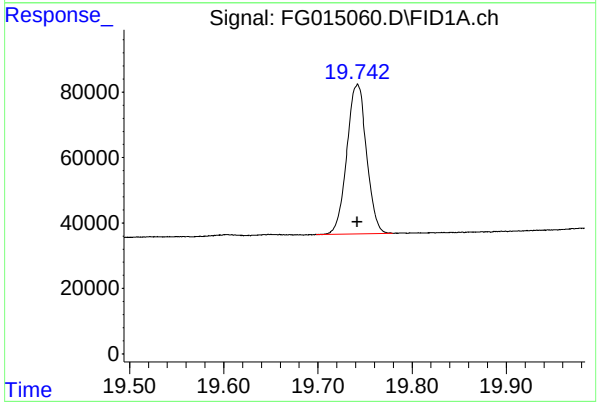
R.T.: 18.121 min
Delta R.T.: 0.000 min
Response: 746793
Conc: 5.23 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



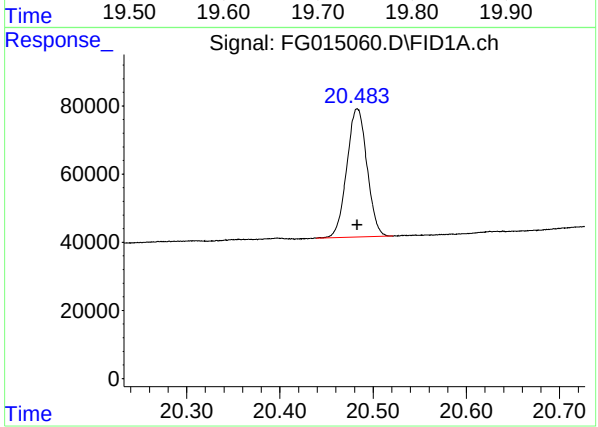
#14 N-DOTRIACONTANE

R.T.: 18.956 min
Delta R.T.: 0.000 min
Response: 739109
Conc: 5.30 ug/ml



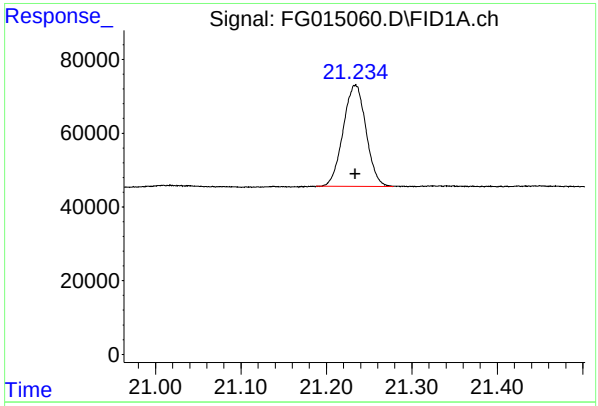
#15 N-TETRATRIACONTANE

R.T.: 19.742 min
Delta R.T.: 0.000 min
Response: 661594
Conc: 5.27 ug/ml



#16 N-HEXATRIACONTANE

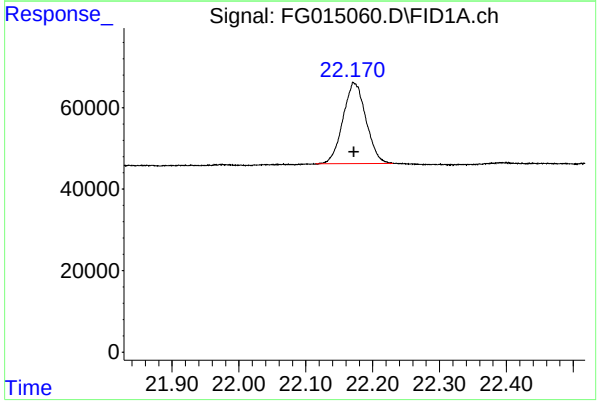
R.T.: 20.483 min
Delta R.T.: 0.000 min
Response: 565434
Conc: 5.23 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.234 min
Delta R.T.: 0.000 min
Response: 509611
Conc: 5.20 ug/ml

Instrument :
FID_G
ClientSampleId :
5 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.172 min
Delta R.T.: 0.000 min
Response: 475271
Conc: 5.21 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015060.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 11:11
Sample : 5 TRPH STD
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.012	1.980	2.059	BB	57857	634654	84.86%	5.242%
2	4.546	4.515	4.578	BB	62980	654008	87.45%	5.401%
3	6.726	6.697	6.757	BB	70587	692533	92.60%	5.720%
4	8.563	8.528	8.596	BB	66151	693227	92.69%	5.725%
5	10.177	10.148	10.212	BB	66556	716946	95.87%	5.921%
6	11.627	11.596	11.660	BB	64945	747864	100.00%	6.177%
7	12.942	12.909	12.976	BB	63072	734881	98.26%	6.069%
8	14.146	14.108	14.183	BB	58745	728625	97.43%	6.018%
9	15.048	15.011	15.081	BB	47823	648631	86.73%	5.357%
10	15.254	15.216	15.289	BB	56152	725335	96.99%	5.990%
11	16.277	16.239	16.320	BB	55490	714017	95.47%	5.897%
12	17.231	17.194	17.267	BB	53743	719588	96.22%	5.943%
13	18.121	18.074	18.157	BB	54311	746793	99.86%	6.168%
14	18.956	18.910	18.999	BB	53232	739109	98.83%	6.104%
15	19.742	19.698	19.780	BB	45796	661594	88.46%	5.464%
16	20.483	20.439	20.521	BB	37634	565434	75.61%	4.670%
17	21.234	21.188	21.278	BB	27412	509611	68.14%	4.209%
18	22.172	22.115	22.230	BB	19853	475271	63.55%	3.925%
			Sum of corrected areas:			12108119		

FG011325.M Mon Jan 13 12:13:09 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015061.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 11:39
Operator : YP\AJ
Sample : 100 TRPH STD
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
100 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 13 11:50:54 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Mon Jan 13 11:50:48 2025
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	TETRACOSANE-d50 (SURR...	15.056	11798567	91.980 ug/ml
	Target Compounds			
1)	N-OCTANE	2.010	11457523	93.897 ug/ml
2)	N-DECANE	4.549	11755056	91.003 ug/ml
3)	N-DODECANE	6.732	12400369	91.021 ug/ml
4)	N-TETRADECANE	8.569	12323693	90.042 ug/ml
5)	N-HEXADECANE	10.184	12738160	90.270 ug/ml
6)	N-OCTADECANE	11.635	13302325	90.685 ug/ml
7)	N-EICOSANE	12.951	13120855	90.248 ug/ml
8)	N-DOCOSANE	14.155	13017284	90.736 ug/ml
10)	N-TETRACOSANE	15.263	12974293	90.840 ug/ml
11)	N-HEXACOSANE	16.288	12736383	90.432 ug/ml
12)	N-OCTACOSANE	17.241	12438625	88.827 ug/ml
13)	N-TRIACONTANE	18.132	12179850	85.611 ug/ml
14)	N-DOTRIACONTANE	18.966	11733502	84.423 ug/ml
15)	N-TETRATRIACONTANE	19.752	10691422	85.329 ug/ml
16)	N-HEXATRIACONTANE	20.492	9388301	86.879 ug/ml
17)	N-OCTATRIACONTANE	21.244	8808855	89.303 ug/ml
18)	N-TETRACONTANE	22.185	8630372	92.952 ug/ml

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

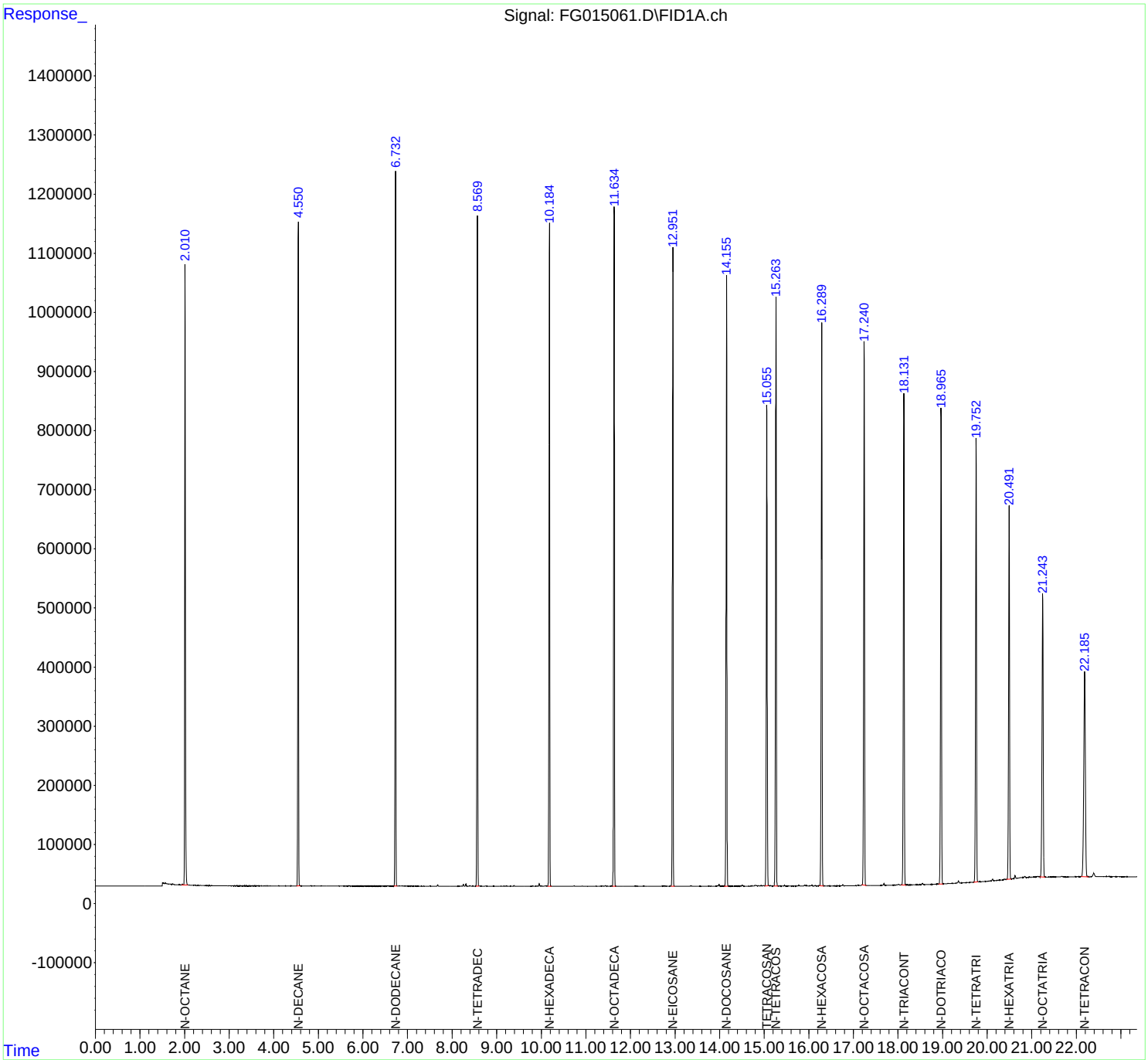
Quantitation Report (QT Reviewed)

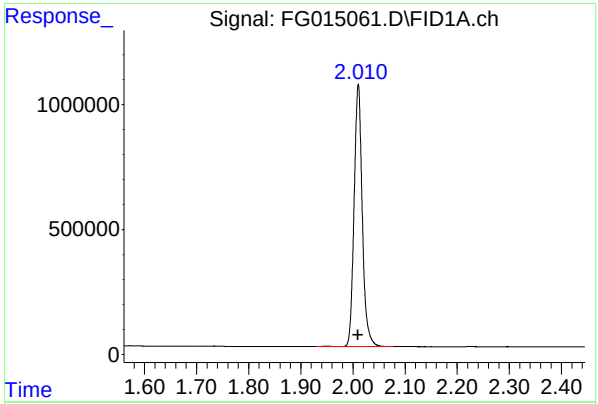
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015061.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 11:39
Operator : YP\AJ
Sample : 100 TRPH STD
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
100 TRPH STD

Integration File: autoint1.e
Quant Time: Jan 13 11:50:54 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Mon Jan 13 11:50:48 2025
Response via : Initial Calibration
Integrator: ChemStation

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

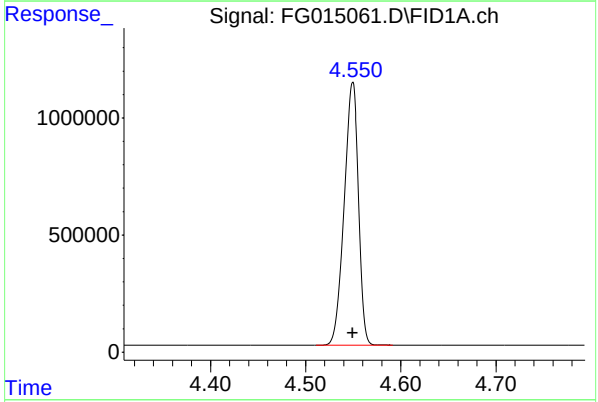




#1 N-OCTANE

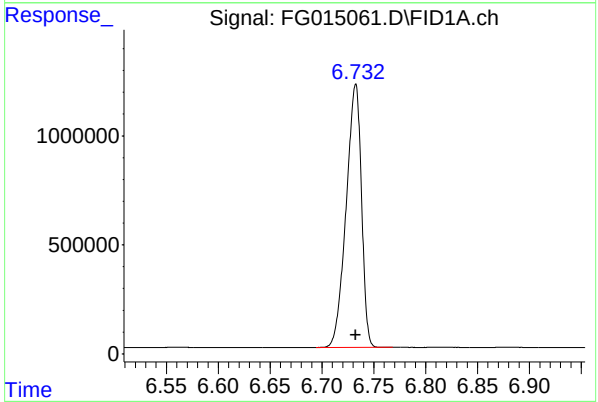
R.T.: 2.010 min
Delta R.T.: 0.000 min
Response: 11457523
Conc: 93.90 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



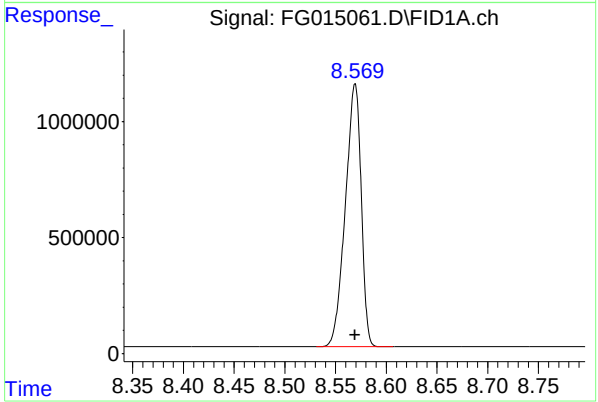
#2 N-DECANE

R.T.: 4.549 min
Delta R.T.: 0.000 min
Response: 11755056
Conc: 91.00 ug/ml



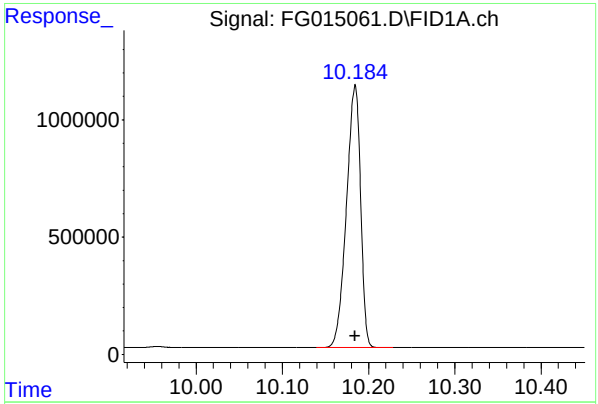
#3 N-DODECANE

R.T.: 6.732 min
Delta R.T.: 0.000 min
Response: 12400369
Conc: 91.02 ug/ml



#4 N-TETRADECANE

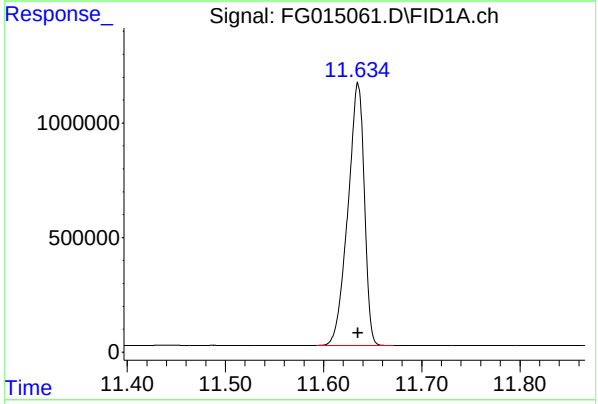
R.T.: 8.569 min
Delta R.T.: 0.000 min
Response: 12323693
Conc: 90.04 ug/ml



#5 N-HEXADECANE

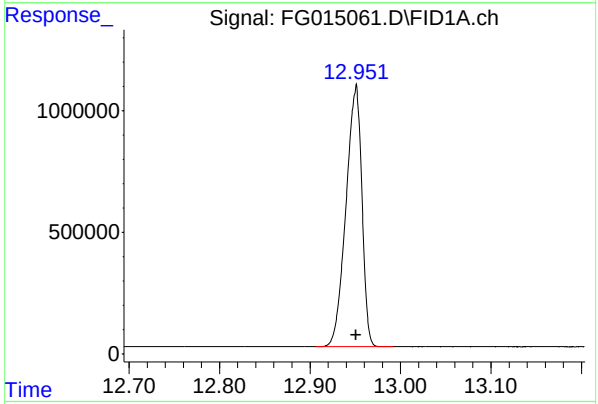
R.T.: 10.184 min
Delta R.T.: 0.000 min
Response: 12738160
Conc: 90.27 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



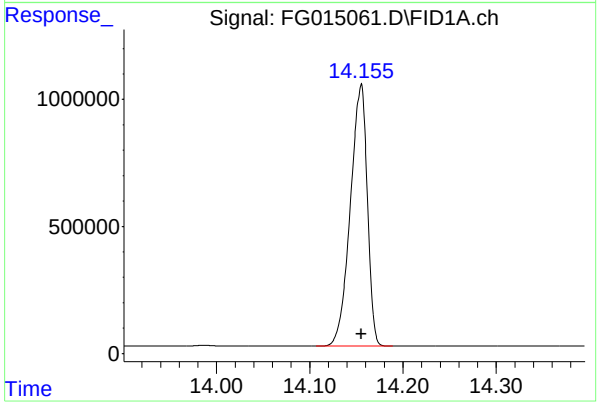
#6 N-OCTADECANE

R.T.: 11.635 min
Delta R.T.: 0.000 min
Response: 13302325
Conc: 90.68 ug/ml



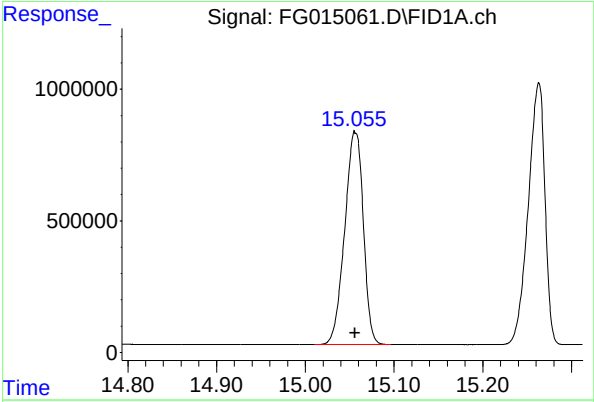
#7 N-EICOSANE

R.T.: 12.951 min
Delta R.T.: 0.000 min
Response: 13120855
Conc: 90.25 ug/ml



#8 N-DOCOSANE

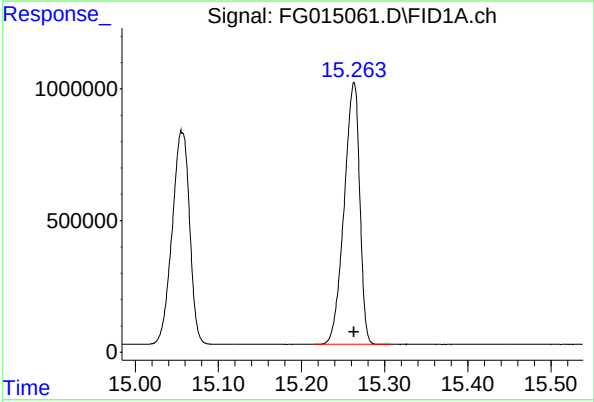
R.T.: 14.155 min
Delta R.T.: 0.000 min
Response: 13017284
Conc: 90.74 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

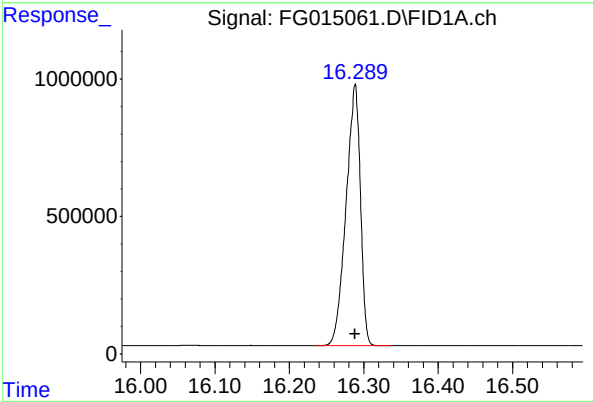
R.T.: 15.056 min
Delta R.T.: 0.000 min
Response: 11798567
Conc: 91.98 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



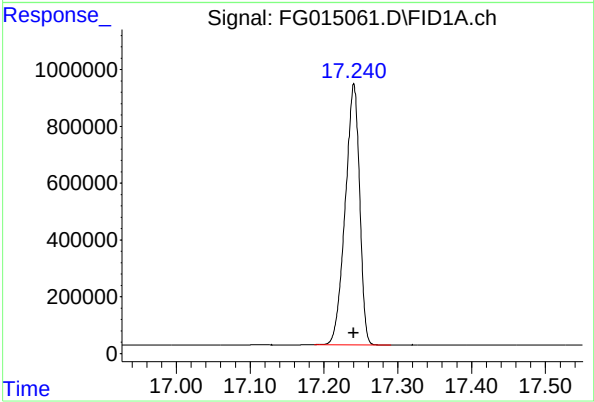
#10 N-TETRACOSANE

R.T.: 15.263 min
Delta R.T.: 0.000 min
Response: 12974293
Conc: 90.84 ug/ml



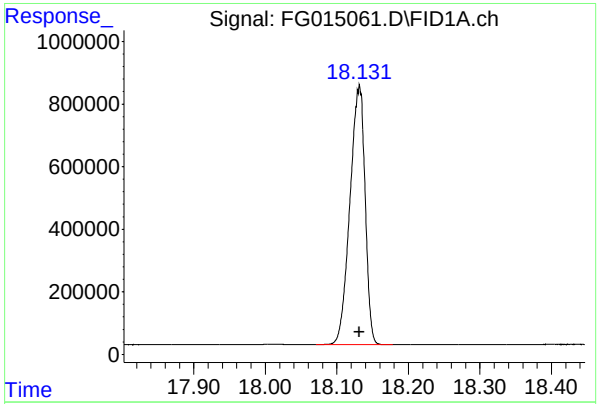
#11 N-HEXACOSANE

R.T.: 16.288 min
Delta R.T.: 0.000 min
Response: 12736383
Conc: 90.43 ug/ml



#12 N-OCTACOSANE

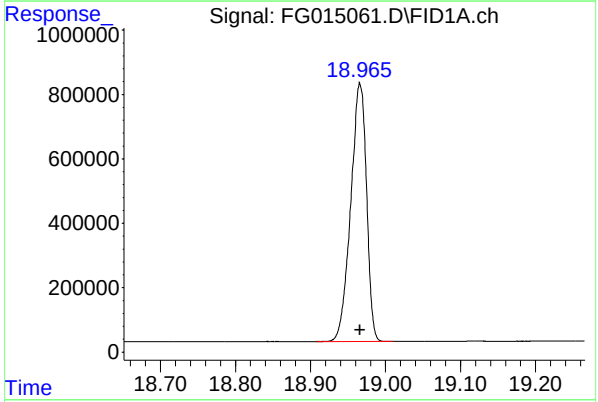
R.T.: 17.241 min
Delta R.T.: 0.000 min
Response: 12438625
Conc: 88.83 ug/ml



#13 N-TRIACONTANE

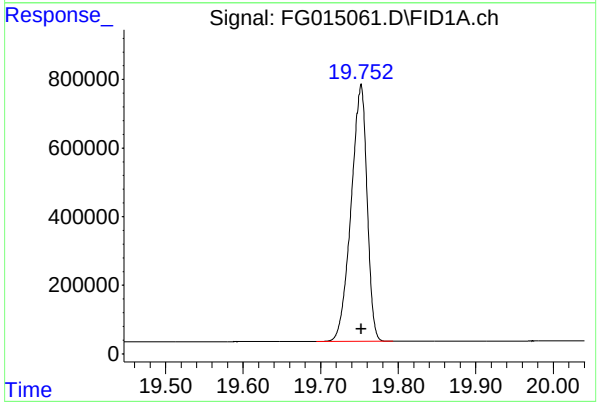
R.T.: 18.132 min
Delta R.T.: 0.000 min
Response: 12179850
Conc: 85.61 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



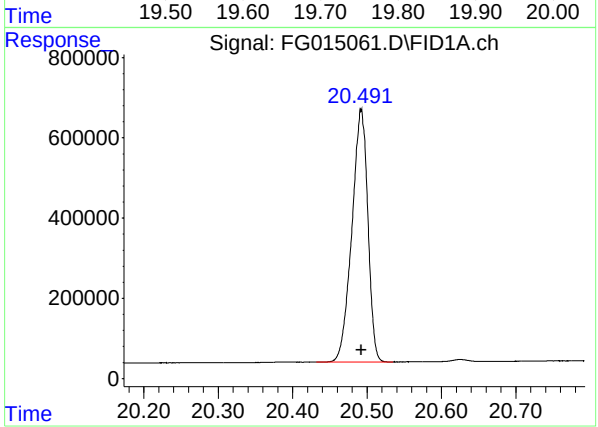
#14 N-DOTRIACONTANE

R.T.: 18.966 min
Delta R.T.: 0.000 min
Response: 11733502
Conc: 84.42 ug/ml



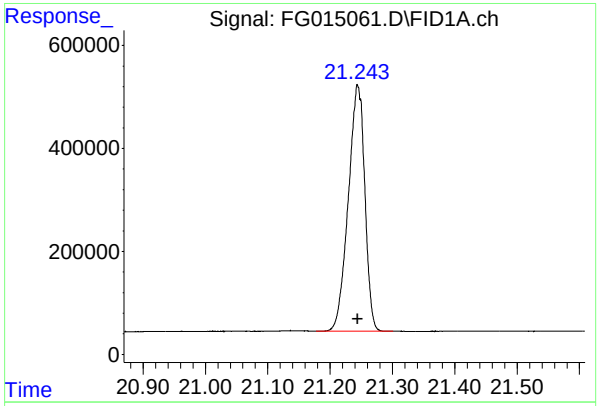
#15 N-TETRATRIACONTANE

R.T.: 19.752 min
Delta R.T.: 0.000 min
Response: 10691422
Conc: 85.33 ug/ml



#16 N-HEXATRIACONTANE

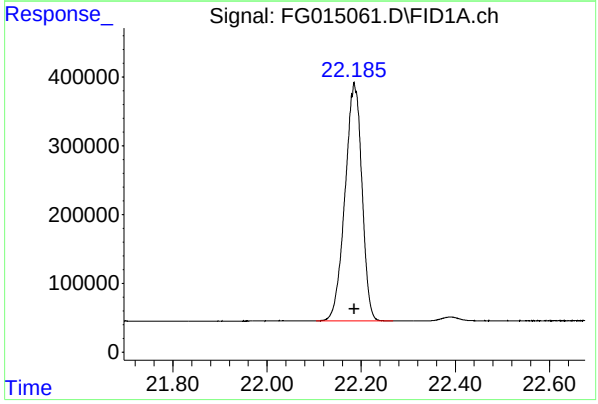
R.T.: 20.492 min
Delta R.T.: 0.000 min
Response: 9388301
Conc: 86.88 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.244 min
Delta R.T.: 0.000 min
Response: 8808855
Conc: 89.30 ug/ml

Instrument :
FID_G
ClientSampleId :
100 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.185 min
Delta R.T.: 0.000 min
Response: 8630372
Conc: 92.95 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015061.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 11:39
Sample : 100 TRPH STD
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.010	1.929	2.077	BB	1049435	11457523	86.13%	5.417%
2	4.549	4.511	4.592	BB	1122240	11755056	88.37%	5.558%
3	6.732	6.694	6.768	BB	1209156	12400369	93.22%	5.863%
4	8.569	8.531	8.607	BB	1133983	12323693	92.64%	5.827%
5	10.184	10.139	10.228	BB	1119738	12738160	95.76%	6.023%
6	11.635	11.593	11.671	BB	1145301	13302325	100.00%	6.290%
7	12.951	12.907	12.992	BB	1071561	13120855	98.64%	6.204%
8	14.155	14.107	14.189	BB	1028232	13017284	97.86%	6.155%
9	15.056	15.010	15.097	BB	804535	11798567	88.70%	5.579%
10	15.263	15.215	15.308	BB	995883	12974293	97.53%	6.135%
11	16.288	16.233	16.337	BB	948498	12736383	95.75%	6.022%
12	17.241	17.187	17.291	BB	919608	12438625	93.51%	5.881%
13	18.132	18.071	18.178	BB	831169	12179850	91.56%	5.759%
14	18.966	18.908	19.010	BB	801625	11733502	88.21%	5.548%
15	19.752	19.694	19.793	BB	751020	10691422	80.37%	5.055%
16	20.492	20.432	20.535	BB	626090	9388301	70.58%	4.439%
17	21.244	21.178	21.301	BB	477507	8808855	66.22%	4.165%
18	22.185	22.104	22.268	BB	346761	8630372	64.88%	4.081%

Sum of corrected areas: 211495435

FG011325.M Mon Jan 13 12:13:24 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015062.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 12:07
Operator : YP\AJ
Sample : FG011325ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
FG011325ICV

Integration File: autoint1.e
Quant Time: Jan 13 12:58:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Mon Jan 13 11:52:01 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...	15.054	6435456	50.170 ug/ml
	Target Compounds			
1)	N-OCTANE	2.011	5689865	46.630 ug/ml
2)	N-DECANE	4.547	6668871	51.628 ug/ml
3)	N-DODECANE	6.729	6965368	51.127 ug/ml
4)	N-TETRADECANE	8.566	7162213	52.330 ug/ml
5)	N-HEXADECANE	10.181	7292547	51.679 ug/ml
6)	N-OCTADECANE	11.631	7485788	51.032 ug/ml
7)	N-EICOSANE	12.948	7583215	52.159 ug/ml
8)	N-DOCOSANE	14.150	7362758	51.322 ug/ml
10)	N-TETRACOSANE	15.259	7320313	51.254 ug/ml
11)	N-HEXACOSANE	16.283	7276923	51.668 ug/ml
12)	N-OCTACOSANE	17.236	7251213	51.782 ug/ml
13)	N-TRIACONTANE	18.127	7526376	52.902 ug/ml
14)	N-DOTRIACONTANE	18.962	7422331	53.404 ug/ml
15)	N-TETRATRIACONTANE	19.748	6986454	55.759 ug/ml
16)	N-HEXATRIACONTANE	20.491	6347544	58.740 ug/ml
17)	N-OCTATRIACONTANE	21.240	5886866	59.680 ug/ml
18)	N-TETRACONTANE	22.182	5565107	59.938 ug/ml

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

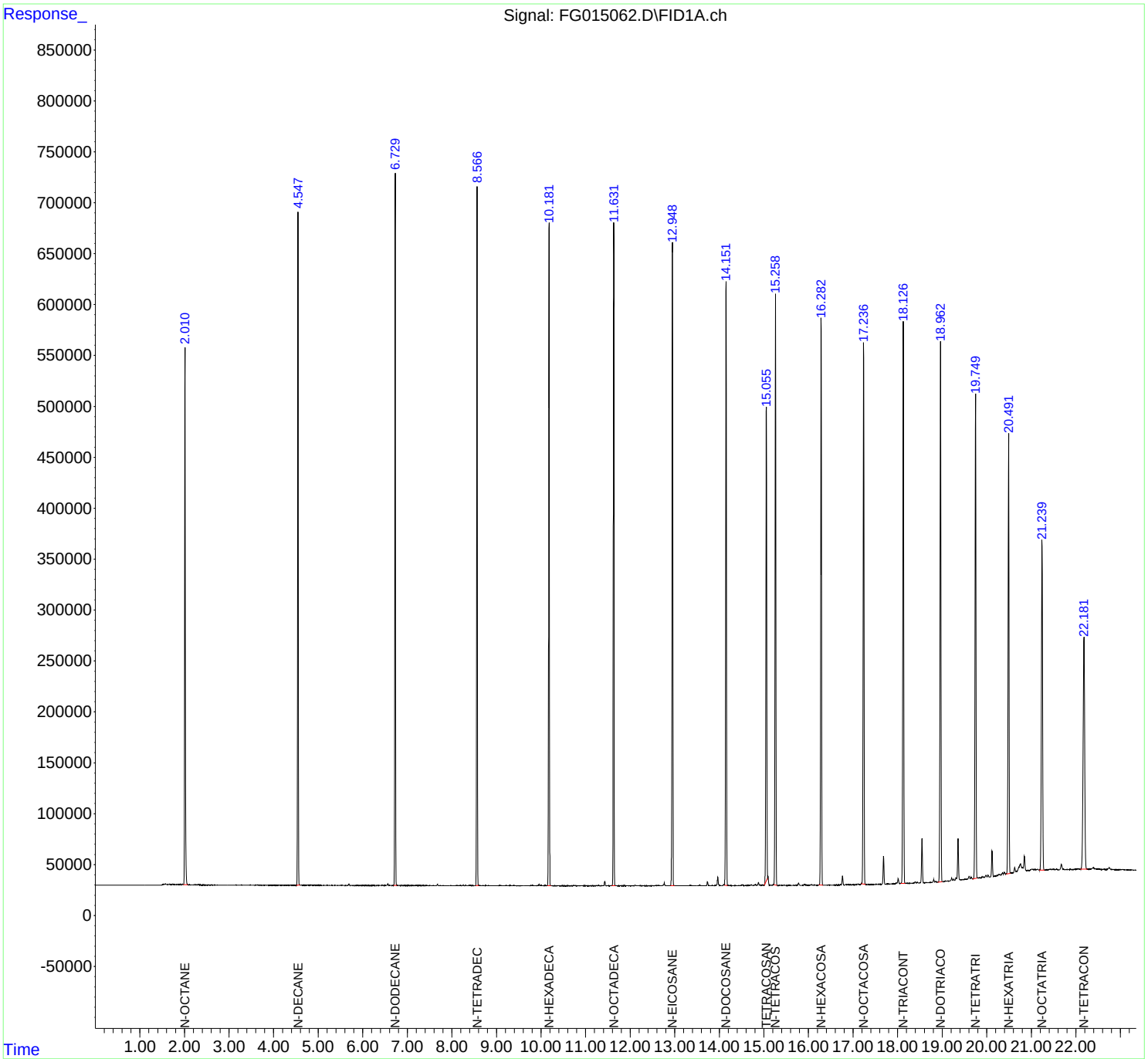
Quantitation Report (QT Reviewed)

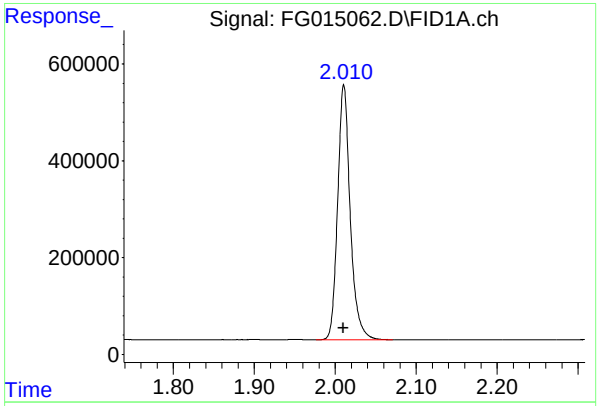
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015062.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 12:07
Operator : YP\AJ
Sample : FG011325ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
FG011325ICV

Integration File: autoint1.e
Quant Time: Jan 13 12:58:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Mon Jan 13 11:52:01 2025
Response via : Initial Calibration
Integrator: ChemStation

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

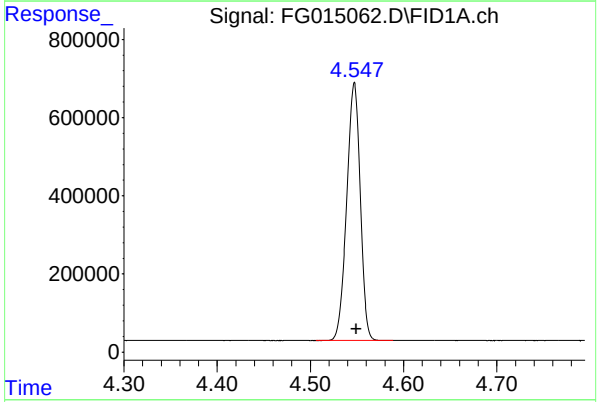




#1 N-OCTANE

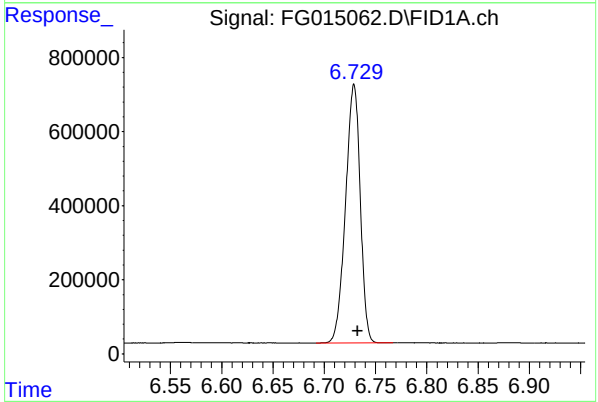
R.T.: 2.011 min
Delta R.T.: 0.000 min
Response: 5689865
Conc: 46.63 ug/ml

Instrument :
FID_G
ClientSampleId :
FG011325ICV



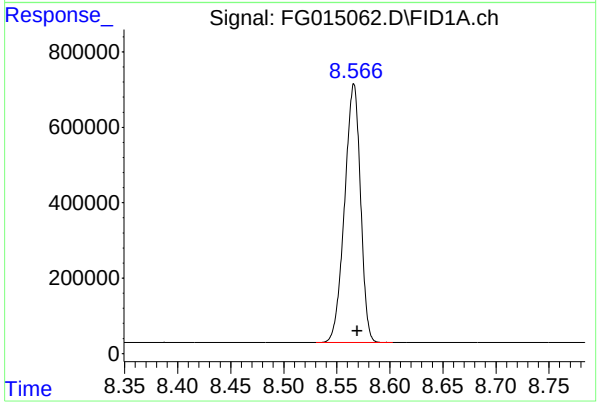
#2 N-DECANE

R.T.: 4.547 min
Delta R.T.: -0.002 min
Response: 6668871
Conc: 51.63 ug/ml



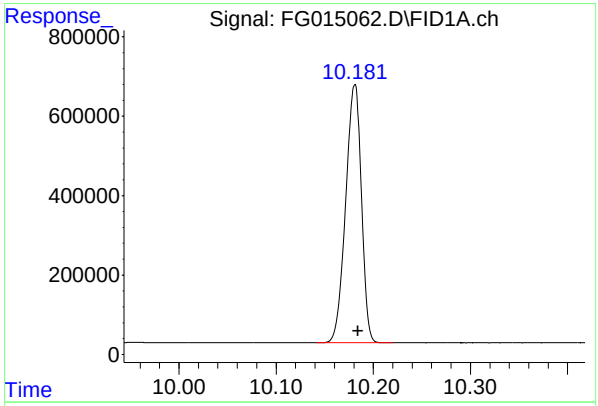
#3 N-DODECANE

R.T.: 6.729 min
Delta R.T.: -0.003 min
Response: 6965368
Conc: 51.13 ug/ml



#4 N-TETRADECANE

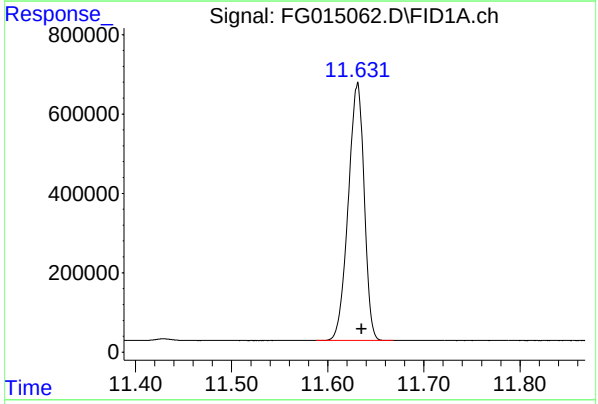
R.T.: 8.566 min
Delta R.T.: -0.003 min
Response: 7162213
Conc: 52.33 ug/ml



#5 N-HEXADECANE

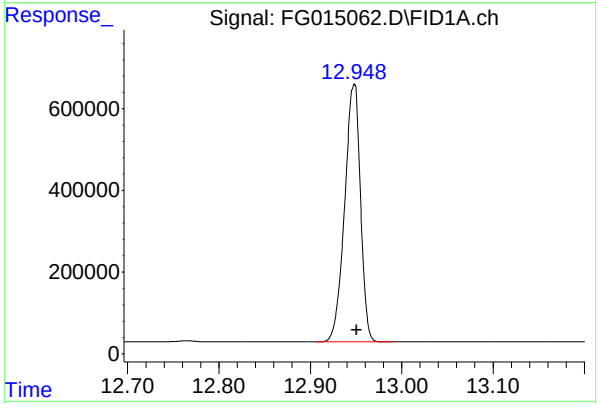
R.T.: 10.181 min
Delta R.T.: -0.003 min
Response: 7292547
Conc: 51.68 ug/ml

Instrument :
FID_G
ClientSampleId :
FG011325ICV



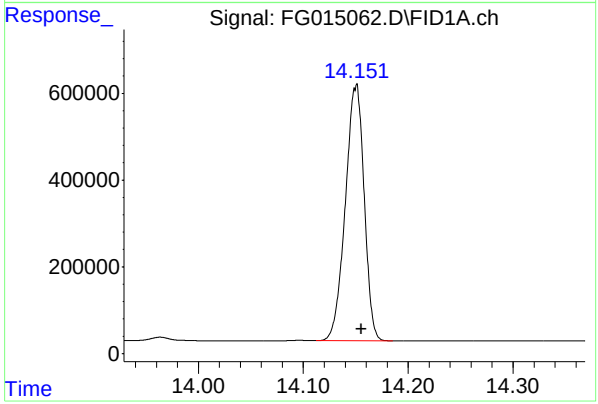
#6 N-OCTADECANE

R.T.: 11.631 min
Delta R.T.: -0.004 min
Response: 7485788
Conc: 51.03 ug/ml



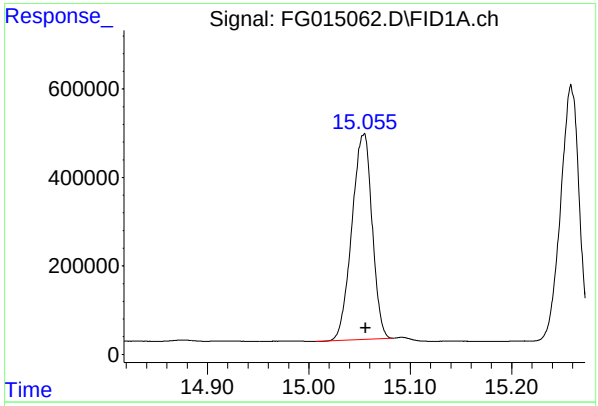
#7 N-EICOSANE

R.T.: 12.948 min
Delta R.T.: -0.003 min
Response: 7583215
Conc: 52.16 ug/ml



#8 N-DOCOSANE

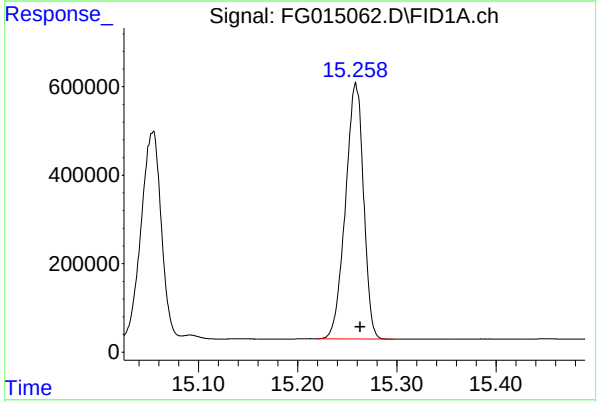
R.T.: 14.150 min
Delta R.T.: -0.005 min
Response: 7362758
Conc: 51.32 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

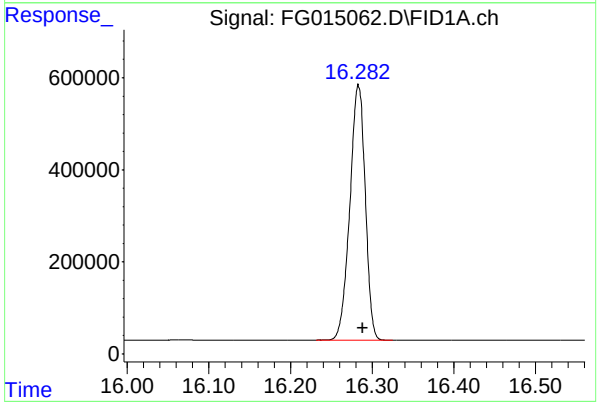
R.T.: 15.054 min
Delta R.T.: -0.002 min
Response: 6435456
Conc: 50.17 ug/ml

Instrument :
FID_G
ClientSampleId :
FG011325ICV



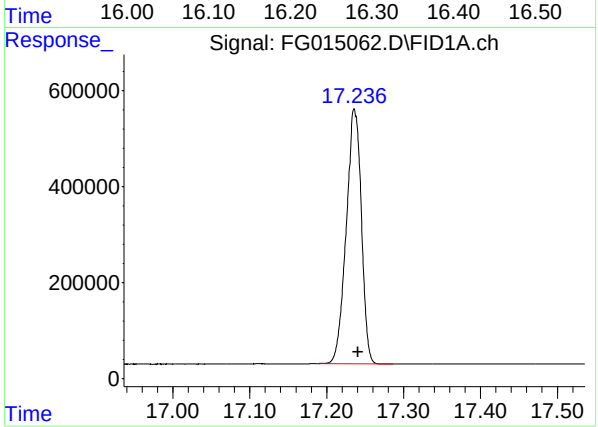
#10 N-TETRACOSANE

R.T.: 15.259 min
Delta R.T.: -0.005 min
Response: 7320313
Conc: 51.25 ug/ml



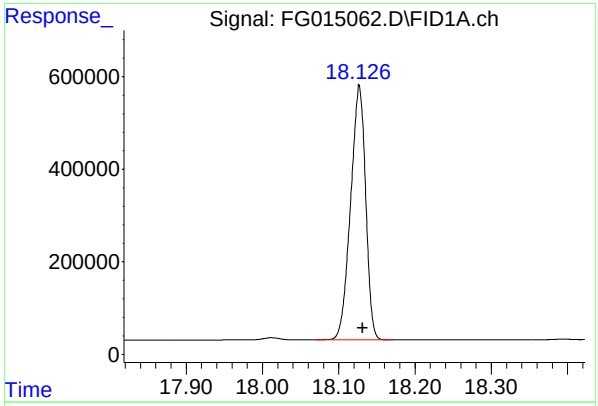
#11 N-HEXACOSANE

R.T.: 16.283 min
Delta R.T.: -0.005 min
Response: 7276923
Conc: 51.67 ug/ml



#12 N-OCTACOSANE

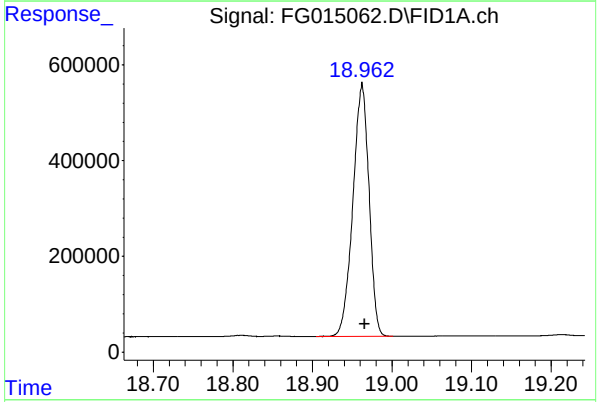
R.T.: 17.236 min
Delta R.T.: -0.005 min
Response: 7251213
Conc: 51.78 ug/ml



#13 N-TRIACONTANE

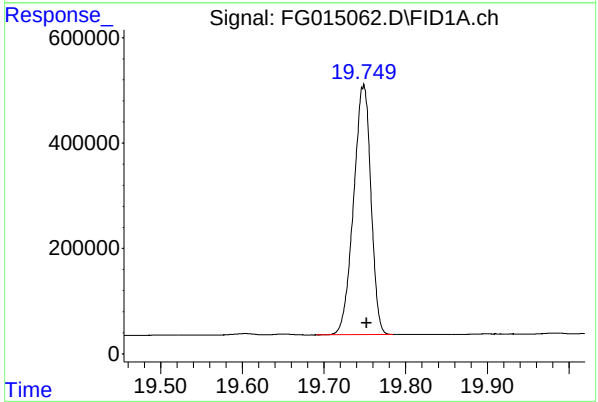
R.T.: 18.127 min
Delta R.T.: -0.005 min
Response: 7526376
Conc: 52.90 ug/ml

Instrument :
FID_G
ClientSampleId :
FG011325ICV



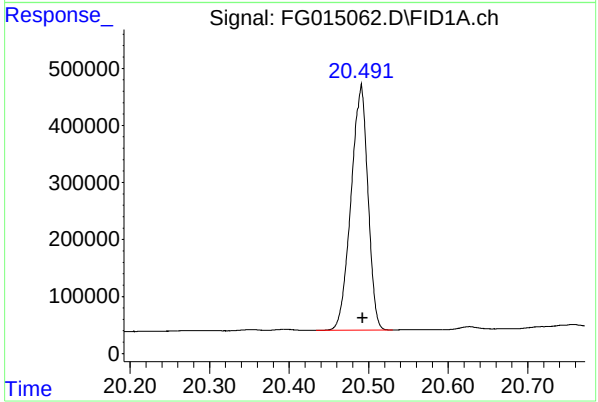
#14 N-DOTRIACONTANE

R.T.: 18.962 min
Delta R.T.: -0.003 min
Response: 7422331
Conc: 53.40 ug/ml



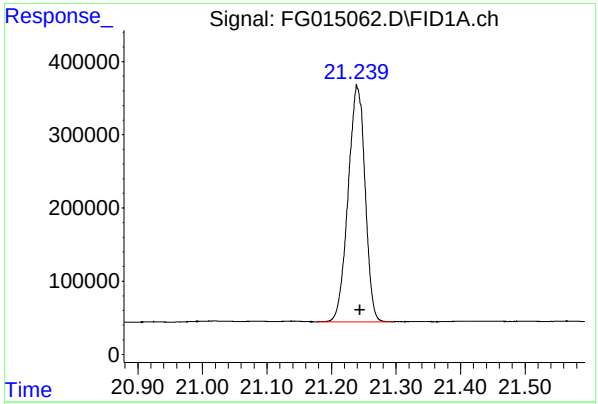
#15 N-TETRATRIACONTANE

R.T.: 19.748 min
Delta R.T.: -0.004 min
Response: 6986454
Conc: 55.76 ug/ml



#16 N-HEXATRIACONTANE

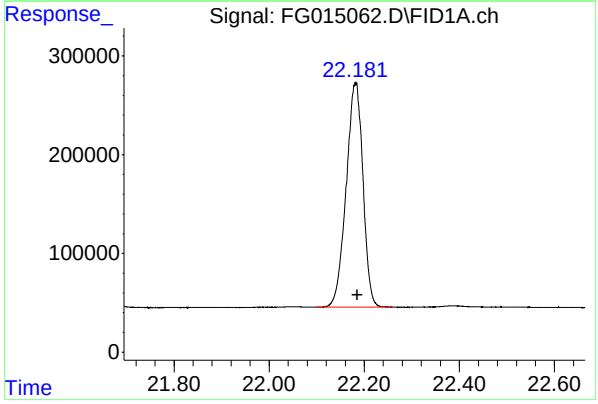
R.T.: 20.491 min
Delta R.T.: -0.001 min
Response: 6347544
Conc: 58.74 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.240 min
Delta R.T.: -0.005 mi
Response: 5886866
Conc: 59.68 ug/m

Instrument :
FID_G
ClientSampleId :
FG011325ICV



#18 N-TETRACONTANE

R.T.: 22.182 min
Delta R.T.: -0.003 min
Response: 5565107
Conc: 59.94 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG011325\
Data File : FG015062.D
Signal(s) : FID1A.ch
Acq On : 13 Jan 2025 12:07
Sample : FG011325ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.011	1.976	2.071	BB	527275	5689865	75.03%	4.580%
2	4.547	4.506	4.589	BB	660717	6668871	87.94%	5.368%
3	6.729	6.692	6.767	BB	697252	6965368	91.85%	5.607%
4	8.566	8.530	8.603	BB	686560	7162213	94.45%	5.765%
5	10.181	10.141	10.220	BB	650981	7292547	96.17%	5.870%
6	11.631	11.588	11.668	BB	649600	7485788	98.72%	6.026%
7	12.948	12.906	12.990	BB	631462	7583215	100.00%	6.104%
8	14.150	14.112	14.185	BB	585011	7362758	97.09%	5.927%
9	15.054	15.007	15.083	BV	463600	6435456	84.86%	5.180%
10	15.259	15.219	15.296	BB	578906	7320313	96.53%	5.893%
11	16.283	16.231	16.325	BB	555163	7276923	95.96%	5.858%
12	17.236	17.186	17.286	BB	531755	7251213	95.62%	5.837%
13	18.127	18.070	18.171	BB	549655	7526376	99.25%	6.058%
14	18.962	18.905	19.001	BB	528971	7422331	97.88%	5.975%
15	19.748	19.690	19.785	BB	473839	6986454	92.13%	5.624%
16	20.491	20.434	20.530	BB	432268	6347544	83.71%	5.110%
17	21.240	21.176	21.295	BB	321478	5886866	77.63%	4.739%
18	22.182	22.099	22.260	BB	226472	5565107	73.39%	4.480%

Sum of corrected areas: 124229206

FG011325.M Mon Jan 13 13:56:24 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.: Q1215 SAS No.: Q1215 SDG No.: Q1215

DataFile: FG015247.D Analyst Name: YP\AJ Analyst Date: 01-30-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	69869948	139740	140262	0.372

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015247.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 10:54
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

Integration File: autoint1.e
Quant Time: Jan 31 05:06:27 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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...	15.044	6455618	50.327 ug/ml
	Target Compounds			
2)	N-DECANE	4.539	6581411	50.951 ug/ml
3)	N-DODECANE	6.721	6925815	50.837 ug/ml
4)	N-TETRADECANE	8.558	6858496	50.111 ug/ml
5)	N-HEXADECANE	10.173	7073787	50.129 ug/ml
6)	N-OCTADECANE	11.623	7351164	50.115 ug/ml
7)	N-EICOSANE	12.938	7216092	49.634 ug/ml
8)	N-DOCOSANE	14.141	7119192	49.624 ug/ml
10)	N-TETRACOSANE	15.249	7061470	49.441 ug/ml
11)	N-HEXACOSANE	16.274	6890090	48.921 ug/ml
12)	N-OCTACOSANE	17.225	6792431	48.506 ug/mlm

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015247.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 10:54
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

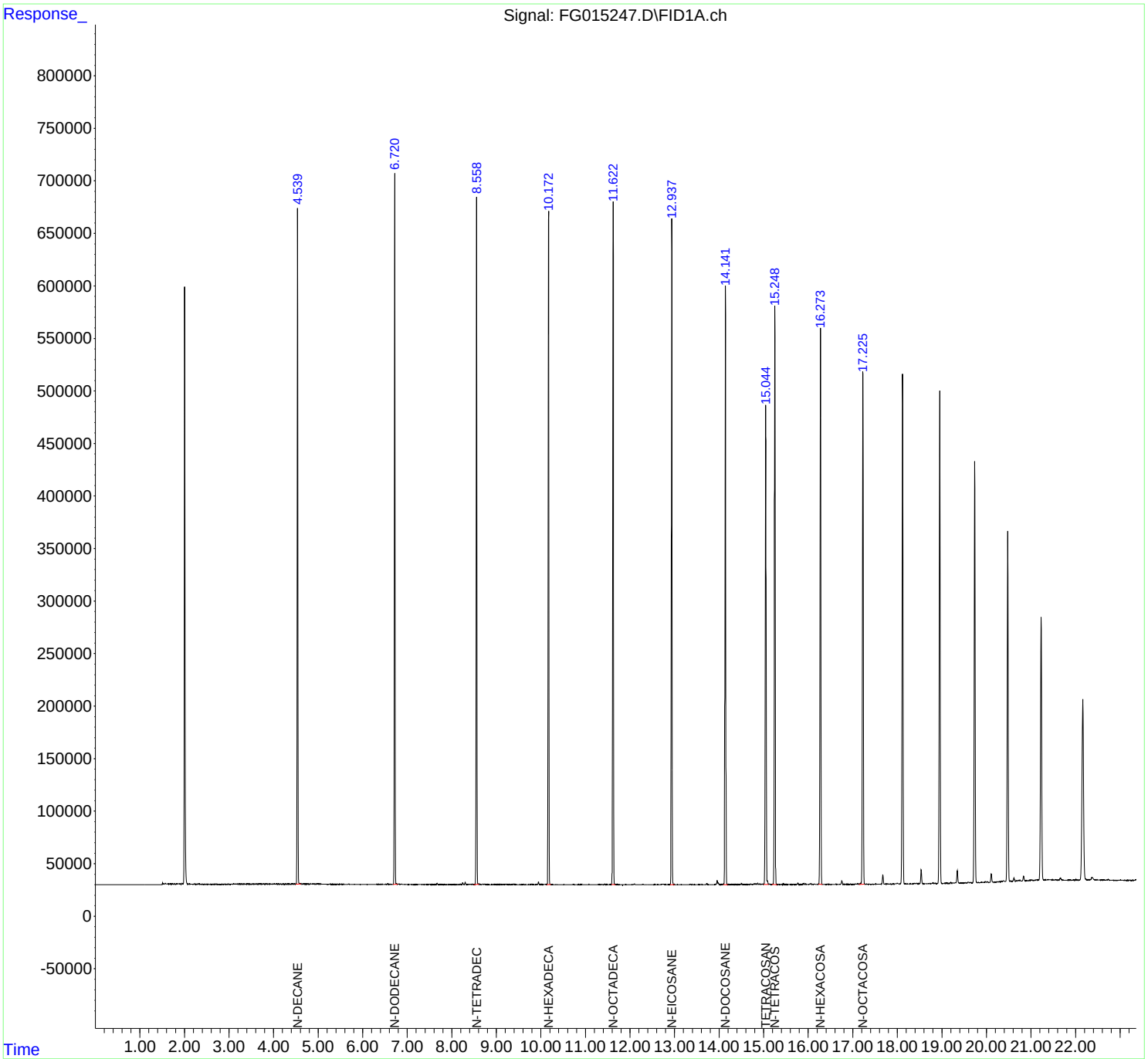
Integration File: autoint1.e
Quant Time: Jan 31 05:06:27 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 2025
Response via : Initial Calibration
Integrator: ChemStation

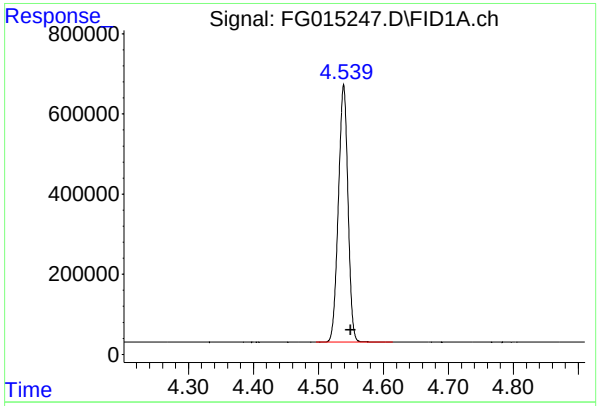
Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025





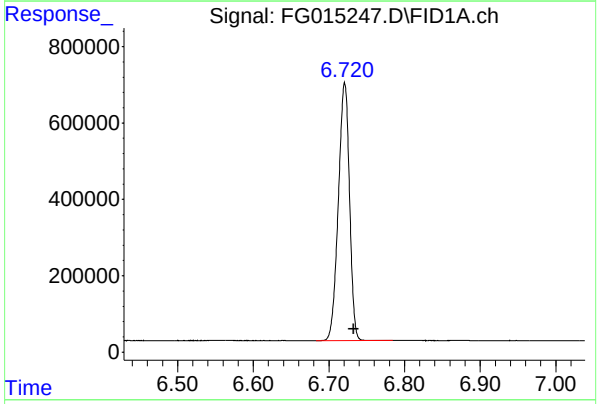
#2 N-DECANE

R.T.: 4.539 min
Delta R.T.: -0.011 min
Response: 6581411
Conc: 50.95 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

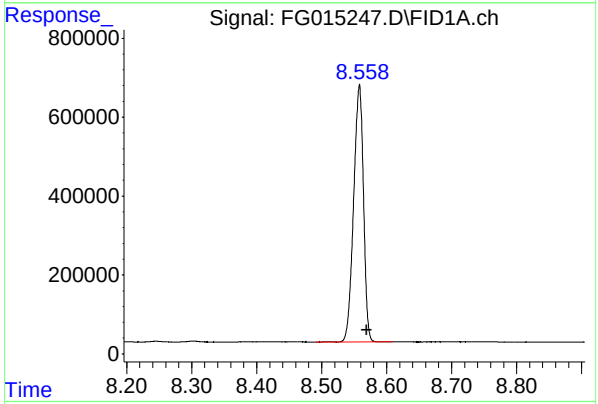
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025



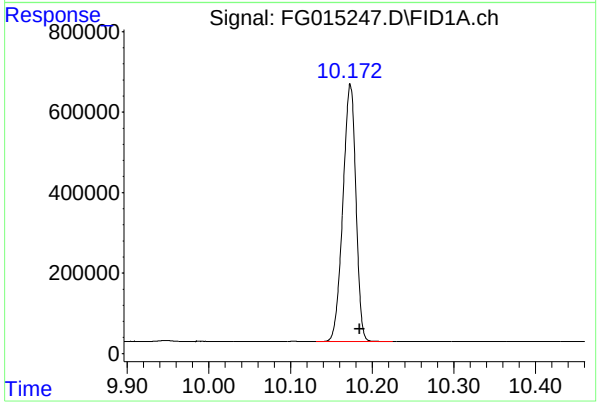
#3 N-DODECANE

R.T.: 6.721 min
Delta R.T.: -0.012 min
Response: 6925815
Conc: 50.84 ug/ml



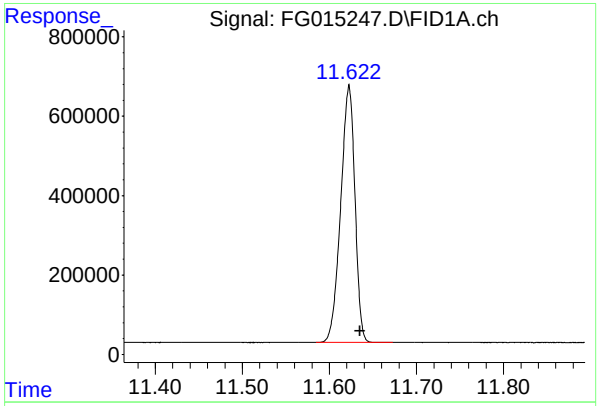
#4 N-TETRADECANE

R.T.: 8.558 min
Delta R.T.: -0.011 min
Response: 6858496
Conc: 50.11 ug/ml



#5 N-HEXADECANE

R.T.: 10.173 min
Delta R.T.: -0.011 min
Response: 7073787
Conc: 50.13 ug/ml



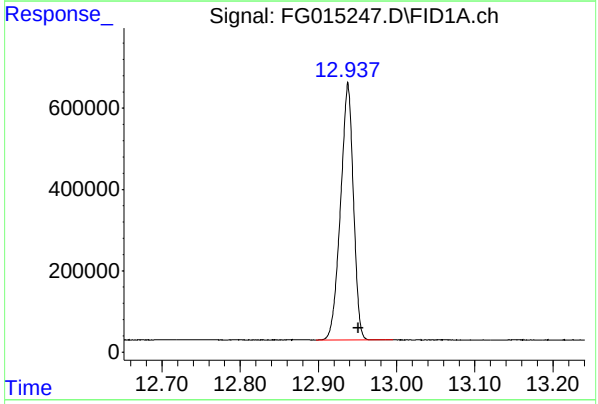
#6 N-OCTADECANE

R.T.: 11.623 min
Delta R.T.: -0.013 min
Response: 7351164
Conc: 50.11 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

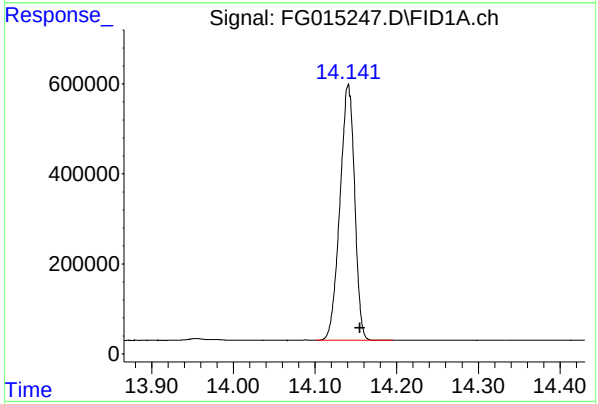
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025



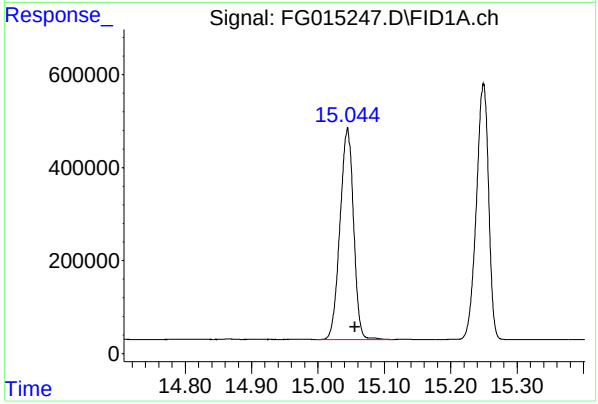
#7 N-EICOSANE

R.T.: 12.938 min
Delta R.T.: -0.013 min
Response: 7216092
Conc: 49.63 ug/ml



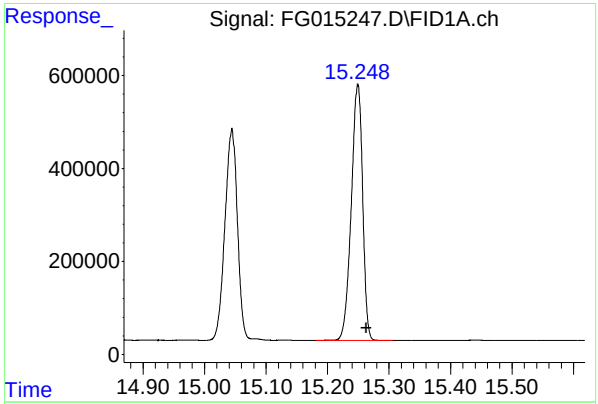
#8 N-DOCOSANE

R.T.: 14.141 min
Delta R.T.: -0.015 min
Response: 7119192
Conc: 49.62 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.044 min
Delta R.T.: -0.012 min
Response: 6455618
Conc: 50.33 ug/ml



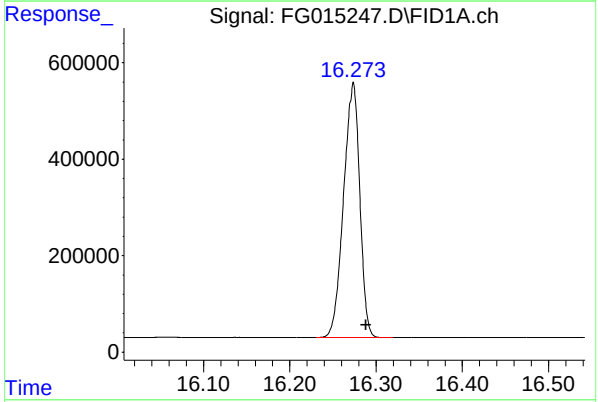
#10 N-TETRACOSANE

R.T.: 15.249 min
Delta R.T.: -0.014 mi
Response: 7061470
Conc: 49.44 ug/m

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

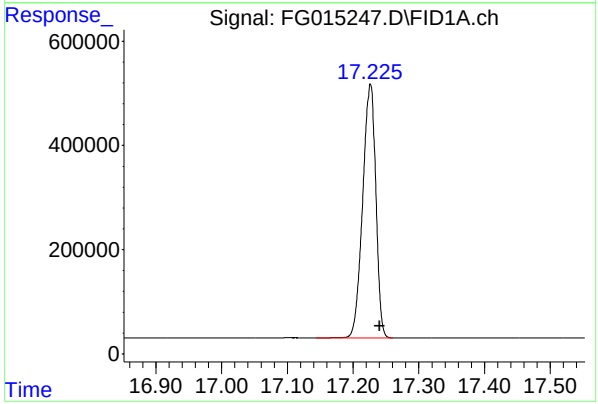
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025



#11 N-HEXACOSANE

R.T.: 16.274 min
Delta R.T.: -0.015 min
Response: 6890090
Conc: 48.92 ug/ml



#12 N-OCTACOSANE

R.T.: 17.225 min
Delta R.T.: -0.015 min
Response: 6792431
Conc: 48.51 ug/ml m

Instrument :
FID_G
LabSampleId :
50 PPM TRPH STD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG01302
Data File : FG015247.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 10:54
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.539	4.496	4.615	BB	642249	6581411	89.53%	8.622%
2	6.721	6.683	6.785	BB	674332	6925815	94.21%	9.073%
3	8.558	8.491	8.610	BB	650396	6858496	93.30%	8.985%
4	10.173	10.131	10.225	BB	635699	7073787	96.23%	9.267%
5	11.623	11.585	11.673	BB	648006	7351164	100.00%	9.630%
6	12.938	12.897	12.995	BB	631996	7216092	98.16%	9.453%
7	14.141	14.101	14.195	VB	566014	7119192	96.84%	9.326%
8	15.044	14.997	15.113	BV	455612	6455618	87.82%	8.457%
9	15.249	15.181	15.306	BB	548313	7061470	96.06%	9.250%
10	16.274	16.230	16.320	BB	529070	6890090	93.73%	9.026%
11	17.227	17.073	17.285	BB	486310	6803082	92.54%	8.912%
			Sum of corrected areas:			76336217		

FG011325.M Fri Jan 31 05:57:20 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.: Q1215 SAS No.: Q1215 SDG No.: Q1215

DataFile: FG015259.D Analyst Name: YP\AJ Analyst Date: 01-30-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	70508145	141016	140262	0.538

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015259.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 17:12
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Jan 31 05:10:39 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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...	15.056	6420948	50.057	ug/ml
	Target Compounds				
2)	N-DECANE	4.545	6610208	51.174	ug/ml
3)	N-DODECANE	6.728	7017542	51.510	ug/ml
4)	N-TETRADECANE	8.566	6981392	51.009	ug/ml
5)	N-HEXADECANE	10.182	7199037	51.017	ug/ml
6)	N-OCTADECANE	11.632	7465337	50.893	ug/ml
7)	N-EICOSANE	12.949	7296364	50.186	ug/ml
8)	N-DOCOSANE	14.152	7156807	49.886	ug/ml
10)	N-TETRACOSANE	15.260	7062041	49.445	ug/ml
11)	N-HEXACOSANE	16.286	6896884	48.970	ug/ml
12)	N-OCTACOSANE	17.239	6822533	48.721	ug/ml

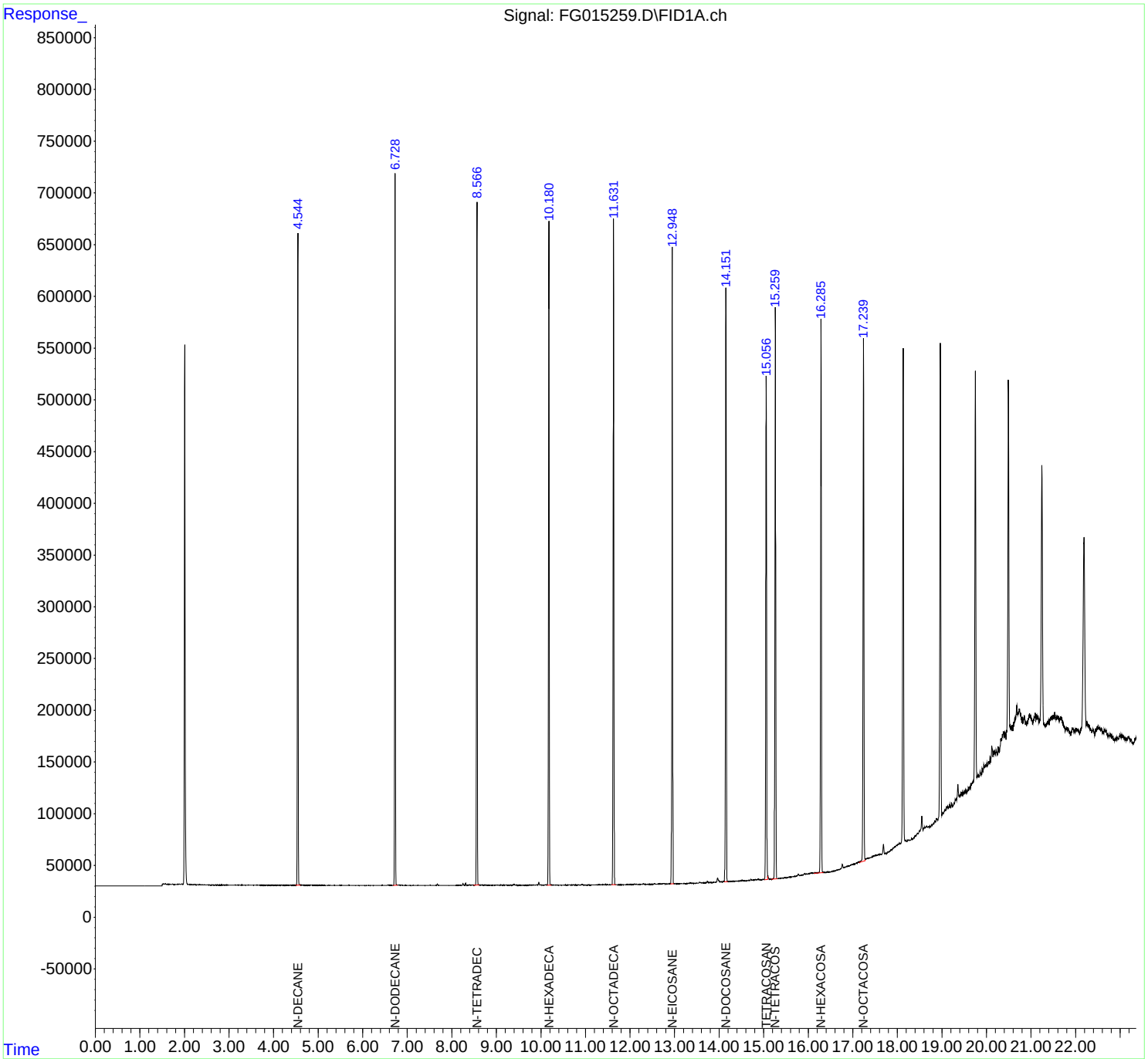
(f)=RT Delta > 1/2 Window (m)=manual int.

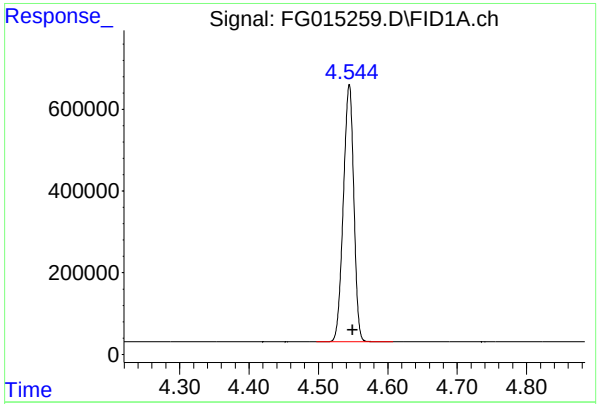
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015259.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 17:12
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Jan 31 05:10:39 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

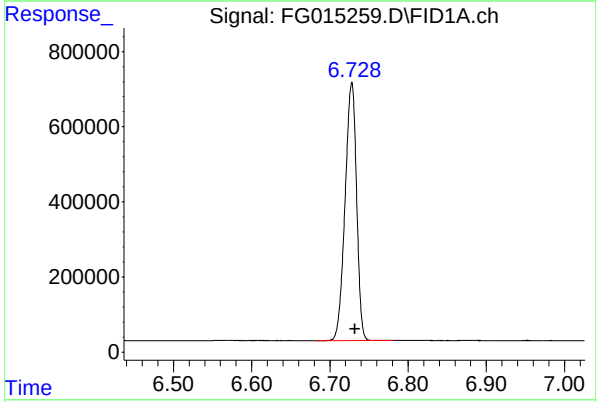




#2 N-DECANE

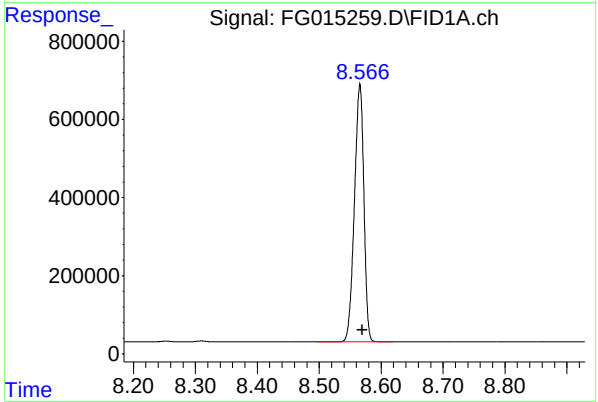
R.T.: 4.545 min
Delta R.T.: -0.005 min
Response: 6610208
Conc: 51.17 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



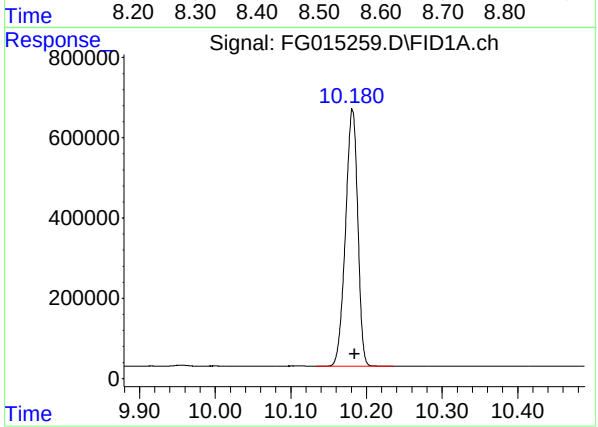
#3 N-DODECANE

R.T.: 6.728 min
Delta R.T.: -0.004 min
Response: 7017542
Conc: 51.51 ug/ml



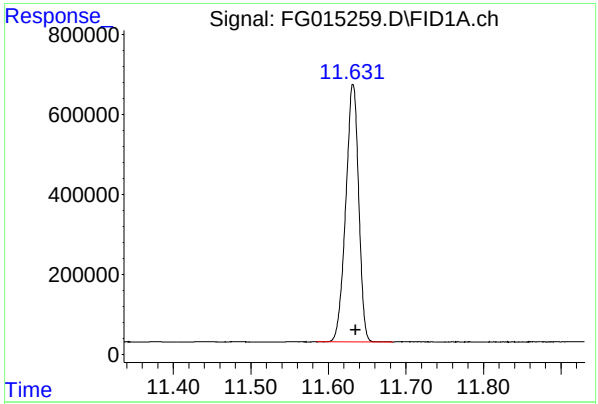
#4 N-TETRADECANE

R.T.: 8.566 min
Delta R.T.: -0.003 min
Response: 6981392
Conc: 51.01 ug/ml



#5 N-HEXADECANE

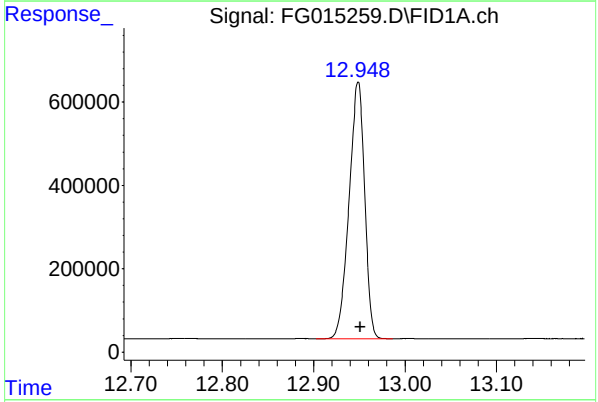
R.T.: 10.182 min
Delta R.T.: -0.003 min
Response: 7199037
Conc: 51.02 ug/ml



#6 N-OCTADECANE

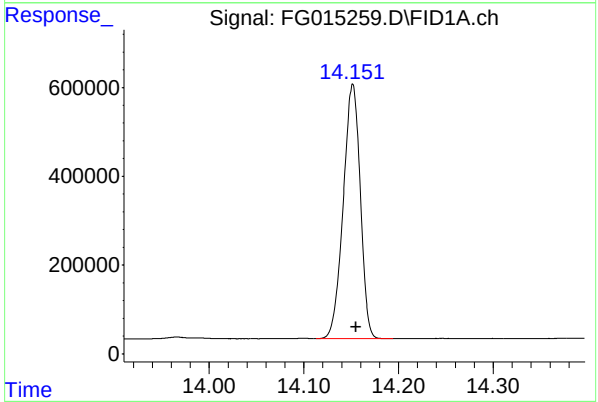
R.T.: 11.632 min
Delta R.T.: -0.003 min
Response: 7465337
Conc: 50.89 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



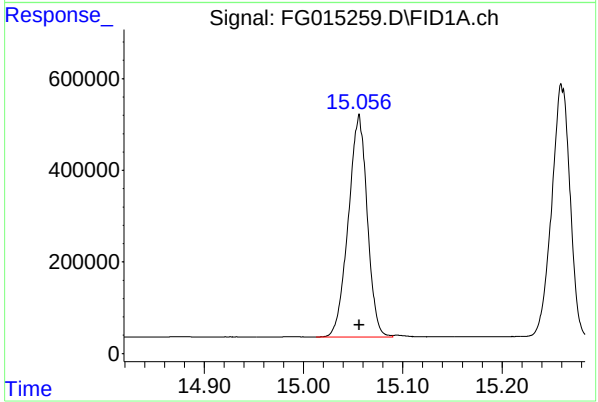
#7 N-EICOSANE

R.T.: 12.949 min
Delta R.T.: -0.002 min
Response: 7296364
Conc: 50.19 ug/ml



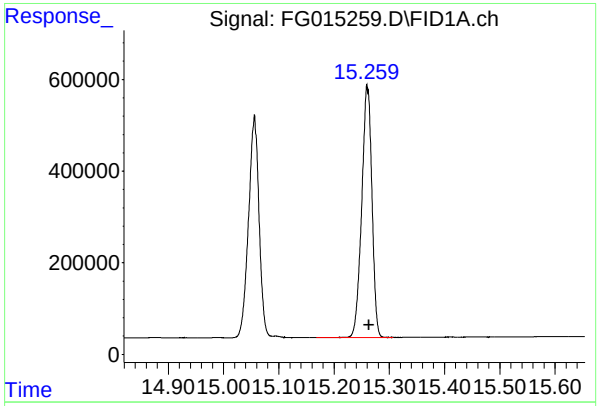
#8 N-DOCOSANE

R.T.: 14.152 min
Delta R.T.: -0.003 min
Response: 7156807
Conc: 49.89 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

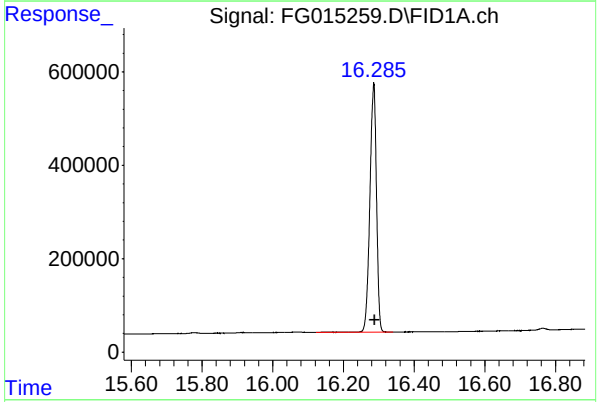
R.T.: 15.056 min
Delta R.T.: 0.000 min
Response: 6420948
Conc: 50.06 ug/ml



#10 N-TETRACOSANE

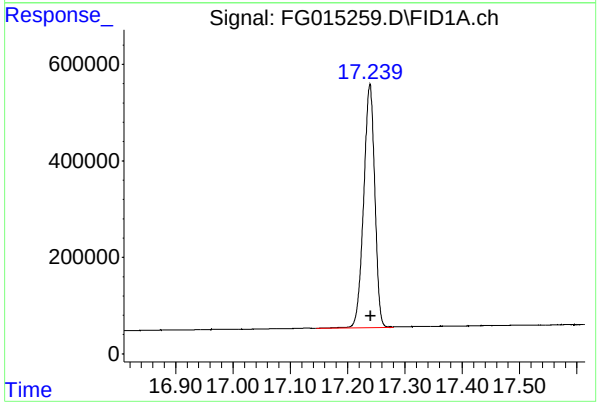
R.T.: 15.260 min
Delta R.T.: -0.003 min
Response: 7062041
Conc: 49.45 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD



#11 N-HEXACOSANE

R.T.: 16.286 min
Delta R.T.: -0.002 min
Response: 6896884
Conc: 48.97 ug/ml



#12 N-OCTACOSANE

R.T.: 17.239 min
Delta R.T.: -0.002 min
Response: 6822533
Conc: 48.72 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015259.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 17:12
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.545	4.497	4.607	BB	629885	6610208	88.55%	8.593%
2	6.728	6.683	6.781	BB	688449	7017542	94.00%	9.122%
3	8.566	8.495	8.619	BB	659510	6981392	93.52%	9.075%
4	10.182	10.133	10.235	BB	636341	7199037	96.43%	9.358%
5	11.632	11.584	11.683	BB	643322	7465337	100.00%	9.704%
6	12.949	12.903	12.987	BB	615758	7296364	97.74%	9.485%
7	14.152	14.113	14.194	VB	574492	7156807	95.87%	9.303%
8	15.056	15.013	15.090	PV	485513	6420948	86.01%	8.347%
9	15.260	15.168	15.307	BB	546287	7062041	94.60%	9.180%
10	16.286	16.123	16.340	BB	533240	6896884	92.39%	8.965%
11	17.239	17.145	17.279	VV	505103	6822533	91.39%	8.869%
			Sum of corrected areas:			76929093		

FG011325.M Fri Jan 31 06:01:05 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.: Q1215 SAS No.: Q1215 SDG No.: Q1215

DataFile: FG015270.D Analyst Name: YP\AJ Analyst Date: 01-30-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	70647067	141294	140262	0.736

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015270.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 23:22
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

Integration File: autoint1.e
Quant Time: Jan 31 05:14:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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...	15.052	6486354	50.567 ug/ml
	Target Compounds			
2)	N-DECANE	4.543	6570185	50.864 ug/ml
3)	N-DODECANE	6.726	6978281	51.222 ug/ml
4)	N-TETRADECANE	8.564	6949537	50.776 ug/ml
5)	N-HEXADECANE	10.180	7189620	50.950 ug/ml
6)	N-OCTADECANE	11.630	7486125	51.035 ug/ml
7)	N-EICOSANE	12.946	7328758	50.409 ug/ml
8)	N-DOCOSANE	14.149	7218561	50.316 ug/ml
10)	N-TETRACOSANE	15.259	7137116	49.971 ug/ml
11)	N-HEXACOSANE	16.282	6958060	49.404 ug/ml
12)	N-OCTACOSANE	17.235	6830824	48.780 ug/mlm

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015270.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 23:22
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

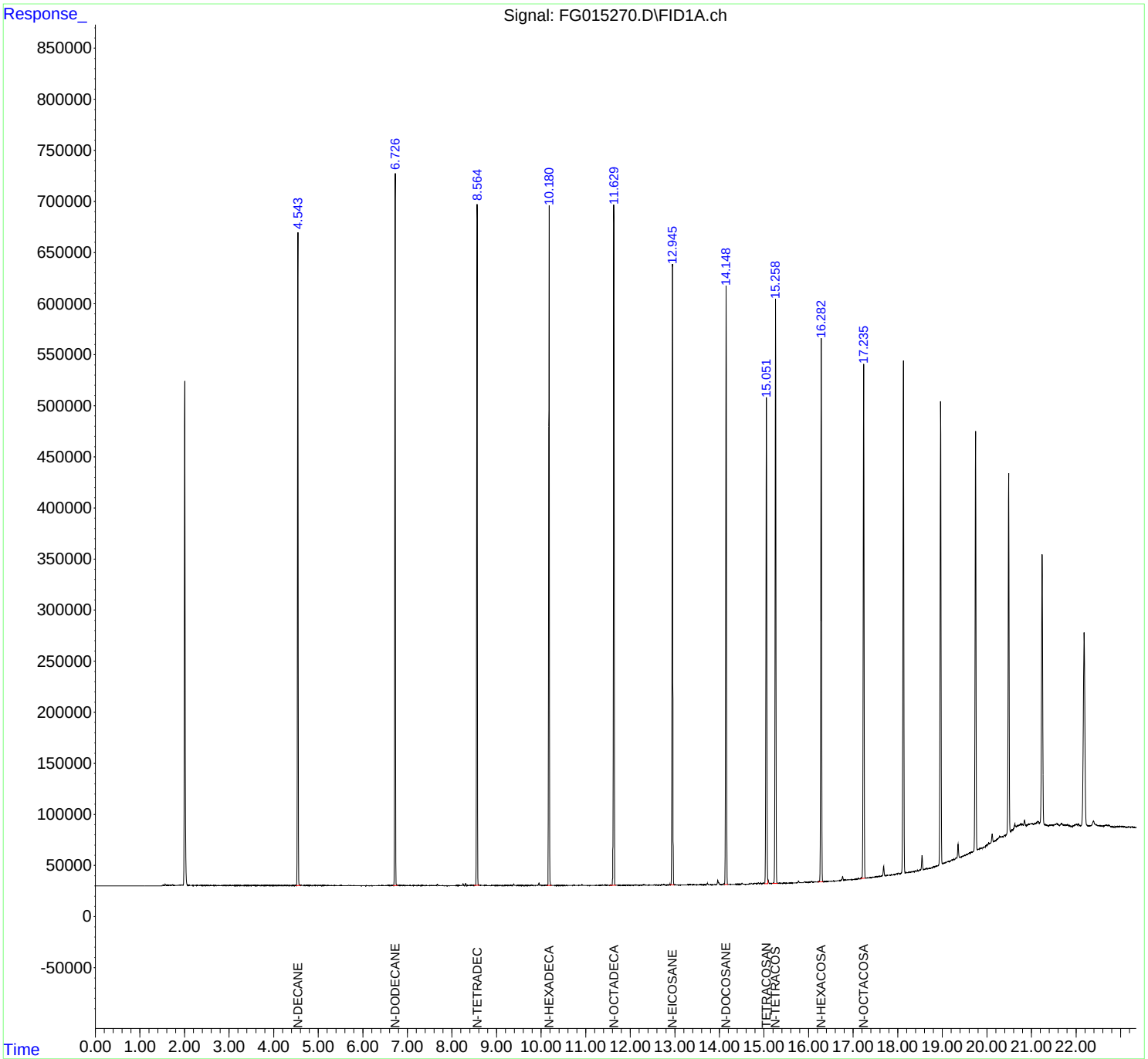
Integration File: autoint1.e
Quant Time: Jan 31 05:14:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 2025
Response via : Initial Calibration
Integrator: ChemStation

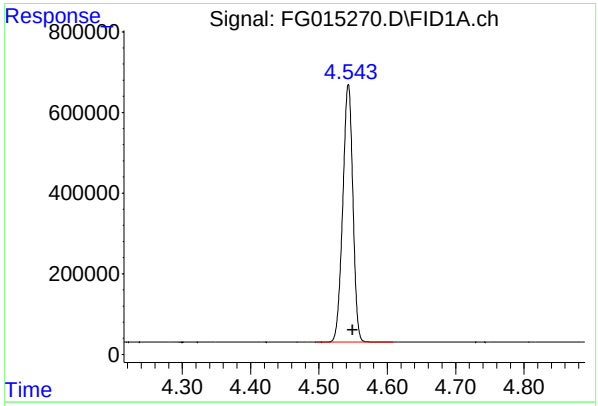
Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025





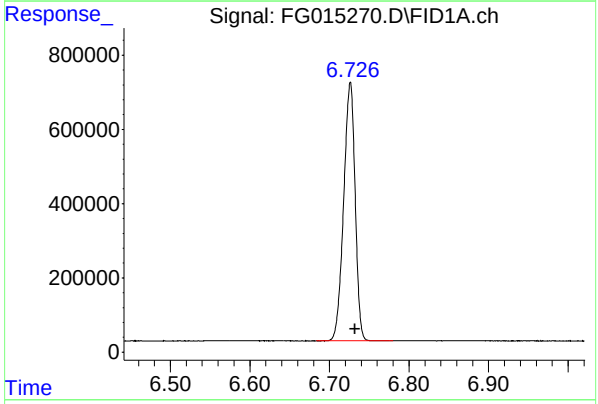
#2 N-DECANE

R.T.: 4.543 min
Delta R.T.: -0.006 min
Response: 6570185
Conc: 50.86 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

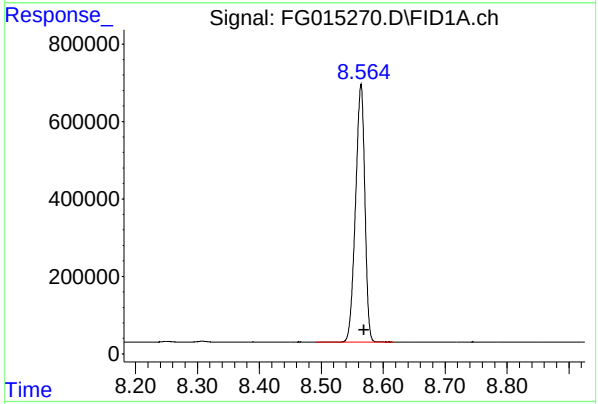
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025



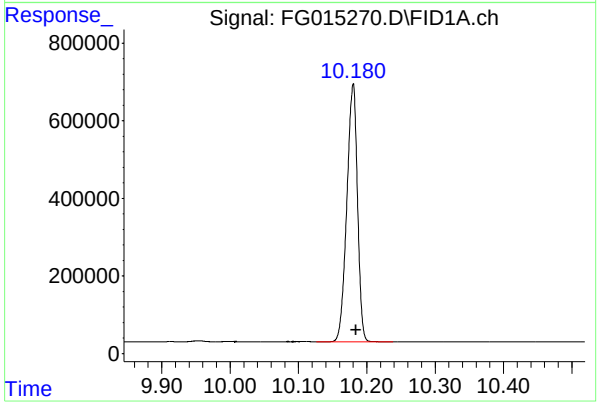
#3 N-DODECANE

R.T.: 6.726 min
Delta R.T.: -0.006 min
Response: 6978281
Conc: 51.22 ug/ml



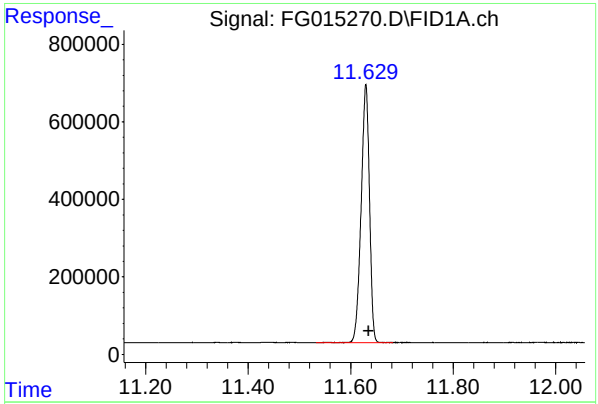
#4 N-TETRADECANE

R.T.: 8.564 min
Delta R.T.: -0.005 min
Response: 6949537
Conc: 50.78 ug/ml



#5 N-HEXADECANE

R.T.: 10.180 min
Delta R.T.: -0.004 min
Response: 7189620
Conc: 50.95 ug/ml



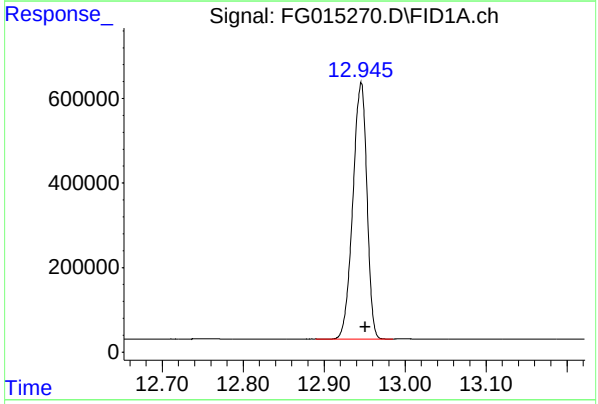
#6 N-OCTADECANE

R.T.: 11.630 min
Delta R.T.: -0.005 min
Response: 7486125
Conc: 51.03 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

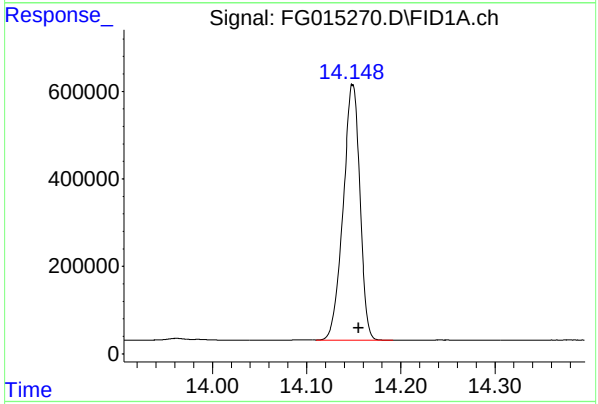
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025



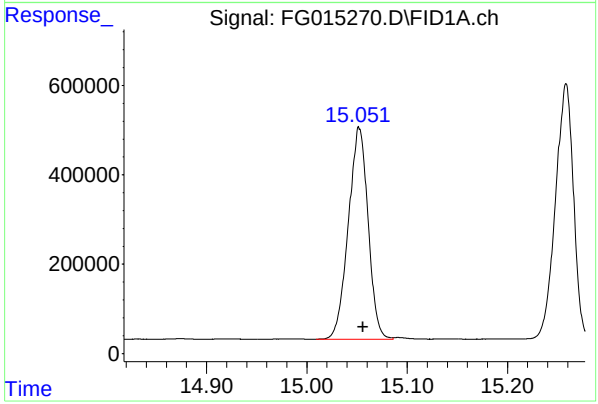
#7 N-EICOSANE

R.T.: 12.946 min
Delta R.T.: -0.005 min
Response: 7328758
Conc: 50.41 ug/ml



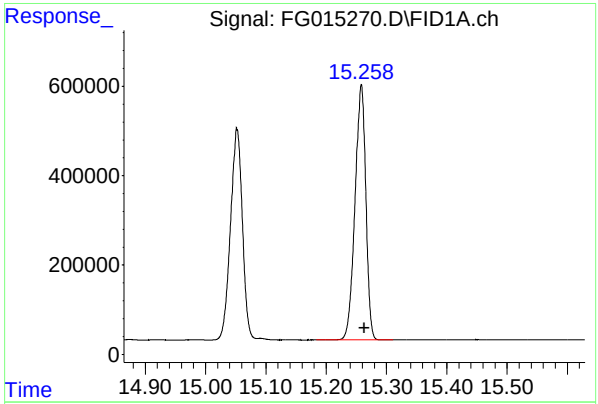
#8 N-DOCOSANE

R.T.: 14.149 min
Delta R.T.: -0.006 min
Response: 7218561
Conc: 50.32 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.052 min
Delta R.T.: -0.004 min
Response: 6486354
Conc: 50.57 ug/ml



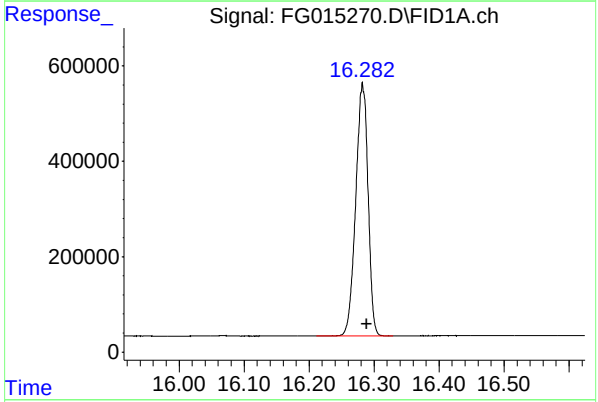
#10 N-TETRACOSANE

R.T.: 15.259 min
Delta R.T.: -0.005 mi
Response: 7137116
Conc: 49.97 ug/m

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

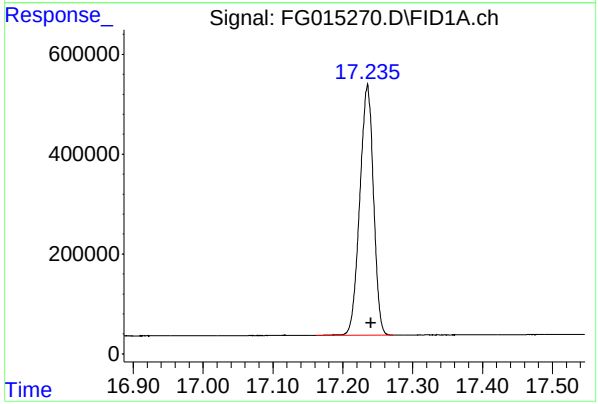
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025



#11 N-HEXACOSANE

R.T.: 16.282 min
Delta R.T.: -0.006 min
Response: 6958060
Conc: 49.40 ug/ml



#12 N-OCTACOSANE

R.T.: 17.235 min
Delta R.T.: -0.005 min
Response: 6830824
Conc: 48.78 ug/ml m

rteres

Instrument :
FID_G
LabSampleId :
50 PPM TRPH STD

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG01302
Data File : FG015270.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 23:22
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.543	4.496	4.608	BB	639710	6570185	87.76%	8.516%
2	6.726	6.683	6.780	BB	697811	6978281	93.22%	9.045%
3	8.564	8.492	8.616	BB	665826	6949537	92.83%	9.008%
4	10.180	10.126	10.238	BB	664951	7189620	96.04%	9.319%
5	11.630	11.533	11.683	BB	665654	7486125	100.00%	9.704%
6	12.946	12.890	12.985	BV	606149	7328758	97.90%	9.500%
7	14.149	14.110	14.192	VB	582849	7218561	96.43%	9.357%
8	15.052	15.009	15.086	BV	470002	6486354	86.65%	8.408%
9	15.259	15.183	15.311	BB	571755	7137116	95.34%	9.251%
10	16.282	16.211	16.329	BB	528333	6958060	92.95%	9.019%
11	17.235	17.036	17.278	BV	500433	6845348	91.44%	8.873%
			Sum of corrected areas:			77147945		

FG011325.M Fri Jan 31 06:03:25 2025

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

Analytical Sequence

Client: RU2 Engineering, LLC **SDG No.:** Q1215

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

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

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

MEAN SUROGATE RT FROM INITIAL CALIBRATION **15.0514**

EPA SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
PIBLK01	I.BLK01	30 Jan 2025 10:25	FG015246.D	15.042	
50 PPM TRPH STD	50 PPM TRPH STD	30 Jan 2025 10:54	FG015247.D	15.044	
PB166361BS	PB166361BS	30 Jan 2025 12:28	FG015249.D	15.043	
PB166361BL	PB166361BL	30 Jan 2025 12:56	FG015250.D	15.040	
PIBLK02	I.BLK02	30 Jan 2025 16:44	FG015258.D	15.054	
50 PPM TRPH STD	50 PPM TRPH STD	30 Jan 2025 17:12	FG015259.D	15.056	
JPP-29.1-012825MS	Q1215-01MS	30 Jan 2025 18:09	FG015260.D	15.003	
JPP-29.1-012825MSD	Q1215-01MSD	30 Jan 2025 18:37	FG015261.D	15.002	
JPP-29.1-012825	Q1215-01	30 Jan 2025 19:06	FG015262.D	15.051	
JPP-29.2-012825	Q1215-05	30 Jan 2025 19:34	FG015263.D	15.051	
PIBLK03	I.BLK03	30 Jan 2025 22:25	FG015269.D	15.051	
50 PPM TRPH STD	50 PPM TRPH STD	30 Jan 2025 23:22	FG015270.D	15.052	

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

QC Limits	Lower Limit	Upper Limits
(± 0.10 minutes)	14.9514	15.1514

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:	PB166361BL	SDG No.:	Q1215
Lab Sample ID:	PB166361BL	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	100 Decanted:
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015250.D	1	01/30/25 09:15	01/30/25 12:56	PB166361

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	15.9		37 - 130	79%	SPK: 20

Comments:

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

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015250.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 12:56
Operator : YP\AJ
Sample : PB166361BL
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB166361BL

Integration File: autoint1.e
Quant Time: Jan 31 05:07:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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...	15.040	2037846	15.887 ug/ml
Target Compounds			

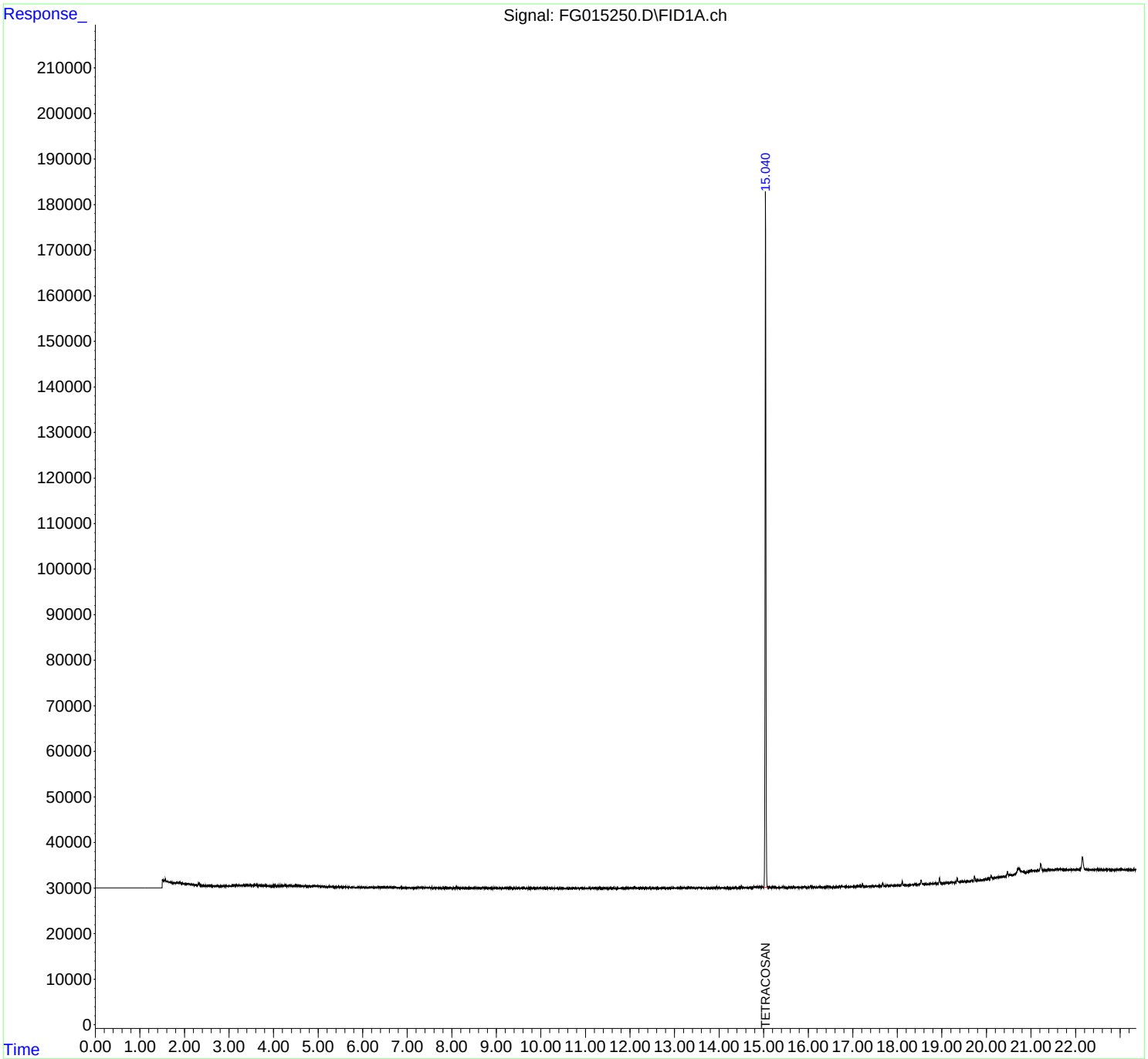
(f)=RT Delta > 1/2 Window (m)=manual int.

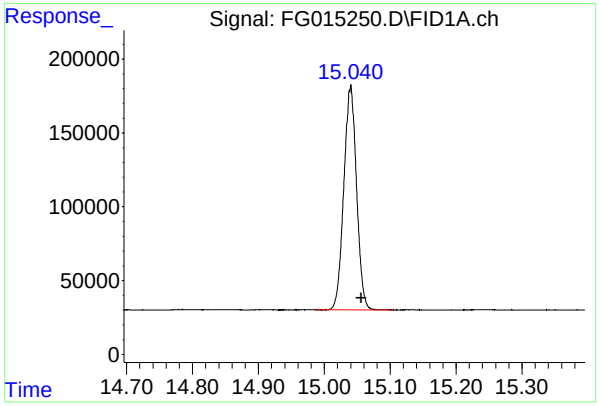
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015250.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 12:56
Operator : YP\AJ
Sample : PB166361BL
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB166361BL

Integration File: autoint1.e
Quant Time: Jan 31 05:07:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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.: 15.040 min
Delta R.T.: -0.016 mi
Response: 2037846
Conc: 15.89 ug/m

Instrument :
FID_G
ClientSampleId :
PB166361BL

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015250.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 12:56
Sample : PB166361BL
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.040	14.988	15.104	BB	151548	2037846	100.00%	100.000%
			Sum of corrected areas:			2037846		

FG011325.M Fri Jan 31 05:58:33 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:	PIBLK-FG015246.D	SDG No.:	Q1215
Lab Sample ID:	I.BLK-FG015246.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
FG015246.D	1		01/30/25	FG013025

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	17.4		29 - 130	87%	SPK: 20

Comments:

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

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015246.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 10:25
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Jan 31 05:06:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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...	15.042	2229297	17.379 ug/ml
Target Compounds			

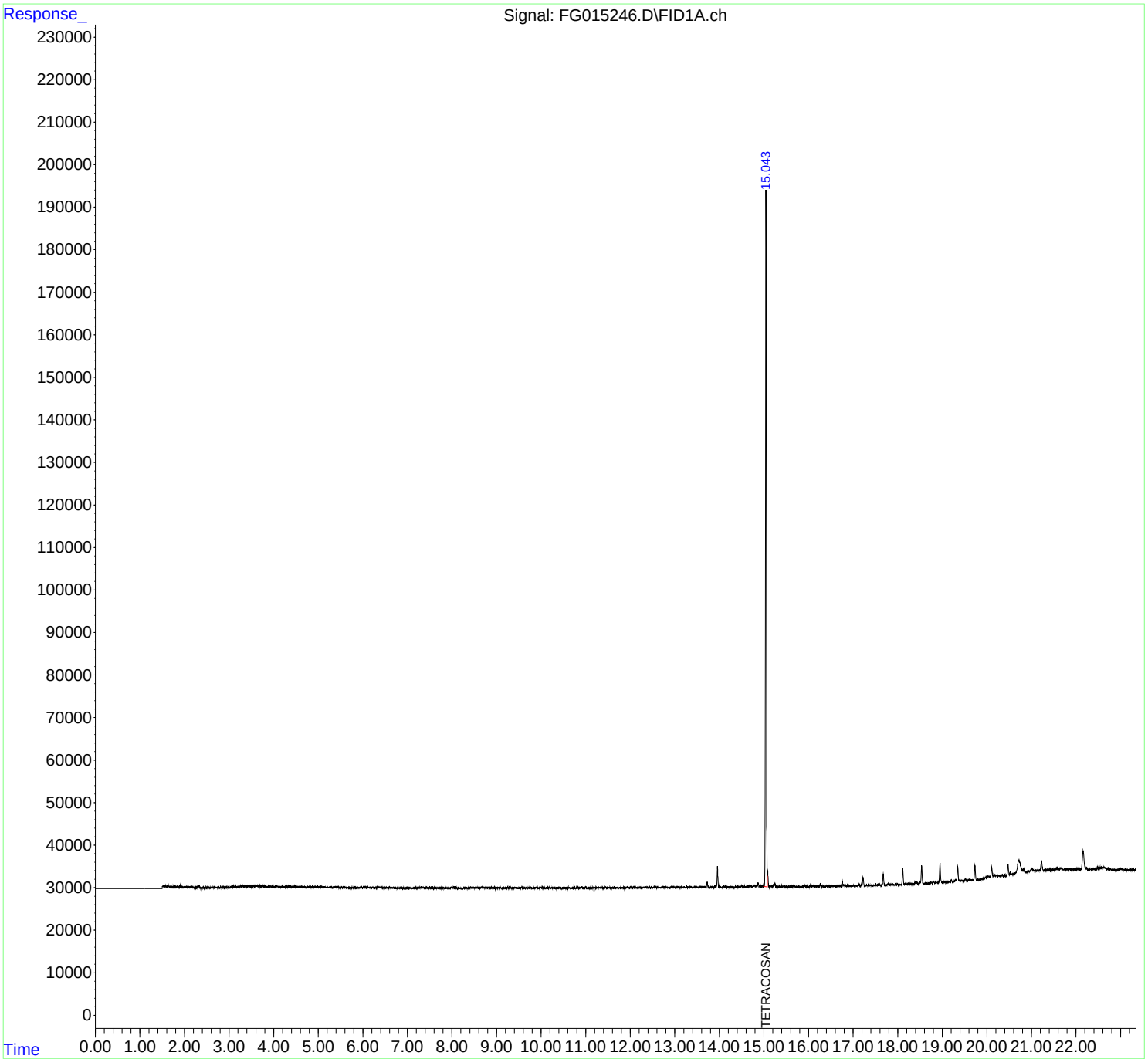
(f)=RT Delta > 1/2 Window (m)=manual int.

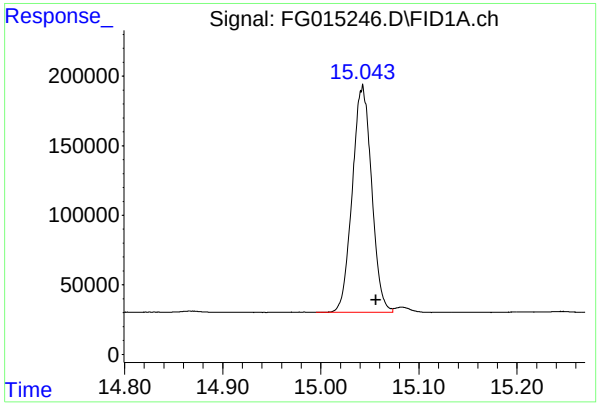
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015246.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 10:25
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Jan 31 05:06:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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.: 15.042 min
Delta R.T.: -0.014 mi
Response: 2229297
Conc: 17.38 ug/m

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015246.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 10:25
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.042	14.995	15.073	BV	162363	2229297	100.00%	100.000%
			Sum of corrected areas:			2229297		

FG011325.M Fri Jan 31 05:56:36 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:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	PIBLK-FG015258.D	SDG No.:	Q1215
Lab Sample ID:	I.BLK-FG015258.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
FG015258.D	1		01/30/25	FG013025

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	17.7		29 - 130	89%	SPK: 20

Comments:

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

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015258.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 16:44
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

Integration File: autoint1.e
Quant Time: Jan 31 05:10:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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...	15.054	2273947	17.727 ug/mlm
Target Compounds				

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015258.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 16:44
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

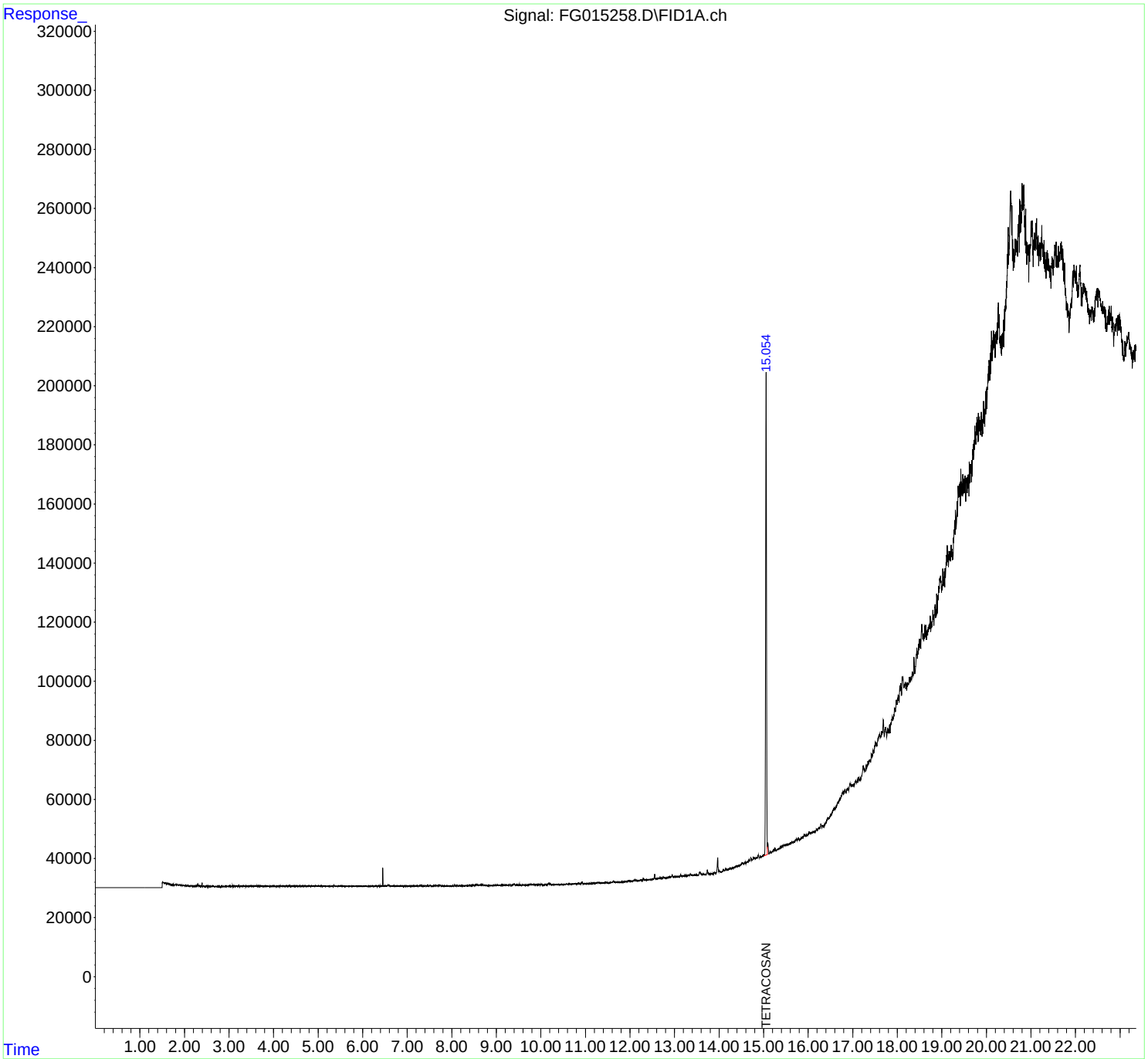
Integration File: autoint1.e
Quant Time: Jan 31 05:10:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 2025
Response via : Initial Calibration
Integrator: ChemStation

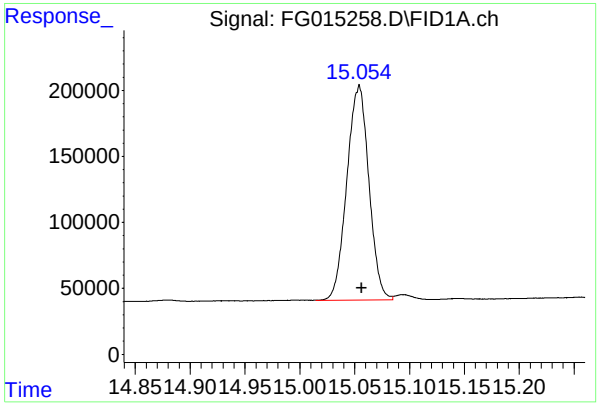
Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Instrument :
FID_G
ClientSampleId :
I.BLK

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.054 min
Delta R.T.: -0.002 mi
Response: 2273947
Conc: 17.73 ug/m

Instrument :
FID_G
ClientSampleId :
I.BLK

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

Instrument :
FID_G
LabSampleId :
I.BLK

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG01302
Data File : FG015258.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 16:44
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.054	14.908	15.086	BV	163272	2286863	100.00%	100.000%
			Sum of corrected areas:			2286863		

FG011325.M Fri Jan 31 06:00:08 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:	PIBLK-FG015269.D	SDG No.:	Q1215
Lab Sample ID:	I.BLK-FG015269.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
FG015269.D	1		01/30/25	FG013025

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	18.0		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_G\Data\FG013025\
Data File : FG015269.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 22:25
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Jan 31 05:14:18 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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...	15.051	2312908	18.031	ug/ml
	Target Compounds				

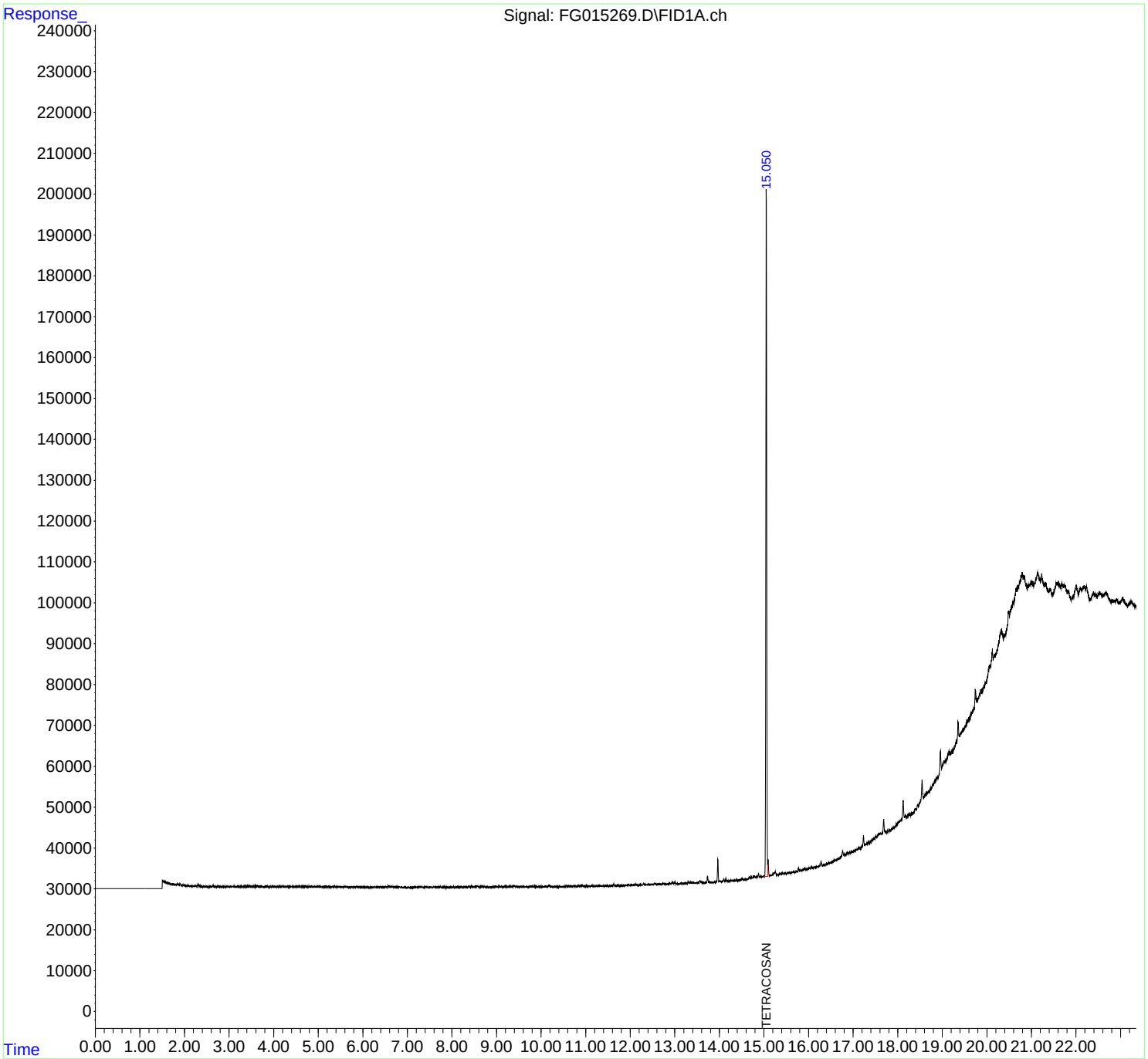
(f)=RT Delta > 1/2 Window (m)=manual int.

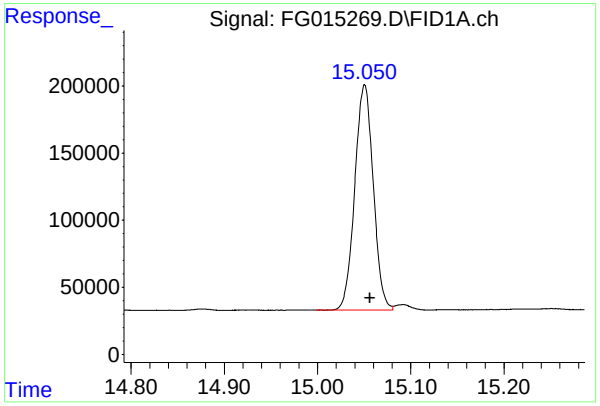
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015269.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 22:25
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Jan 31 05:14:18 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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.: 15.051 min
Delta R.T.: -0.005 mi
Response: 2312908
Conc: 18.03 ug/m

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015269.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 22:25
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.051	14.998	15.081	BV	167764	2312908	100.00%	100.000%
			Sum of corrected areas:			2312908		

FG011325.M Fri Jan 31 06:02:42 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:	PB166361BS	SDG No.:	Q1215
Lab Sample ID:	PB166361BS	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
FG015249.D	1	01/30/25 09:15	01/30/25 12:28	PB166361

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	5210		185	1670	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	15.3		37 - 130	76%	SPK: 20

Comments:

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

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015249.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 12:28
Operator : YP\AJ
Sample : PB166361BS
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB166361BS

Integration File: autoint1.e
Quant Time: Jan 31 05:07:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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...	15.043	1962051	15.296 ug/ml
	Target Compounds			
2)	N-DECANE	4.537	2031031	15.723 ug/ml
3)	N-DODECANE	6.719	2130150	15.636 ug/ml
4)	N-TETRADECANE	8.556	2179688	15.926 ug/ml
5)	N-HEXADECANE	10.171	2231699	15.815 ug/ml
6)	N-OCTADECANE	11.620	2295559	15.649 ug/ml
7)	N-EICOSANE	12.937	2319823	15.956 ug/ml
8)	N-DOCOSANE	14.138	2243803	15.640 ug/ml
10)	N-TETRACOSANE	15.246	2215095	15.509 ug/ml
11)	N-HEXACOSANE	16.271	2175668	15.448 ug/ml
12)	N-OCTACOSANE	17.223	2125560	15.179 ug/ml

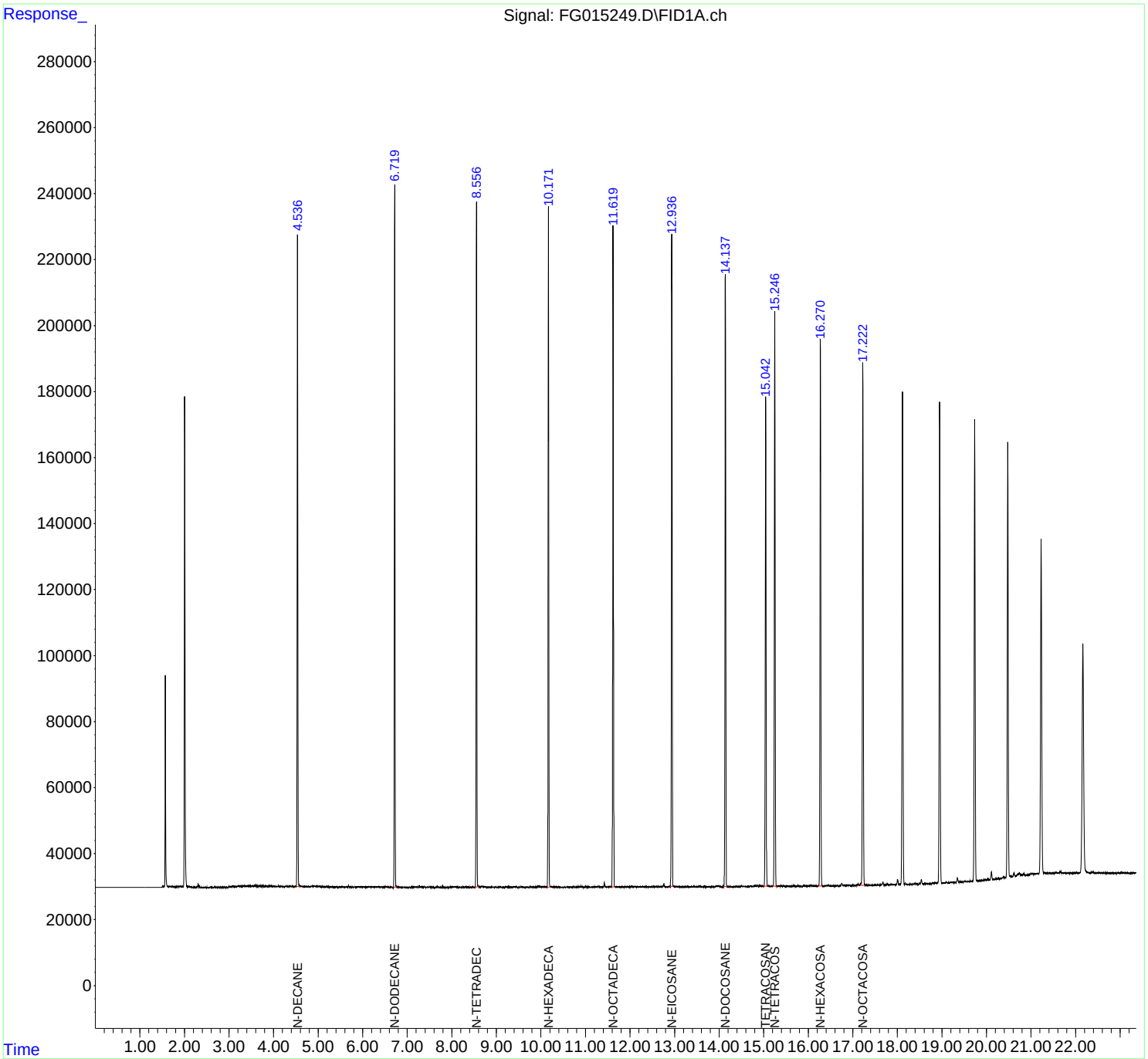
(f)=RT Delta > 1/2 Window (m)=manual int.

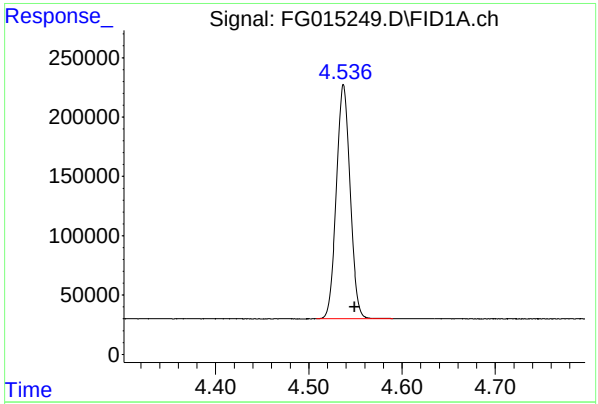
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015249.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 12:28
Operator : YP\AJ
Sample : PB166361BS
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB166361BS

Integration File: autoint1.e
Quant Time: Jan 31 05:07:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

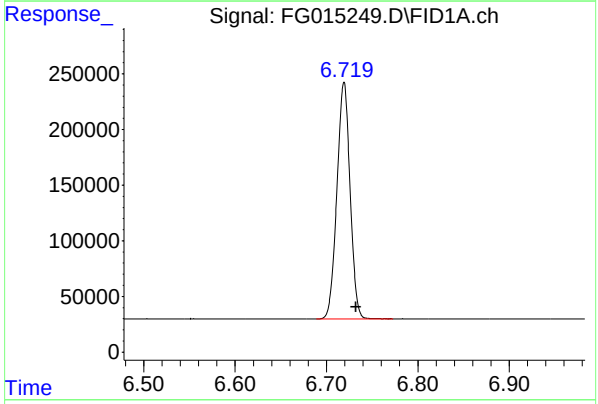




#2 N-DECANE

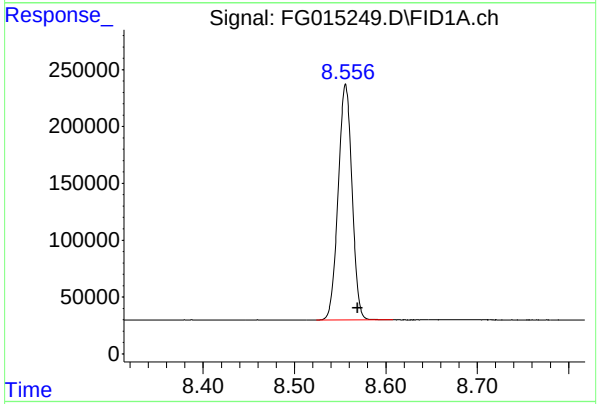
R.T.: 4.537 min
Delta R.T.: -0.012 min
Response: 2031031
Conc: 15.72 ug/ml

Instrument :
FID_G
ClientSampleId :
PB166361BS



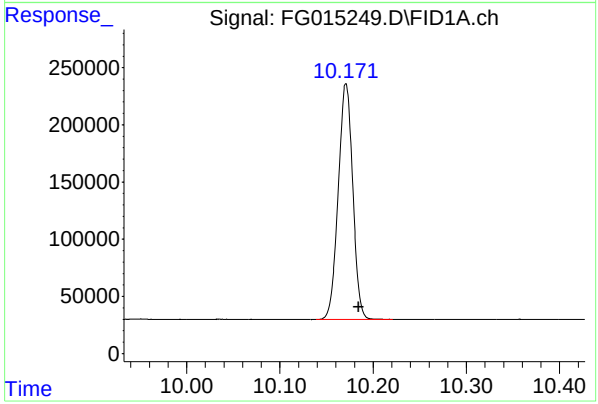
#3 N-DODECANE

R.T.: 6.719 min
Delta R.T.: -0.013 min
Response: 2130150
Conc: 15.64 ug/ml



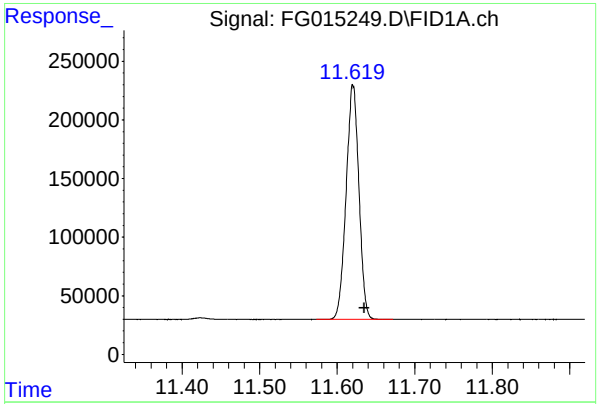
#4 N-TETRADECANE

R.T.: 8.556 min
Delta R.T.: -0.013 min
Response: 2179688
Conc: 15.93 ug/ml



#5 N-HEXADECANE

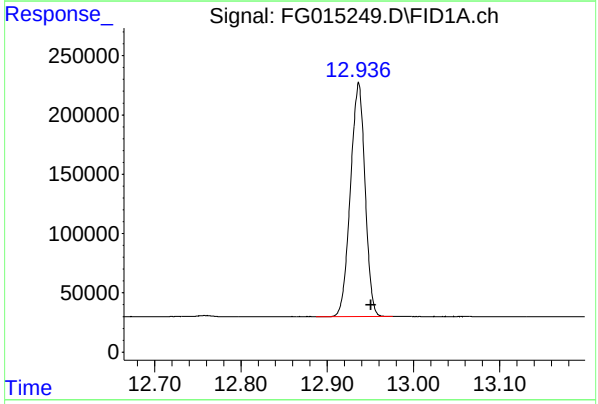
R.T.: 10.171 min
Delta R.T.: -0.013 min
Response: 2231699
Conc: 15.82 ug/ml



#6 N-OCTADECANE

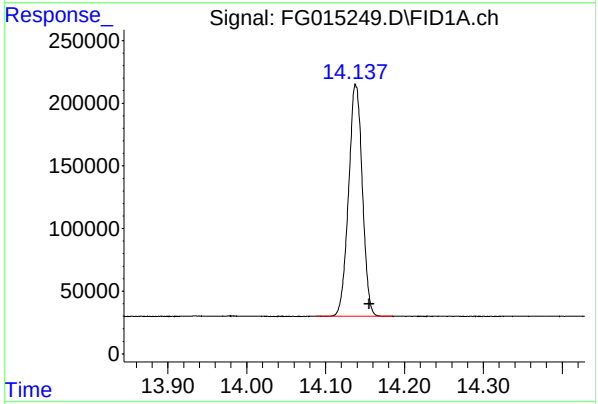
R.T.: 11.620 min
Delta R.T.: -0.015 min
Response: 2295559
Conc: 15.65 ug/ml

Instrument :
FID_G
ClientSampleId :
PB166361BS



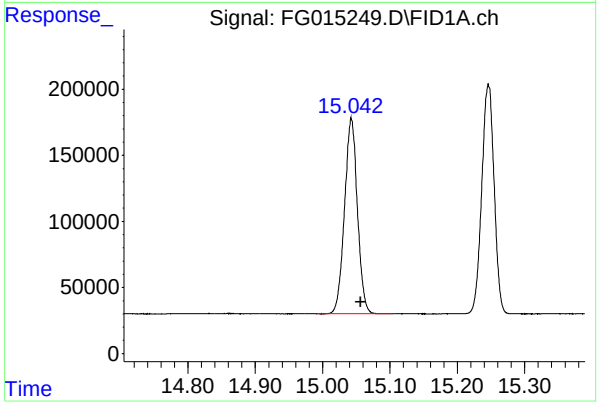
#7 N-EICOSANE

R.T.: 12.937 min
Delta R.T.: -0.014 min
Response: 2319823
Conc: 15.96 ug/ml



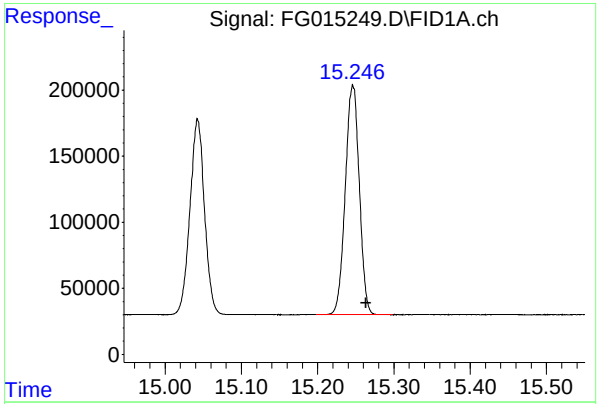
#8 N-DOCOSANE

R.T.: 14.138 min
Delta R.T.: -0.017 min
Response: 2243803
Conc: 15.64 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

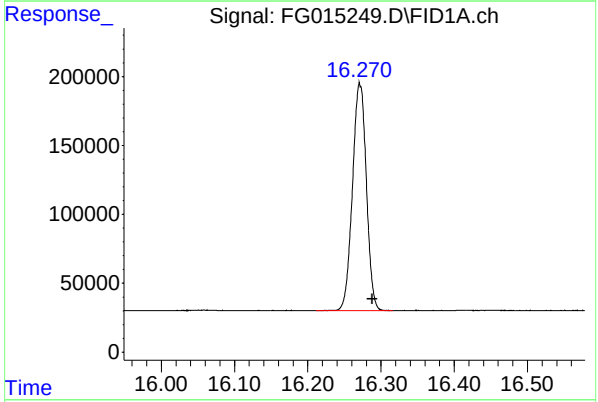
R.T.: 15.043 min
Delta R.T.: -0.014 min
Response: 1962051
Conc: 15.30 ug/ml



#10 N-TETRACOSANE

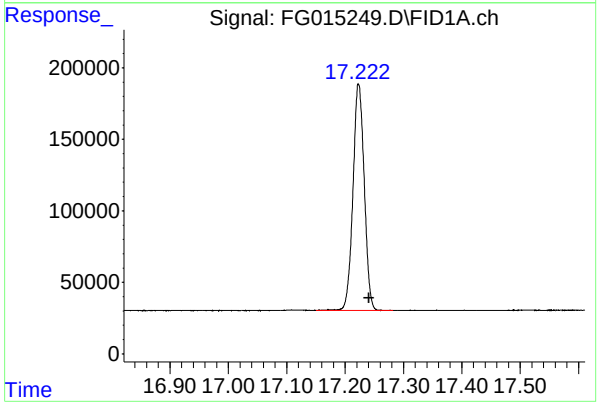
R.T.: 15.246 min
Delta R.T.: -0.017 min
Response: 2215095
Conc: 15.51 ug/ml

Instrument :
FID_G
ClientSampleId :
PB166361BS



#11 N-HEXACOSANE

R.T.: 16.271 min
Delta R.T.: -0.017 min
Response: 2175668
Conc: 15.45 ug/ml



#12 N-OCTACOSANE

R.T.: 17.223 min
Delta R.T.: -0.017 min
Response: 2125560
Conc: 15.18 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015249.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 12:28
Sample : PB166361BS
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.537	4.508	4.590	BB	197322	2031031	87.55%	8.494%
2	6.719	6.689	6.773	BB	212980	2130150	91.82%	8.909%
3	8.556	8.524	8.608	BB	207593	2179688	93.96%	9.116%
4	10.171	10.139	10.221	BB	206350	2231699	96.20%	9.334%
5	11.620	11.573	11.672	BB	199262	2295559	98.95%	9.601%
6	12.937	12.887	12.976	BB	197351	2319823	100.00%	9.702%
7	14.138	14.088	14.185	BB	184923	2243803	96.72%	9.384%
8	15.043	14.990	15.105	BB	147569	1962051	84.58%	8.206%
9	15.246	15.198	15.299	BB	173522	2215095	95.49%	9.264%
10	16.271	16.211	16.316	BB	164178	2175668	93.79%	9.099%
11	17.223	17.150	17.282	BB	158078	2125560	91.63%	8.890%
			Sum of corrected areas:			23910127		

FG011325.M Fri Jan 31 05:58:14 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:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825MS	SDG No.:	Q1215
Lab Sample ID:	Q1215-01MS	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	89 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
FG015260.D	1	01/30/25 09:15	01/30/25 18:09	PB166361

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	81300	E	207	1870	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	17.6		37 - 130	88%	SPK: 20

Comments:

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

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015260.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 18:09
Operator : YP\AJ
Sample : Q1215-01MS
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825MS

Integration File: autoint1.e
Quant Time: Jan 31 05:11:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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...	15.055	2259116	17.612 ug/ml
	Target Compounds			
2)	N-DECANE	4.542	1869239	14.471 ug/ml
3)	N-DODECANE	6.724	1980187	14.535 ug/ml
4)	N-TETRADECANE	8.562	2081725	15.210 ug/ml
5)	N-HEXADECANE	10.178	2717591	19.258 ug/ml
6)	N-OCTADECANE	11.629	2320367	15.818 ug/ml
7)	N-EICOSANE	12.948	3255199	22.390 ug/ml
8)	N-DOCOSANE	14.150	3122737	21.767 ug/ml
10)	N-TETRACOSANE	15.252	10718922	75.049 ug/ml
11)	N-HEXACOSANE	16.286	2756362	19.571 ug/ml
12)	N-OCTACOSANE	17.246	4416765	31.541 ug/ml

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

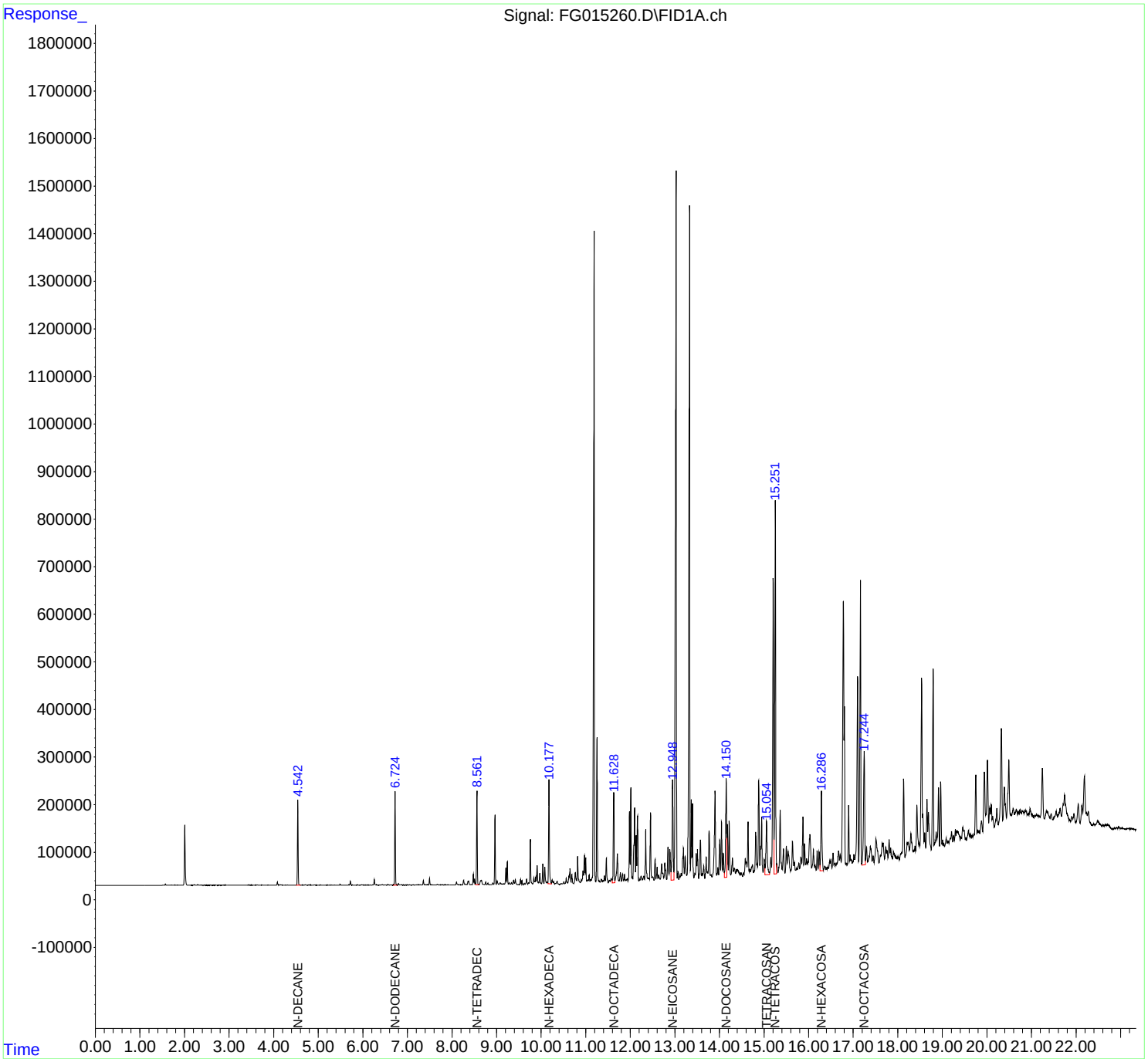
Quantitation Report (QT Reviewed)

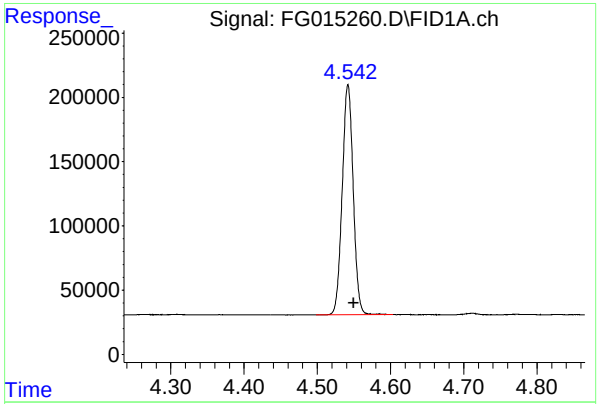
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015260.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 18:09
Operator : YP\AJ
Sample : Q1215-01MS
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825MS

Integration File: autoint1.e
Quant Time: Jan 31 05:11:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

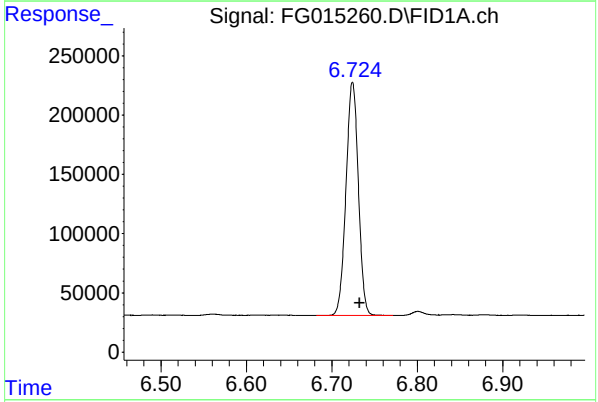




#2 N-DECANE

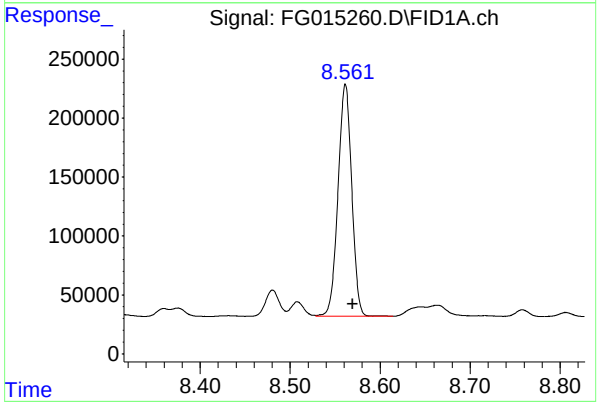
R.T.: 4.542 min
Delta R.T.: -0.007 min
Response: 1869239
Conc: 14.47 ug/ml

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825MS



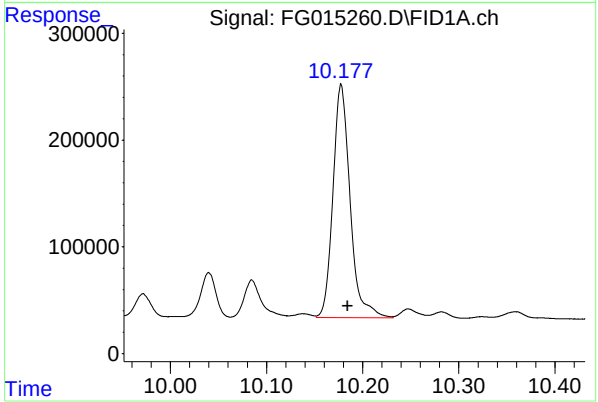
#3 N-DODECANE

R.T.: 6.724 min
Delta R.T.: -0.008 min
Response: 1980187
Conc: 14.53 ug/ml



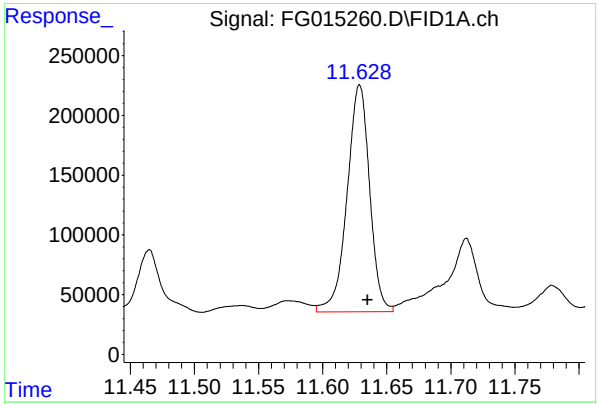
#4 N-TETRADECANE

R.T.: 8.562 min
Delta R.T.: -0.008 min
Response: 2081725
Conc: 15.21 ug/ml



#5 N-HEXADECANE

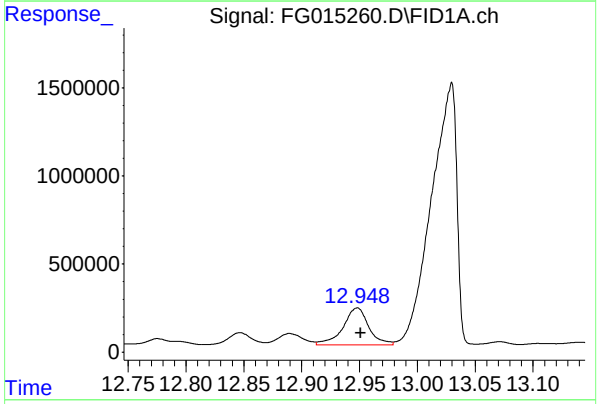
R.T.: 10.178 min
Delta R.T.: -0.007 min
Response: 2717591
Conc: 19.26 ug/ml



#6 N-OCTADECANE

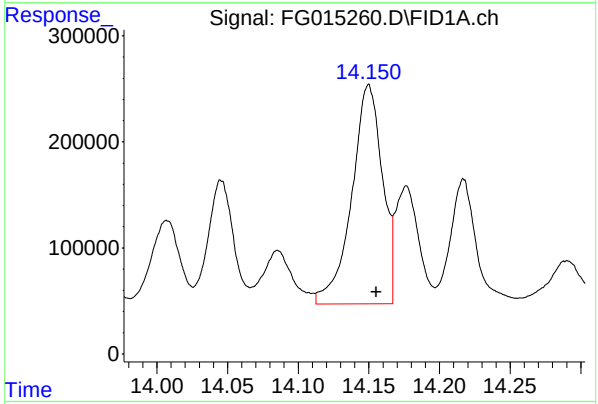
R.T.: 11.629 min
Delta R.T.: -0.006 min
Response: 2320367
Conc: 15.82 ug/ml

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825MS



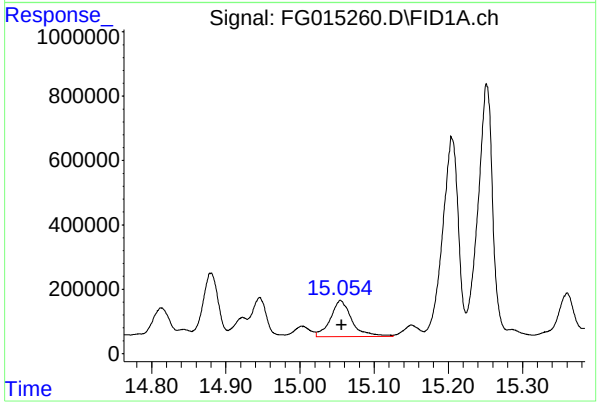
#7 N-EICOSANE

R.T.: 12.948 min
Delta R.T.: -0.003 min
Response: 3255199
Conc: 22.39 ug/ml



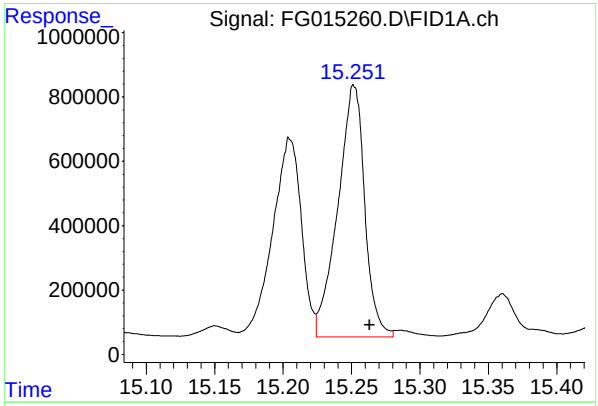
#8 N-DOCOSANE

R.T.: 14.150 min
Delta R.T.: -0.005 min
Response: 3122737
Conc: 21.77 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

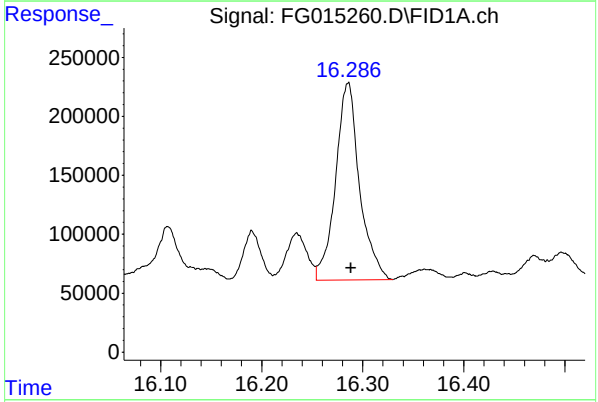
R.T.: 15.055 min
Delta R.T.: -0.001 min
Response: 2259116
Conc: 17.61 ug/ml



#10 N-TETRACOSANE

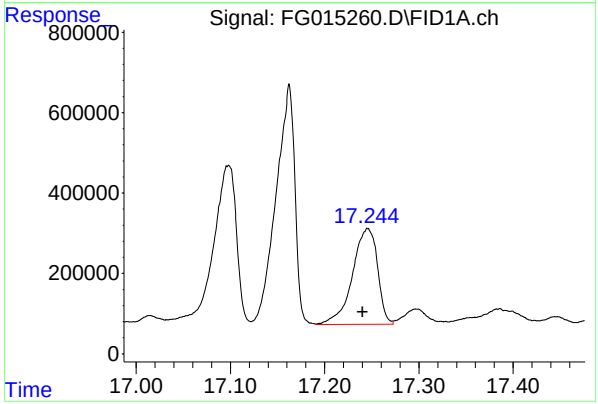
R.T.: 15.252 min
Delta R.T.: -0.011 min
Response: 10718922
Conc: 75.05 ug/ml

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825MS



#11 N-HEXACOSANE

R.T.: 16.286 min
Delta R.T.: -0.003 min
Response: 2756362
Conc: 19.57 ug/ml



#12 N-OCTACOSANE

R.T.: 17.246 min
Delta R.T.: 0.005 min
Response: 4416765
Conc: 31.54 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015260.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 18:09
Sample : Q1215-01MS
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.367	4.350	4.394	BH	70	-1367	-0.01%	-0.000%
2	4.399	4.394	4.404	PH	-94	-748	-0.00%	-0.000%
3	4.421	4.404	4.429	PH	-42	-1680	-0.01%	-0.001%
4	4.435	4.429	4.468	PH	1	-2851	-0.01%	-0.001%
5	4.481	4.468	4.492	PH	-29	-1337	-0.01%	-0.000%
6	4.542	4.492	4.578	PH	179081	1863064	8.06%	0.607%
7	4.584	4.578	4.613	HH	562	6278	0.03%	0.002%
8	4.619	4.613	4.635	HH	178	1240	0.01%	0.000%
9	4.646	4.635	4.681	PH	157	463	0.00%	0.000%
10	4.712	4.681	4.748	PH	1118	12663	0.05%	0.004%
11	4.773	4.748	4.815	PH	359	4833	0.02%	0.002%
12	4.825	4.815	4.843	PH	201	1431	0.01%	0.000%
13	4.854	4.843	4.868	PH	92	476	0.00%	0.000%
14	4.913	4.868	4.940	PH	483	8817	0.04%	0.003%
15	4.956	4.940	4.978	HH	271	2566	0.01%	0.001%
16	4.989	4.978	4.996	PH	124	277	0.00%	0.000%
17	5.002	4.996	5.024	PH	88	502	0.00%	0.000%
18	5.052	5.024	5.078	PH	399	4103	0.02%	0.001%
19	5.098	5.078	5.128	PH	46	-1721	-0.01%	-0.001%
20	5.133	5.128	5.146	PH	-35	-628	-0.00%	-0.000%
21	5.185	5.146	5.195	PH	263	1678	0.01%	0.001%
22	5.203	5.195	5.222	HH	259	1373	0.01%	0.000%
23	5.227	5.222	5.239	PH	49	-475	-0.00%	-0.000%
24	5.267	5.239	5.283	PH	145	280	0.00%	0.000%
25	5.304	5.283	5.320	PH	338	2377	0.01%	0.001%
26	5.333	5.320	5.345	PH	-12	-807	-0.00%	-0.000%
27	5.363	5.345	5.385	PH	239	1390	0.01%	0.000%
28	5.389	5.385	5.399	PH	-66	-928	-0.00%	-0.000%
29	5.403	5.399	5.413	PH	-134	-1392	-0.01%	-0.000%
30	5.432	5.413	5.447	PH	-76	-2875	-0.01%	-0.001%
31	5.490	5.447	5.519	PH	1688	13523	0.06%	0.004%
32	5.524	5.519	5.543	PH	122	162	0.00%	0.000%
33	5.561	5.543	5.587	PH	21	-1585	-0.01%	-0.001%
34	5.593	5.587	5.599	PH	-96	-919	-0.00%	-0.000%
35	5.604	5.599	5.614	PH	-115	-1263	-0.01%	-0.000%
36	5.625	5.614	5.635	PH	-27	-1056	-0.00%	-0.000%

rteres

37	5.638	5.635	5.646	PH	-138	-1024	-0.00%	-0.000%
38	5.650	5.646	5.671	PH	-105	-2319	-0.01%	-0.001%
39	5.688	5.671	5.704	PH	848	8073	0.03%	0.003%
40	5.722	5.704	5.755	HH	8350	83022	0.36%	0.027%
41	5.765	5.755	5.786	HH	280	2360	0.01%	0.001%
42	5.796	5.786	5.832	PH	118	246	0.00%	0.000%
43	5.854	5.832	5.861	PH	102	158	0.00%	0.000%
44	5.878	5.861	5.913	PH	422	4281	0.02%	0.001%
45	5.922	5.913	5.929	PH	21	-393	-0.00%	-0.000%
46	5.950	5.929	5.963	PH	471	5074	0.02%	0.002%
47	5.979	5.963	6.000	HH	979	11213	0.05%	0.004%
48	6.004	6.000	6.030	HH	341	3100	0.01%	0.001%
49	6.035	6.030	6.040	PH	70	154	0.00%	0.000%
50	6.058	6.040	6.091	PH	196	2495	0.01%	0.001%
51	6.100	6.091	6.123	PH	193	1154	0.00%	0.000%
52	6.133	6.123	6.148	PH	118	511	0.00%	0.000%
53	6.162	6.148	6.188	PH	273	2818	0.01%	0.001%
54	6.223	6.188	6.238	PH	966	10515	0.05%	0.003%
55	6.258	6.238	6.293	HH	11804	126543	0.55%	0.041%
56	6.309	6.293	6.338	HH	779	10917	0.05%	0.004%
57	6.366	6.338	6.387	PH	356	5129	0.02%	0.002%
58	6.408	6.387	6.418	HH	499	6624	0.03%	0.002%
59	6.438	6.418	6.471	HH	1402	22843	0.10%	0.007%
60	6.490	6.471	6.502	HH	509	6048	0.03%	0.002%
61	6.514	6.502	6.532	HH	374	5074	0.02%	0.002%
62	6.561	6.532	6.599	HH	1226	18274	0.08%	0.006%
63	6.611	6.599	6.627	HH	293	4868	0.02%	0.002%
64	6.634	6.627	6.658	HH	376	4865	0.02%	0.002%
65	6.664	6.658	6.694	HH	161	2706	0.01%	0.001%
66	6.724	6.694	6.779	HH	196884	1984818	8.59%	0.647%
67	6.801	6.779	6.828	HH	3514	39420	0.17%	0.013%
68	6.843	6.828	6.864	HH	802	12222	0.05%	0.004%
69	6.880	6.864	6.908	HH	700	9626	0.04%	0.003%
70	6.918	6.908	6.947	HH	446	6280	0.03%	0.002%
71	6.957	6.947	6.970	HH	224	2572	0.01%	0.001%
72	6.976	6.970	6.984	HH	220	1494	0.01%	0.000%
73	7.006	6.984	7.031	HH	766	9577	0.04%	0.003%
74	7.050	7.031	7.096	HH	862	14386	0.06%	0.005%
75	7.129	7.096	7.148	HH	784	12332	0.05%	0.004%
76	7.163	7.148	7.194	HH	309	6018	0.03%	0.002%
77	7.217	7.194	7.245	HH	1150	20296	0.09%	0.007%
78	7.259	7.245	7.278	HH	957	15119	0.07%	0.005%
79	7.296	7.278	7.330	HH	978	17610	0.08%	0.006%
80	7.359	7.330	7.382	HH	10177	110285	0.48%	0.036%
81	7.398	7.382	7.429	HH	1299	24560	0.11%	0.008%
82	7.448	7.429	7.474	HH	1428	22532	0.10%	0.007%
83	7.497	7.474	7.528	HH	14809	151993	0.66%	0.050%
84	7.545	7.528	7.565	HH	614	11005	0.05%	0.004%
85	7.570	7.565	7.592	HH	431	5988	0.03%	0.002%
86	7.599	7.592	7.604	HH	385	2417	0.01%	0.001%
87	7.618	7.604	7.643	HH	599	10734	0.05%	0.003%
88	7.674	7.643	7.704	HH	2063	33699	0.15%	0.011%
89	7.737	7.704	7.755	HH	805	17759	0.08%	0.006%

rteres

90	7.761	7.755	7.781	HH	719	7587	0.03%	0.002%
91	7.795	7.781	7.800	HH	647	5819	0.03%	0.002%
92	7.822	7.800	7.838	HH	734	14513	0.06%	0.005%
93	7.852	7.838	7.882	HH	884	15437	0.07%	0.005%
94	7.901	7.882	7.918	HH	658	10612	0.05%	0.003%
95	7.925	7.918	7.934	HH	367	2747	0.01%	0.001%
96	7.963	7.934	7.980	HH	625	12094	0.05%	0.004%
97	7.985	7.980	7.998	HH	424	3881	0.02%	0.001%
98	8.012	7.998	8.035	HH	526	10112	0.04%	0.003%
99	8.039	8.035	8.050	HH	371	3276	0.01%	0.001%
100	8.061	8.050	8.073	HH	473	5256	0.02%	0.002%
101	8.102	8.073	8.151	HH	6860	104798	0.45%	0.034%
102	8.164	8.151	8.192	HH	943	19591	0.08%	0.006%
103	8.205	8.192	8.225	HH	930	14422	0.06%	0.005%
104	8.261	8.225	8.294	HH	10678	156042	0.68%	0.051%
105	8.315	8.294	8.341	HH	2359	43762	0.19%	0.014%
106	8.360	8.341	8.366	HH	7541	72937	0.32%	0.024%
107	8.375	8.366	8.412	HH	7991	100281	0.43%	0.033%
108	8.432	8.412	8.450	HH	1546	28044	0.12%	0.009%
109	8.481	8.450	8.496	HH	23213	260749	1.13%	0.085%
110	8.508	8.496	8.529	HH	13297	143447	0.62%	0.047%
111	8.562	8.529	8.591	HH	197754	2117596	9.17%	0.690%
112	8.601	8.591	8.614	HH	1369	17543	0.08%	0.006%
113	8.645	8.614	8.651	HH	8967	125351	0.54%	0.041%
114	8.664	8.651	8.702	HH	10376	171644	0.74%	0.056%
115	8.717	8.702	8.737	HH	1515	26954	0.12%	0.009%
116	8.758	8.737	8.783	HH	6561	79958	0.35%	0.026%
117	8.806	8.783	8.827	HH	4252	55830	0.24%	0.018%
118	8.836	8.827	8.857	HH	1237	18745	0.08%	0.006%
119	8.870	8.857	8.882	HH	1062	14682	0.06%	0.005%
120	8.918	8.882	8.941	HH	4689	76513	0.33%	0.025%
121	8.966	8.941	8.994	HH	147767	1487156	6.44%	0.485%
122	9.014	8.994	9.057	HH	9178	155612	0.67%	0.051%
123	9.083	9.057	9.101	HH	5056	85991	0.37%	0.028%
124	9.108	9.101	9.123	HH	2983	34237	0.15%	0.011%
125	9.135	9.123	9.147	HH	2676	33605	0.15%	0.011%
126	9.161	9.147	9.185	HH	2929	58215	0.25%	0.019%
127	9.211	9.185	9.226	HH	36702	419985	1.82%	0.137%
128	9.242	9.226	9.267	HH	49836	515644	2.23%	0.168%
129	9.283	9.267	9.317	HH	4875	88968	0.39%	0.029%
130	9.336	9.317	9.360	HH	5800	84129	0.36%	0.027%
131	9.382	9.360	9.404	HH	10375	149088	0.65%	0.049%
132	9.423	9.404	9.472	HH	11793	184559	0.80%	0.060%
133	9.486	9.472	9.513	HH	1546	32240	0.14%	0.011%
134	9.539	9.513	9.556	HH	12175	150159	0.65%	0.049%
135	9.571	9.556	9.600	HH	10477	128111	0.55%	0.042%
136	9.622	9.600	9.639	HH	3946	56641	0.25%	0.018%
137	9.676	9.639	9.699	HH	12941	202694	0.88%	0.066%
138	9.718	9.699	9.731	HH	4822	66929	0.29%	0.022%
139	9.759	9.731	9.813	HH	96116	1138815	4.93%	0.371%
140	9.839	9.813	9.854	HH	15973	213242	0.92%	0.069%
141	9.882	9.854	9.894	HH	17645	250400	1.08%	0.082%

142	9.912	9.894	9.932	HH	41090	520624	2.25%	0.170%
143	9.941	9.932	9.952	HH	6396	65988	0.29%	0.021%
144	9.972	9.952	10.003	HH	25268	351030	1.52%	0.114%
145	10.040	10.003	10.063	HH	44977	572064	2.48%	0.186%
146	10.085	10.063	10.124	HH	38065	542506	2.35%	0.177%
147	10.138	10.124	10.152	HH	6468	92083	0.40%	0.030%
148	10.178	10.152	10.232	HH	221759	2846712	12.32%	0.927%
149	10.248	10.232	10.268	HH	11041	160550	0.69%	0.052%
150	10.282	10.268	10.306	HH	8212	119884	0.52%	0.039%
151	10.324	10.306	10.333	HH	3707	50810	0.22%	0.017%
152	10.359	10.333	10.405	HH	8346	182564	0.79%	0.059%
153	10.409	10.405	10.427	HH	1777	21228	0.09%	0.007%
154	10.453	10.427	10.469	HH	3500	63486	0.27%	0.021%
155	10.485	10.469	10.494	HH	3102	41993	0.18%	0.014%
156	10.511	10.494	10.529	HH	7311	103101	0.45%	0.034%
157	10.537	10.529	10.544	HH	3550	30826	0.13%	0.010%
158	10.563	10.544	10.598	HH	15079	249816	1.08%	0.081%
159	10.625	10.598	10.634	HH	19300	260957	1.13%	0.085%
160	10.649	10.634	10.672	HH	35097	482538	2.09%	0.157%
161	10.690	10.672	10.728	HH	22767	342866	1.48%	0.112%
162	10.768	10.728	10.800	HH	26333	535398	2.32%	0.174%
163	10.821	10.800	10.880	HH	60496	920803	3.99%	0.300%
164	10.905	10.880	10.915	HH	11047	169240	0.73%	0.055%
165	10.941	10.915	10.952	HH	30554	434652	1.88%	0.142%
166	10.974	10.952	10.989	HH	62437	929896	4.02%	0.303%
167	11.002	10.989	11.023	HH	57874	671186	2.90%	0.219%
168	11.048	11.023	11.060	HH	11230	221903	0.96%	0.072%
169	11.078	11.060	11.096	HH	21396	320131	1.39%	0.104%
170	11.112	11.096	11.127	HH	11940	191646	0.83%	0.062%
171	11.144	11.127	11.148	HH	16042	174369	0.75%	0.057%
172	11.190	11.148	11.224	HH	1358733	17169956	74.31%	5.594%
173	11.254	11.224	11.292	HH	310446	3414675	14.78%	1.113%
174	11.302	11.292	11.318	HH	9665	126684	0.55%	0.041%
175	11.327	11.318	11.333	HH	6867	59546	0.26%	0.019%
176	11.351	11.333	11.373	HH	12016	227092	0.98%	0.074%
177	11.387	11.373	11.403	HH	10480	161384	0.70%	0.053%
178	11.421	11.403	11.444	HH	19302	327616	1.42%	0.107%
179	11.465	11.444	11.506	HH	56847	833133	3.61%	0.271%
180	11.537	11.506	11.552	HH	10038	224868	0.97%	0.073%
181	11.573	11.552	11.595	HH	14007	297340	1.29%	0.097%
182	11.629	11.595	11.655	HH	194834	2495076	10.80%	0.813%
183	11.712	11.655	11.749	HH	66487	1424324	6.16%	0.464%
184	11.779	11.749	11.801	HH	26756	496461	2.15%	0.162%
185	11.827	11.801	11.849	HH	23431	437552	1.89%	0.143%
186	11.871	11.849	11.893	HH	22867	385788	1.67%	0.126%
187	11.910	11.893	11.919	HH	11806	163989	0.71%	0.053%
188	11.934	11.919	11.952	HH	13959	223347	0.97%	0.073%
189	11.983	11.952	11.998	HH	154686	1916802	8.30%	0.625%
190	12.014	11.998	12.036	HH	205163	2284428	9.89%	0.744%
191	12.044	12.036	12.057	HH	17362	202001	0.87%	0.066%
192	12.099	12.057	12.115	HH	162605	2728238	11.81%	0.889%
193	12.131	12.115	12.146	HH	104619	1248622	5.40%	0.407%
194	12.163	12.146	12.191	HH	146021	1820926	7.88%	0.593%

195	12.207	12.191	12.218	HH	12639	177727	0.77%	0.058%
196	12.243	12.218	12.264	HH	18902	409228	1.77%	0.133%
197	12.304	12.264	12.322	HH	18721	497856	2.15%	0.162%
198	12.347	12.322	12.388	HH	116530	1771570	7.67%	0.577%
199	12.397	12.388	12.408	HH	14991	173252	0.75%	0.056%
200	12.416	12.408	12.429	HH	14894	166086	0.72%	0.054%
201	12.454	12.429	12.479	HH	151957	1949048	8.44%	0.635%
202	12.496	12.479	12.532	HH	17190	486832	2.11%	0.159%
203	12.557	12.532	12.577	HH	53995	769488	3.33%	0.251%
204	12.602	12.577	12.620	HH	38331	617082	2.67%	0.201%
205	12.636	12.620	12.672	HH	20854	504866	2.19%	0.164%
206	12.705	12.672	12.722	HH	43921	812560	3.52%	0.265%
207	12.728	12.722	12.750	HH	25340	356431	1.54%	0.116%
208	12.775	12.750	12.815	HH	46832	1052192	4.55%	0.343%
209	12.847	12.815	12.870	HH	80207	1318974	5.71%	0.430%
210	12.890	12.870	12.912	HH	75204	1241961	5.38%	0.405%
211	12.948	12.912	12.979	HH	221303	3677106	15.91%	1.198%
212	13.029	12.979	13.051	HH	1495330	23105209	100.00%	7.528%
213	13.071	13.051	13.088	HH	28761	455631	1.97%	0.148%
214	13.105	13.088	13.120	HH	18758	310879	1.35%	0.101%
215	13.140	13.120	13.153	HH	25277	428123	1.85%	0.139%
216	13.192	13.153	13.212	HH	78187	1709965	7.40%	0.557%
217	13.230	13.212	13.267	HH	60640	1228251	5.32%	0.400%
218	13.330	13.267	13.347	HH	1427806	21696209	93.90%	7.069%
219	13.366	13.347	13.382	HH	179220	2145062	9.28%	0.699%
220	13.396	13.382	13.425	HH	171151	2085185	9.02%	0.679%
221	13.446	13.425	13.460	HH	24537	434626	1.88%	0.142%
222	13.480	13.460	13.493	HH	66743	906110	3.92%	0.295%
223	13.508	13.493	13.532	HH	75351	1087115	4.71%	0.354%
224	13.573	13.532	13.597	HH	94350	1592629	6.89%	0.519%
225	13.609	13.597	13.621	HH	23573	314123	1.36%	0.102%
226	13.645	13.621	13.671	HH	40862	832130	3.60%	0.271%
227	13.702	13.671	13.721	HH	59174	1036132	4.48%	0.338%
228	13.731	13.721	13.741	HH	27998	324002	1.40%	0.106%
229	13.768	13.741	13.797	HH	114060	1909078	8.26%	0.622%
230	13.804	13.797	13.810	HH	21290	165747	0.72%	0.054%
231	13.814	13.810	13.831	HH	21363	248893	1.08%	0.081%
232	13.900	13.831	13.935	HH	198431	4306913	18.64%	1.403%
233	13.964	13.935	13.982	HH	36350	757212	3.28%	0.247%
234	14.007	13.982	14.026	HH	94730	1532009	6.63%	0.499%
235	14.045	14.026	14.067	HH	132886	1853856	8.02%	0.604%
236	14.085	14.067	14.112	HH	66725	1190038	5.15%	0.388%
237	14.150	14.112	14.167	HH	223943	3652769	15.81%	1.190%
238	14.177	14.167	14.197	HH	127963	1565969	6.78%	0.510%
239	14.217	14.197	14.256	HH	134588	2091275	9.05%	0.681%
240	14.290	14.256	14.313	HH	57080	1289106	5.58%	0.420%
241	14.336	14.313	14.358	HH	35860	841194	3.64%	0.274%
242	14.379	14.358	14.393	HH	33105	615632	2.66%	0.201%
243	14.406	14.393	14.441	HH	32948	851001	3.68%	0.277%
244	14.448	14.441	14.471	HH	25734	432315	1.87%	0.141%
245	14.485	14.471	14.519	HH	26342	651985	2.82%	0.212%
246	14.539	14.519	14.554	HH	25590	472540	2.05%	0.154%

247	14.579	14.554	14.593	HH	55533	1004481	4.35%	0.327%
248	14.604	14.593	14.618	HH	48824	672184	2.91%	0.219%
249	14.639	14.618	14.668	HH	132319	2104433	9.11%	0.686%
250	14.683	14.668	14.697	HH	33445	536688	2.32%	0.175%
251	14.739	14.697	14.771	HH	43212	1531857	6.63%	0.499%
252	14.813	14.771	14.835	HH	110473	2306058	9.98%	0.751%
253	14.843	14.835	14.854	HH	44502	478301	2.07%	0.156%
254	14.880	14.854	14.903	HH	219328	3453287	14.95%	1.125%
255	14.923	14.903	14.929	HH	82219	1016638	4.40%	0.331%
256	14.946	14.929	14.980	HH	143469	2333879	10.10%	0.760%
257	15.003	14.980	15.022	HH	54126	1041372	4.51%	0.339%
258	15.055	15.022	15.125	HH	134677	3623279	15.68%	1.181%
259	15.150	15.125	15.167	HH	58314	1087974	4.71%	0.354%
260	15.205	15.167	15.224	HH	636690	9891725	42.81%	3.223%
261	15.252	15.224	15.280	HH	805460	11494150	49.75%	3.745%
262	15.286	15.280	15.314	HH	44417	727461	3.15%	0.237%
263	15.360	15.314	15.405	HH	157701	3529187	15.27%	1.150%
264	15.434	15.405	15.467	HH	76454	1793716	7.76%	0.584%
265	15.499	15.467	15.520	HH	82681	1633779	7.07%	0.532%
266	15.537	15.520	15.596	HH	69756	2316856	10.03%	0.755%
267	15.638	15.596	15.666	HH	92063	2230054	9.65%	0.727%
268	15.682	15.666	15.707	HH	47987	978206	4.23%	0.319%
269	15.733	15.707	15.752	HH	34968	897582	3.88%	0.292%
270	15.780	15.752	15.797	HH	46417	1102593	4.77%	0.359%
271	15.826	15.797	15.846	HH	58252	1372107	5.94%	0.447%
272	15.873	15.846	15.892	HH	143278	2421475	10.48%	0.789%
273	15.909	15.892	15.939	HH	86445	1657916	7.18%	0.540%
274	15.955	15.939	15.970	HH	55547	910335	3.94%	0.297%
275	15.979	15.970	15.984	HH	47606	395597	1.71%	0.129%
276	16.029	15.984	16.066	HH	106220	3500800	15.15%	1.141%
277	16.107	16.066	16.168	HH	75698	2811251	12.17%	0.916%
278	16.190	16.168	16.212	HH	72357	1285885	5.57%	0.419%
279	16.235	16.212	16.254	HH	70493	1340628	5.80%	0.437%
280	16.286	16.254	16.330	HH	197444	4138363	17.91%	1.348%
281	16.362	16.330	16.390	HH	39470	1283491	5.55%	0.418%
282	16.401	16.390	16.413	HH	36561	479571	2.08%	0.156%
283	16.429	16.413	16.438	HH	38002	549583	2.38%	0.179%
284	16.443	16.438	16.447	HH	35632	195436	0.85%	0.064%
285	16.470	16.447	16.485	HH	51066	1006587	4.36%	0.328%
286	16.497	16.485	16.522	HH	54028	1030086	4.46%	0.336%
287	16.547	16.522	16.567	HH	67934	1402783	6.07%	0.457%
288	16.575	16.567	16.596	HH	46656	759774	3.29%	0.248%
289	16.618	16.596	16.628	HH	46373	859684	3.72%	0.280%
290	16.672	16.628	16.692	HH	70940	2160849	9.35%	0.704%
291	16.709	16.692	16.731	HH	63771	1342717	5.81%	0.437%
292	16.781	16.731	16.795	HH	594000	11934124	51.65%	3.888%
293	16.802	16.795	16.833	HH	376081	3871025	16.75%	1.261%
294	16.845	16.833	16.867	HH	46244	909228	3.94%	0.296%
295	16.897	16.867	16.917	HH	168089	2714993	11.75%	0.885%
296	16.929	16.917	16.945	HH	63487	960783	4.16%	0.313%
297	16.955	16.945	16.978	HH	54561	1020980	4.42%	0.333%
298	17.014	16.978	17.034	HH	64588	1810179	7.83%	0.590%
299	17.098	17.034	17.122	HH	438752	9015468	39.02%	2.937%

rteres

300	17.162	17.122	17.191	HH	640475	10054724	43.52%	3.276%
301	17.246	17.191	17.272	HH	280070	6497539	28.12%	2.117%
302	17.297	17.272	17.331	HH	80502	2192823	9.49%	0.714%
303	17.385	17.331	17.400	HHA	81353	2741051	11.86%	0.893%

Sum of corrected areas: 306926021

FG011325.M Fri Jan 31 06:11:46 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:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825MSD	SDG No.:	Q1215
Lab Sample ID:	Q1215-01MSD	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	89 Decanted:
Sample Wt/Vol:	30.08 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
FG015261.D	1	01/30/25 09:15	01/30/25 18:37	PB166361

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	82600	E	207	1870	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	17.7		37 - 130	89%	SPK: 20

Comments:

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

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015261.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 18:37
Operator : YP\AJ
Sample : Q1215-01MSD
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825MSD

Integration File: autoint1.e
Quant Time: Jan 31 05:11:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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...	15.055	2273394	17.723	ug/ml
	Target Compounds				
2)	N-DECANE	4.542	1889813	14.630	ug/ml
3)	N-DODECANE	6.724	1998908	14.672	ug/ml
4)	N-TETRADECANE	8.562	2094909	15.306	ug/ml
5)	N-HEXADECANE	10.178	2745798	19.458	ug/ml
6)	N-OCTADECANE	11.628	2349523	16.017	ug/ml
7)	N-EICOSANE	12.947	3280849	22.566	ug/ml
8)	N-DOCOSANE	14.149	3168918	22.089	ug/ml
10)	N-TETRACOSANE	15.252	11056600	77.414	ug/ml
11)	N-HEXACOSANE	16.285	2769279	19.663	ug/ml
12)	N-OCTACOSANE	17.246	4493749	32.091	ug/ml

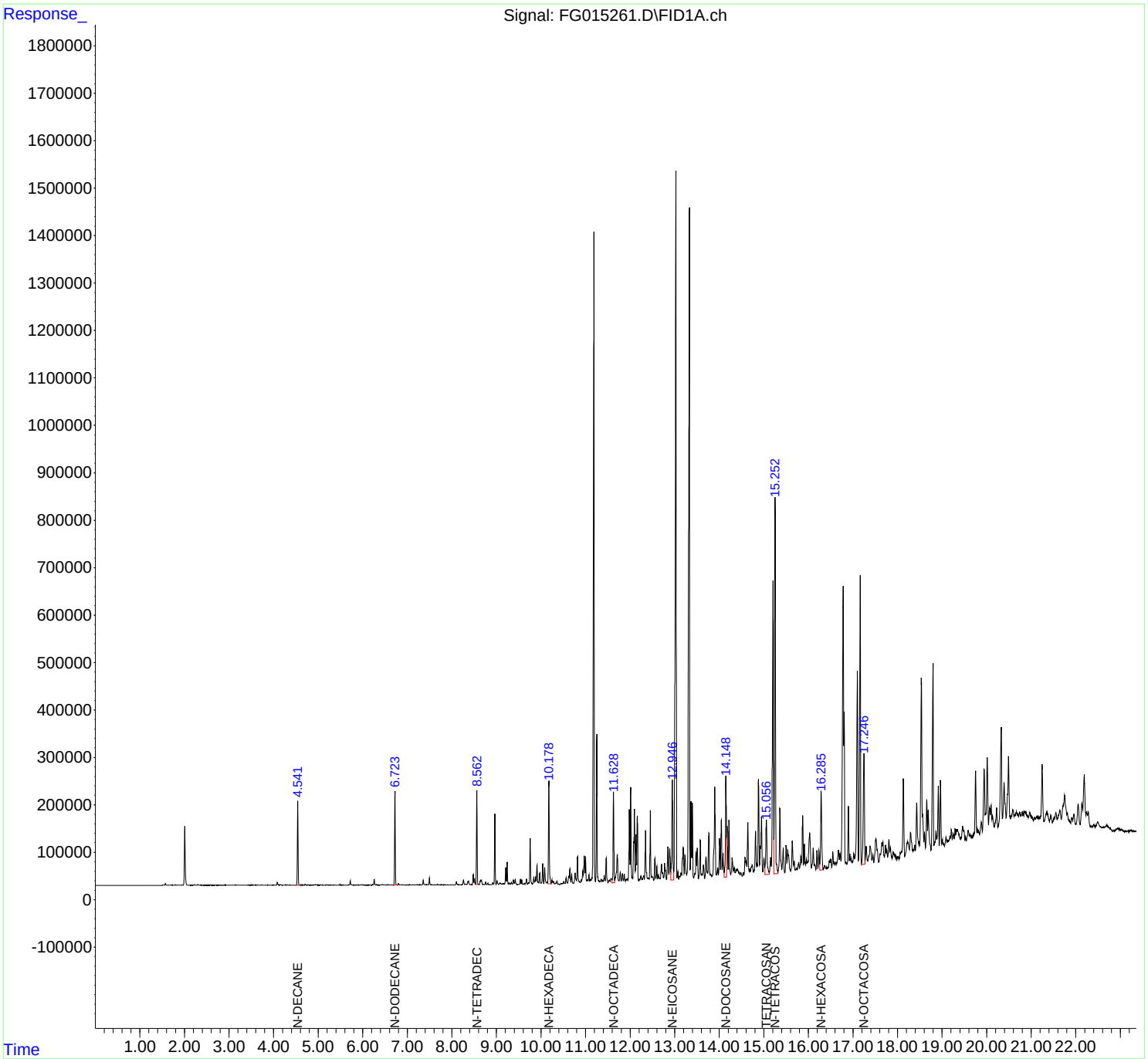
(f)=RT Delta > 1/2 Window (m)=manual int.

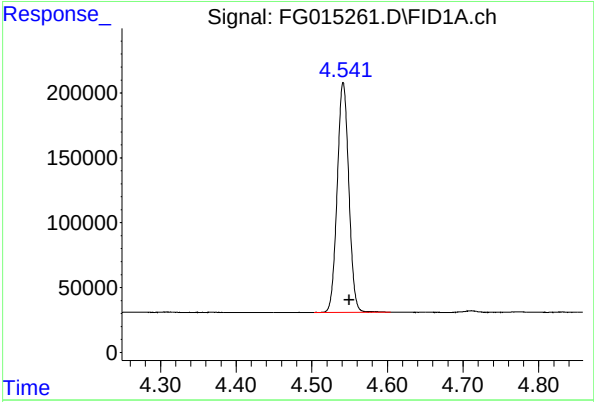
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015261.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 18:37
Operator : YP\AJ
Sample : Q1215-01MSD
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825MSD

Integration File: autoint1.e
Quant Time: Jan 31 05:11:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

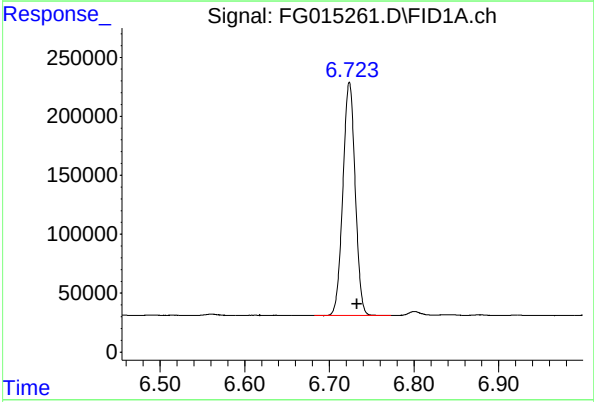




#2 N-DECANE

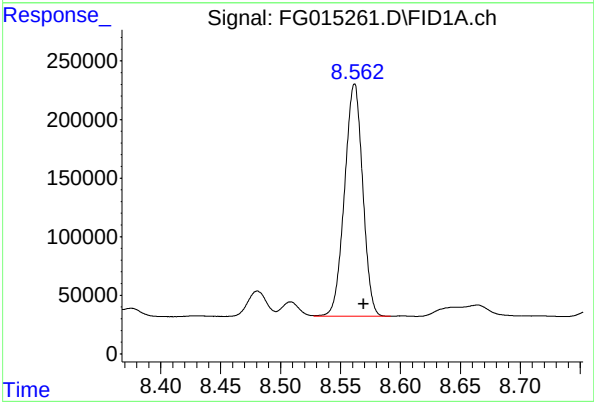
R.T.: 4.542 min
Delta R.T.: -0.008 min
Response: 1889813
Conc: 14.63 ug/ml

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825MSD



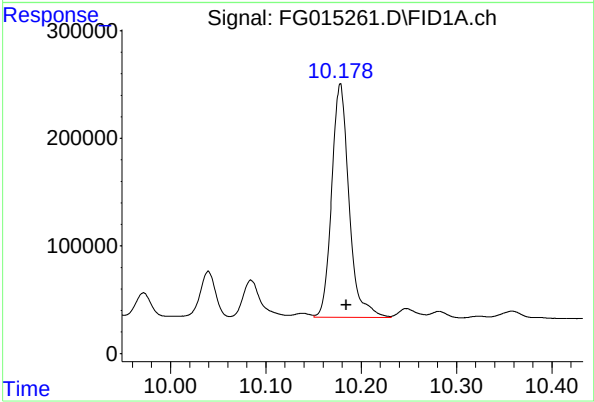
#3 N-DODECANE

R.T.: 6.724 min
Delta R.T.: -0.009 min
Response: 1998908
Conc: 14.67 ug/ml



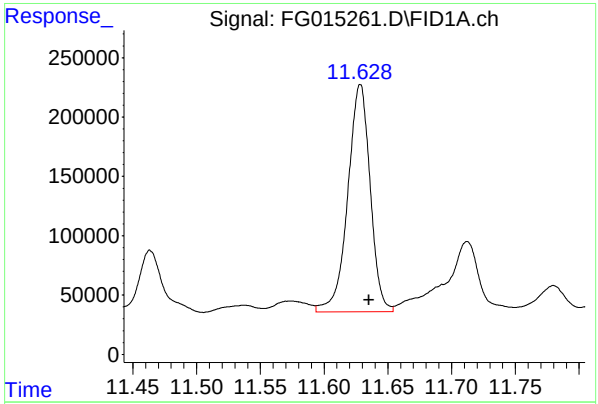
#4 N-TETRADECANE

R.T.: 8.562 min
Delta R.T.: -0.008 min
Response: 2094909
Conc: 15.31 ug/ml



#5 N-HEXADECANE

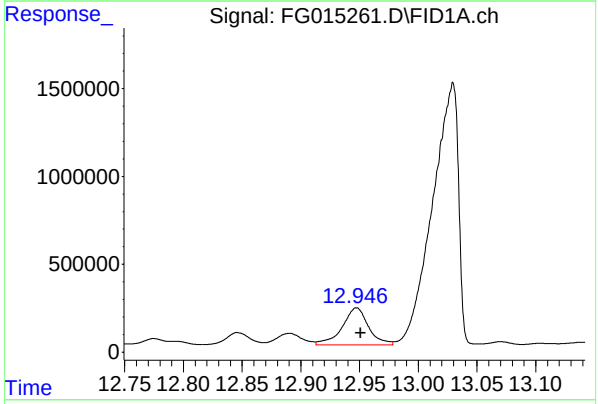
R.T.: 10.178 min
Delta R.T.: -0.006 min
Response: 2745798
Conc: 19.46 ug/ml



#6 N-OCTADECANE

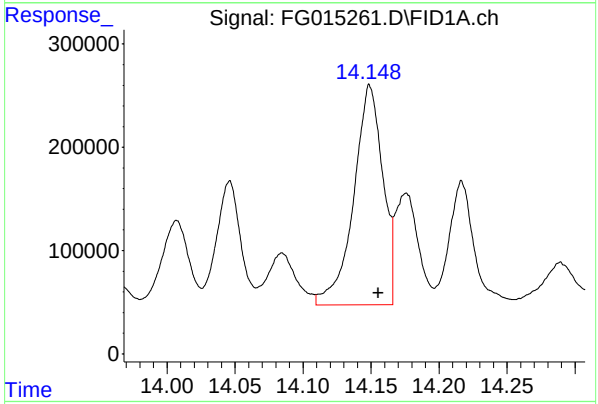
R.T.: 11.628 min
Delta R.T.: -0.007 min
Response: 2349523
Conc: 16.02 ug/ml

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825MSD



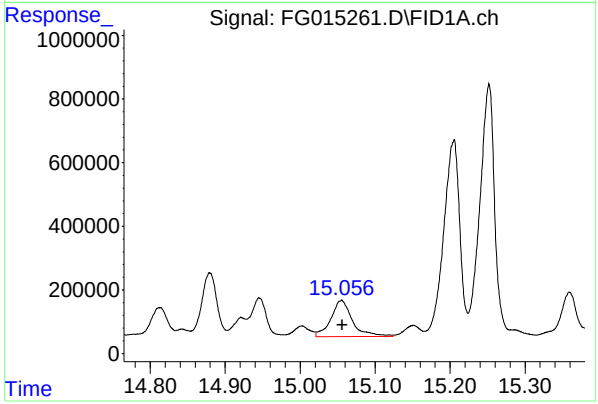
#7 N-EICOSANE

R.T.: 12.947 min
Delta R.T.: -0.003 min
Response: 3280849
Conc: 22.57 ug/ml



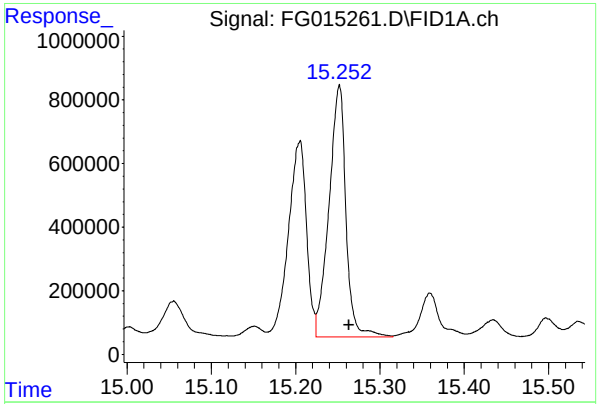
#8 N-DOCOSANE

R.T.: 14.149 min
Delta R.T.: -0.006 min
Response: 3168918
Conc: 22.09 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

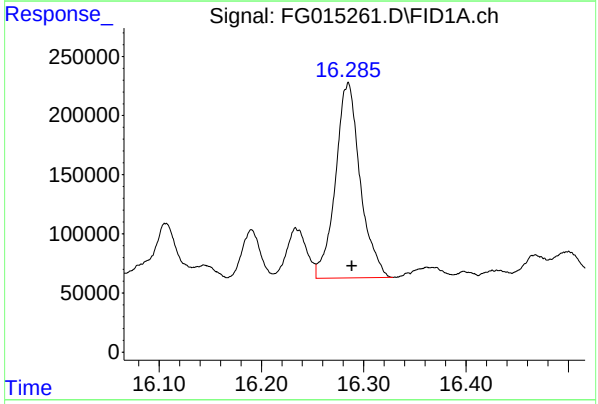
R.T.: 15.055 min
Delta R.T.: 0.000 min
Response: 2273394
Conc: 17.72 ug/ml



#10 N-TETRACOSANE

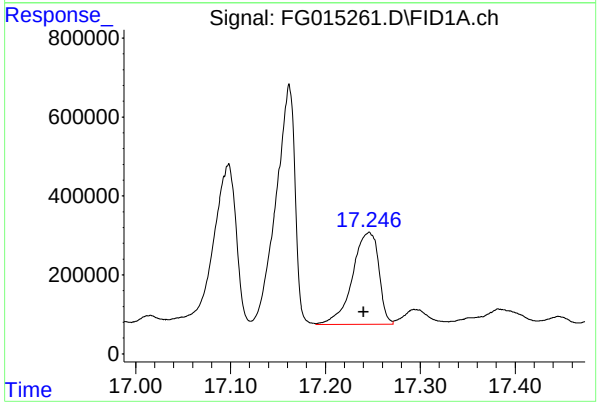
R.T.: 15.252 min
Delta R.T.: -0.011 min
Response: 11056600
Conc: 77.41 ug/ml

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825MSD



#11 N-HEXACOSANE

R.T.: 16.285 min
Delta R.T.: -0.003 min
Response: 2769279
Conc: 19.66 ug/ml



#12 N-OCTACOSANE

R.T.: 17.246 min
Delta R.T.: 0.005 min
Response: 4493749
Conc: 32.09 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015261.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 18:37
Sample : Q1215-01MSD
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.367	4.350	4.400	BH	173	324	0.00%	0.000%
2	4.406	4.400	4.409	PH	-24	-437	-0.00%	-0.000%
3	4.414	4.409	4.419	PH	11	-395	-0.00%	-0.000%
4	4.433	4.419	4.454	PH	14	-1242	-0.01%	-0.000%
5	4.458	4.454	4.469	PH	-36	-782	-0.00%	-0.000%
6	4.486	4.469	4.496	PH	23	-397	-0.00%	-0.000%
7	4.542	4.496	4.578	PH	177400	1886532	8.08%	0.604%
8	4.582	4.578	4.611	HH	632	7663	0.03%	0.002%
9	4.615	4.611	4.636	HH	241	2313	0.01%	0.001%
10	4.649	4.636	4.683	HH	219	2538	0.01%	0.001%
11	4.711	4.683	4.734	PH	1297	15280	0.07%	0.005%
12	4.739	4.734	4.747	HH	131	751	0.00%	0.000%
13	4.773	4.747	4.789	HH	459	6381	0.03%	0.002%
14	4.793	4.789	4.813	HH	218	1923	0.01%	0.001%
15	4.832	4.813	4.844	PH	340	3403	0.01%	0.001%
16	4.850	4.844	4.872	HH	232	1972	0.01%	0.001%
17	4.880	4.872	4.886	HH	144	983	0.00%	0.000%
18	4.890	4.886	4.893	HH	160	457	0.00%	0.000%
19	4.915	4.893	4.931	HH	506	8446	0.04%	0.003%
20	4.935	4.931	4.950	HH	790	4882	0.02%	0.002%
21	4.953	4.950	4.981	HH	420	4364	0.02%	0.001%
22	4.996	4.981	5.018	HH	220	3361	0.01%	0.001%
23	5.021	5.018	5.026	HH	147	582	0.00%	0.000%
24	5.049	5.026	5.073	HH	483	7288	0.03%	0.002%
25	5.102	5.073	5.119	HH	194	1430	0.01%	0.000%
26	5.130	5.119	5.155	PH	86	263	0.00%	0.000%
27	5.182	5.155	5.197	PH	327	4597	0.02%	0.001%
28	5.203	5.197	5.228	HH	283	2918	0.01%	0.001%
29	5.230	5.228	5.235	HH	180	304	0.00%	0.000%
30	5.263	5.235	5.280	PH	291	3347	0.01%	0.001%
31	5.304	5.280	5.321	HH	471	5009	0.02%	0.002%
32	5.331	5.321	5.344	HH	167	1171	0.01%	0.000%
33	5.363	5.344	5.417	HH	338	4017	0.02%	0.001%
34	5.434	5.417	5.450	PH	54	-342	-0.00%	-0.000%
35	5.465	5.450	5.470	PH	45	-79	-0.00%	-0.000%
36	5.490	5.470	5.514	PH	1691	17594	0.08%	0.006%

rteres

37	5.528	5.514	5.539	HH	217	1628	0.01%	0.001%
38	5.543	5.539	5.549	PH	118	197	0.00%	0.000%
39	5.559	5.549	5.574	PH	154	1098	0.00%	0.000%
40	5.577	5.574	5.603	PH	66	-371	-0.00%	-0.000%
41	5.625	5.603	5.642	PH	84	-543	-0.00%	-0.000%
42	5.650	5.642	5.657	PH	-21	-394	-0.00%	-0.000%
43	5.661	5.657	5.669	PH	-40	-509	-0.00%	-0.000%
44	5.688	5.669	5.704	PH	1056	10631	0.05%	0.003%
45	5.721	5.704	5.755	HH	8502	88510	0.38%	0.028%
46	5.761	5.755	5.788	HH	407	4690	0.02%	0.002%
47	5.797	5.788	5.827	HH	219	2709	0.01%	0.001%
48	5.877	5.827	5.904	HH	537	9735	0.04%	0.003%
49	5.949	5.904	5.963	HH	539	8481	0.04%	0.003%
50	5.978	5.963	5.993	HH	1044	12166	0.05%	0.004%
51	6.004	5.993	6.038	HH	472	7197	0.03%	0.002%
52	6.061	6.038	6.089	HH	249	5262	0.02%	0.002%
53	6.102	6.089	6.118	HH	345	3429	0.01%	0.001%
54	6.128	6.118	6.143	HH	225	1967	0.01%	0.001%
55	6.161	6.143	6.189	HH	407	5503	0.02%	0.002%
56	6.223	6.189	6.237	HH	1131	13686	0.06%	0.004%
57	6.258	6.237	6.296	HH	11987	133058	0.57%	0.043%
58	6.307	6.296	6.337	HH	883	13004	0.06%	0.004%
59	6.366	6.337	6.384	HH	430	7251	0.03%	0.002%
60	6.410	6.384	6.421	HH	583	9727	0.04%	0.003%
61	6.438	6.421	6.478	HH	1606	26811	0.11%	0.009%
62	6.491	6.478	6.508	HH	565	8213	0.04%	0.003%
63	6.515	6.508	6.536	HH	463	5861	0.03%	0.002%
64	6.561	6.536	6.589	HH	1375	20155	0.09%	0.006%
65	6.613	6.589	6.623	HH	500	7466	0.03%	0.002%
66	6.637	6.623	6.662	HH	431	7854	0.03%	0.003%
67	6.678	6.662	6.694	HH	294	4535	0.02%	0.001%
68	6.724	6.694	6.777	HH	198118	2010022	8.61%	0.644%
69	6.801	6.777	6.824	HH	3635	42711	0.18%	0.014%
70	6.840	6.824	6.862	HH	905	15524	0.07%	0.005%
71	6.875	6.862	6.905	HH	810	12232	0.05%	0.004%
72	6.918	6.905	6.945	HH	516	8739	0.04%	0.003%
73	6.949	6.945	6.966	HH	327	3338	0.01%	0.001%
74	6.973	6.966	6.983	HH	330	2709	0.01%	0.001%
75	7.006	6.983	7.029	HH	886	12311	0.05%	0.004%
76	7.049	7.029	7.081	HH	965	16741	0.07%	0.005%
77	7.091	7.081	7.099	HH	362	3332	0.01%	0.001%
78	7.129	7.099	7.153	HH	882	15927	0.07%	0.005%
79	7.160	7.153	7.196	HH	438	8164	0.03%	0.003%
80	7.217	7.196	7.243	HH	1362	22245	0.10%	0.007%
81	7.260	7.243	7.280	HH	1140	18946	0.08%	0.006%
82	7.297	7.280	7.325	HH	1102	19975	0.09%	0.006%
83	7.359	7.325	7.383	HH	10533	116620	0.50%	0.037%
84	7.397	7.383	7.430	HH	1414	28201	0.12%	0.009%
85	7.449	7.430	7.475	HH	1564	25081	0.11%	0.008%
86	7.497	7.475	7.529	HH	14793	156575	0.67%	0.050%
87	7.544	7.529	7.603	HH	696	23143	0.10%	0.007%
88	7.620	7.603	7.640	HH	688	12292	0.05%	0.004%
89	7.675	7.640	7.713	HH	2145	40449	0.17%	0.013%

90	7.739	7.713	7.777	HH	875	25677	0.11%	0.008%
91	7.797	7.777	7.801	HH	751	8478	0.04%	0.003%
92	7.821	7.801	7.837	HH	890	16217	0.07%	0.005%
93	7.851	7.837	7.879	HH	1003	17269	0.07%	0.006%
94	7.900	7.879	7.921	HH	832	14600	0.06%	0.005%
95	7.933	7.921	7.939	HH	426	4203	0.02%	0.001%
96	7.963	7.939	7.977	HH	819	13272	0.06%	0.004%
97	7.990	7.977	7.998	HH	535	5924	0.03%	0.002%
98	8.013	7.998	8.033	HH	668	12000	0.05%	0.004%
99	8.039	8.033	8.044	HH	462	2797	0.01%	0.001%
100	8.049	8.044	8.057	HH	483	3508	0.02%	0.001%
101	8.067	8.057	8.073	HH	562	4515	0.02%	0.001%
102	8.103	8.073	8.150	HH	7073	111075	0.48%	0.036%
103	8.167	8.150	8.192	HH	999	22215	0.10%	0.007%
104	8.201	8.192	8.223	HH	1042	15975	0.07%	0.005%
105	8.261	8.223	8.294	HH	10943	163285	0.70%	0.052%
106	8.315	8.294	8.339	HH	2453	45266	0.19%	0.014%
107	8.360	8.339	8.367	HH	7868	79181	0.34%	0.025%
108	8.375	8.367	8.411	HH	8137	100329	0.43%	0.032%
109	8.432	8.411	8.453	HH	1582	32619	0.14%	0.010%
110	8.481	8.453	8.496	HH	22875	264554	1.13%	0.085%
111	8.508	8.496	8.528	HH	13529	145695	0.62%	0.047%
112	8.562	8.528	8.592	HH	199784	2144442	9.19%	0.687%
113	8.603	8.592	8.614	HH	1539	18704	0.08%	0.006%
114	8.646	8.614	8.649	HH	8957	118417	0.51%	0.038%
115	8.664	8.649	8.710	HH	10894	194781	0.83%	0.062%
116	8.715	8.710	8.739	HH	1582	22997	0.10%	0.007%
117	8.758	8.739	8.780	HH	6709	80414	0.34%	0.026%
118	8.807	8.780	8.826	HH	4355	59648	0.26%	0.019%
119	8.838	8.826	8.854	HH	1330	19602	0.08%	0.006%
120	8.869	8.854	8.884	HH	1179	18471	0.08%	0.006%
121	8.892	8.884	8.896	HH	989	7273	0.03%	0.002%
122	8.917	8.896	8.940	HH	4940	72275	0.31%	0.023%
123	8.966	8.940	8.994	HH	149798	1504415	6.45%	0.482%
124	9.015	8.994	9.056	HH	9337	159062	0.68%	0.051%
125	9.084	9.056	9.100	HH	5151	89426	0.38%	0.029%
126	9.109	9.100	9.123	HH	3069	37724	0.16%	0.012%
127	9.135	9.123	9.146	HH	2928	34734	0.15%	0.011%
128	9.161	9.146	9.186	HH	3085	63797	0.27%	0.020%
129	9.211	9.186	9.226	HH	37404	425476	1.82%	0.136%
130	9.242	9.226	9.268	HH	48843	524573	2.25%	0.168%
131	9.283	9.268	9.316	HH	5132	90456	0.39%	0.029%
132	9.336	9.316	9.363	HH	6064	93284	0.40%	0.030%
133	9.383	9.363	9.404	HH	10513	149895	0.64%	0.048%
134	9.423	9.404	9.469	HH	12284	188198	0.81%	0.060%
135	9.487	9.469	9.514	HH	1623	38041	0.16%	0.012%
136	9.540	9.514	9.556	HH	12348	154030	0.66%	0.049%
137	9.571	9.556	9.601	HH	10567	133350	0.57%	0.043%
138	9.623	9.601	9.640	HH	4192	60975	0.26%	0.020%
139	9.677	9.640	9.699	HH	13350	207429	0.89%	0.066%
140	9.718	9.699	9.731	HH	5021	70809	0.30%	0.023%
141	9.759	9.731	9.813	HH	98977	1153625	4.94%	0.369%

142	9.840	9.813	9.855	HH	16442	221362	0.95%	0.071%
143	9.882	9.855	9.894	HH	17476	251516	1.08%	0.081%
144	9.912	9.894	9.933	HH	41861	529355	2.27%	0.169%
145	9.941	9.933	9.952	HH	6736	67508	0.29%	0.022%
146	9.972	9.952	10.004	HH	25794	360533	1.54%	0.115%
147	10.040	10.004	10.062	HH	45853	579766	2.48%	0.186%
148	10.084	10.062	10.124	HH	37502	554282	2.37%	0.177%
149	10.138	10.124	10.151	HH	6575	90768	0.39%	0.029%
150	10.178	10.151	10.230	HH	220057	2885197	12.36%	0.924%
151	10.247	10.230	10.268	HH	10892	168611	0.72%	0.054%
152	10.282	10.268	10.306	HH	8256	122982	0.53%	0.039%
153	10.324	10.306	10.334	HH	3872	55909	0.24%	0.018%
154	10.358	10.334	10.428	HH	8616	213078	0.91%	0.068%
155	10.453	10.428	10.469	HH	3703	68449	0.29%	0.022%
156	10.485	10.469	10.494	HH	3244	43530	0.19%	0.014%
157	10.511	10.494	10.528	HH	7345	106224	0.46%	0.034%
158	10.537	10.528	10.544	HH	3740	33017	0.14%	0.011%
159	10.563	10.544	10.597	HH	14868	254336	1.09%	0.081%
160	10.624	10.597	10.633	HH	18978	260685	1.12%	0.083%
161	10.649	10.633	10.672	HH	34509	497172	2.13%	0.159%
162	10.689	10.672	10.727	HH	23060	349918	1.50%	0.112%
163	10.767	10.727	10.801	HH	25880	553635	2.37%	0.177%
164	10.820	10.801	10.879	HH	60066	930637	3.99%	0.298%
165	10.905	10.879	10.914	HH	11360	175193	0.75%	0.056%
166	10.940	10.914	10.952	HH	30087	449521	1.93%	0.144%
167	10.973	10.952	10.989	HH	61768	935312	4.01%	0.299%
168	11.002	10.989	11.022	HH	60022	679726	2.91%	0.218%
169	11.048	11.022	11.060	HH	11936	235878	1.01%	0.076%
170	11.078	11.060	11.096	HH	21313	321901	1.38%	0.103%
171	11.111	11.096	11.125	HH	12177	188716	0.81%	0.060%
172	11.143	11.125	11.149	HH	16210	190482	0.82%	0.061%
173	11.190	11.149	11.226	HH	1372779	17340471	74.30%	5.552%
174	11.253	11.226	11.293	HH	316836	3446269	14.77%	1.103%
175	11.302	11.293	11.319	HH	9757	132065	0.57%	0.042%
176	11.351	11.319	11.373	HH	12460	295145	1.26%	0.094%
177	11.388	11.373	11.402	HH	10875	159670	0.68%	0.051%
178	11.420	11.402	11.443	HH	20147	334869	1.43%	0.107%
179	11.463	11.443	11.505	HH	56985	853102	3.66%	0.273%
180	11.537	11.505	11.554	HH	10676	248675	1.07%	0.080%
181	11.574	11.554	11.594	HH	14075	282468	1.21%	0.090%
182	11.628	11.594	11.654	HH	196635	2530648	10.84%	0.810%
183	11.712	11.654	11.750	HH	64353	1459038	6.25%	0.467%
184	11.780	11.750	11.802	HH	27245	504956	2.16%	0.162%
185	11.827	11.802	11.849	HH	24143	440926	1.89%	0.141%
186	11.870	11.849	11.893	HH	23590	393901	1.69%	0.126%
187	11.909	11.893	11.920	HH	11920	178870	0.77%	0.057%
188	11.933	11.920	11.953	HH	14090	231376	0.99%	0.074%
189	11.982	11.953	11.997	HH	159713	1927290	8.26%	0.617%
190	12.014	11.997	12.035	HH	206783	2314885	9.92%	0.741%
191	12.045	12.035	12.057	HH	17987	207574	0.89%	0.066%
192	12.098	12.057	12.115	HH	160847	2763093	11.84%	0.885%
193	12.131	12.115	12.145	HH	105103	1258077	5.39%	0.403%
194	12.162	12.145	12.192	HH	145946	1857101	7.96%	0.595%

rteres

195	12.206	12.192	12.219	HH	13046	186801	0.80%	0.060%
196	12.244	12.219	12.263	HH	19695	405647	1.74%	0.130%
197	12.303	12.263	12.320	HH	19733	510397	2.19%	0.163%
198	12.346	12.320	12.389	HH	114726	1813921	7.77%	0.581%
199	12.396	12.389	12.406	HH	14850	152993	0.66%	0.049%
200	12.416	12.406	12.429	HH	15268	190921	0.82%	0.061%
201	12.454	12.429	12.479	HH	156742	1980713	8.49%	0.634%
202	12.484	12.479	12.503	HH	17533	240510	1.03%	0.077%
203	12.510	12.503	12.530	HH	17063	245840	1.05%	0.079%
204	12.556	12.530	12.577	HH	56129	808285	3.46%	0.259%
205	12.601	12.577	12.619	HH	39984	626309	2.68%	0.201%
206	12.636	12.619	12.669	HH	21556	501597	2.15%	0.161%
207	12.704	12.669	12.722	HH	44224	859435	3.68%	0.275%
208	12.729	12.722	12.749	HH	26540	356226	1.53%	0.114%
209	12.775	12.749	12.815	HH	46252	1070660	4.59%	0.343%
210	12.846	12.815	12.869	HH	80677	1324219	5.67%	0.424%
211	12.891	12.869	12.913	HH	76795	1285684	5.51%	0.412%
212	12.947	12.913	12.978	HH	220725	3706453	15.88%	1.187%
213	13.029	12.978	13.051	HH	1505902	23339030	100.00%	7.472%
214	13.070	13.051	13.089	HH	29245	464892	1.99%	0.149%
215	13.104	13.089	13.120	HH	19229	324879	1.39%	0.104%
216	13.141	13.120	13.154	HH	25882	439507	1.88%	0.141%
217	13.192	13.154	13.211	HH	78737	1710867	7.33%	0.548%
218	13.229	13.211	13.266	HH	62071	1255737	5.38%	0.402%
219	13.330	13.266	13.347	HH	1423264	21917130	93.91%	7.017%
220	13.366	13.347	13.380	HH	175541	2135307	9.15%	0.684%
221	13.395	13.380	13.425	HH	173551	2145605	9.19%	0.687%
222	13.449	13.425	13.459	HH	25001	434666	1.86%	0.139%
223	13.479	13.459	13.492	HH	68724	918894	3.94%	0.294%
224	13.507	13.492	13.532	HH	78123	1100959	4.72%	0.352%
225	13.573	13.532	13.597	HH	95362	1621868	6.95%	0.519%
226	13.608	13.597	13.620	HH	23649	310903	1.33%	0.100%
227	13.646	13.620	13.671	HH	42261	867050	3.72%	0.278%
228	13.703	13.671	13.722	HH	59434	1067051	4.57%	0.342%
229	13.730	13.722	13.742	HH	28510	322163	1.38%	0.103%
230	13.767	13.742	13.795	HH	110026	1910015	8.18%	0.611%
231	13.804	13.795	13.831	HH	22474	449035	1.92%	0.144%
232	13.899	13.831	13.934	HH	206766	4363573	18.70%	1.397%
233	13.964	13.934	13.981	HH	36207	764789	3.28%	0.245%
234	14.007	13.981	14.026	HH	98575	1575798	6.75%	0.504%
235	14.046	14.026	14.066	HH	136962	1874954	8.03%	0.600%
236	14.085	14.066	14.109	HH	66992	1167929	5.00%	0.374%
237	14.149	14.109	14.166	HH	229979	3735624	16.01%	1.196%
238	14.176	14.166	14.197	HH	124990	1586212	6.80%	0.508%
239	14.217	14.197	14.256	HH	136678	2140487	9.17%	0.685%
240	14.289	14.256	14.314	HH	57895	1314568	5.63%	0.421%
241	14.335	14.314	14.361	HH	37063	897280	3.84%	0.287%
242	14.378	14.361	14.390	HH	33478	532318	2.28%	0.170%
243	14.406	14.390	14.440	HH	34053	901425	3.86%	0.289%
244	14.451	14.440	14.467	HH	26476	412880	1.77%	0.132%
245	14.482	14.467	14.514	HH	26758	655515	2.81%	0.210%
246	14.538	14.514	14.554	HH	26295	537045	2.30%	0.172%

rteres

247	14.578	14.554	14.598	HH	58257	1173299	5.03%	0.376%
248	14.601	14.598	14.618	HH	48504	541431	2.32%	0.173%
249	14.639	14.618	14.669	HH	132067	2132427	9.14%	0.683%
250	14.684	14.669	14.699	HH	34223	569710	2.44%	0.182%
251	14.737	14.699	14.769	HH	43181	1494879	6.41%	0.479%
252	14.813	14.769	14.834	HH	113411	2375752	10.18%	0.761%
253	14.842	14.834	14.854	HH	46132	500758	2.15%	0.160%
254	14.880	14.854	14.903	HH	221830	3494138	14.97%	1.119%
255	14.921	14.903	14.928	HH	82946	998601	4.28%	0.320%
256	14.946	14.928	14.977	HH	143807	2364127	10.13%	0.757%
257	15.002	14.977	15.021	HH	55787	1107990	4.75%	0.355%
258	15.055	15.021	15.124	HH	137398	3669654	15.72%	1.175%
259	15.151	15.124	15.167	HH	58627	1118475	4.79%	0.358%
260	15.205	15.167	15.224	HH	640699	10021806	42.94%	3.208%
261	15.252	15.224	15.315	HH	816520	12363472	52.97%	3.958%
262	15.359	15.315	15.402	HH	162377	3533004	15.14%	1.131%
263	15.434	15.402	15.467	HH	78236	1883575	8.07%	0.603%
264	15.497	15.467	15.518	HH	84062	1609058	6.89%	0.515%
265	15.535	15.518	15.599	HH	73035	2495218	10.69%	0.799%
266	15.637	15.599	15.665	HH	92922	2194643	9.40%	0.703%
267	15.680	15.665	15.701	HH	49594	904878	3.88%	0.290%
268	15.730	15.701	15.749	HH	35774	977634	4.19%	0.313%
269	15.780	15.749	15.798	HH	47980	1185001	5.08%	0.379%
270	15.829	15.798	15.845	HH	60575	1375511	5.89%	0.440%
271	15.871	15.845	15.891	HH	146342	2462562	10.55%	0.788%
272	15.908	15.891	15.941	HH	86279	1771274	7.59%	0.567%
273	15.953	15.941	15.968	HH	55670	827865	3.55%	0.265%
274	15.979	15.968	15.985	HH	48098	486853	2.09%	0.156%
275	16.027	15.985	16.067	HH	109791	3562087	15.26%	1.140%
276	16.107	16.067	16.133	HH	78079	2050771	8.79%	0.657%
277	16.144	16.133	16.167	HH	42862	790376	3.39%	0.253%
278	16.190	16.167	16.212	HH	72760	1359254	5.82%	0.435%
279	16.234	16.212	16.253	HH	73920	1369111	5.87%	0.438%
280	16.285	16.253	16.329	HH	197562	4220552	18.08%	1.351%
281	16.362	16.329	16.388	HH	40921	1310191	5.61%	0.419%
282	16.398	16.388	16.412	HH	37456	528457	2.26%	0.169%
283	16.431	16.412	16.445	HH	38337	719421	3.08%	0.230%
284	16.468	16.445	16.481	HH	51416	982445	4.21%	0.315%
285	16.500	16.481	16.522	HH	54511	1195559	5.12%	0.383%
286	16.546	16.522	16.567	HH	70067	1433700	6.14%	0.459%
287	16.577	16.567	16.597	HH	48818	811660	3.48%	0.260%
288	16.618	16.597	16.633	HH	48884	1006799	4.31%	0.322%
289	16.673	16.633	16.691	HH	73904	2075032	8.89%	0.664%
290	16.709	16.691	16.732	HH	66961	1443519	6.19%	0.462%
291	16.779	16.732	16.794	HH	630063	11969052	51.28%	3.832%
292	16.802	16.794	16.833	HH	363882	3998775	17.13%	1.280%
293	16.841	16.833	16.864	HH	47615	856217	3.67%	0.274%
294	16.896	16.864	16.916	HH	166376	2857210	12.24%	0.915%
295	16.928	16.916	16.945	HH	65633	1001456	4.29%	0.321%
296	16.955	16.945	16.977	HH	56600	1012766	4.34%	0.324%
297	16.988	16.977	16.996	HH	50958	552234	2.37%	0.177%
298	17.016	16.996	17.036	HH	66845	1412859	6.05%	0.452%
299	17.098	17.036	17.122	HH	448264	9134213	39.14%	2.924%

rteres

300	17.162	17.122	17.190	HH	649647	10239143	43.87%	3.278%
301	17.246	17.190	17.272	HH	276982	6636314	28.43%	2.125%
302	17.294	17.272	17.331	HH	81803	2273743	9.74%	0.728%
303	17.383	17.331	17.401	HHA	82871	2845856	12.19%	0.911%

Sum of corrected areas: 312356280

FG011325.M Fri Jan 31 06:12:15 2025

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

Manual Integration Report

Sample ID	ClientId ID	File ID	Sequence ID	Parameter	Supervised By	Supervised On	Reason
50 PPM TRPH STD		FG015247.D	FG013025	N-OCTACOSANE	Ankita	1/31/2025 11:08:12 AM	Peak Integrated by Software incorrectly
Q1215-01		FG015251.D	FG013025	TETRACOSANE-d50 (SURROGA	Ankita	1/31/2025 11:08:13 AM	Peak Integrated by Software incorrectly
I.BLK		FG015258.D	FG013025	TETRACOSANE-d50 (SURROGA	Ankita	1/31/2025 11:08:14 AM	Peak Integrated by Software incorrectly
Q1216-09		FG015266.D	FG013025	TETRACOSANE-d50 (SURROGA	Ankita	1/31/2025 11:08:16 AM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FG015270.D	FG013025	N-OCTACOSANE	Ankita	1/31/2025 11:08:18 AM	Peak Integrated by Software incorrectly

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

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG011325

Review By	yogesh	Review On	1/13/2025 12:01:44 PM		
Supervise By	Ankita	Supervise On	1/14/2025 8:47:57 AM		
SubDirectory	FG011325	HP Acquire Method		HP Processing Method	FG011325

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	FG015054.D	13 Jan 2025 08:20	YP\AJ	Ok
2	I.BLK	FG015055.D	13 Jan 2025 08:49	YP\AJ	Ok
3	100 TRPH STD	FG015056.D	13 Jan 2025 09:17	YP\AJ	Not Ok
4	50 TRPH STD	FG015057.D	13 Jan 2025 09:45	YP\AJ	Ok
5	20 TRPH STD	FG015058.D	13 Jan 2025 10:14	YP\AJ	Ok
6	10 TRPH STD	FG015059.D	13 Jan 2025 10:42	YP\AJ	Ok
7	5 TRPH STD	FG015060.D	13 Jan 2025 11:11	YP\AJ	Ok
8	100 TRPH STD	FG015061.D	13 Jan 2025 11:39	YP\AJ	Ok
9	FG011325ICV	FG015062.D	13 Jan 2025 12:07	YP\AJ	Ok

M : Manual Integration

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

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG013025

Review By	yogesh	Review On	1/30/2025 11:31:42 AM		
Supervise By	Ankita	Supervise On	1/31/2025 11:08:29 AM		
SubDirectory	FG013025	HP Acquire Method		HP Processing Method	FG011325

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	FG015245.D	30 Jan 2025 08:53	YP\AJ	Ok
2	I.BLK	FG015246.D	30 Jan 2025 10:25	YP\AJ	Ok
3	50 PPM TRPH STD	FG015247.D	30 Jan 2025 10:54	YP\AJ	Ok,M
4	RT MARKER	FG015248.D	30 Jan 2025 11:50	YP\AJ	Ok
5	PB166361BS	FG015249.D	30 Jan 2025 12:28	YP\AJ	Ok
6	PB166361BL	FG015250.D	30 Jan 2025 12:56	YP\AJ	Ok
7	Q1215-01	FG015251.D	30 Jan 2025 13:25	YP\AJ	Dilution
8	Q1215-05	FG015252.D	30 Jan 2025 13:53	YP\AJ	Dilution
9	Q1216-01	FG015253.D	30 Jan 2025 14:22	YP\AJ	Dilution
10	Q1216-05	FG015254.D	30 Jan 2025 14:50	YP\AJ	Dilution
11	Q1216-09	FG015255.D	30 Jan 2025 15:19	YP\AJ	Dilution
12	Q1216-13	FG015256.D	30 Jan 2025 15:47	YP\AJ	Dilution
13	Q1216-17	FG015257.D	30 Jan 2025 16:15	YP\AJ	Dilution
14	I.BLK	FG015258.D	30 Jan 2025 16:44	YP\AJ	Ok,M
15	50 PPM TRPH STD	FG015259.D	30 Jan 2025 17:12	YP\AJ	Ok
16	Q1215-01MS	FG015260.D	30 Jan 2025 18:09	YP\AJ	Ok
17	Q1215-01MSD	FG015261.D	30 Jan 2025 18:37	YP\AJ	Ok
18	Q1215-01	FG015262.D	30 Jan 2025 19:06	YP\AJ	Ok
19	Q1215-05	FG015263.D	30 Jan 2025 19:34	YP\AJ	Ok
20	Q1216-01	FG015264.D	30 Jan 2025 20:02	YP\AJ	Ok
21	Q1216-05	FG015265.D	30 Jan 2025 20:31	YP\AJ	Ok

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

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG013025

Review By	yogesh	Review On	1/30/2025 11:31:42 AM		
Supervise By	Ankita	Supervise On	1/31/2025 11:08:29 AM		
SubDirectory	FG013025	HP Acquire Method		HP Processing Method	FG011325

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	Q1216-09	FG015266.D	30 Jan 2025 21:00	YP\AJ	Ok,M
23	Q1216-13	FG015267.D	30 Jan 2025 21:28	YP\AJ	Ok
24	Q1216-17	FG015268.D	30 Jan 2025 21:56	YP\AJ	Ok
25	I.BLK	FG015269.D	30 Jan 2025 22:25	YP\AJ	Ok
26	50 PPM TRPH STD	FG015270.D	30 Jan 2025 23:22	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_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG011325

Review By	yogesh	Review On	1/13/2025 12:01:44 PM		
Supervise By	Ankita	Supervise On	1/14/2025 8:47:57 AM		
SubDirectory	FG011325	HP Acquire Method		HP Processing Method	FG011325

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		FG015054.D	13 Jan 2025 08:20		YP\AJ	Ok
2	I.BLK		FG015055.D	13 Jan 2025 08:49		YP\AJ	Ok
3	100 TRPH STD		FG015056.D	13 Jan 2025 09:17	NOT USE	YP\AJ	Not Ok
4	50 TRPH STD		FG015057.D	13 Jan 2025 09:45		YP\AJ	Ok
5	20 TRPH STD		FG015058.D	13 Jan 2025 10:14		YP\AJ	Ok
6	10 TRPH STD		FG015059.D	13 Jan 2025 10:42		YP\AJ	Ok
7	5 TRPH STD		FG015060.D	13 Jan 2025 11:11		YP\AJ	Ok
8	100 TRPH STD		FG015061.D	13 Jan 2025 11:39		YP\AJ	Ok
9	FG011325ICV		FG015062.D	13 Jan 2025 12:07		YP\AJ	Ok

M : Manual Integration

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

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG013025

Review By	yogesh	Review On	1/30/2025 11:31:42 AM		
Supervise By	Ankita	Supervise On	1/31/2025 11:08:29 AM		
SubDirectory	FG013025	HP Acquire Method		HP Processing Method	FG011325

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		FG015245.D	30 Jan 2025 08:53		YP\AJ	Ok
2	I.BLK		FG015246.D	30 Jan 2025 10:25		YP\AJ	Ok
3	50 PPM TRPH STD		FG015247.D	30 Jan 2025 10:54		YP\AJ	Ok,M
4	RT MARKER		FG015248.D	30 Jan 2025 11:50		YP\AJ	Ok
5	PB166361BS		FG015249.D	30 Jan 2025 12:28		YP\AJ	Ok
6	PB166361BL		FG015250.D	30 Jan 2025 12:56		YP\AJ	Ok
7	Q1215-01		FG015251.D	30 Jan 2025 13:25	need 10x dilution	YP\AJ	Dilution
8	Q1215-05		FG015252.D	30 Jan 2025 13:53	need 10x dilution	YP\AJ	Dilution
9	Q1216-01		FG015253.D	30 Jan 2025 14:22	need 10x dilution	YP\AJ	Dilution
10	Q1216-05		FG015254.D	30 Jan 2025 14:50	need 10x dilution	YP\AJ	Dilution
11	Q1216-09		FG015255.D	30 Jan 2025 15:19	need 10x dilution	YP\AJ	Dilution
12	Q1216-13		FG015256.D	30 Jan 2025 15:47	need 10x dilution	YP\AJ	Dilution
13	Q1216-17		FG015257.D	30 Jan 2025 16:15	need 10x dilution	YP\AJ	Dilution
14	I.BLK		FG015258.D	30 Jan 2025 16:44		YP\AJ	Ok,M
15	50 PPM TRPH STD		FG015259.D	30 Jan 2025 17:12		YP\AJ	Ok
16	Q1215-01MS		FG015260.D	30 Jan 2025 18:09		YP\AJ	Ok
17	Q1215-01MSD		FG015261.D	30 Jan 2025 18:37		YP\AJ	Ok
18	Q1215-01		FG015262.D	30 Jan 2025 19:06		YP\AJ	Ok

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

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG013025

Review By	yogesh	Review On	1/30/2025 11:31:42 AM		
Supervise By	Ankita	Supervise On	1/31/2025 11:08:29 AM		
SubDirectory	FG013025	HP Acquire Method		HP Processing Method	FG011325

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	Q1215-05		FG015263.D	30 Jan 2025 19:34		YP\AJ	Ok
20	Q1216-01		FG015264.D	30 Jan 2025 20:02		YP\AJ	Ok
21	Q1216-05		FG015265.D	30 Jan 2025 20:31		YP\AJ	Ok
22	Q1216-09		FG015266.D	30 Jan 2025 21:00		YP\AJ	Ok,M
23	Q1216-13		FG015267.D	30 Jan 2025 21:28		YP\AJ	Ok
24	Q1216-17		FG015268.D	30 Jan 2025 21:56		YP\AJ	Ok
25	I.BLK		FG015269.D	30 Jan 2025 22:25		YP\AJ	Ok
26	50 PPM TRPH STD		FG015270.D	30 Jan 2025 23:22		YP\AJ	Ok,M

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 1/31/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 16:45
In Date: 01/30/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:14
Out Date: 01/31/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB134481

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
Q1215-01	JPP-29.1-012825	1	1.15	8.54	9.69	8.75	89.0	
Q1215-03	JPP-29.1-012825	2	1.16	8.48	9.64	8.69	88.8	
Q1215-05	JPP-29.2-012825	3	1.19	8.70	9.89	8.77	87.1	
Q1215-07	JPP-29.2-012825	4	1.15	8.63	9.78	8.81	88.8	
Q1216-01	JPP-18.1-012825	5	1.19	8.45	9.64	8.05	81.2	
Q1216-03	JPP-18.1-012825	6	1.16	8.82	9.98	8.51	83.3	
Q1216-05	JPP-21.1-012825	7	1.15	8.40	9.55	8.83	91.4	
Q1216-07	JPP-21.1-012825	8	1.15	8.75	9.9	9.06	90.4	
Q1216-09	JPP-21.2-012825	9	1.19	8.42	9.61	8.29	84.3	
Q1216-11	JPP-21.2-012825	10	1.15	8.36	9.51	8.2	84.3	
Q1216-13	JPP-26.1-012825	11	1.19	8.46	9.65	7.87	79.0	
Q1216-15	JPP-26.1-012825	12	1.17	8.76	9.93	8.42	82.8	
Q1216-17	JPP-26.2-012825	13	1.16	8.63	9.79	8.52	85.3	
Q1216-19	JPP-26.2-012825	14	1.17	8.51	9.68	8.47	85.8	
Q1232-01	JPP-46.2-012925	15	1.12	8.77	9.89	8.99	89.7	
Q1232-03	JPP-46.2-012925	16	1.15	8.37	9.52	8.62	89.2	
Q1232-05	JPP-46.1-012925	17	1.17	8.50	9.67	9.14	93.8	
Q1232-07	JPP-46.1-012925	18	1.15	8.72	9.87	9.35	94.0	
Q1232-09	JPP-42.1-012925	19	1.14	8.37	9.51	8.56	88.6	
Q1232-11	JPP-42.1-012925	20	1.19	8.43	9.62	8.62	88.1	
Q1232-13	JPP-42.2-012925	21	1.15	8.50	9.65	8.98	92.1	
Q1232-15	JPP-42.2-012925	22	1.15	8.37	9.52	8.95	93.2	
Q1232-17	JPP-51.1-012925	23	1.19	8.42	9.61	9.14	94.4	
Q1232-19	JPP-51.1-012925	24	1.12	8.75	9.87	9.44	95.1	
Q1233-01	WIPE-1	25	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q1233-02	WIPE-2	26	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q1235-01	JPP-51.2-012925	27	1.15	8.60	9.75	8.99	91.2	
Q1235-03	JPP-51.2-012925	28	1.15	8.51	9.66	8.96	91.8	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 1/31/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 16:45
In Date: 01/30/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:14
Out Date: 01/31/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB134481

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
Q1235-05	JPP-16.1-012925	29	1.15	8.75	9.9	8.94	89.0	
Q1235-07	JPP-16.1-012925	30	1.12	8.77	9.89	8.94	89.2	
Q1237-01	HL6PX1	31	1.16	8.53	9.69	9.27	95.1	
Q1237-02	HL6PX2	32	1.16	8.70	9.86	9.28	93.3	
Q1237-03	HL6PX3	33	1.15	8.82	9.97	9.27	92.1	
Q1237-04	HL6PX4	34	1.15	8.78	9.93	9.43	94.3	
Q1237-05	HL6PX5	35	1.17	8.54	9.71	9.33	95.6	
Q1237-06	HL6PX6	36	1.17	8.57	9.74	9.07	92.2	
Q1239-01	286	37	1.14	8.49	9.63	8.68	88.8	
Q1239-04	348	38	1.14	8.83	9.97	9.00	89.0	
Q1239-07	RBR22266	39	1.17	8.74	9.91	9.00	89.6	
Q1239-10	357	40	1.16	8.80	9.96	8.62	84.8	
Q1240-01	MEG-OIL	41	1.00	1.00	2.00	2.00	100.0	oil sample

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

WORKLIST(Hardcopy Internal Chain) (B 13448)

WorkList Name : %1-013025 **WorkList ID :** 187270 **Department :** Wet-Chemistry **Date :** 01-30-2025 07:55:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1215-01	JPP-29.1-012825	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/28/2025	Chemtech -SO
Q1215-03	JPP-29.1-012825	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/28/2025	Chemtech -SO
Q1215-05	JPP-29.2-012825	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/28/2025	Chemtech -SO
Q1215-07	JPP-29.2-012825	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/28/2025	Chemtech -SO
Q1216-01	JPP-18.1-012825	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/28/2025	Chemtech -SO
Q1216-03	JPP-18.1-012825	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/28/2025	Chemtech -SO
Q1216-05	JPP-21.1-012825	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/28/2025	Chemtech -SO
Q1216-07	JPP-21.1-012825	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/28/2025	Chemtech -SO
Q1216-09	JPP-21.2-012825	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/28/2025	Chemtech -SO
Q1216-11	JPP-21.2-012825	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/28/2025	Chemtech -SO
Q1216-13	JPP-26.1-012825	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/28/2025	Chemtech -SO
Q1216-15	JPP-26.1-012825	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/28/2025	Chemtech -SO
Q1216-17	JPP-26.2-012825	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/28/2025	Chemtech -SO
Q1216-19	JPP-26.2-012825	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/28/2025	Chemtech -SO
Q1232-01	JPP-46.2-012925	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/28/2025	Chemtech -SO
Q1232-03	JPP-46.2-012925	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/29/2025	Chemtech -SO
Q1232-05	JPP-46.1-012925	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/29/2025	Chemtech -SO
Q1232-07	JPP-46.1-012925	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/29/2025	Chemtech -SO
Q1232-09	JPP-42.1-012925	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/29/2025	Chemtech -SO
Q1232-11	JPP-42.1-012925	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/29/2025	Chemtech -SO
Q1232-13	JPP-42.2-012925	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/29/2025	Chemtech -SO

Date/Time 01/30/25 1520

Raw Sample Received by: SB WC)

Raw Sample Relinquished by: CJSM

Date/Time 01/30/25 1711

Raw Sample Received by: CF SB

Raw Sample Relinquished by: SB WC)

WORKLIST(Hardcopy Internal Chain)

JB 134481

WorkList Name : %1-013025 **WorkList ID :** 187270 **Department :** Wet-Chemistry **Date :** 01-30-2025 07:55:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1232-15	JPP-42.2-012925	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/29/2025	Chemtech -SO
Q1232-17	JPP-51.1-012925	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/29/2025	Chemtech -SO
Q1232-19	JPP-51.1-012925	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/29/2025	Chemtech -SO
Q1233-01	WIPE-1	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/29/2025	Chemtech -SO
Q1233-02	WIPE-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	N41	01/30/2025	Chemtech -SO
Q1235-01	JPP-51.2-012925	Solid	Percent Solids	Cool 4 deg C	PSEG03	N41	01/30/2025	Chemtech -SO
Q1235-03	JPP-51.2-012925	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/29/2025	Chemtech -SO
Q1235-05	JPP-16.1-012925	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/29/2025	Chemtech -SO
Q1235-07	JPP-16.1-012925	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/29/2025	Chemtech -SO
Q1237-01	HL6PX1	Solid	Percent Solids	Cool 4 deg C	RUTW01	E11	01/29/2025	Chemtech -SO
Q1237-02	HL6PX2	Solid	Percent Solids	Cool 4 deg C	GENV01	N31	01/30/2025	Chemtech -SO
Q1237-03	HL6PX3	Solid	Percent Solids	Cool 4 deg C	GENV01	N31	01/30/2025	Chemtech -SO
Q1237-04	HL6PX4	Solid	Percent Solids	Cool 4 deg C	GENV01	N31	01/30/2025	Chemtech -SO
Q1237-05	HL6PX5	Solid	Percent Solids	Cool 4 deg C	GENV01	N31	01/30/2025	Chemtech -SO
Q1237-06	HL6PX6	Solid	Percent Solids	Cool 4 deg C	GENV01	N31	01/30/2025	Chemtech -SO
Q1239-01	286	Solid	Percent Solids	Cool 4 deg C	GENV01	N31	01/30/2025	Chemtech -SO
Q1239-04	348	Solid	Percent Solids	Cool 4 deg C	PSEG03	N31	01/30/2025	Chemtech -SO
Q1239-07	RBR22266	Solid	Percent Solids	Cool 4 deg C	PSEG03	N31	01/30/2025	Chemtech -SO
Q1239-10	357	Solid	Percent Solids	Cool 4 deg C	PSEG03	N31	01/30/2025	Chemtech -SO
Q1240-01	MEG-OIL	Solid	Percent Solids	Cool 4 deg C	PSEG03	N41	01/30/2025	Chemtech -SO

Date/Time 01/30/25 1512 0

Raw Sample Received by: JB WdC

Raw Sample Relinquished by: CF SM

Date/Time 01/30/25 1720

Raw Sample Received by: CF SM

Raw Sample Relinquished by: JB WdC

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB166361

SOP ID:	M3541-ASE Extraction-14				
Clean Up SOP #:	N/A			**Extraction Start Date :**	01/30/2025
Matrix :	Solid			**Extraction Start Time :**	09:15
Weigh By:	EH	**Extraction By:**	RJ	**Extraction End Date :**	01/30/2025
Balance check:	RJ	**Filter By:**	RJ	**Extraction End Time :**	12:15
Balance ID:	EX-SC-2	**pH Meter ID:**	N/A	**Concentration By:**	EH
pH Strip Lot#:	N/A	**Hood ID:**	3,7	**Supervisor By :**	rajesh

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

Standared Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Surrogate	1.0ML	20 PPM	PP23935
Spike Sol 1	1.0ML	20 PPM	PP23913
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	E3871
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5 ML Vial lot# 2210673.

KD Bath ID:	N/A	**Envap ID:**	NEVAP-02
KD Bath Temperature:	N/A	**Envap Temperature:**	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
01/30/25	RP (Eed Labs)	T-P-Pest/PCB.
12:20	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB166361

Analytical Method: M3541-ASE Extraction-14 **Concentration Date:** 01/30/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB166361BL	PB166361BL	Diesel Range Organics	30.01	N/A	ritesh	Evelyn	1			U5-1
PB166361BS	PB166361BS	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1			2
Q1215-01	JPP-29.1-012825	Diesel Range Organics	30.05	N/A	ritesh	Evelyn	1	C		3
Q1215-01MS	JPP-29.1-012825MS	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1	C		4
Q1215-01MSD	JPP-29.1-012825MSD	Diesel Range Organics	30.08	N/A	ritesh	Evelyn	1	C		5
Q1215-05	JPP-29.2-012825	Diesel Range Organics	30.02	N/A	ritesh	Evelyn	1	C		6
Q1216-01	JPP-18.1-012825	Diesel Range Organics	30.04	N/A	ritesh	Evelyn	1	C		U4-1
Q1216-05	JPP-21.1-012825	Diesel Range Organics	30.01	N/A	ritesh	Evelyn	1	C		2
Q1216-09	JPP-21.2-012825	Diesel Range Organics	30.09	N/A	ritesh	Evelyn	1	C		3
Q1216-13	JPP-26.1-012825	Diesel Range Organics	30.07	N/A	ritesh	Evelyn	1	C		4
Q1216-17	JPP-26.2-012825	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1	C		5

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

166361
9:17

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1215 **WorkList ID :** 187280 **Department :** Extraction **Date :** 01-30-2025 08:19:59

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1215-01	JPP-29.1-012825	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/28/2025	8015D
Q1215-05	JPP-29.2-012825	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/28/2025	8015D
Q1216-01	JPP-18.1-012825	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/28/2025	8015D
Q1216-05	JPP-21.1-012825	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/28/2025	8015D
Q1216-09	JPP-21.2-012825	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/28/2025	8015D
Q1216-13	JPP-26.1-012825	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/28/2025	8015D
Q1216-17	JPP-26.2-012825	Solid	Diesel Range Organics	Cool 4 deg C	RUTW01	E11	01/28/2025	8015D

Date/Time 01/30/25 9:10
Raw Sample Received by: RJ (Ext lab)
Raw Sample Relinquished by: JD (SM)

Date/Time 01/30/25 9:45
Raw Sample Received by: JD (SM)
Raw Sample Relinquished by: RJ (Ext lab)

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

Prep Standard - Chemical Standard Summary

Order ID : Q1215

Test : Diesel Range Organics

Prepbatch ID : PB166361,

Sequence ID/Qc Batch ID: FG013025,

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

Chemical ID :
E2865,E3551,E3822,E3828,E3846,E3848,E3871,P11958,P11959,P13104,P13109,P13213,P13218,P13219,P13492,P13493,P13494,P13495,

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

Extractions STANDARD PREPARATION LOG

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

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3609	20 PPM DRO SPIKE SOLUTION (RESTEK)	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

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
433	100/100 PPM DRO (Restek)	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

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
435	50 PPM ICC DRO STD (Restek)	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

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
438	10 PPM ICC DRO STD (Restek)	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

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

Pest/Pcb STANDARD PREPARATION LOG

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

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

CHEMICAL RECEIPT LOG BOOK

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24K1762005	07/14/2025	01/14/2025 / Rajesh	12/27/2024 / Rajesh	E3871

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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.: 2412662006
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

Avantor Performance Materials LLC

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

Avantor Performance Materials LLC

PO: PO2-798 PRODUCT CODE: SHIP DATE: 12/9/2024

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

12/9-1/24

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 3871

Jamie Croak
Director Quality Operations, Bioscience Production

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

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

P11948
&
P11962
7.8
07/11/2

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

Description : Florida TRPH Standard

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

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

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

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

CERTIFIED VALUES

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

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

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

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

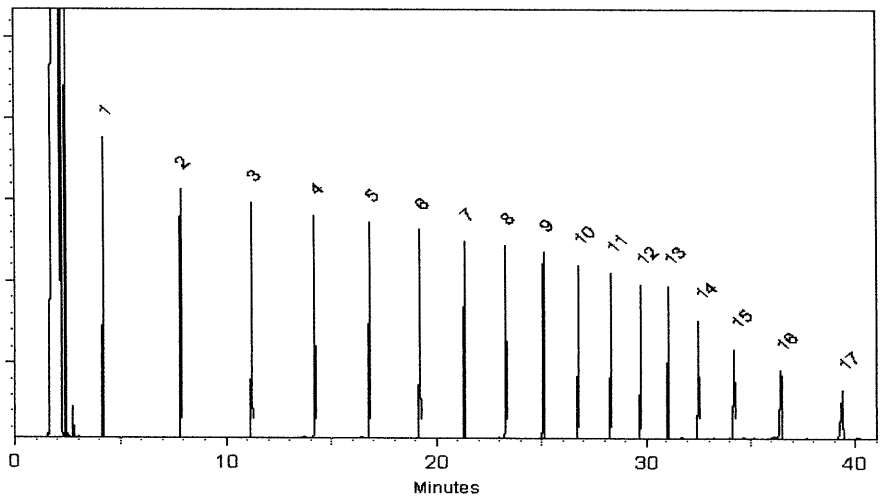
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Brittany Federinko - Operations Tech I

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

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

P11948
&
P11962
7.8
07/11/2

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

Description : Florida TRPH Standard

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

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

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

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

CERTIFIED VALUES

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

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

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

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

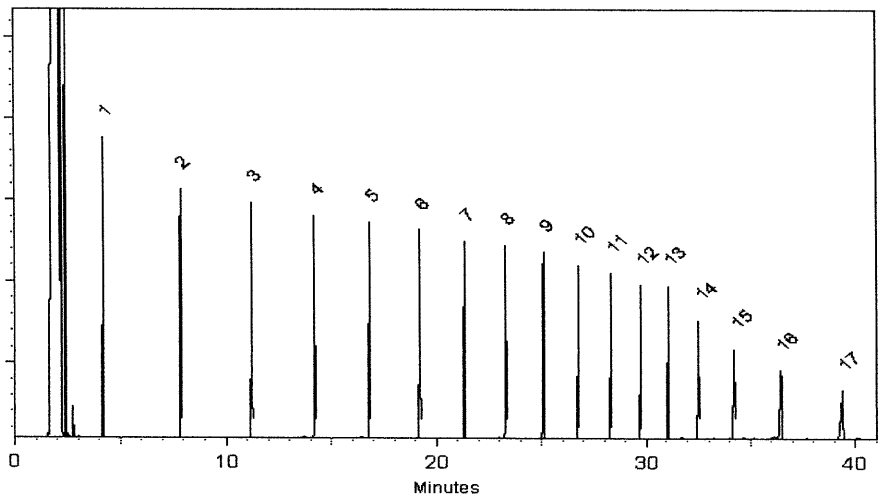
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Brittany Federinko - Operations Tech I

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

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

RESTEK

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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

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

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Florida TRPH Standard

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

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

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

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

P13103 → P13112 Y.P. 01/12/2024

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

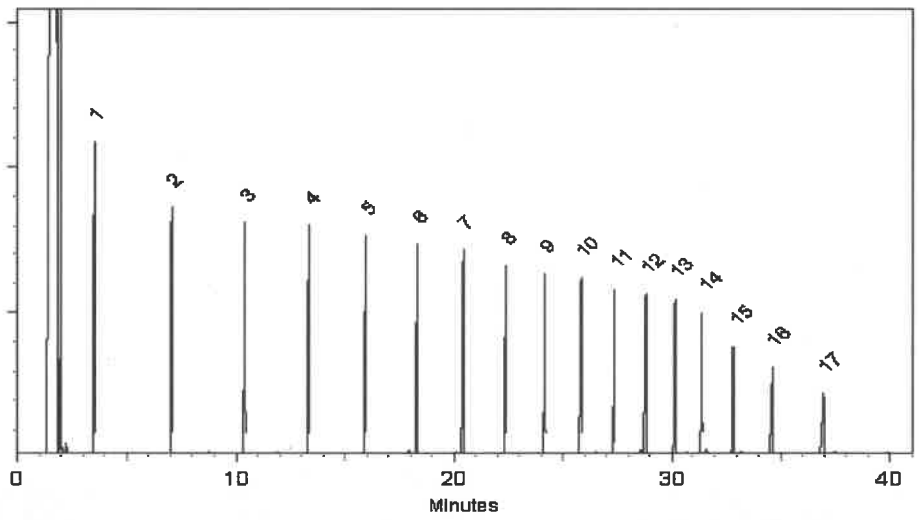
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Dakota Parson - Operations Technician I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 01-Dec-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

RESTEK

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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

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

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Florida TRPH Standard

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

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

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

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

P13103 → P13112 Y.P. 01/12/2024

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

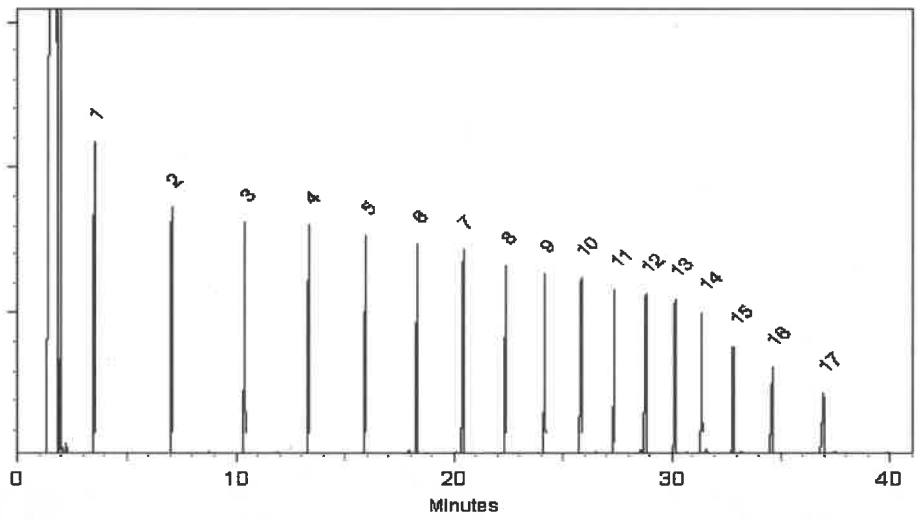
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Dakota Parson - Operations Technician I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 01-Dec-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

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

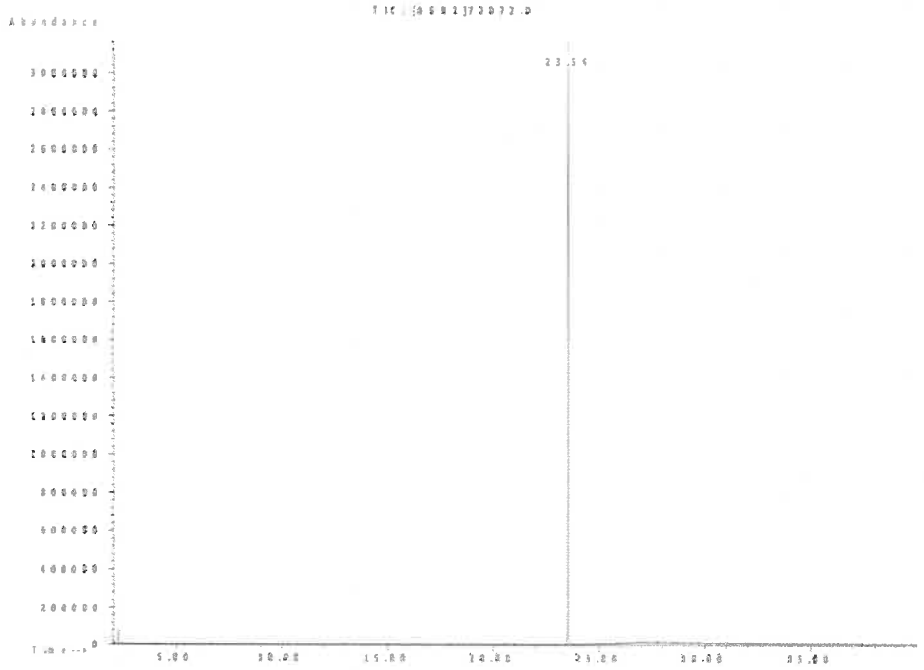
Expiration Date: 101132
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

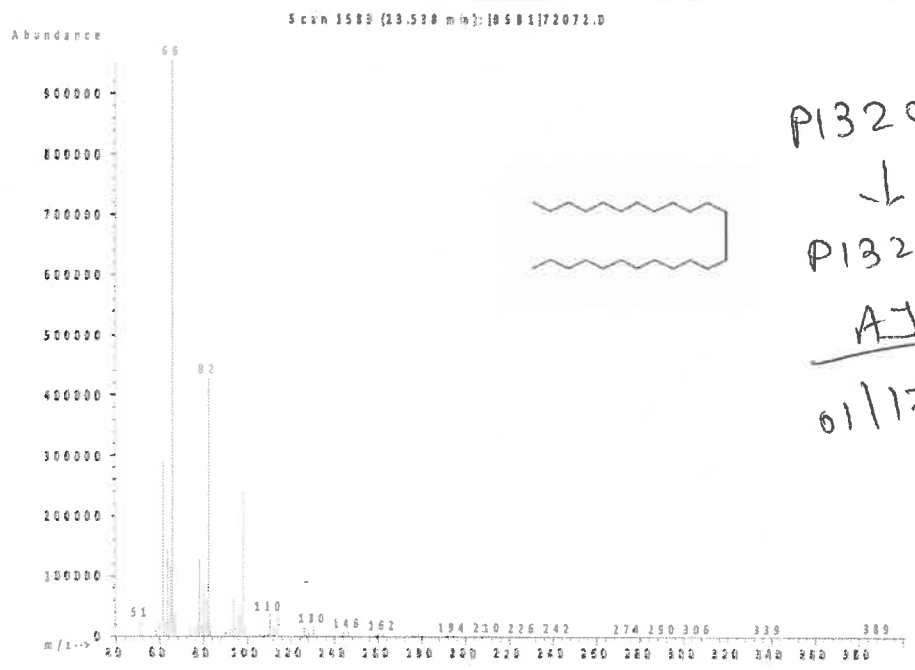
Weight(s) shown below were combined and diluted to (mL): 200.0 ± 0.058 Flask Uncertainty; 5E-05 Balance Uncertainty

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

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

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





P13205
↓
P13214
AJ
01/17/24

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

CPI INTERNATIONAL

5580 Skylane Blvd
Santa Rosa, CA 95403

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

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

Date Received:_____

Certificate of Analysis

Rev 0 **Page 1 of 1**

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

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

P13215
↓
P13224

AJ
01/31/24

*Not a certified value

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

Certified By: Andrea Schaible

Andrea Schaible
Chemist

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

CPI INTERNATIONAL

5580 Skylane Blvd
Santa Rosa, CA 95403

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

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

Date Received:_____

Certificate of Analysis

Rev 0 **Page 1 of 1**

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

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

P13215
↓
P13224

AJ
01/31/24

*Not a certified value

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

Certified By: Andrea Schaible

Andrea Schaible
Chemist

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

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

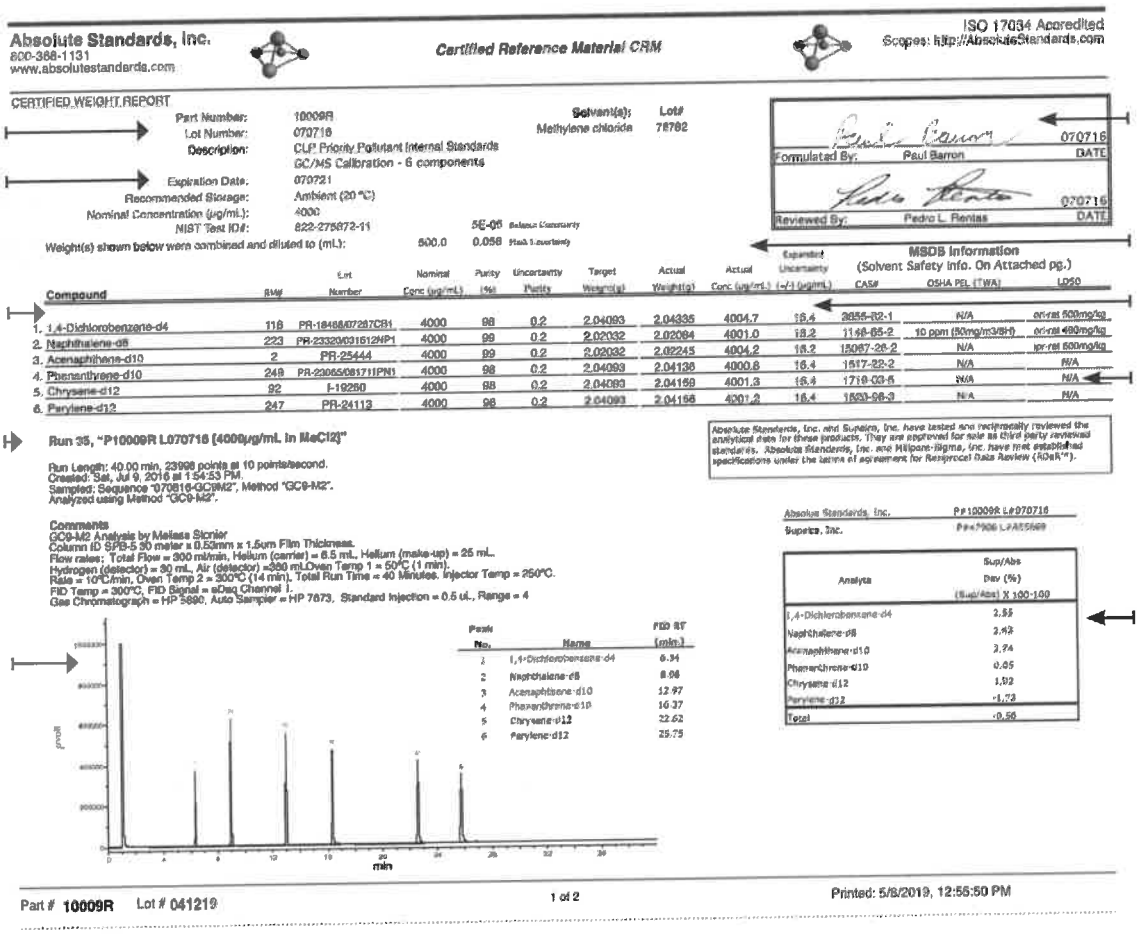
Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

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

Solvent(s): Methylene chloride
Lot#: 78782

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

Weight(s) shown below were combined and diluted to (mL): 500.0 5E-05 Balance Uncertainty 0.050 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-18488/07267CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	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-23065/051711PN1	4000	98	0.2	2.04093	2.04136	4000.8	16.4	1517-22-2	N/A	N/A
5. Chrysene-d12	92	I-19250	4000	98	0.2	2.04093	2.04159	4001.3	16.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	96	0.2	2.04093	2.04156	4001.2	16.4	1520-96-3	N/A	N/A

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

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

Qualitative
Quantitative

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

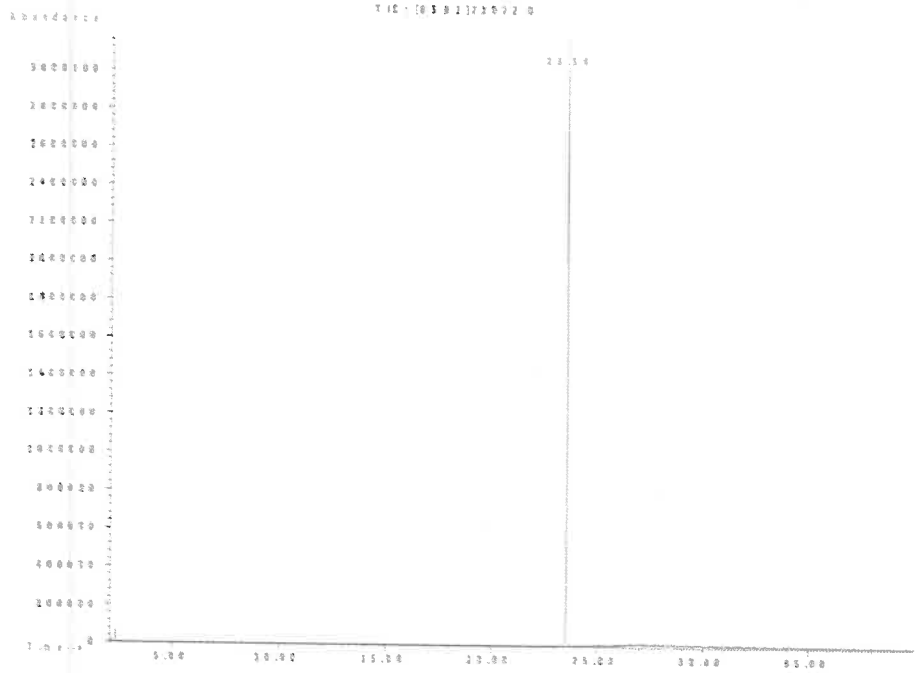
P13477 → P13496 } X.P. 07/24/24

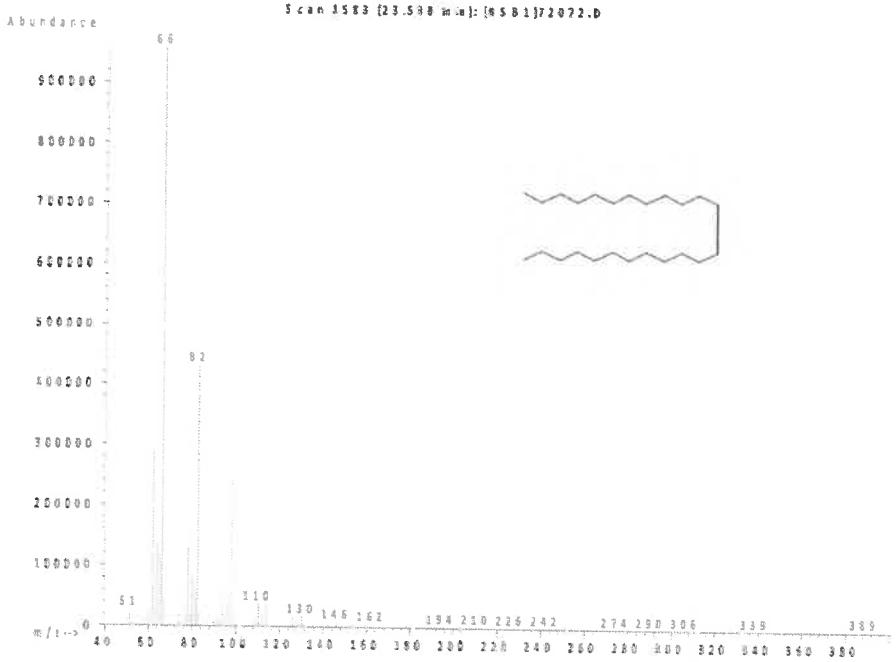
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

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).

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

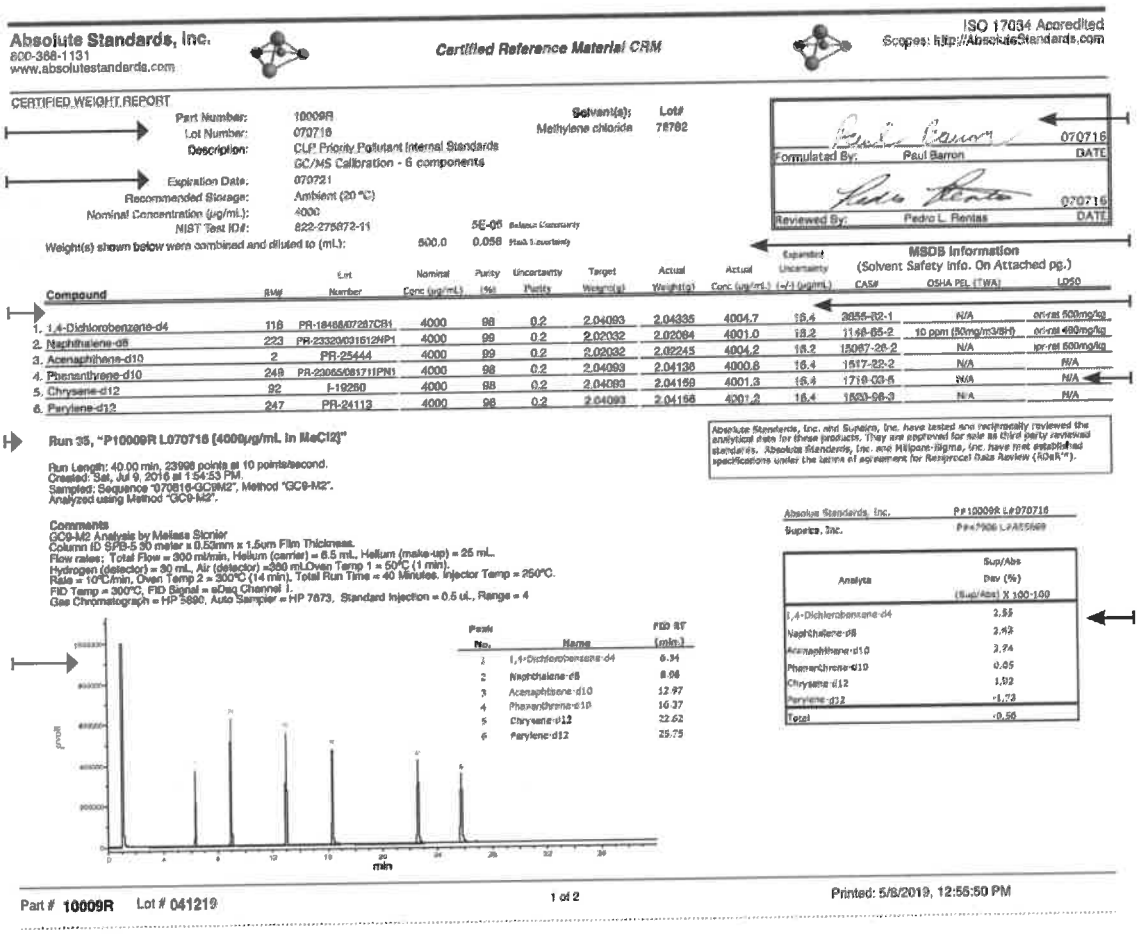
Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

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

Solvent(s): Methylene chloride
Lot#: 78782

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

Weight(s) shown below were combined and diluted to (mL): 500.0 5E-05 Balance Uncertainty 0.050 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-18488/07267CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	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-23065/051711PN1	4000	98	0.2	2.04093	2.04136	4000.8	16.4	1517-22-2	N/A	N/A
5. Chrysene-d12	92	I-19250	4000	98	0.2	2.04093	2.04159	4001.3	16.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	96	0.2	2.04093	2.04156	4001.2	16.4	1520-96-3	N/A	N/A

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

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

Qualitative
Quantitative

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

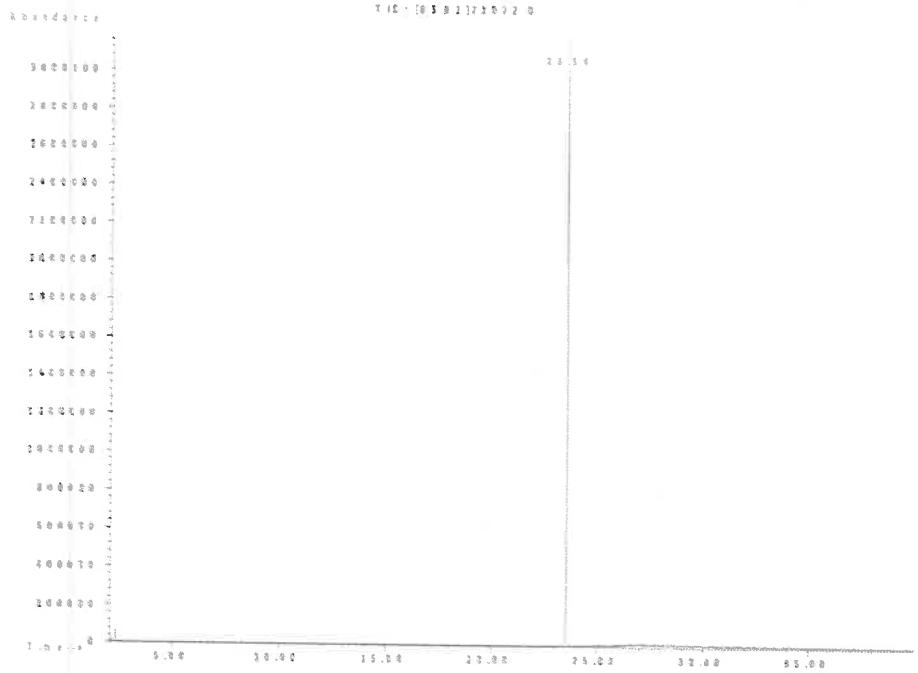
P13477 → P13496 } X.P. 07/24/24

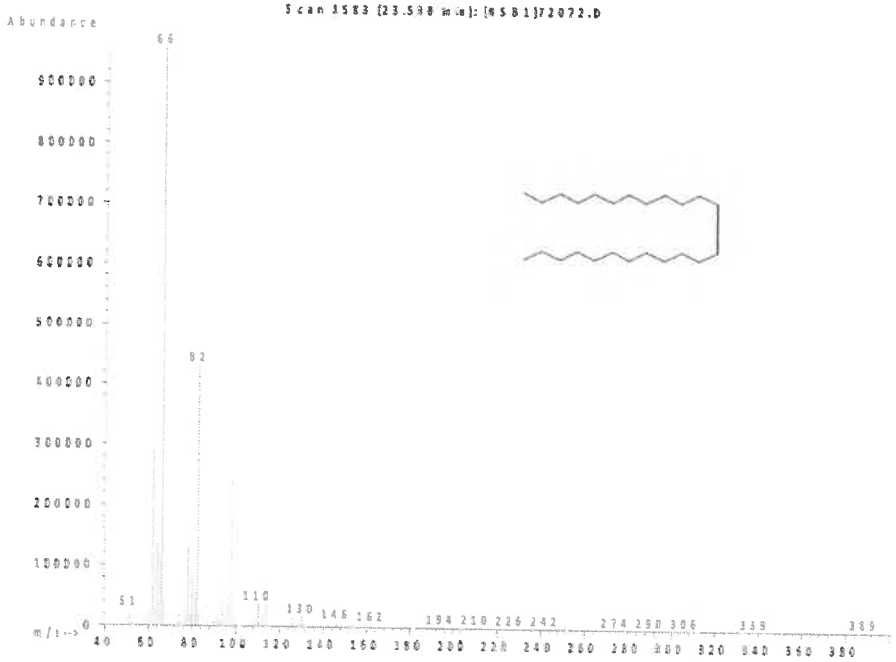
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

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).

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

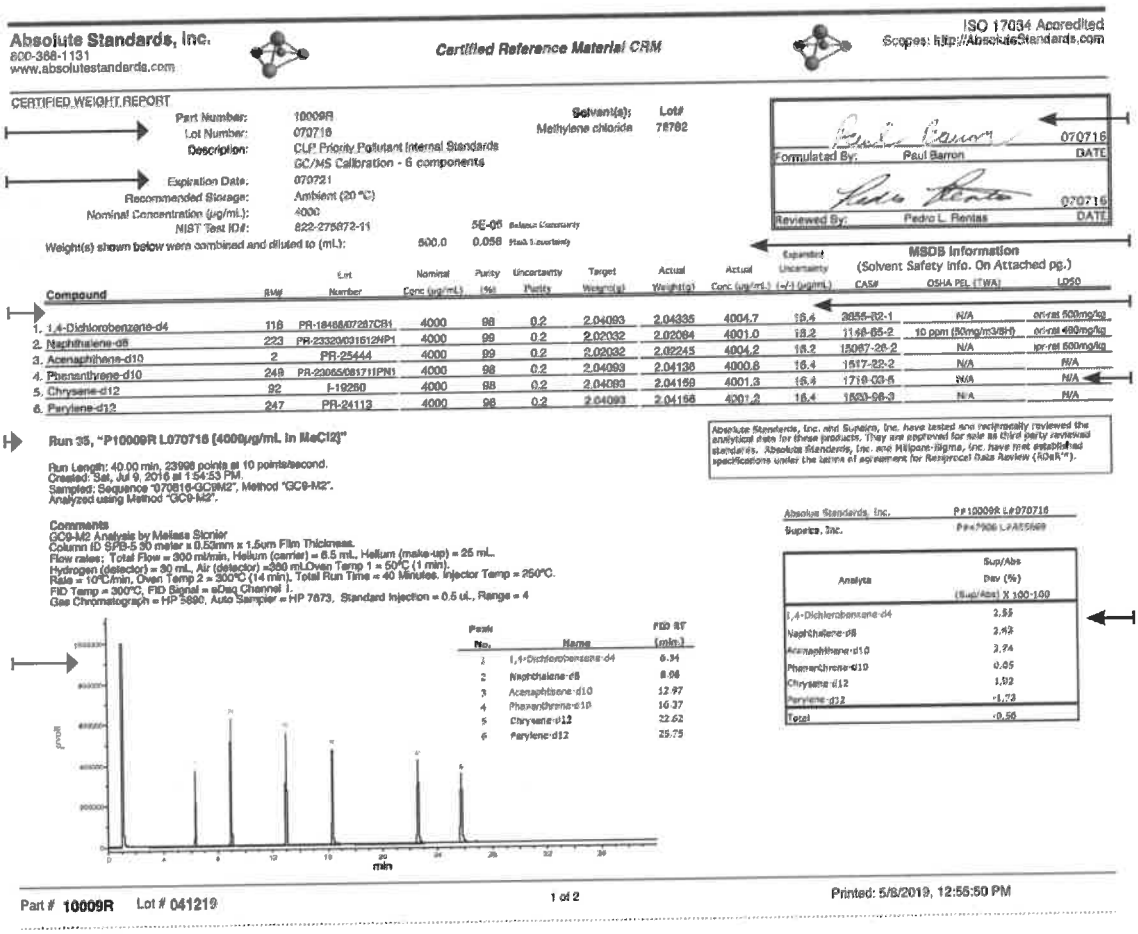
Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

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

Solvent(s): Methylene chloride
Lot#: 78782

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

Weight(s) shown below were combined and diluted to (mL): 500.0 5E-05 Balance Uncertainty 0.050 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-18488/07267CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	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-23065/051711PN1	4000	98	0.2	2.04093	2.04136	4000.8	16.4	1517-22-2	N/A	N/A
5. Chrysene-d12	92	I-19250	4000	98	0.2	2.04093	2.04159	4001.3	16.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	96	0.2	2.04093	2.04156	4001.2	16.4	1520-96-3	N/A	N/A

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

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

Qualitative
Quantitative

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

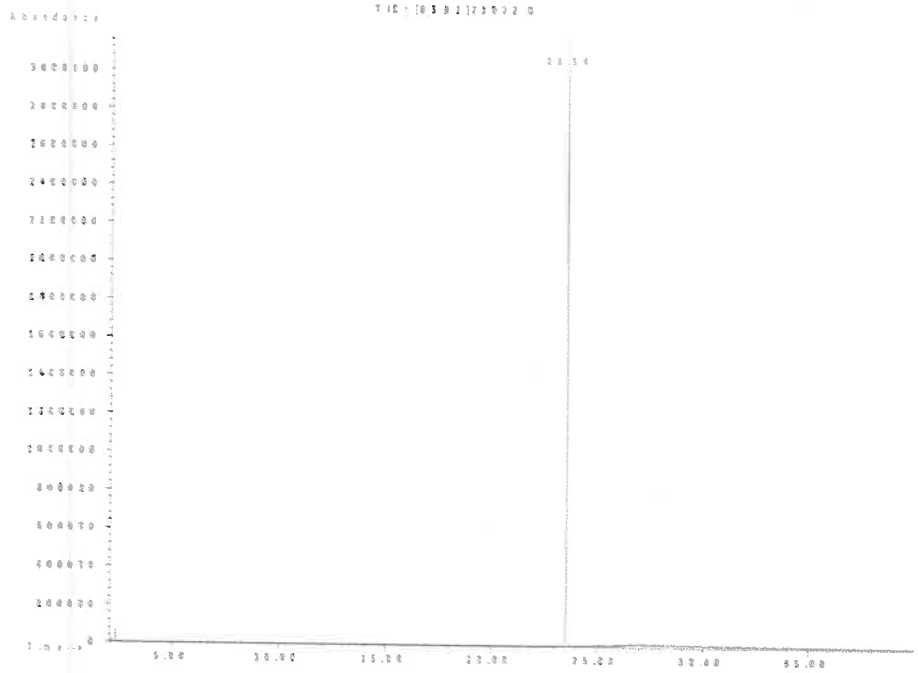
P13477 → P13496 } X.P. 07/24/24

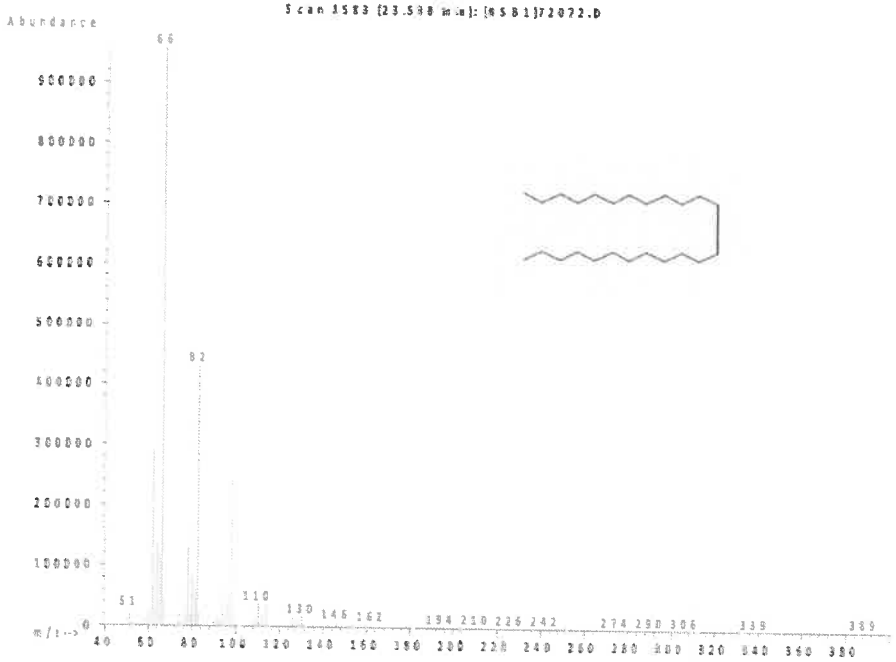
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

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).

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

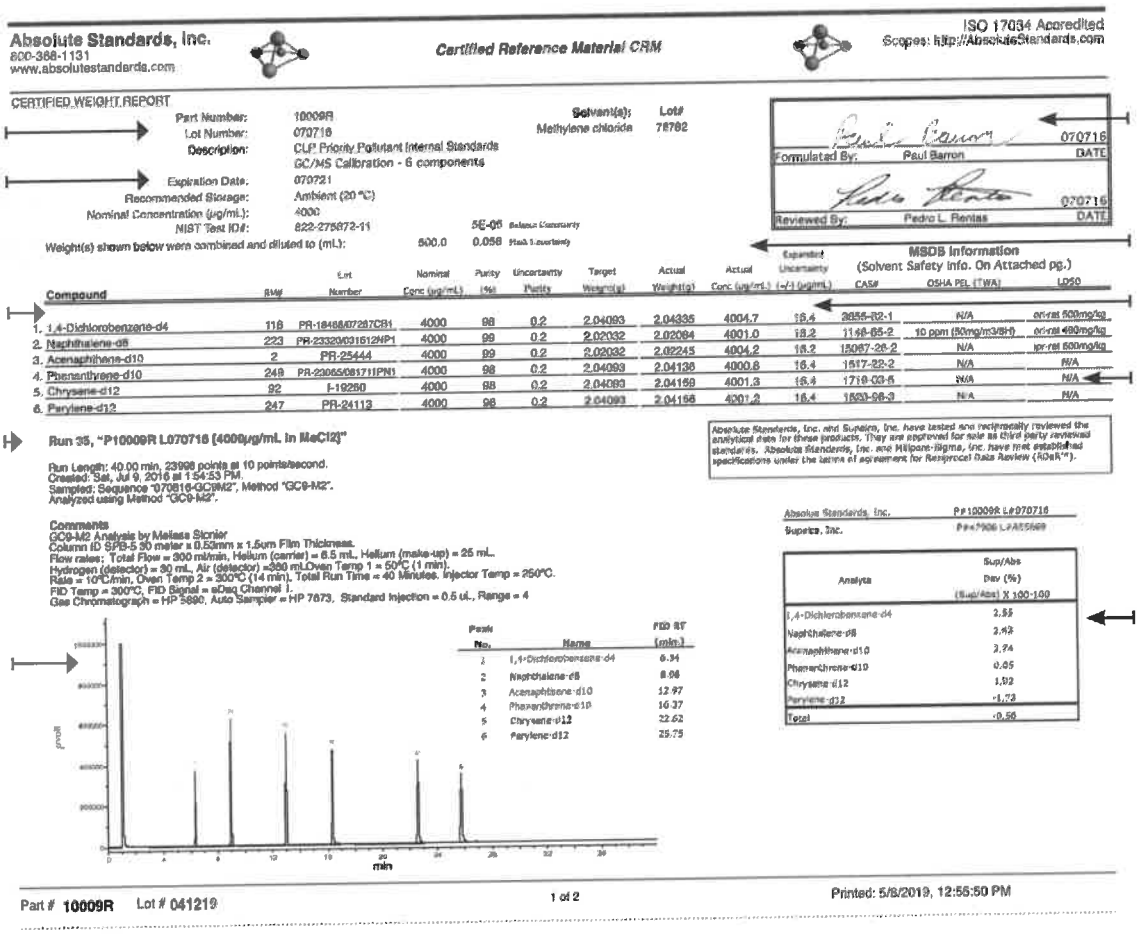
Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019

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

Solvent(s): Methylene chloride
Lot#: 78782

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

Weight(s) shown below were combined and diluted to (mL): 500.0 5E-05 Balance Uncertainty 0.050 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-18488/07267CB1	4000	98	0.2	2.04093	2.04335	4004.7	16.4	3855-82-1	N/A	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-23065/051711PN1	4000	98	0.2	2.04093	2.04136	4000.8	16.4	1517-22-2	N/A	N/A
5. Chrysene-d12	92	I-19250	4000	98	0.2	2.04093	2.04159	4001.3	16.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	96	0.2	2.04093	2.04156	4001.2	16.4	1520-96-3	N/A	N/A

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

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

Qualitative
Quantitative

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

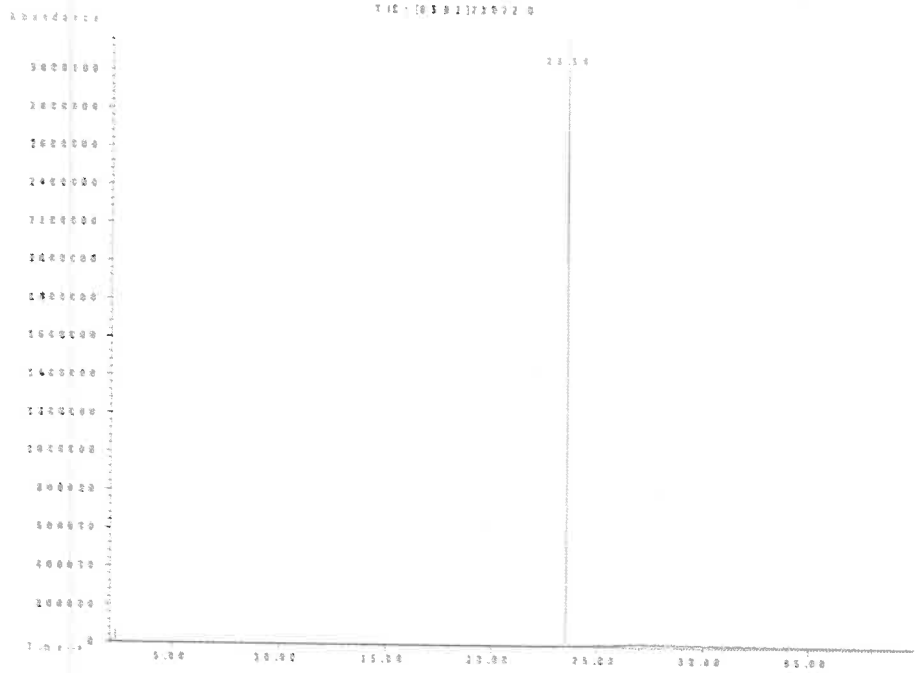
P13477 → P13496 } X.P. 07/24/24

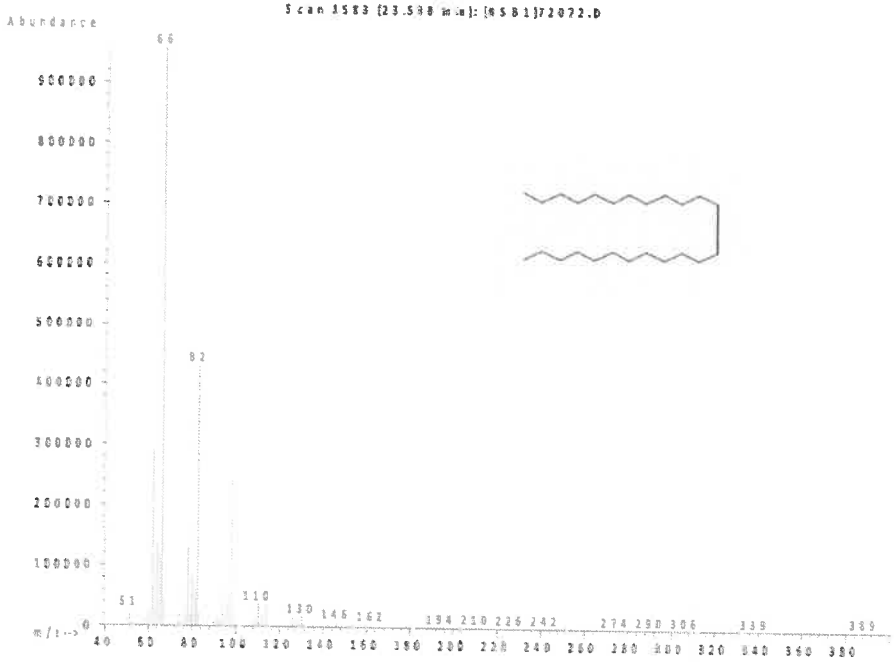
Formulated By:	Prashant Chauhan	101122 DATE
Reviewed By:	Pedro L. Rentas	101122 DATE

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_G\Data\FG013025\
Data File : FG015251.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 13:25
Operator : YP\AJ
Sample : Q1215-01
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jan 31 05:07:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.043	3082761	24.033 ug/mlm
Target Compounds			

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015251.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 13:25
Operator : YP\AJ
Sample : Q1215-01
Misc :
ALS Vial : 16 Sample Multiplier: 1

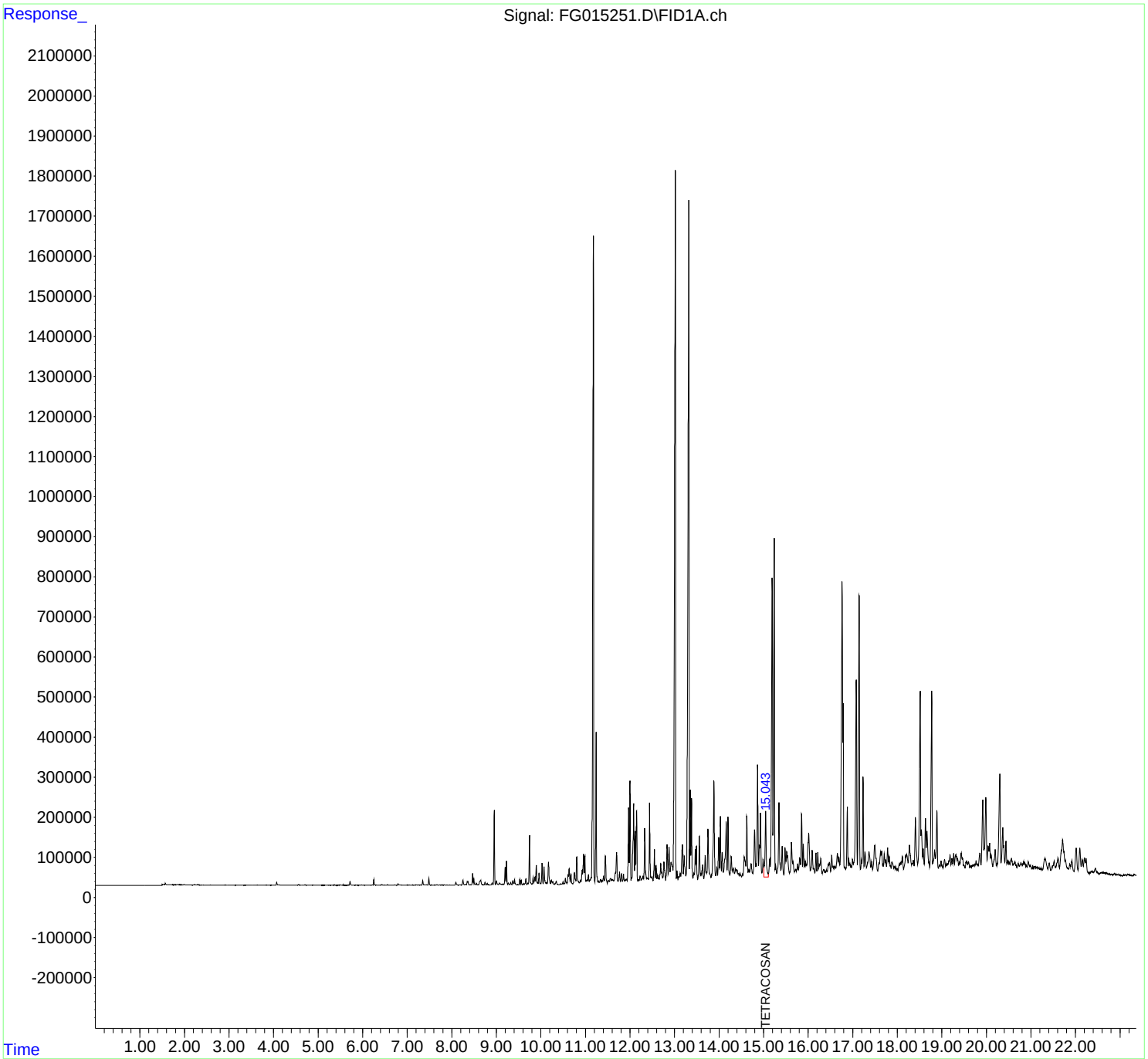
Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825

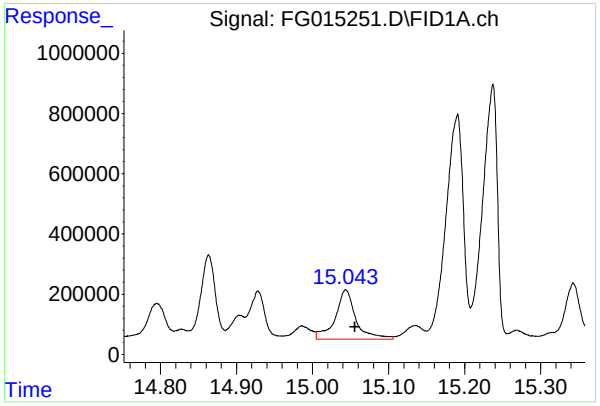
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

Integration File: autoint1.e
Quant Time: Jan 31 05:07:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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.: 15.043 min
Delta R.T.: -0.013 mir
Response: 3082761
Conc: 24.03 ug/m

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG01302
Data File : FG015251.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 13:25
Sample : Q1215-01
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.374	4.350	4.391	BH	23	-1089	-0.00%	-0.000%
2	4.394	4.391	4.409	PH	-71	-1195	-0.00%	-0.000%
3	4.416	4.409	4.422	PH	-22	-690	-0.00%	-0.000%
4	4.432	4.422	4.463	PH	-25	-2758	-0.01%	-0.001%
5	4.478	4.463	4.490	PH	-31	-1461	-0.00%	-0.000%
6	4.492	4.490	4.498	PH	-62	-642	-0.00%	-0.000%
7	4.500	4.498	4.517	PH	-62	-1421	-0.00%	-0.000%
8	4.539	4.517	4.544	PH	477	3362	0.01%	0.001%
9	4.557	4.544	4.604	HH	1033	17470	0.06%	0.005%
10	4.611	4.604	4.631	HH	219	1375	0.00%	0.000%
11	4.647	4.631	4.676	PH	155	-149	-0.00%	-0.000%
12	4.708	4.676	4.734	PH	1233	10755	0.04%	0.003%
13	4.764	4.734	4.785	PH	298	914	0.00%	0.000%
14	4.789	4.785	4.808	PH	66	-1015	-0.00%	-0.000%
15	4.826	4.808	4.838	PH	70	-1268	-0.00%	-0.000%
16	4.845	4.838	4.874	PH	-114	-3825	-0.01%	-0.001%
17	4.882	4.874	4.886	PH	-179	-1488	-0.00%	-0.000%
18	4.914	4.886	4.940	PH	155	-989	-0.00%	-0.000%
19	4.953	4.940	4.979	PH	25	-1420	-0.00%	-0.000%
20	4.986	4.979	5.023	PH	-49	-3310	-0.01%	-0.001%
21	5.043	5.023	5.065	PH	256	436	0.00%	0.000%
22	5.068	5.065	5.075	PH	-153	-1372	-0.00%	-0.000%
23	5.078	5.075	5.091	PH	-205	-2366	-0.01%	-0.001%
24	5.098	5.091	5.114	PH	-163	-3224	-0.01%	-0.001%
25	5.118	5.114	5.146	PH	-238	-5346	-0.02%	-0.002%
26	5.170	5.146	5.173	PH	-61	-2249	-0.01%	-0.001%
27	5.199	5.173	5.230	PH	95	-1935	-0.01%	-0.001%
28	5.248	5.230	5.274	PH	-21	-3954	-0.01%	-0.001%
29	5.298	5.274	5.315	PH	259	-408	-0.00%	-0.000%
30	5.318	5.315	5.339	PH	-118	-2460	-0.01%	-0.001%
31	5.362	5.339	5.410	PH	414	-2858	-0.01%	-0.001%
32	5.421	5.410	5.442	PH	-218	-5102	-0.02%	-0.001%
33	5.460	5.442	5.469	PH	-184	-3776	-0.01%	-0.001%
34	5.487	5.469	5.510	PH	1563	13819	0.05%	0.004%
35	5.521	5.510	5.547	PH	23	-2567	-0.01%	-0.001%
36	5.563	5.547	5.572	PH	1110	-1873	-0.01%	-0.001%

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

rteres

37	5.585	5.572	5.599	PH	-241	-4603	-0.02%	-0.001%
38	5.602	5.599	5.610	PH	-299	-2280	-0	
39	5.618	5.610	5.626	PH	-232	-2598	-0	
40	5.629	5.626	5.653	PH	-278	-5268	-0	
41	5.659	5.653	5.664	PH	-341	-2391	-0	
42	5.683	5.664	5.700	PH	347	1180	0	
43	5.717	5.700	5.785	PH	9532	96330	0.32%	0.028%
44	5.794	5.785	5.827	PH	7	-3861	-0.01%	-0.001%
45	5.830	5.827	5.834	PH	-153	-932	-0.00%	-0.000%
46	5.874	5.834	5.903	PH	377	-79	-0.00%	-0.000%
47	5.909	5.903	5.915	PH	-255	-1924	-0.01%	-0.001%
48	5.932	5.915	5.956	PH	217	879	0.00%	0.000%
49	5.972	5.956	6.006	HH	883	9710	0.03%	0.003%
50	6.012	6.006	6.029	PH	55	-739	-0.00%	-0.000%
51	6.033	6.029	6.039	PH	-173	-1252	-0.00%	-0.000%
52	6.050	6.039	6.054	PH	-68	-1170	-0.00%	-0.000%
53	6.066	6.054	6.081	PH	88	-645	-0.00%	-0.000%
54	6.096	6.081	6.112	PH	-52	-2082	-0.01%	-0.001%
55	6.121	6.112	6.138	PH	-105	-2506	-0.01%	-0.001%
56	6.159	6.138	6.183	PH	73	-2244	-0.01%	-0.001%
57	6.220	6.183	6.231	PH	759	4653	0.02%	0.001%
58	6.251	6.231	6.293	HH	14196	151554	0.50%	0.044%
59	6.302	6.293	6.334	HH	585	6074	0.02%	0.002%
60	6.358	6.334	6.381	PH	208	916	0.00%	0.000%
61	6.401	6.381	6.416	PH	495	5256	0.02%	0.002%
62	6.435	6.416	6.464	HH	1783	20249	0.07%	0.006%
63	6.484	6.464	6.496	PH	430	3076	0.01%	0.001%
64	6.506	6.496	6.531	HH	190	1352	0.00%	0.000%
65	6.555	6.531	6.590	PH	1129	11139	0.04%	0.003%
66	6.601	6.590	6.615	PH	134	986	0.00%	0.000%
67	6.628	6.615	6.650	PH	129	223	0.00%	0.000%
68	6.662	6.650	6.671	PH	-36	-1355	-0.00%	-0.000%
69	6.677	6.671	6.690	PH	-22	-1716	-0.01%	-0.000%
70	6.717	6.690	6.765	PH	869	7020	0.02%	0.002%
71	6.796	6.765	6.816	PH	3705	34347	0.11%	0.010%
72	6.833	6.816	6.857	HH	832	12491	0.04%	0.004%
73	6.872	6.857	6.897	PH	452	3554	0.01%	0.001%
74	6.912	6.897	6.933	PH	127	-142	-0.00%	-0.000%
75	6.944	6.933	6.958	PH	-29	-1086	-0.00%	-0.000%
76	6.976	6.958	6.982	PH	107	192	0.00%	0.000%
77	6.999	6.982	7.022	HH	659	6083	0.02%	0.002%
78	7.043	7.022	7.074	PH	658	6504	0.02%	0.002%
79	7.081	7.074	7.090	PH	-58	-769	-0.00%	-0.000%
80	7.121	7.090	7.139	PH	679	5802	0.02%	0.002%
81	7.153	7.139	7.178	PH	42	-317	-0.00%	-0.000%
82	7.204	7.178	7.229	PH	809	11932	0.04%	0.003%
83	7.251	7.229	7.268	HH	859	12977	0.04%	0.004%
84	7.289	7.268	7.319	HH	899	13921	0.05%	0.004%
85	7.350	7.319	7.379	HH	11869	130288	0.43%	0.037%
86	7.391	7.379	7.420	HH	1146	19634	0.06%	0.006%
87	7.441	7.420	7.467	HH	1626	21505	0.07%	0.006%
88	7.488	7.467	7.524	HH	17624	180559	0.60%	0.052%
89	7.541	7.524	7.589	HH	388	7497	0.02%	0.002%

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

rteres

90	7.613	7.589	7.632	PH	335	4329	0.01%	0.001%
91	7.668	7.632	7.695	HH	1615	21783		
92	7.733	7.695	7.772	HH	615	13211		
93	7.790	7.772	7.813	PH	430	6341		
94	7.842	7.813	7.875	HH	811	14431		
95	7.895	7.875	7.909	HH	549	5568		
96	7.913	7.909	7.927	PH	121	494	0.00%	0.000%
97	7.956	7.927	7.979	HH	450	5700	0.02%	0.002%
98	7.986	7.979	7.991	HH	191	1137	0.00%	0.000%
99	8.009	7.991	8.029	HH	319	3748	0.01%	0.001%
100	8.046	8.029	8.063	PH	116	1609	0.01%	0.000%
101	8.094	8.063	8.145	HH	7738	111814	0.37%	0.032%
102	8.166	8.145	8.184	HH	712	12780	0.04%	0.004%
103	8.198	8.184	8.214	HH	716	9372	0.03%	0.003%
104	8.252	8.214	8.287	HH	13173	176959	0.59%	0.051%
105	8.308	8.287	8.329	HH	2387	38440	0.13%	0.011%
106	8.349	8.329	8.357	HH	9096	87850	0.29%	0.025%
107	8.366	8.357	8.402	HH	9345	107564	0.36%	0.031%
108	8.424	8.402	8.442	HH	1417	22871	0.08%	0.007%
109	8.470	8.442	8.486	HH	29490	312366	1.03%	0.090%
110	8.497	8.486	8.519	HH	16041	170784	0.57%	0.049%
111	8.553	8.519	8.577	HH	4722	80636	0.27%	0.023%
112	8.593	8.577	8.603	HH	1029	13158	0.04%	0.004%
113	8.636	8.603	8.641	HH	10691	148747	0.49%	0.043%
114	8.652	8.641	8.696	HH	11983	184958	0.61%	0.053%
115	8.707	8.696	8.724	HH	1197	16280	0.05%	0.005%
116	8.748	8.724	8.777	HH	7516	86300	0.29%	0.025%
117	8.797	8.777	8.817	HH	4875	55545	0.18%	0.016%
118	8.826	8.817	8.850	HH	1106	14724	0.05%	0.004%
119	8.862	8.850	8.878	HH	688	8705	0.03%	0.003%
120	8.907	8.878	8.930	HH	5304	76473	0.25%	0.022%
121	8.956	8.930	8.984	HH	187626	1859270	6.15%	0.534%
122	9.005	8.984	9.046	HH	10506	168987	0.56%	0.049%
123	9.073	9.046	9.089	HH	5709	89674	0.30%	0.026%
124	9.100	9.089	9.112	HH	3122	35648	0.12%	0.010%
125	9.123	9.112	9.135	HH	2609	29828	0.10%	0.009%
126	9.150	9.135	9.168	HH	2843	40171	0.13%	0.012%
127	9.201	9.168	9.215	HH	45847	514410	1.70%	0.148%
128	9.231	9.215	9.258	HH	60728	637524	2.11%	0.183%
129	9.272	9.258	9.308	HH	5363	88610	0.29%	0.025%
130	9.326	9.308	9.351	HH	6688	90361	0.30%	0.026%
131	9.371	9.351	9.393	HH	11280	156805	0.52%	0.045%
132	9.412	9.393	9.461	HH	14412	203989	0.68%	0.059%
133	9.476	9.461	9.502	HH	1302	23344	0.08%	0.007%
134	9.528	9.502	9.545	HH	14692	169543	0.56%	0.049%
135	9.560	9.545	9.593	HH	12837	147138	0.49%	0.042%
136	9.611	9.593	9.627	HH	4162	50088	0.17%	0.014%
137	9.665	9.627	9.687	HH	16154	231762	0.77%	0.067%
138	9.707	9.687	9.719	HH	5036	68057	0.23%	0.020%
139	9.747	9.719	9.802	HH	124285	1395794	4.62%	0.401%
140	9.828	9.802	9.844	HH	19937	249947	0.83%	0.072%
141	9.869	9.844	9.881	HH	20726	293795	0.97%	0.084%

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

rteres

142	9.900	9.881	9.922	HH	49710	643858	2.13%	0.185%
143	9.930	9.922	9.940	HH	6667	65355		
144	9.960	9.940	9.995	HH	30640	418874		
145	10.029	9.995	10.052	HH	55249	686529		
146	10.073	10.052	10.113	HH	46188	658810		
147	10.129	10.113	10.145	HH	7338	109565		
148	10.173	10.145	10.218	HH	57692	931931	3.08%	0.268%
149	10.236	10.218	10.258	HH	12811	199867	0.66%	0.057%
150	10.271	10.258	10.296	HH	9475	134455	0.45%	0.039%
151	10.314	10.296	10.323	HH	3771	50983	0.17%	0.015%
152	10.347	10.323	10.394	HH	9663	196048	0.65%	0.056%
153	10.403	10.394	10.417	HH	1459	18411	0.06%	0.005%
154	10.441	10.417	10.460	HH	3689	64317	0.21%	0.018%
155	10.477	10.460	10.481	HH	3133	34915	0.12%	0.010%
156	10.499	10.481	10.517	HH	8389	113683	0.38%	0.033%
157	10.551	10.517	10.585	HH	17422	317395	1.05%	0.091%
158	10.612	10.585	10.621	HH	24986	324471	1.07%	0.093%
159	10.636	10.621	10.660	HH	41012	595425	1.97%	0.171%
160	10.676	10.660	10.716	HH	27760	411953	1.36%	0.118%
161	10.754	10.716	10.787	HH	31541	630919	2.09%	0.181%
162	10.806	10.787	10.866	HH	70579	1102578	3.65%	0.317%
163	10.891	10.866	10.904	HH	12768	200202	0.66%	0.057%
164	10.929	10.904	10.939	HH	38312	524285	1.74%	0.151%
165	10.961	10.939	10.976	HH	77726	1153928	3.82%	0.331%
166	10.990	10.976	11.010	HH	72703	843859	2.79%	0.242%
167	11.035	11.010	11.048	HH	13401	264737	0.88%	0.076%
168	11.067	11.048	11.085	HH	25816	389117	1.29%	0.112%
169	11.099	11.085	11.112	HH	13814	198343	0.66%	0.057%
170	11.128	11.112	11.135	HH	18778	220745	0.73%	0.063%
171	11.179	11.135	11.211	HH	1618811	22042234	72.96%	6.331%
172	11.241	11.211	11.279	HH	382059	4308012	14.26%	1.237%
173	11.290	11.279	11.307	HH	10990	149697	0.50%	0.043%
174	11.315	11.307	11.320	HH	7749	59720	0.20%	0.017%
175	11.340	11.320	11.361	HH	14052	267988	0.89%	0.077%
176	11.375	11.361	11.389	HH	12057	175002	0.58%	0.050%
177	11.406	11.389	11.429	HH	22982	373325	1.24%	0.107%
178	11.448	11.429	11.492	HH	72847	1030843	3.41%	0.296%
179	11.521	11.492	11.537	HH	11477	249726	0.83%	0.072%
180	11.560	11.537	11.582	HH	16431	362221	1.20%	0.104%
181	11.601	11.582	11.636	HH	14930	418121	1.38%	0.120%
182	11.701	11.636	11.736	HH	82069	1774471	5.87%	0.510%
183	11.766	11.736	11.788	HH	33395	601682	1.99%	0.173%
184	11.814	11.788	11.835	HH	28712	513981	1.70%	0.148%
185	11.856	11.835	11.879	HH	27839	463378	1.53%	0.133%
186	11.895	11.879	11.907	HH	13406	203509	0.67%	0.058%
187	11.920	11.907	11.938	HH	15298	246902	0.82%	0.071%
188	11.969	11.938	11.984	HH	192765	2435844	8.06%	0.700%
189	12.000	11.984	12.023	HH	259533	2913659	9.64%	0.837%
190	12.038	12.023	12.043	HH	18634	195714	0.65%	0.056%
191	12.085	12.043	12.101	HH	203541	3511302	11.62%	1.008%
192	12.117	12.101	12.131	HH	134270	1587646	5.26%	0.456%
193	12.148	12.131	12.175	HH	184620	2305784	7.63%	0.662%
194	12.191	12.175	12.204	HH	14648	212442	0.70%	0.061%

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

rteres

195	12.229	12.204	12.250	HH	22794	473682	1.57%	0.136%
196	12.292	12.250	12.306	HH	23015	576542	1	
197	12.331	12.306	12.350	HH	142277	1894200	6	
198	12.356	12.350	12.375	HH	31880	357221	1	
199	12.386	12.375	12.396	HH	17721	221112	0	
200	12.400	12.396	12.416	HH	17008	193212	0	
201	12.441	12.416	12.480	HH	205267	2635586	8.72%	0.757%
202	12.493	12.480	12.518	HH	20635	402929	1.33%	0.116%
203	12.550	12.518	12.568	HH	88559	1296170	4.29%	0.372%
204	12.587	12.568	12.606	HH	48200	710429	2.35%	0.204%
205	12.621	12.606	12.658	HH	24966	594370	1.97%	0.171%
206	12.690	12.658	12.707	HH	54331	991890	3.28%	0.285%
207	12.713	12.707	12.735	HH	32015	424000	1.40%	0.122%
208	12.761	12.735	12.802	HH	58494	1325541	4.39%	0.381%
209	12.832	12.802	12.854	HH	101808	1626025	5.38%	0.467%
210	12.875	12.854	12.898	HH	95471	1556742	5.15%	0.447%
211	12.922	12.898	12.964	HH	56887	1891170	6.26%	0.543%
212	13.018	12.964	13.039	HH	1779048	30211454	100.00%	8.677%
213	13.056	13.039	13.075	HH	36519	529074	1.75%	0.152%
214	13.092	13.075	13.104	HH	21593	334987	1.11%	0.096%
215	13.126	13.104	13.140	HH	30348	547015	1.81%	0.157%
216	13.176	13.140	13.197	HH	101814	2107760	6.98%	0.605%
217	13.217	13.197	13.254	HH	72875	1543779	5.11%	0.443%
218	13.320	13.254	13.334	HH	1706156	28379424	93.94%	8.151%
219	13.352	13.334	13.366	HH	236495	2686175	8.89%	0.771%
220	13.382	13.366	13.411	HH	216497	2696183	8.92%	0.774%
221	13.432	13.411	13.445	HH	29764	497770	1.65%	0.143%
222	13.465	13.445	13.477	HH	89740	1156063	3.83%	0.332%
223	13.491	13.477	13.518	HH	96791	1352795	4.48%	0.389%
224	13.557	13.518	13.580	HH	121150	1945979	6.44%	0.559%
225	13.594	13.580	13.604	HH	28214	374478	1.24%	0.108%
226	13.630	13.604	13.656	HH	51171	1062026	3.52%	0.305%
227	13.687	13.656	13.709	HH	74565	1320569	4.37%	0.379%
228	13.716	13.709	13.726	HH	33531	328506	1.09%	0.094%
229	13.750	13.726	13.816	HH	140097	3014922	9.98%	0.866%
230	13.884	13.816	13.922	HH	258729	5472255	18.11%	1.572%
231	13.949	13.922	13.965	HH	45015	855048	2.83%	0.246%
232	13.991	13.965	14.010	HH	119726	1907898	6.32%	0.548%
233	14.029	14.010	14.050	HH	171720	2326402	7.70%	0.668%
234	14.070	14.050	14.098	HH	82611	1495545	4.95%	0.430%
235	14.159	14.098	14.180	HH	157911	3932437	13.02%	1.129%
236	14.200	14.180	14.239	HH	169471	2615229	8.66%	0.751%
237	14.272	14.239	14.294	HH	71280	1500448	4.97%	0.431%
238	14.319	14.294	14.345	HH	43083	1109014	3.67%	0.319%
239	14.364	14.345	14.378	HH	42088	704233	2.33%	0.202%
240	14.387	14.378	14.400	HH	37941	487943	1.62%	0.140%
241	14.404	14.400	14.425	HH	38213	519758	1.72%	0.149%
242	14.434	14.425	14.452	HH	29745	428385	1.42%	0.123%
243	14.467	14.452	14.502	HH	30957	774811	2.56%	0.223%
244	14.523	14.502	14.534	HH	28237	473655	1.57%	0.136%
245	14.564	14.534	14.600	HH	71150	2090113	6.92%	0.600%
246	14.621	14.600	14.654	HH	172219	2703768	8.95%	0.777%

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

rteres

247	14.666	14.654	14.681	HH	39378	595606	1.97%	0.171%
248	14.718	14.681	14.755	HH	53384	1779889	5	
249	14.795	14.755	14.819	HH	138628	2834100	9	
250	14.827	14.819	14.839	HH	53642	601069	1	
251	14.863	14.839	14.886	HH	299926	4311509	14	
252	14.904	14.886	14.911	HH	98422	1235123	4	
253	14.928	14.911	14.962	HH	180774	2856555	9.46%	0.820%
254	14.986	14.962	15.005	HH	64412	1246964	4.13%	0.358%
255	15.044	15.005	15.105	HH	184890	4291626	14.21%	1.233%
256	15.135	15.105	15.150	HH	64945	1295501	4.29%	0.372%
257	15.190	15.150	15.208	HH	762530	12605520	41.72%	3.620%
258	15.237	15.208	15.257	HH	865501	11969563	39.62%	3.438%
259	15.269	15.257	15.297	HH	50275	938308	3.11%	0.269%
260	15.343	15.297	15.386	HH	206221	4203143	13.91%	1.207%
261	15.415	15.386	15.454	HH	96834	2143561	7.10%	0.616%
262	15.479	15.454	15.500	HH	93647	1751731	5.80%	0.503%
263	15.518	15.500	15.532	HH	83340	1408089	4.66%	0.404%
264	15.538	15.532	15.575	HH	73343	1317327	4.36%	0.378%
265	15.624	15.575	15.647	HH	107565	2502441	8.28%	0.719%
266	15.660	15.647	15.695	HH	59105	1312836	4.35%	0.377%
267	15.716	15.695	15.733	HH	38175	845082	2.80%	0.243%
268	15.764	15.733	15.781	HH	52688	1240718	4.11%	0.356%
269	15.807	15.781	15.828	HH	68038	1557406	5.16%	0.447%
270	15.852	15.828	15.872	HH	175267	2832102	9.37%	0.813%
271	15.888	15.872	15.918	HH	102821	1864641	6.17%	0.536%
272	15.933	15.918	15.948	HH	61209	974981	3.23%	0.280%
273	15.962	15.948	15.968	HH	51749	586013	1.94%	0.168%
274	16.010	15.968	16.049	HH	129429	3978223	13.17%	1.143%
275	16.089	16.049	16.122	HH	86981	2361742	7.82%	0.678%
276	16.125	16.122	16.148	HH	41372	568491	1.88%	0.163%
277	16.173	16.148	16.192	HH	80426	1405562	4.65%	0.404%
278	16.215	16.192	16.234	HH	81076	1424692	4.72%	0.409%
279	16.251	16.234	16.260	HH	52254	773183	2.56%	0.222%
280	16.283	16.260	16.312	HH	66066	1564379	5.18%	0.449%
281	16.345	16.312	16.369	HH	39547	1207798	4.00%	0.347%
282	16.382	16.369	16.394	HH	35480	504409	1.67%	0.145%
283	16.407	16.394	16.428	HH	37578	710210	2.35%	0.204%
284	16.451	16.428	16.460	HH	52947	889598	2.94%	0.255%
285	16.480	16.460	16.503	HH	56302	1234308	4.09%	0.354%
286	16.528	16.503	16.547	HH	74097	1438813	4.76%	0.413%
287	16.559	16.547	16.577	HH	47559	794282	2.63%	0.228%
288	16.596	16.577	16.613	HH	47920	955802	3.16%	0.275%
289	16.655	16.613	16.673	HH	79104	2204063	7.30%	0.633%
290	16.689	16.673	16.711	HH	69153	1387156	4.59%	0.398%
291	16.760	16.711	16.777	HH	749339	14660585	48.53%	4.211%
292	16.785	16.777	16.812	HH	450156	4627395	15.32%	1.329%
293	16.818	16.812	16.843	HH	44746	801880	2.65%	0.230%
294	16.877	16.843	16.897	HH	194933	3151731	10.43%	0.905%
295	16.908	16.897	16.927	HH	65839	1055467	3.49%	0.303%
296	16.939	16.927	16.956	HH	53003	876562	2.90%	0.252%
297	16.968	16.956	16.975	HH	46843	523227	1.73%	0.150%
298	16.995	16.975	17.014	HH	65286	1279228	4.23%	0.367%
299	17.079	17.014	17.103	HH	511774	10634231	35.20%	3.054%

Instrument :
FID_G
ClientSampleId :
JPP-29.1-012825

rteres

300	17.145	17.103	17.172	HH	721463	12032104	39.83%	3.456%
301	17.196	17.172	17.207	HH	63154	1101242	3	
302	17.231	17.207	17.252	HH	269817	3787866	12	
303	17.276	17.252	17.308	HH	82886	2068721	6	
304	17.364	17.308	17.400	HHA	83356	3421455	11	
			Sum of corrected areas:				348	

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 01/31/2025
Supervised By :Ankita Jodhani 01/31/2025

FG011325.M Fri Jan 31 06:05:01 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015252.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 13:53
Operator : YP\AJ
Sample : Q1215-05
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
JPP-29.2-012825

Integration File: autoint1.e
Quant Time: Jan 31 05:08:08 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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...	15.043	2341395	18.253	ug/ml
	Target Compounds				

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

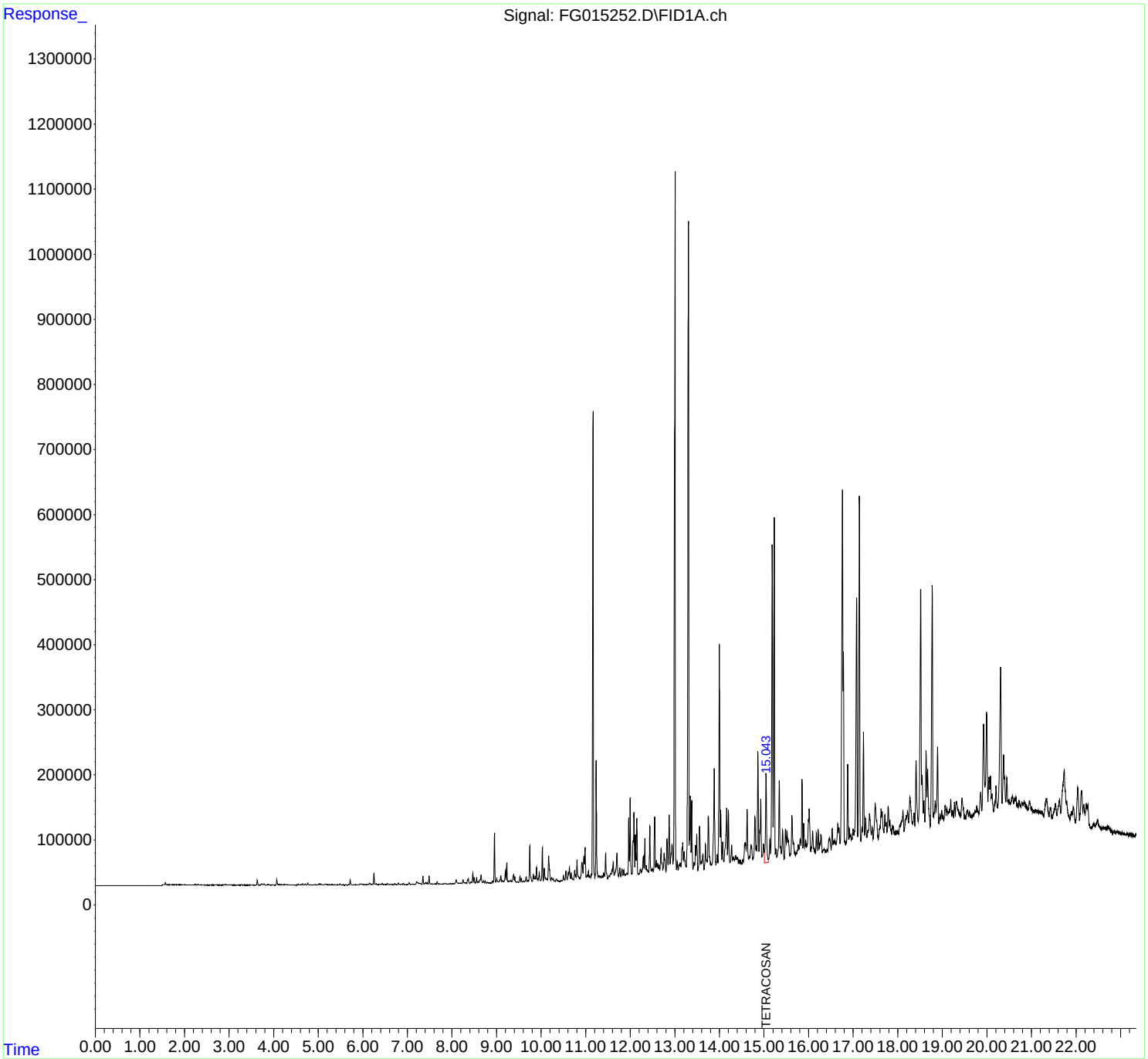
Quantitation Report (QT Reviewed)

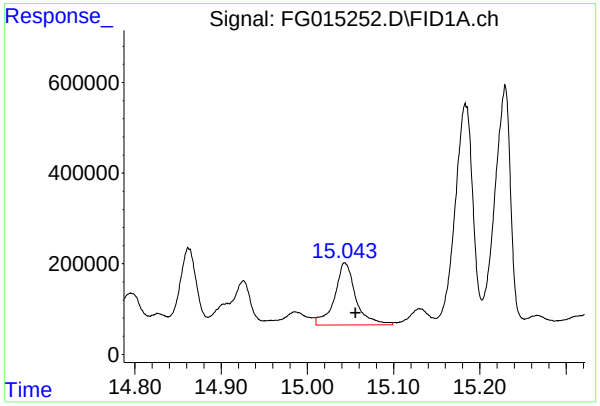
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015252.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 13:53
Operator : YP\AJ
Sample : Q1215-05
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
JPP-29.2-012825

Integration File: autoint1.e
Quant Time: Jan 31 05:08:08 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Quant Title :
QLast Update : Fri Jan 24 12:51:39 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.: 15.043 min
Delta R.T.: -0.013 mi
Response: 2341395
Conc: 18.25 ug/m

Instrument :
FID_G
ClientSampleId :
JPP-29.2-012825

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG013025\
Data File : FG015252.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2025 13:53
Sample : Q1215-05
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG011325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.357	4.350	4.362	BH	70	-20	-0.00%	-0.000%
2	4.373	4.362	4.393	PH	89	70	0.00%	0.000%
3	4.399	4.393	4.424	PH	37	-702	-0.00%	-0.000%
4	4.427	4.424	4.454	PH	-48	-1907	-0.01%	-0.001%
5	4.471	4.454	4.482	PH	-33	-1726	-0.01%	-0.001%
6	4.496	4.482	4.500	PH	-34	-1273	-0.01%	-0.000%
7	4.539	4.500	4.546	PH	735	3002	0.02%	0.001%
8	4.556	4.546	4.600	HH	1123	16368	0.11%	0.005%
9	4.614	4.600	4.629	PH	262	1986	0.01%	0.001%
10	4.649	4.629	4.680	PH	1831	19468	0.13%	0.007%
11	4.707	4.680	4.727	PH	1406	15026	0.10%	0.005%
12	4.731	4.727	4.735	PH	-58	-408	-0.00%	-0.000%
13	4.765	4.735	4.809	PH	2838	37458	0.25%	0.013%
14	4.825	4.809	4.843	PH	177	661	0.00%	0.000%
15	4.856	4.843	4.877	PH	75	-631	-0.00%	-0.000%
16	4.920	4.877	4.938	PH	844	10566	0.07%	0.004%
17	4.954	4.938	4.973	HH	301	3419	0.02%	0.001%
18	5.004	4.973	5.012	PH	967	12387	0.08%	0.004%
19	5.026	5.012	5.035	HH	1440	17031	0.11%	0.006%
20	5.043	5.035	5.059	HH	1516	16813	0.11%	0.006%
21	5.073	5.059	5.135	HH	1246	20369	0.13%	0.007%
22	5.164	5.135	5.234	PH	1500	35006	0.23%	0.012%
23	5.247	5.234	5.269	HH	434	5579	0.04%	0.002%
24	5.298	5.269	5.316	HH	581	8906	0.06%	0.003%
25	5.328	5.316	5.346	HH	304	2599	0.02%	0.001%
26	5.362	5.346	5.403	PH	691	7948	0.05%	0.003%
27	5.424	5.403	5.440	PH	291	1845	0.01%	0.001%
28	5.445	5.440	5.468	HH	159	1325	0.01%	0.000%
29	5.487	5.468	5.510	PH	1957	19776	0.13%	0.007%
30	5.526	5.510	5.542	HH	188	1529	0.01%	0.001%
31	5.559	5.542	5.575	PH	343	1552	0.01%	0.001%
32	5.579	5.575	5.597	PH	-72	-1855	-0.01%	-0.001%
33	5.616	5.597	5.663	PH	677	4097	0.03%	0.001%
34	5.685	5.663	5.701	PH	1117	12626	0.08%	0.004%
35	5.718	5.701	5.773	HH	8032	87568	0.58%	0.029%
36	5.778	5.773	5.783	HH	81	152	0.00%	0.000%

rteres

37	5.798	5.783	5.822	PH	221	746	0.00%	0.000%
38	5.845	5.822	5.855	PH	358	2615	0.02%	0.001%
39	5.873	5.855	5.897	HH	552	7528	0.05%	0.003%
40	5.934	5.897	5.945	PH	1631	18745	0.12%	0.006%
41	5.950	5.945	5.963	HH	1587	14588	0.10%	0.005%
42	5.972	5.963	5.984	HH	1365	15382	0.10%	0.005%
43	5.994	5.984	6.033	HH	1317	23575	0.15%	0.008%
44	6.036	6.033	6.041	HH	480	2247	0.01%	0.001%
45	6.048	6.041	6.057	HH	564	4341	0.03%	0.001%
46	6.068	6.057	6.083	HH	638	7919	0.05%	0.003%
47	6.095	6.083	6.112	HH	663	7867	0.05%	0.003%
48	6.152	6.112	6.177	HH	3063	52427	0.34%	0.018%
49	6.191	6.177	6.201	HH	1013	12653	0.08%	0.004%
50	6.216	6.201	6.232	HH	1608	22907	0.15%	0.008%
51	6.251	6.232	6.284	HH	18463	200064	1.31%	0.067%
52	6.302	6.284	6.339	HH	2411	33705	0.22%	0.011%
53	6.372	6.339	6.388	HH	1275	22303	0.15%	0.007%
54	6.404	6.388	6.419	HH	1680	21140	0.14%	0.007%
55	6.438	6.419	6.465	HH	2116	32138	0.21%	0.011%
56	6.480	6.465	6.499	HH	1185	16747	0.11%	0.006%
57	6.507	6.499	6.528	HH	756	9723	0.06%	0.003%
58	6.555	6.528	6.581	HH	2330	36190	0.24%	0.012%
59	6.605	6.581	6.616	HH	883	12805	0.08%	0.004%
60	6.627	6.616	6.649	HH	978	14933	0.10%	0.005%
61	6.662	6.649	6.694	HH	794	13519	0.09%	0.005%
62	6.718	6.694	6.746	HH	2475	36785	0.24%	0.012%
63	6.749	6.746	6.768	HH	620	6611	0.04%	0.002%
64	6.797	6.768	6.817	HH	3224	40926	0.27%	0.014%
65	6.829	6.817	6.853	HH	1084	18860	0.12%	0.006%
66	6.873	6.853	6.893	HH	1481	23062	0.15%	0.008%
67	6.908	6.893	6.938	HH	2668	38587	0.25%	0.013%
68	6.941	6.938	6.959	HH	641	6727	0.04%	0.002%
69	6.981	6.959	6.989	HH	617	9173	0.06%	0.003%
70	7.001	6.989	7.015	HH	999	11560	0.08%	0.004%
71	7.038	7.015	7.093	HH	3261	67034	0.44%	0.023%
72	7.124	7.093	7.139	HH	1653	32472	0.21%	0.011%
73	7.153	7.139	7.173	HH	1060	17873	0.12%	0.006%
74	7.207	7.173	7.243	HH	4989	121894	0.80%	0.041%
75	7.251	7.243	7.277	HH	3079	52587	0.35%	0.018%
76	7.292	7.277	7.321	HH	2332	45622	0.30%	0.015%
77	7.350	7.321	7.375	HH	13798	166958	1.10%	0.056%
78	7.406	7.375	7.426	HH	3341	71829	0.47%	0.024%
79	7.442	7.426	7.466	HH	3656	57629	0.38%	0.019%
80	7.489	7.466	7.521	HH	14223	167031	1.10%	0.056%
81	7.537	7.521	7.554	HH	2072	33693	0.22%	0.011%
82	7.570	7.554	7.599	HH	1658	40025	0.26%	0.013%
83	7.614	7.599	7.638	HH	1878	37682	0.25%	0.013%
84	7.669	7.638	7.706	HH	5032	96008	0.63%	0.032%
85	7.727	7.706	7.752	HH	1788	43582	0.29%	0.015%
86	7.756	7.752	7.772	HH	1593	16684	0.11%	0.006%
87	7.796	7.772	7.817	HH	1764	39499	0.26%	0.013%
88	7.845	7.817	7.873	HH	2843	66202	0.44%	0.022%
89	7.894	7.873	7.911	HH	1710	34654	0.23%	0.012%

90	7.922	7.911	7.932	HH	1388	16687	0.11%	0.006%
91	7.957	7.932	7.977	HH	2782	50616	0.33%	0.017%
92	8.010	7.977	8.030	HH	2197	58142	0.38%	0.020%
93	8.047	8.030	8.065	HH	2288	41970	0.28%	0.014%
94	8.096	8.065	8.145	HH	8079	202705	1.33%	0.068%
95	8.164	8.145	8.187	HH	2910	67483	0.44%	0.023%
96	8.200	8.187	8.221	HH	2878	52602	0.35%	0.018%
97	8.251	8.221	8.274	HH	8027	145071	0.95%	0.049%
98	8.282	8.274	8.292	HH	3341	34524	0.23%	0.012%
99	8.303	8.292	8.331	HH	3549	71559	0.47%	0.024%
100	8.350	8.331	8.356	HH	7681	81786	0.54%	0.027%
101	8.369	8.356	8.403	HH	9773	155922	1.02%	0.052%
102	8.426	8.403	8.446	HH	4734	94013	0.62%	0.032%
103	8.470	8.446	8.486	HH	18251	237650	1.56%	0.080%
104	8.498	8.486	8.517	HH	10776	130431	0.86%	0.044%
105	8.530	8.517	8.534	HH	3757	37635	0.25%	0.013%
106	8.554	8.534	8.575	HH	11432	161325	1.06%	0.054%
107	8.590	8.575	8.607	HH	5101	82020	0.54%	0.028%
108	8.655	8.607	8.692	HH	15508	389460	2.56%	0.131%
109	8.711	8.692	8.730	HH	6293	106495	0.70%	0.036%
110	8.747	8.730	8.774	HH	6550	112868	0.74%	0.038%
111	8.797	8.774	8.817	HH	4659	92672	0.61%	0.031%
112	8.827	8.817	8.857	HH	3372	75736	0.50%	0.025%
113	8.862	8.857	8.878	HH	2990	35549	0.23%	0.012%
114	8.908	8.878	8.930	HH	6140	141037	0.93%	0.047%
115	8.955	8.930	8.985	HH	79630	878181	5.77%	0.295%
116	9.007	8.985	9.044	HH	10298	221903	1.46%	0.074%
117	9.077	9.044	9.081	HH	7681	128313	0.84%	0.043%
118	9.098	9.081	9.115	HH	14222	200656	1.32%	0.067%
119	9.126	9.115	9.140	HH	6887	89274	0.59%	0.030%
120	9.149	9.140	9.166	HH	5980	83391	0.55%	0.028%
121	9.201	9.166	9.215	HH	21996	347033	2.28%	0.117%
122	9.231	9.215	9.258	HH	33858	412572	2.71%	0.139%
123	9.273	9.258	9.287	HH	6214	97579	0.64%	0.033%
124	9.302	9.287	9.310	HH	6129	75827	0.50%	0.025%
125	9.325	9.310	9.342	HH	7449	119072	0.78%	0.040%
126	9.383	9.342	9.399	HH	15981	337790	2.22%	0.113%
127	9.411	9.399	9.452	HH	12422	223575	1.47%	0.075%
128	9.472	9.452	9.496	HH	4750	110489	0.73%	0.037%
129	9.527	9.496	9.545	HH	13359	230670	1.52%	0.077%
130	9.559	9.545	9.580	HH	10370	148513	0.98%	0.050%
131	9.611	9.580	9.630	HH	6614	155611	1.02%	0.052%
132	9.665	9.630	9.686	HH	12473	254686	1.67%	0.086%
133	9.707	9.686	9.723	HH	7697	139543	0.92%	0.047%
134	9.747	9.723	9.768	HH	60184	733650	4.82%	0.246%
135	9.773	9.768	9.799	HH	12183	158062	1.04%	0.053%
136	9.829	9.799	9.845	HH	15607	272719	1.79%	0.092%
137	9.851	9.845	9.856	HH	9562	66696	0.44%	0.022%
138	9.869	9.856	9.881	HH	13320	161408	1.06%	0.054%
139	9.899	9.881	9.920	HH	27015	403316	2.65%	0.135%
140	9.931	9.920	9.941	HH	9788	113638	0.75%	0.038%
141	9.959	9.941	9.992	HH	19139	354363	2.33%	0.119%

142	10.030	9.992	10.054	HH	57340	766130	5.03%	0.257%
143	10.073	10.054	10.116	HH	25636	510003	3.35%	0.171%
144	10.126	10.116	10.143	HH	9878	147514	0.97%	0.050%
145	10.172	10.143	10.219	HH	44927	927968	6.10%	0.312%
146	10.236	10.219	10.258	HH	11259	213756	1.40%	0.072%
147	10.272	10.258	10.300	HH	10266	199774	1.31%	0.067%
148	10.309	10.300	10.319	HH	5830	65675	0.43%	0.022%
149	10.343	10.319	10.366	HH	9314	213150	1.40%	0.072%
150	10.380	10.366	10.419	HH	6770	185463	1.22%	0.062%
151	10.442	10.419	10.456	HH	7192	137650	0.90%	0.046%
152	10.475	10.456	10.482	HH	6611	98512	0.65%	0.033%
153	10.504	10.482	10.534	HH	14479	308918	2.03%	0.104%
154	10.558	10.534	10.587	HH	21314	441418	2.90%	0.148%
155	10.612	10.587	10.622	HH	18837	295541	1.94%	0.099%
156	10.636	10.622	10.662	HH	26818	446613	2.93%	0.150%
157	10.675	10.662	10.697	HH	18180	290359	1.91%	0.097%
158	10.706	10.697	10.723	HH	9908	138145	0.91%	0.046%
159	10.755	10.723	10.787	HH	22491	542250	3.56%	0.182%
160	10.806	10.787	10.867	HH	38269	845366	5.56%	0.284%
161	10.917	10.867	10.940	HH	34393	896044	5.89%	0.301%
162	10.960	10.940	10.973	HH	44146	676704	4.45%	0.227%
163	10.988	10.973	11.011	HH	57464	809209	5.32%	0.272%
164	11.033	11.011	11.045	HH	15070	276253	1.82%	0.093%
165	11.062	11.045	11.080	HH	21283	337359	2.22%	0.113%
166	11.093	11.080	11.113	HH	13775	251006	1.65%	0.084%
167	11.128	11.113	11.136	HH	17084	200340	1.32%	0.067%
168	11.167	11.136	11.206	HH	728273	8602419	56.53%	2.888%
169	11.236	11.206	11.257	HH	190890	2219501	14.58%	0.745%
170	11.261	11.257	11.278	HH	19481	198462	1.30%	0.067%
171	11.291	11.278	11.302	HH	14352	201866	1.33%	0.068%
172	11.307	11.302	11.323	HH	13777	152245	1.00%	0.051%
173	11.336	11.323	11.357	HH	13753	254085	1.67%	0.085%
174	11.373	11.357	11.388	HH	14521	241235	1.59%	0.081%
175	11.406	11.388	11.427	HH	18449	354479	2.33%	0.119%
176	11.449	11.427	11.493	HH	48016	884030	5.81%	0.297%
177	11.523	11.493	11.538	HH	14248	332196	2.18%	0.112%
178	11.560	11.538	11.576	HH	17379	367735	2.42%	0.123%
179	11.594	11.576	11.603	HH	24194	343707	2.26%	0.115%
180	11.618	11.603	11.642	HH	34971	578163	3.80%	0.194%
181	11.702	11.642	11.738	HH	48813	1452280	9.54%	0.488%
182	11.766	11.738	11.787	HH	26628	538115	3.54%	0.181%
183	11.815	11.787	11.836	HH	24561	534480	3.51%	0.179%
184	11.855	11.836	11.880	HH	22707	468381	3.08%	0.157%
185	11.897	11.880	11.901	HH	16168	201443	1.32%	0.068%
186	11.918	11.901	11.938	HH	18241	368970	2.42%	0.124%
187	11.968	11.938	11.982	HH	102729	1392269	9.15%	0.467%
188	11.999	11.982	12.037	HH	133344	1783736	11.72%	0.599%
189	12.082	12.037	12.100	HH	111182	2175766	14.30%	0.730%
190	12.116	12.100	12.130	HH	77172	986758	6.48%	0.331%
191	12.147	12.130	12.180	HH	101874	1490557	9.79%	0.500%
192	12.192	12.180	12.203	HH	17816	230716	1.52%	0.077%
193	12.227	12.203	12.249	HH	24380	576432	3.79%	0.194%
194	12.293	12.249	12.308	HH	43527	1017823	6.69%	0.342%

195	12.326	12.308	12.346	HH	70836	1010062	6.64%	0.339%
196	12.357	12.346	12.373	HH	30078	419241	2.75%	0.141%
197	12.381	12.373	12.415	HH	23365	558245	3.67%	0.187%
198	12.440	12.415	12.478	HH	89919	1567731	10.30%	0.526%
199	12.497	12.478	12.515	HH	25790	514368	3.38%	0.173%
200	12.548	12.515	12.567	HH	104596	1639300	10.77%	0.550%
201	12.587	12.567	12.602	HH	37682	667510	4.39%	0.224%
202	12.613	12.602	12.633	HH	32779	561799	3.69%	0.189%
203	12.646	12.633	12.661	HH	30384	447977	2.94%	0.150%
204	12.691	12.661	12.732	HH	55665	1497801	9.84%	0.503%
205	12.759	12.732	12.774	HH	48603	936514	6.15%	0.314%
206	12.777	12.774	12.800	HH	39007	469988	3.09%	0.158%
207	12.825	12.800	12.850	HH	70676	1329846	8.74%	0.446%
208	12.872	12.850	12.896	HH	107509	1809816	11.89%	0.608%
209	12.937	12.896	12.962	HH	62467	1858411	12.21%	0.624%
210	13.005	12.962	13.037	HH	1087997	15217953	100.00%	5.109%
211	13.054	13.037	13.073	HH	35982	610781	4.01%	0.205%
212	13.091	13.073	13.105	HH	30736	551870	3.63%	0.185%
213	13.121	13.105	13.134	HH	33586	537900	3.53%	0.181%
214	13.175	13.134	13.191	HH	65011	1642908	10.80%	0.552%
215	13.207	13.191	13.249	HH	51278	1377656	9.05%	0.463%
216	13.254	13.249	13.259	HH	29071	175954	1.16%	0.059%
217	13.305	13.259	13.321	HH	1020390	13925907	91.51%	4.675%
218	13.347	13.321	13.363	HH	136330	2212636	14.54%	0.743%
219	13.378	13.363	13.408	HH	129032	1833708	12.05%	0.616%
220	13.431	13.408	13.443	HH	34646	638827	4.20%	0.214%
221	13.462	13.443	13.474	HH	60940	877819	5.77%	0.295%
222	13.491	13.474	13.517	HH	77979	1281591	8.42%	0.430%
223	13.555	13.517	13.580	HH	89651	1797875	11.81%	0.604%
224	13.592	13.580	13.603	HH	36492	467472	3.07%	0.157%
225	13.628	13.603	13.654	HH	48095	1153982	7.58%	0.387%
226	13.687	13.654	13.727	HH	62664	1741043	11.44%	0.584%
227	13.751	13.727	13.811	HH	105168	2763075	18.16%	0.928%
228	13.823	13.811	13.830	HH	32017	361584	2.38%	0.121%
229	13.882	13.830	13.919	HH	178943	4092052	26.89%	1.374%
230	13.949	13.919	13.966	HH	46528	1076896	7.08%	0.362%
231	13.998	13.966	14.017	HH	363559	5417161	35.60%	1.819%
232	14.028	14.017	14.050	HH	115214	1582293	10.40%	0.531%
233	14.071	14.050	14.103	HH	65688	1519297	9.98%	0.510%
234	14.161	14.103	14.180	HH	118676	3267460	21.47%	1.097%
235	14.200	14.180	14.238	HH	114878	2189698	14.39%	0.735%
236	14.273	14.238	14.296	HH	61500	1587681	10.43%	0.533%
237	14.319	14.296	14.339	HH	42586	1049497	6.90%	0.352%
238	14.365	14.339	14.386	HH	45377	1164299	7.65%	0.391%
239	14.405	14.386	14.423	HH	42256	895316	5.88%	0.301%
240	14.440	14.423	14.453	HH	38387	627268	4.12%	0.211%
241	14.465	14.453	14.493	HH	37962	836370	5.50%	0.281%
242	14.496	14.493	14.503	HH	33816	212107	1.39%	0.071%
243	14.523	14.503	14.535	HH	38481	673062	4.42%	0.226%
244	14.575	14.535	14.599	HH	64591	2105690	13.84%	0.707%
245	14.620	14.599	14.655	HH	116429	2289423	15.04%	0.769%
246	14.669	14.655	14.680	HH	44027	640219	4.21%	0.215%

247	14.716	14.680	14.755	HH	60770	2255755	14.82%	0.757%
248	14.796	14.755	14.818	HH	104426	2557900	16.81%	0.859%
249	14.827	14.818	14.839	HH	59761	702408	4.62%	0.236%
250	14.862	14.839	14.885	HH	202591	3184233	20.92%	1.069%
251	14.926	14.885	14.949	HH	131832	3129447	20.56%	1.051%
252	14.986	14.949	15.010	HH	63125	1872778	12.31%	0.629%
253	15.043	15.010	15.099	HH	171385	4165401	27.37%	1.398%
254	15.131	15.099	15.150	HH	69548	1627236	10.69%	0.546%
255	15.183	15.150	15.203	HH	521377	8045841	52.87%	2.701%
256	15.229	15.203	15.252	HH	564499	7705041	50.63%	2.587%
257	15.267	15.252	15.287	HH	55026	1032528	6.78%	0.347%
258	15.342	15.287	15.389	HH	160054	4455544	29.28%	1.496%
259	15.416	15.389	15.454	HH	84818	2275225	14.95%	0.764%
260	15.480	15.454	15.500	HH	86049	1805391	11.86%	0.606%
261	15.516	15.500	15.531	HH	82648	1379123	9.06%	0.463%
262	15.538	15.531	15.580	HH	68768	1727035	11.35%	0.580%
263	15.626	15.580	15.651	HH	106818	2911758	19.13%	0.978%
264	15.658	15.651	15.686	HH	65035	1222628	8.03%	0.410%
265	15.690	15.686	15.712	HH	48721	750049	4.93%	0.252%
266	15.717	15.712	15.733	HH	48775	613822	4.03%	0.206%
267	15.767	15.733	15.780	HH	60975	1542496	10.14%	0.518%
268	15.810	15.780	15.828	HH	71640	1840499	12.09%	0.618%
269	15.853	15.828	15.873	HH	162110	2729708	17.94%	0.916%
270	15.890	15.873	15.920	HH	95004	2017233	13.26%	0.677%
271	15.934	15.920	15.950	HH	68253	1132551	7.44%	0.380%
272	15.963	15.950	15.967	HH	61451	629903	4.14%	0.211%
273	16.012	15.967	16.050	HH	116855	4132538	27.16%	1.387%
274	16.090	16.050	16.128	HH	82704	2948851	19.38%	0.990%
275	16.131	16.128	16.151	HH	53667	697493	4.58%	0.234%
276	16.174	16.151	16.195	HH	79766	1675986	11.01%	0.563%
277	16.214	16.195	16.236	HH	85722	1676359	11.02%	0.563%
278	16.252	16.236	16.259	HH	64389	852977	5.61%	0.286%
279	16.279	16.259	16.312	HH	76301	2027320	13.32%	0.681%
280	16.353	16.312	16.368	HH	55136	1775364	11.67%	0.596%
281	16.381	16.368	16.398	HH	53256	944107	6.20%	0.317%
282	16.412	16.398	16.426	HH	54672	874502	5.75%	0.294%
283	16.470	16.426	16.505	HH	71559	3033594	19.93%	1.018%
284	16.528	16.505	16.547	HH	85560	1815837	11.93%	0.610%
285	16.563	16.547	16.578	HH	66042	1160317	7.62%	0.390%
286	16.593	16.578	16.612	HH	68252	1355280	8.91%	0.455%
287	16.657	16.612	16.672	HH	93873	2818542	18.52%	0.946%
288	16.681	16.672	16.705	HH	87507	1487270	9.77%	0.499%
289	16.758	16.705	16.774	HH	605186	12134029	79.73%	4.074%
290	16.782	16.774	16.814	HH	357046	4108157	27.00%	1.379%
291	16.827	16.814	16.838	HH	66199	953020	6.26%	0.320%
292	16.877	16.838	16.897	HH	184805	3732800	24.53%	1.253%
293	16.912	16.897	16.935	HH	86666	1787583	11.75%	0.600%
294	16.946	16.935	16.958	HH	75216	1010660	6.64%	0.339%
295	16.967	16.958	16.975	HH	71471	715688	4.70%	0.240%
296	16.997	16.975	17.015	HH	85296	1890182	12.42%	0.635%
297	17.077	17.015	17.101	HH	437740	9873860	64.88%	3.315%
298	17.139	17.101	17.174	HH	596431	10327723	67.87%	3.467%
299	17.198	17.174	17.208	HH	89060	1593317	10.47%	0.535%

rteres

300	17.231	17.208	17.255	HH	233158	4050350	26.62%	1.360%
301	17.278	17.255	17.308	HH	101725	2741614	18.02%	0.920%
302	17.370	17.308	17.400	HHA	108154	4951216	32.54%	1.662%

Sum of corrected areas: 297871128

FG011325.M Fri Jan 31 06:07:23 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. Q1215
QUOTE NO.
COC Number 2041067

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 BMCR 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
- ☐ 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-29.1-012825	Soil		G	1/28/25	14:26	3	X	X	X							
2.	JPP-29.1-012825	Soil	C		1/28/25	14:30	7			X	X	X	X	X	X	X	
3.	JPP-29.2-012825	Soil		G	1/28/25	15:15	3	X	X	X							
4.	JPP-29.2-012825	Soil	C		1/28/25	15:22	7			X	X	X	X	X	X	X	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

PRESERVATIVES: ← Specify Preservatives
A-HCl D-NaOH
B-HN03 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	1/29/2025 1045	1. 1-29-25
2.		2.
3.	1-29-25 1614	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 2.8 °C
Comments: Preserve extra sample jar if additional analysis is Required

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

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (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 : Q1215 RUTW01
Client Name : RU2 Engineering, LLC
Client Contact : Rutu Manani
Invoice Name : RU2 Engineering, LLC
Invoice Contact : Rutu Manani

Order Date : 1/29/2025 11:20:00 AM
Project Name : ~~SANDTWOBR BMCR Bro~~
Receive DateTime : 1/29/2025 4:14:00 PM
Purchase Order :

YG
02/03/25
NYCDDC SANTWOBR Brooklyn Bridge BBMCR

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
Q1215-01	JPP-29.1-012825	Solid	01/28/2025	14:26					
					VOCMS Group1		8260D		10 Bus. Days
Q1215-05	JPP-29.2-012825	Solid	01/28/2025	15:15					
					VOCMS Group1		8260D		10 Bus. Days

Relinguished By :
Date / Time : 1-29-25 1700

Samples in Sm Frig @ 1700.

Received By :
Date / Time : 1-29-25 17:00

Storage Area : VOA Refridgerator Room

left stored rc